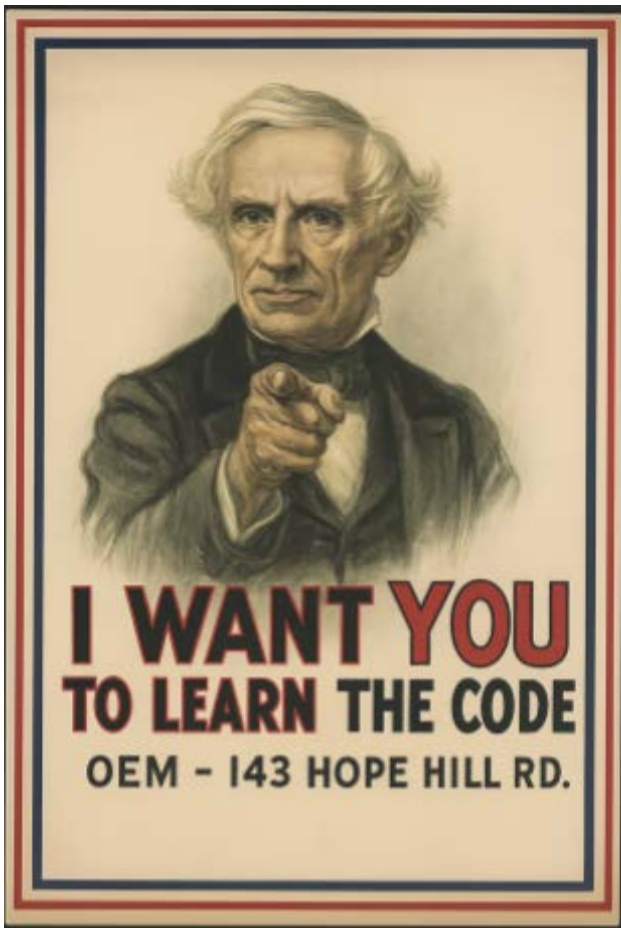


# Key Klix OCTOBER 2025

*The Monthly Q-S-T de the*

**MERIDEN AMATEUR RADIO CLUB & WALLINGFORD AMATEUR RADIO GROUP**

*"It's the Radio News that's fun to use"*



***Special CW Issue.* CHECK OUT  
THE MORSE CODE FEATURES INSIDE!  
SEE PAGES 8, 14, & 16**

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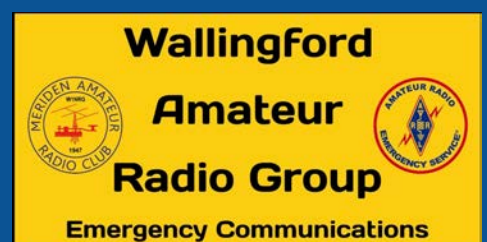
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### ***Your 2025 Club Officers are:***

<b>President</b>	-	<i>vacant</i>
<b>Vice President</b>	NZ1J	Dave Tipping
<b>Treasurer</b>	KC1OYN	Rick Becker
<b>SAM</b>	K1RCT	Rob Cichon
<b>Secretary</b>	AB1DQ	Jimmy Surprenant





# VICE-PRESIDENT'S POST

*by Dave, NZ1J*

Ray has used this space to share some very good technical information. I'm going to use the space this month to talk about what's new. I'll arbitrarily say that 'new' is about the last ten years. So, the internet, which has done a lot for ham radio, isn't new for my purposes. Neither is the smartphone or LoTW.

But POTA is new. So is FT8. Whether you love them or hate them, they've both had a huge impact on the hobby. Tune across 20 meters on any day other than part of a contest weekend, and you'll find most of the activity is either POTA or FT8. And, they both created activity. A ham who spends a few hours in a POTA park and makes 100 QSOs or spends a few hours on FT8 and makes 50 QSOs, wasn't going to make anywhere near that number of QSOs elsewhere - except during a contest.

POTA has also changed the face of portable operation. Though LiFePO4 batteries were available ten years ago, probably most of us had never seen one. Power for portable operation was understood to be a gasoline-powered generator or possibly a lead-acid battery for QRP.



Portable antennas have also evolved. I'm guessing that the large number of POTA activators drove the market to create better and less expensive portable antennas. Though there are still a lot of antenna designs in use, the 17-foot telescopic vertical antenna with either an aluminum window screen or a Faraday cloth ground has become something of a de facto standard. Here's a photo from the SECARS club in Norwich. That's five of those 17-foot antennas lined up. It also seems to be the number one choice among MARC members.

The final big change I'll mention is the speed and ease of deployment. With modern equipment and refined procedures gained through frequent POTA activations, it's not uncommon to be on the air in ten minutes or less from the time of entering a park.

All these benefits carry over easily to EMCOMM.

That's my take on the last ten years. I think that ham radio offers us more now than it ever has. I'll be thrilled if the next ten years is even close to being on pace with the last ten.

# Minutes of the September Business Meeting

The following minutes of the September 11, 2025, MARC Business Meeting will be moved for approval at the October 9th Meeting.

2025.09.11 MARC BUSINESS MEETING MINUTES  
7:00 - 8:11 PM EDT via Zoom  
Submitted by, AB1DQ, Jimmy Surprenant, MARC Secretary

## Quorum

- Club secretary AB1DQ Jimmy confirmed a quorum:
- Membership per August 2025 Roster: 205
- Minimum for Quorum: 21 = 19 members + 2 Officers
- In attendance: 32 = 27 members + 5 Officers

In Attendance:

**Officers:** KC1QLS, Ray Cirimo [President]; NZ1J, Dave Tipping [Vice President]; KC1OYN, Rick Becker [Treasurer]; K1RCT, Rob Cichon [Station Activity Manager]; AB1DQ, Jimmy Surprenant [Secretary]

**Members:** AC1TY, Andy Rudczynski; K1LHO, Mike Ash; K1VDF, Joh Blevins; KB1EHE, Eric Knight; KB1IFZ, Elsie Mathews; KB1JL, Eric Olsson; KB1MFU, John Ramadei; KC1DOY, Ted Renzoni; KC1FWB, Lloyd R Saberski; KC1NHE, Reed Hansen; KC1RBY, Sergio S Frutuoso; KC1TSG, Jim Drexler; KC1TSM, Ellen Cosgrove; KE1AU, Bob Kaczor; N1API, Al Kaiser; N1GNV, John Bee; N1ZN, Jim Savage; NA1L, Dale Clift; W1BRY, Don Chepurna; W1EDX, Paul Stasieluk; W1IKW, Iain White; W1YSM, Ed Snyder; WA1EXA, Mark Petruzzi; WB1GFI, Stan Hiriak; WB1GYZ, Bob Biancur; WB8IMY, Steve Ford; WV2LKM, Steve Waldmann

**Call to Order:** The meeting was called to order at 7:00 p.m. EDT by Club President KC1QLS, Ray.

## Approval of the Minutes

**MOTION:** Jimmy, AB1DQ, moved that the August business meeting minutes previously emailed to the club membership be approved.

**SECONDED DISCUSSION:** None **VOTED:** Approved.

## Secretary's Report, by AB1DQ Jimmy

**MOTION:** Jimmy, AB1DQ, moved that the following applicant for club membership be approved:

<u>Name</u>	<u>Call Sign</u>	<u>License Class</u>	<u>Home QTH</u>
Richard J. Castaldo	K1RJC	Advanced	Cheshire, CT

**SECONDED DISCUSSION:** None **VOTED:** Approved.

Membership Report: The club now has 205 members.  
Correspondence: None.

**Questions for the Secretary:** None

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### Treasurer's Report by Rick, KC10YN

Rick began by observing that the day was 9/11 and then made a **MOTION** to accept the Treasurer's Report

**SECONDED**      **DISCUSSION:** None      **VOTED:** Approved.

Rick proceeded to highlight the following three items from the Treasurer's Report:

1. Rick deposited the \$600 donation from Benevity on behalf of Elizabeth Carpenter, who works at the Hartford. Elizabeth donated \$200 which was matched by Benevity, to make the total donation \$600. Rick thanked Elizabeth for her donation.
2. Although Field Day was June 28th & 29th and LARK at the MARC was July 26th, the final accounting of the books didn't occur until August. To answer inevitable questions (about what we spent) next year, Rick provided a detailed Final Accounting of the Field Day/ LatM Recurring Costs. Checks totaling \$556.08 have been issued to members for reimbursement of costs, cash donated at Field Day of \$213, leaving a net adjusted balance of \$343.08.
3. The scholarship check awarded to Noah Kerelejza was cashed by Brown University. Rick acknowledged Noah's hard work and perseverance that earned you this wonderful scholarship, a well-deserved recognition of his academic excellence, and wished Noah good luck.

#### Questions for the Treasurer:

Q: Do we know who Elizabeth Carpenter is and why she made her donation to the club. [de N1GNV]

A: The only information provided by Benevity is her name and place of employment. [de KC10YN]

### Station Activities Report by Rob, K1RCT:

Rob highlighted several items from the Station Activities Manager's Report, which was previously distributed to the membership. Items mentioned during the meeting report included:

- After the release of the Mosely TA-33 Jr. Beam & Ringo Ranger 2M vertical antenna to club member Steve Chapman, KB1RLF, Steve has reported that after installing the antennas, he has made "hundreds of contacts" with both antennas (mostly POTA).
- Participation in weekly club nets has seen a recent uptick.

#### Questions for the SAM:

Q: What is meant by "the Beam was released to KB1RLF." [de N1ZN]

A: It means I gave it to him. [de K1RCT]

Standing Committee reports (As Needed):      None

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## Old Business / New Business

- Technician Class [de Jimmy, AB1DQ]

During the week before the start of the class, the officers and Jimmy discussed and decided to postpone the fall Technician Class as there were only 2 students enrolled at that time.

Although the class is promoted through several online outlets such as the ARRL website, and various Facebook radio and community groups, we rely on our partnership with the Wallingford Adult Ed office, who not only publish our class listing in their continuing ed catalog but also handles student enrollments. This summer, the catalogs went out very late, in part due to their office relocation.

The course, now in its third year, continues to evolve, and with the help of members like Dave, NZ1J, and Bill, NR1B, we have plans to add hands-on experiences for the students.

We are targeting to offer the class next in January, after Nutfest and the holidays, and club members are invited to share their thoughts and ideas.

Q: Mike K1LHO asks whether the late publication of the town course booklet affected other classes.

A: We do not know and can not speak for others. [de AB1DQ]

Comment: Ed W1YSM expressed kudos to James for his work on the program.

- ICOM 7300 [de Dave, NZ1J]

Harold, WJ1B, has offered to sell one of his radios, an Icom IC-7300 for \$750. The radio is reported to be in great shape and comes with factory manuals, the original box, and PowerPoles installed.

As all of our current club HF radios are older and lack modern features like SDR, digital filters, and waterfall displays, the club would do well to accept Harold's offer and purchase the Icom 7300. Dave made the following motion:

**MOTION:** That the club purchase Harold's IC-7300 for \$750. **SECONDED**

**DISCUSSION:** Several members shared their thoughts and opinions on the proposed purchase. Opinions shared and points raised during the general discussion included:

- Whether we need more radios and how this radio would be used by the club. It was observed that this proposed purchase is more of a want than a need.
- The current station radios at the OEM are not owned by the club, but are the property of the town.
- The advanced features of the IC-7300 could help attract Technicians and license candidates in our class to experience HF. The IC-7300 has a shorter learning curve than the FT-991.
- The club finances are currently in a very positive state, and according to our Treasurer, Rick, KC1OYN, we are currently 'flush with cash' due to recent donations.
- The asking price is very fair based on current eBay listings for similar radios, and the seller, Harold, has a reputation of taking good care of his station equipment.

This motion was **TABLED** and will be reopened next month for further discussion and a vote per club bylaws.

- Motion to buy four mini PCs [de Rob, K1RCT]

This motion was tabled last month per the club's bylaws and reopened for further discussion and a vote.

**MOTION:** To upgrade the club computers at the OEM, the following hardware is to be purchased:

- 4 Refurbished Windows 11 Pro SFF PC's,
- 4 Wireless keyboard/mouse,
- 4 Hardware mounts for PC's, and,
- 4 VGA/Displayport adapters

Deployment: The hardware will be installed at the following stations:

- North HF Station (upgrade)
- South HF Station (CW) (upgrade)
- VHF Station (upgrade)
- CERT Trailer Station (new)

The proposed cost is about \$1200.00

#### **DISCUSSION:**

Q: Are these Windows 11-compatible machines? [de N1GNV]

A: They are Windows 11 Pro machines, and not upgrades. [de K1RCT]

**VOTED:** Passed.

- Activity Meeting [de Ray, KC1QLS]

The September Activity Meeting will be in-house again in September and has been moved from Thursday, 9/25/2025, to Saturday, 9/27/2025. Bill Huggins, NR1B, will again be presenting on a digital mode; this time the focus will be on WINLINK. Again, pizza will be served after the presentation for a \$10 contribution. Bill's presentation is scheduled for 11:00, preceding pizza.

- Upcoming public events seeking volunteer radio support [de Eric, KB1JL].

Volunteers are sought for the following two events - contact Eric if you are interested:

- YMCA - Celebrate Wallingford 5K                      Date: October 5th.
- Cheshire Hot Cocoa Road Race                      Date: November 8th

- Holiday Party [de Ray, KC1QLS]

Volunteers are needed to plan and organize our 2025 Holiday Party. A general discussion ensued about what we should do for a party, and opinions were offered stating preferences of doing something in-house at the OEM, having the party catered, or returning to a restaurant like Serafino's.

It was suggested we might hold the party earlier in the afternoon to make it easier for some older folks to attend.

W1YSM, Ed shared information on the past years' parties while he was club president, and volunteered to be part of a committee to organize the 2025 party.

#### **Announcements**

- David Minster, NA1AA, ARRL CEO Talk [de KC1QLS]

On Thursday, September 11, 2025, @ 8:00 PM, David Minster will be talking at the SECARS Business Meeting. We are invited to attend. The link is:

<https://us06web.zoom.us/j/88227793864?pwd=PP0wt0dYx3JsR59gbYSqH5Fgx1fj5x>

- Nutfest 2025 [de Ed, W1YSM]

The Nutmeg Hamfest will be on Sunday, October 12, and is being publicized through various media, with 13 talks planned.

Volunteers are sought.

- MARCONI [de Ed, W1YSM]

Ed provided a general update on the status of the MARCONI project.

Things are going ok.

- Worked All Europe Contest [de Al, N1API]

The contest is coming up next weekend (September 13)



- VHF Contest & VE Session [de N1ZN]

There is also a VHF contest the same weekend, and a VE Session will be held at the OEM on 9/13. Members are encouraged to arrive at the OEM an hour later than usual, after the exam concludes.

### Ham Radio Activities [de Dave, NZ1J]

The club's push to boost CW familiarity among club members is going well. There was a good turnout last Saturday at the OEM, where several members who have not experienced code were able to try their hand at a straight key and paddles attached to a CP0.

Members who don't know anything about CW are encouraged to learn more and to give it a try. Saturday mornings at the OEM and Bob WB1GYZ's class are great ways to get involved.

### Adjournment

**MOTION:** KC1QLS, Ray moved at 8:11 PM EDT that the September 2025 business meeting should now be adjourned.

**SECONDED**      **DISCUSSION:** None      **VOTED:** Approved.



The meeting was adjourned at 8:11 PM EDT.

## MARC VE Sessions

MARC hosts a VE License Exam Session on the second Saturday of each month at 9:00 AM at the OEM at 143 Hope Hill Road, in Wallingford.

Exams are now paperless and require obtaining a PIN from [www.hamstudy.org/](http://www.hamstudy.org/) before the test date.

For more info, contact Jim at [N1ZN@arrl.net](mailto:N1ZN@arrl.net)

# ARRL

# VEC

# 2025 ARRL ONLINE AUCTION

## OCTOBER 10-16

PREVIEW BEGINS OCTOBER 7

[www.arrl.org/auction](http://www.arrl.org/auction)






## CW at the Clubhouse *by Ted, KC1DOY*

At the August Business Meeting, MARC Vice President **Dave, NZ1J**, announced that he wanted to promote CW familiarity as the next club group goal and on Saturday September 6, we had a code practice oscillator (CPO) and a straight key available for members who are newer hams (as well as older hams who perhaps haven't given Morse Code much thought since passing their Element 1 exams back in the day) an opportunity to experience the feel of a straight key and learn some CW basics.

The CPOs were getting a workout again on September 20, as code practice could be heard in the main room. Taking their turn pounding some brass were **Bart N1BRL**, **Mike K1LHO**, **Jim N1ZN**, and **Ray KC1QLS**.

The day started with a VE session at which **Jules, KC1STF**, and **Scott, KC1IIK**, both passed their Amateur Extra class exams. Congratulations, guys, and **Dave, NZ1J**, gave some instruction to **Scott, KC1IIK**, explaining how FT8 worked and letting him make some QSOs. I think that Scott may have caught the "digital bug" that Saturday.



**MARC members getting hands-on Morse Code experience at the OEM in September. LEFT: Ray, KC1QLS tries his hand at the CPO while Bart, N1BRL looks on. RIGHT: Charles KC1TSL at the key.**



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# Fall Technician Class Postponed

The Fall Technician License Class, a cornerstone MARC education initiative now in its third year, originally scheduled to start on September 9th, has been postponed due to low enrollment.

While the class is also cross-promoted on other media outlets, including the ARRL website, and on social media sites, MARC has partnered with the Wallingford Adult Education program to serve as the primary channel for promoting the class, as they can a broad local reach. This summer, the fall Adult Ed catalog was delayed in part due to the relocation of the AE office this summer.

Club license class point person, Jimmy, AB1DQ, has been in conversation with club leadership about how we will proceed, and welcomes the input of all interested club members for their input. Currently we are planning to offer the class next in January after the upcoming holiday season. Your thoughts and ideas are welcome - drop a line to Jimmy at [james@ab1dq.com](mailto:james@ab1dq.com).

Over the past two years, we have helped over 40 local hams earn their first ticket or upgrade to earn their HF privileges with the General license. Our recent focus has been to bring more hands-on activities for the students.

Our next class will feature bench sessions in which students will build a simple flea power AM BCB transmitter and receiver to demonstrate oscillation, modulation and demodulation, and harmonics. It is an innovative idea allowing license candidates to go beyond simply memorizing the question pool answers. Building a receiver and transmitter is a throwback to the 'old days' when aspiring hams built their own radios while studying for their first license and something we feel the hobby is missing today.

*~Reported by Jimmy, AB1DQ*



**Scott Martin, W1HLP**, passed his Amateur Extra exam at the MARC VE session on September 20, 60 years after first earning his Novice ticket.

Sharing his news on the club Facebook site, Scott extended a "huge thank you to Bill Huggins and the other attending VEs," adding that he could never have done it without the support of his club, MARC!

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## September Activity Meeting Recap

### Learning Winlink with Bill Huggins, NR1B

September 27, the first Saturday of autumn, brought glorious warm sunny weather, and a great turnout to the OEM, with 30+ members showing up for the weekly open house, followed by our monthly Activity Meeting.

The code practice oscillators were getting a good workout as **John, K1LYP**, was coaching **Jim, KC1TSG**, and others on some hands-on CW learning until 11:00 AM, when **Bill Huggins, NR1B**, gave his second presentation on a powerful digital mode in as many months. In August, Bill introduced us to the versatile VarAC mode (see September **Key Klix**) and followed up with a September primer and live demonstration of Winlink.

Winlink is a global radio email system that allows licensed hams to send and receive messages, including email, using RF instead of the internet. It provides off-grid communication capabilities for use during emergencies or in areas where internet access is unavailable. The State of Connecticut incorporates Winlink as part of its emergency communication program. Like VarAC, Winlink can be used on HF and VHF bands, meaning that Technicians can set up a Winlink station and get on the air on 2 meters.

Bill demonstrated how to obtain and set up the Winlink software and how to create an account and send an initial message via Telnet over the Internet before configuring your PC for RF Winlink. As he did last month, Bill took a list of email addresses of members interested in setting up a Winlink station and later that afternoon sent out a pair of clear, easy-to-follow instructions on how to get started.

Bill's presentation wrapped up shortly after noon, and all members feasted once again on Napoli Pizza. What a great way to ring in fall.



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# MARC ELECTION NEWS

*by Ellen Cosgrove, KC1TSM*

MARC elections for 2026 officers will occur on November 13, the day of our annual business meeting. Once again, **Jim Cook W3APC**, **Elsie Mathews KB1IFZ**, and I (**Ellen Cosgrove KC1TSM**) will serve as your election committee. You can reach us at [W1NRGelection@gmail.com](mailto:W1NRGelection@gmail.com) with any questions throughout the process.

The 2025 election protocol has been updated following discussions with the officers and the election committee. I want to highlight a few important points as well as some changes:

## Key Dates:

### October 9

- Nominations for all officer positions as well as for Ham of the Year and Elmer of the Year will open during the October business meeting and remain open until 11:59pm October 31.
- Voting eligibility in the November election will be based on the list of members in good standing as of the October 9 business meeting.

### November 4

- A list of candidates for all officer positions as well as candidate statements will appear in November Key Klix.

### November 13

- Ballots will be sent to all eligible members at 12:00am.
- Voting will remain open until 6:00pm
- Results will be announced at the November Business Meeting

## Some changes to note:

- The election will close at 6pm which will allow results to be announced during the business meeting but will also give us access to Election Buddy's tech support in case any members have any technical issues. Last year, we had more than 100 members vote (more than 50% of the club) and two technical challenges. Neither issue affected the outcome of the election. We encourage you to avoid voting at the last minute if possible to give us time to get Election Buddy's support if need be.
- HOTY and EOTY will be announced at the November Business Meeting.
- We want to ensure that candidate statements in KeyKlix and on social media focus on what candidates bring to the position (focusing on their own skills and accomplishments) as well as their plans for the club in the upcoming year. Disparaging other candidates is not in keeping with the goals of our hobby or our club.

If you have any questions, please contact us at [W1NRGelection@gmail.com](mailto:W1NRGelection@gmail.com). We will see you at the October Business Meeting.

73,  
Ellen Cosgrove KC1TSM (chair)

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## MERIDEN AMATEUR RADIO CLUB OFFICER ELECTION PROTOCOL - 2025

### OFFICER ELECTIONS

Pursuant to Article V of MARC's Constitution, the officers of MARC, Inc. are: President, Vice-President, Secretary, Treasurer, and Station Activities Manager. Position Descriptions can be found in Article V of the Constitution. Elections are held on the day of the Annual Meeting in November. Officers are elected for one year terms (more detail can be found in Article V of the Constitution).

Election procedures will be printed in October's KeyKlix and candidate statements will appear in the November KeyKlix.

Your 2025 Election Committee (Ellen Cosgrove KC1TSM (chair), Jim Cook W3APC, and Elsie Mathews KB1IFZ) will be available to you throughout this election cycle. Please contact the Election Committee at [WINRGelection@gmail.com](mailto:WINRGelection@gmail.com).

### NOMINATIONS

- Nominations for all five officer positions will open at the October Business Meeting on Thursday October 9, 2025 at 7:00p (ET)
- The Election Committee will entertain nominations from the floor (including self-nominations). Incumbents will be asked whether they wish to stand for re-election.
- At the end of the October 9th Business Meeting, the nomination period will remain open until 11:59 pm (ET) on October 31, 2025. Nominations made after the Business Meeting, and before the October 31st deadline, should be directed to the Election Committee at [WINRGelection@gmail.com](mailto:WINRGelection@gmail.com).
- At the same time, from the Business Meeting on October 9th through October 31st at 11:59pm, the Election Committee will accept nominees for HAM of the Year and ELMER of the Year. These are MARC's most esteemed awards and represent the highest honors bestowed by the membership.
  - The MARC Ham of the Year recognizes outstanding service to MARC and the amateur service at large in the most idealistic sense.
  - The Adolph Goodsell (W1ICQ) Elmer of the Year honors the mentor of new and not so new operators to enjoy amateur radio to its fullest.

### CAMPAIGNING

Candidate Statements will appear in the November KeyKlix which will be sent to all members via email on Tuesday, November 4th (nine days before the election), If candidates wish to campaign on social media, they can use MARC's social media channels.

Please note: the Amateur Radio Code emphasizes the importance of consideration, encouragement, and kindness as we engage in the hobby. At MARC, we endeavor to foster a welcoming and respectful environment for all members. Accordingly, we want to ensure that candidate statements in KeyKlix and on social media focus on what candidates bring to the position (focusing on their own skills and accomplishments) as well as their plans for the club in the upcoming year. Disparaging other candidates is not in keeping with the goals of our hobby or our club. Any concerns about disparaging posts can be directed to the Election Committee and, if found to violate campaign procedures, the Election Committee will work with club leadership to remove those statements as soon as practicable.

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## VOTING PROCESS

Rick Becker, KC1OYN, maintains the Club's official membership list. The Election Committee will upload all members in good standing as of the October 2025 meeting.

As a reminder, it is an FCC requirement for every Ham to update their email address and regularly check email for messages. Please ensure that your dues and email address are current in the October KeyKlix roster and connect with Rick if you have changes before the October 9th meeting.

After the nominations are closed on October 31st, the Election Committee will assemble a ballot of officer candidates as well as the nominees for Ham and Elmer of the Year.

The list of candidates and candidate statements as well as the list of Ham of the Year and Elmer of the Year nominees will be included in the November KeyKlix (to be emailed to all club members on Tuesday, November 4th).

Election Day is November 13, 2025. MARC will once again use the Election Buddy Software Program to tally the votes for the officers and awards. This program has been successfully used in our 2023 and 2024 elections.

The Election Buddy Program will automatically send a ballot to MARC members in good standing on election day beginning at 12:00 am. Voting will end at 6pm (ET) on November 13.

If a member does not receive a ballot by 9am (ET) on November 13th, the member should contact the Election Committee by email. If an issue cannot be resolved by Election Buddy's tech support, the Election Committee can manually add a member's votes (after confirming that the member has not voted). All votes are anonymous but voting participation is tracked to ensure a fair election.

## RESULTS

The Election Committee will announce the results of the election for each officer position at the November 13th meeting.

In addition, MARC's President will announce the Ham of the Year and Elmer of the Year at the November 13th meeting. Those announcements will also be posted on MARC's social media and in December's KeyKlix.

Anyone with questions should contact the Election Committee by email.



On September 20, **David Henry, KC1PEN**, led a Scouting radio merit badge session as a warm-up to Jamboree On The Air (JOTA).

The Scouts were on the air 1500 UTC and 2030 UTC operating as special event station W1Y from Connecticut in grid FN31.

Do your part to support Scouting & Ham Radio... a great combination for generations!



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# Some Morse Code Basics

*by Dave Tipping, NZIJ*

There is a long tradition of Morse Code in amateur radio. Just as the telegraph predated the telephone, radiotelegraphy predated radiotelephony. In the early days, continuous wave (CW), along with Morse Code, could get a message through much more easily than voice on AM. Much later, with the advent of SSB, Morse Code still was the performance champ. Into the 1980s, the military and commercial shipping still relied heavily on Morse Code.

More recently, new digital modes have emerged that outperform Morse Code. Military and commercial operators now rely very little on Morse Code. However, within amateur radio, Morse Code still thrives. Lots of ham radio operators, young and old, enjoy using Morse Code. For example, the Straight Key Century Club (SKCC), has more than 30,000 members. The Long Island CW Club was only established in 2018, but it now has almost 7,000 members.

Within MARC, there are quite a few members who make great use of Morse Code. Scott, W1HLP, for instance, has a microphone somewhere in a drawer, but doesn't clutter his desk with it. He operates 100 percent Morse Code.

What about the rest of us? Operating with Morse Code is a skill that takes some time to learn. Bob, WB1GYZ, has been offering nightly instruction for about the past four years. That instruction is available to all members.

In parallel with Bob's effort, the club is also advocating that members just take a little time and become familiar with Morse Code. Usually, on a Saturday morning at the OEM, a Morse Code Key and a set of paddles are available to try out. Over the past month, on two occasions, I've seen a club member go from "I don't know what paddles are or how they work," to, fifteen minutes later, "I think I'll buy a set of paddles."

This article is, to a large extent, a sales pitch. Either at the OEM or at a group POTA event, take advantage of a brief introduction to sending and receiving Morse Code. Now that donuts cost more than a dollar, I will wager you "dollars to donuts" that you'll be glad you did.

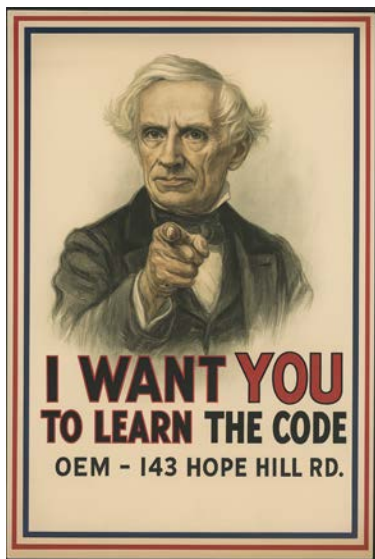
And, for anyone with no familiarity with the topic, here are some absolute basics. Morse Code may be written out as dots and dashes, but it's always 'dits' and 'dahs.'. A dit is a short tone, and a dah is a long tone. The two most common ways to send Morse Code are with a 'straight key' and a set of paddles. The straight key is just a switch, like a doorbell button. Press the key and get a tone. Dits and dahs are controlled by how long you hold the key down.

Paddles are a bit more complicated. They need to be mated to an electronic keyer to work correctly. Modern radios have the electronic keyer built in. I'm going to stop there. Please find some time to try a key and paddles for yourself, if you haven't already. There is always an Elmer available in the club to help you out. The paddles, especially, can seem a little bit magical. We have had Girl Scouts visit the club and wait in line for a second or third chance to send some Morse Code. We shouldn't let them have all the fun.



**LEFT: An inexpensive 'straight key.' RIGHT: Inexpensive Putikeeg paddles.**

## *Great resources for learning the Code...*



### **MARC NIGHTLY CW PRACTICE WITH WB1GYZ**

Our own "Railroad" Bob Biancur has Elmered dozens of hams wanting to learn the code and hosts a nightly live CW net aimed for beginners looking to learn and built on air confidence. We meet up around 7:15 PM local on Zoom and some nights switch over to on air. Learn more: [rgdp@comcast.net](mailto:rgdp@comcast.net)



### **LONG ISLAND CW CLUB CW CLASSES**

The LICC Beginners curriculum groups lessons into three carousels and culminates with getting on the air. Students enter whenever they wish and progress when they feel ready. This concept accommodates a broad range of student performance. Learn more: <https://longislandcwclub.org/>



### **CW ACADEMY by the CW OPS CLUB**

CW Academy training and mentoring for Beginners and those with Morse Code experience needing help are offered three times a year, in two-month increments: Jan-Feb; May-Jun; Sep-Oct. Learn more: <https://cwops.org/cw-academy/>

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# Resto-Modding a Classic Pair of HD-16 CPOs

## *Revisiting a timely CW-related workbench project by AB1DQ*

As we, as a club, have been working on increasing Morse Code & CW familiarity, I decided to dust off my vintage Heathkit HD-16 Code Practice Oscillator (CPO) and bring it to the OEM for show and tell.

The HD-16 was Heathkit's second CPO, introduced in 1967, following the original CO-1, and was replaced by the HD-1416, which came out in 1975 and was sold in various cosmetic variations until 1990.

In August 2022, I purchased a pair of hard luck HD-16 CPOs at the HamX Flea Market for \$10. Although in rough condition and sold as 'parts only,' they seemed to be 'mostly' complete, and I figured I could combine the two to make one classic restored CPO for my shack.

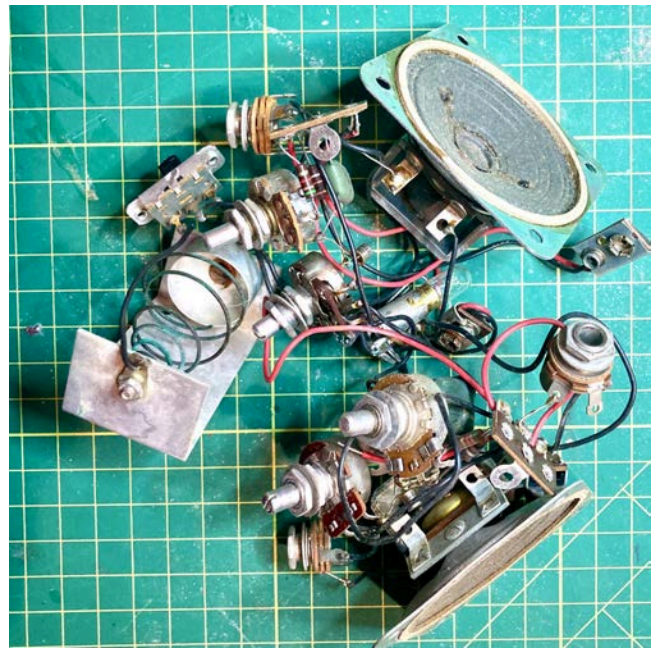
I began restoration by disassembling both units, and I washed the cabinet parts in warm water and dish soap, gently scrubbing away most of the stains with a soft brush. The back halves of both CPOs were scuffed and scratched badly, so I chose to re-paint them in flat black instead of the original dark Heath green.

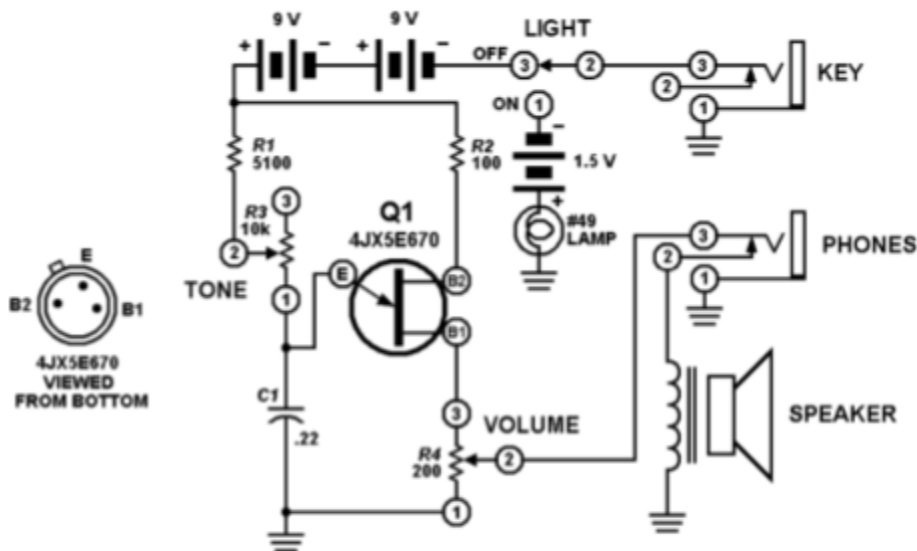
Purists may cringe, but my philosophy when repairing vintage gear is to take advantage of modern tech and replacement parts to make tasteful mods as necessary to keep the vintage gear in service. I operate a ham shack, not a museum, after all.

To complement the blacked-out cabinet half, I also painted the speaker grilles flat black and replaced the enclosure screws with new black variants.

I found the original well-written HD-16 construction manual online, which was complete with the schematic, complete specs, and some nice content on circuit theory and Morse Code.

**Circuit theory:** Unlike a bipolar junction transistor, the unijunction transistor, Q1, is a curious beastie. It has two bases and one emitter, allowing it to function as a relaxation oscillator. When the key is closed, the battery charges C2 through R1 and R3 until the emitter voltage reaches the point of becoming forward-biased with respect to B2.





The HD-16 schematic - elegantly simple & built around a single unijunction transistor.

Emitter current then flows as the dynamic resistance between E and B1 drops to a low value. R2 drops the battery voltage to a low level, permitting C1 to charge to a higher voltage than B2. C1 then discharges through the emitter and R4 until the emitter voltage drops to the point where the emitter is no longer biased. The cycle then repeats at a rate governed by the set value of R3, the tone control.

The pulsing base current, that is, the oscillator tone, is developed across R5, where the signal is coupled through the normally closed contacts of the phone jack to the speaker.

When I started this project, I was completely unfamiliar with unijunction transistors, so this was a great opportunity to advance my electronics knowledge. I was thrilled that both 4JX5E670s in my two CPOs were still functional, as I also discovered that today they are 'unobtainium.'

A previous owner had apparently gutted these HD-16s for parts. Three of the four 9-volt battery snaps were gone, and one unit was missing its bayonet lamp holder, along with the C-cell battery holder. The C-cell holder in the other unit was filthy and extremely corroded. I replaced all with new modern parts.

One of the 10K tone potentiometers was gunked up to the point that the shaft would not turn. I replaced it with one from my parts box and cleaned the other pots and switches with DeOxit. I also replaced C1 in both CPOs with new Mylar caps I had on hand, but left the original carbon resistors in place.

I flipped one HD-16 at NEARfest the following spring for \$20, making a tidy profit (yay capitali\$m!) while the other remains a prized functional piece of gear in my shack.

A more in-depth version of this article, including more information on the unijunction transistor, can be found on my blog [here](#).

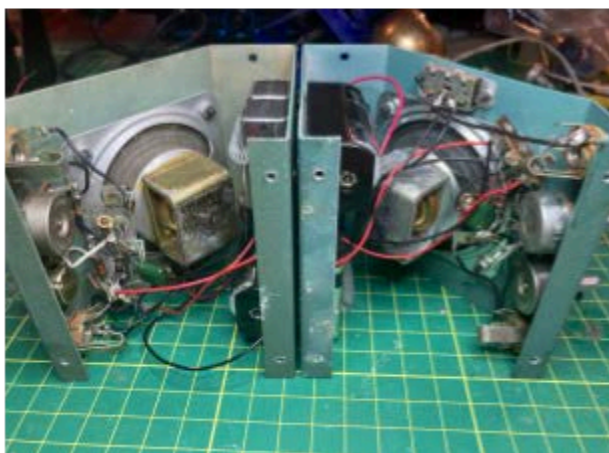




**CLOCKWISE FROM TOP LEFT:**

**Before: What \$10 will get you at the HamX Flea in Marlboro.**

**After: With blacked out finish and my Morse Express straight key.**

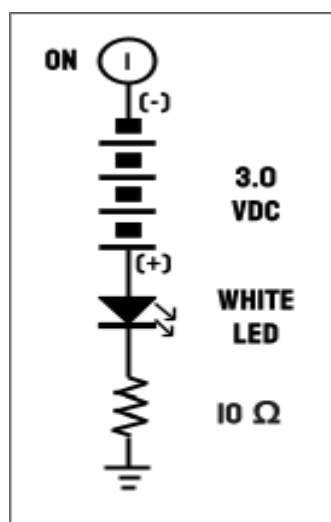


**The guts with replacement parts installed.**

**My two CPOs, side by side, restored and ready for final assembly..**

### The Saga Continues...

When I inspected my HD-16 before bringing it to the OEM last month, I discovered the 1.5V lamp was burnt out. While I had spare bulbs on hand, I decided this was a fine opportunity to modify the unit by replacing the dim incandescent bulb with a bright white LED.



**EASY PEASY LED MOD FOR HD-16 CPO**

I chose to replace the C-cell battery that powered the incandescent bulb with a new battery clip that held a pair of AA batteries to produce 3.0 VDC. According to the datasheet for my white LEDs, the forward voltage was listed as 2.7 - 4.2 VDC, with a maximum current rating of 30 mA, so I thought I could skip the dropping resistor jazz altogether.

Before installation, I tested the LED with the 3.0 battery, and it lit up brightly without showing any signs of burning out.

However, after sharing my plan with Dave, NZ1J at the OEM, he cautioned me to use any low-value resistor in the circuit, even if the battery voltage was within the published specifications for the LED.



Dave's advice was, as usual, solid. If we recall the electrical fundamentals we learned when studying for our first ticket, we know it's not the voltage - it's the current, stupid!

A battery's output voltage is relatively constant, but an LED's resistance is highly non-linear. Once it reaches its forward voltage, the LED has low resistance. Without a resistor, the available voltage from the battery could drive an overwhelming amount of current, which would quickly destroy the LED. The resistor provides the necessary constant opposition to current flow to keep the LED safe from the constant voltage of the battery.

So, let's do the math... Using Ohm's Law, we can calculate the value of the resistor:

$R = \frac{V_s - V_f}{I_f}$	$V_s$	= Source voltage in volts	
	$V_f$	= LED forward voltage in volts	
	$I_f$	= LED forward current in A	
	$R$	= Resistance in ohms ( $\Omega$ )	
$R = \frac{3.0 - 2.8}{0.03}$	$V_s$	= Source voltage in volts	3.00 V
	$V_f$	= LED forward voltage in volts	2.80 V
	$I_f$	= LED forward current in A	0.03 A
		NOTE: 30 mA / 1000 = 0.03 A	
	$R$	= Resistance in ohms ( $\Omega$ )	

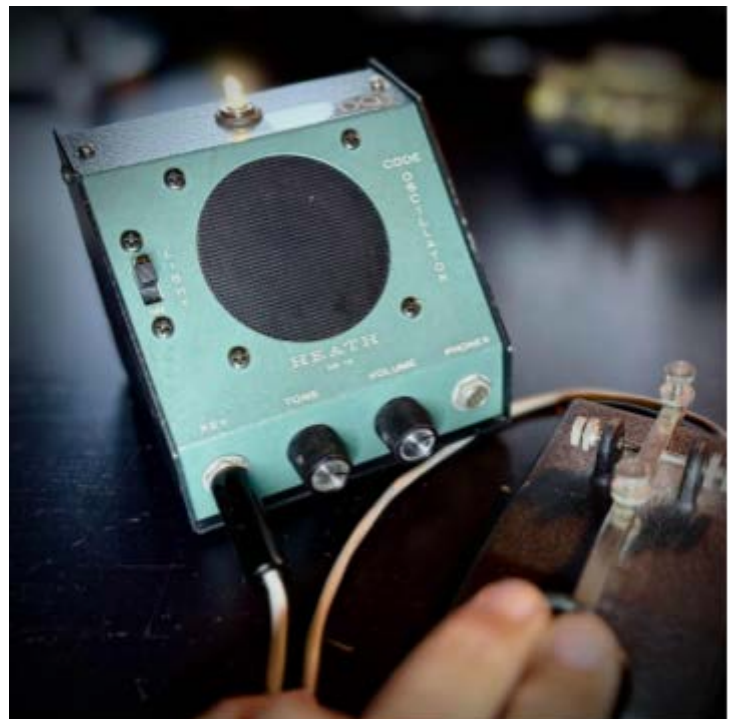
$$R = 0.2 / 0.03 = 6.667 \Omega$$

So I rounded up and soldered a 10-ohm resistor in series with the LED, and I am loving the results.

The LED is super bright, and the AA batteries ought to last a very long time - which is a good thing as the HD-16 doesn't have an easy-to-remove battery cover - to change the batteries for the audio or light circuit, you must remove a total of six screws - YIKES!



**73 de**  
**AB1DQ**  
*"Jimmy"*



The completed LED modification for my HD16 - it's wicked bright and beautiful!



Join us - October 12, 2025

## 33rd Annual Nutmeg Hamfest & ARRL Connecticut State Convention

MALONEY HIGH SCHOOL, 121 Gravel Street, Meriden CT  
MERIDEN AMATEUR RADIO CLUB

### SCHEDULE OF EVENTS

6:00 AM	Tailgate & Vendor Setup
8:00 AM	Doors open to the public
8:30 AM-10:00 AM	VE SESSION in ROOM 113
8:55 AM	Door Prize Drawing
9:00 AM-09:50 AM	FORUM SESSION ONE*
9:55 AM	Door Prize Drawing
10:00 AM-10:50 AM	FORUM SESSION TWO*
10:55 AM	Door Prize Drawing
11:00 AM-11:50 AM	FORUM SESSION THREE*
11:55 AM	Door Prize Drawing
12:00 PM	GRAND PRIZE DRAWINGS
12:10 PM	CERT ROUND TABLE

### ACTIVITIES

**FREE** Handheld Radio Programming  
by Mike, KC1MJZ

**LIVE** CW Demonstration  
with "Railroad Bob," WB1GYZ

**VISIT** the ARRL Table  
Renew your membership, and learn  
about 2026 "Year of the Club"

**ENJOY** Delicious Hot Food  
Hot Fresh Breakfast Sandwiches,  
Sweet Moist Muffins  
& Robust Aromatic Coffee

**Grand  
Prizes!**

1ST PRIZE

YAESU FT-70DR 144/430MHZ DUAL BAND  
DIGITAL HANDHELD TRANSCEIVER

2ND PRIZE

COAXIAL CABLE CRIMP KIT

- Courtesy of QuickSilver Radio

3RD PRIZE

KJI ELECTRONICS GIFT CERTIFICATE



### Special Sessions...

VE SESSION - STATE OF THE ARRL 2025 - CT CERT ROUND TABLE

### Forums

WOMEN INNOVATORS IN HAM RADIO - OUR ANTARCTICA DX-EXPEDITION

WINLINK FOR ARES - INTRODUCTION TO DIGITAL MODES

TECHNICIAN FORUM: 2 METERS / 10 METERS / SATELLITE OPS / FOX HUNTING

CT POTA GROUP: ACCOUNT SET UP / EQUIPMENT / APPS / COLLABORATION / LOGGING

### MARC Members...

**Sell your used gear  
at the Club Table!**

Set your price & we sell it  
for a modest 10% cut (up to \$25)

**It's a WIN-WIN-WIN!!!**

Your item gets great exposure  
You are free to enjoy Nutfest  
MARC gets a donation.

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# MARCONI on Contesting

*by Eric Knight, KB1EHE & Elsie Mathews, KB1IFZ*



The MARCONI Program, conceived by former MARC President Ed Snyder, W1YSM, was developed as part of a grant awarded through the ARRL Club Grants Program, beginning in September 2022. The Project is designed to help clubs become more active and engaged with their members and the local community. The name MARCONI references both an early innovator in radio communications and is an acronym for "Motivating Amateur Radio Clubs to Open New Initiatives."

The MARCONI Program offers a suite of program activities to ham radio clubs in a variety of different areas. As we enter contesting season at this time of year, **KeyKlix** is publishing the Operational Guidelines on Contesting, one of the defined MARCONI Activity Programs.

Our intent in sharing this document is twofold - first to make MARC members more aware of MARCONI, and second to inspire individual club members to become more active in on-air contesting this season. The following document was written by club members Eric Knight, KB1EHE, and Elsie Mathews, KB1IFZ, who also serve as the directors of the MARCONI Contesting Program. Members wishing to learn more about MARCONI or get involved in the project should contact Ed Snyder at [w1ysm@arrl.net](mailto:w1ysm@arrl.net).

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## **Motivating Amateur Radio Clubs to Open New Initiatives (MARCONI)**

### **Program 13: CONTESTING: Its Role in Keeping a Club Vibrant**

Program Directors: Eric Knight, KB1EHE & Elsie Mathews, KB1IFZ

#### **Operational Guidelines**

**Statement of Program Purpose:** Amateur radio is a hobby built upon curiosity, experimentation, and community. Clubs form the backbone of this world: they bring hams together, preserve traditions, and nurture newcomers. Yet, as with any organization, clubs can face challenges in keeping members engaged and active. One of the most effective tools for maintaining vibrancy and energy within a club is contesting. Far more than a competitive pastime, contesting channels the spirit of radio into a dynamic, social, and educational activity that benefits not only the club but also the wider ham community.

This Program is intended to build upon the natural, dynamic energy of contesting to further energize the camaraderie of a club's members.



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**The Importance of Contesting to Club Activity:** For many clubs, contesting is the heartbeat that keeps organizational blood flowing. Meetings, newsletters, and repeaters are important, but contests create shared goals that demand action. They offer scheduled events where members can come together – whether physically in a club shack or virtually on the air – and unite behind a common purpose.

Contests also give clubs visibility. A strong showing in regional, national, or international competitions builds pride and recognition. Publishing scores in national contest results or in publications such as QST provides a sense of accomplishment and external validation, reinforcing to members that their collective efforts matter. Simply put, contesting turns theory into practice: it transforms passive membership into active participation.

**How Contesting Keeps Members Engaged and Energized:** Without challenges, any hobby can stagnate. Contesting adds adrenaline. The countdown to a contest, the strategy sessions, the late-night operating, and the rush of logging contacts across the globe all inject excitement into the life of a club.

Importantly, contests also create multiple layers of engagement. Some members thrive in high-intensity “run stations” where hundreds of QSOs pour in per hour. Others enjoy quieter “search and pounce” operations. Some hams prefer working behind the scenes, improving antennas or optimizing software. Each of these roles contributes to the team’s success.

The result is a cycle of motivation: contesting provides milestones, those milestones produce achievements, and achievements fuel pride. That pride, in turn, keeps members energized for the next event.

**Equipment Needed for Contesting:** The beauty of contesting is that it scales. At its simplest, one can participate from a home shack with a modest transceiver and a wire antenna. Yet clubs often pool resources to build more elaborate “contest stations” that maximize effectiveness.

A typical club contest station may include:

- **One or more transceivers** with effective filtering for crowded bands.
- **Amplifiers** to boost signal strength, particularly in DX contests.
- **Antennas** ranging from dipoles and verticals to elaborate multi-element beams on tall towers.
- **Logging software** (such as N3FJP or N1MM Logger+) that automates scoring, dupe checking, and post-contest reporting.
- **Networking equipment** to link multiple operators and synchronize logs.
- **Comfortable infrastructure** that includes good seating and lighting, operator-scheduling spreadsheets and/or whiteboards, and plentiful snacks – because contests often last 24–48 hours.

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The technical aspects of contesting can, themselves, create an energizing platform. Clubs can rally members around antenna-building projects, station optimization, experimentation with filters or propagation techniques, and more. The contesting station can thus become a classroom, a workshop, and “mission control” for the contest event itself.

**Types of Contests and How They Differ:** There is a contest for every taste. Some focus on speed and quantity, while others reward technical finesse or geographic coverage.

- **Domestic contests** (like the national ARRL Sweepstakes or regional “QSO Parties”) emphasize contacts within a specific geography and are ideal for clubs focused on local engagement.
- **International contests** (such as the CQ World Wide DX Contest) open the floodgates to worldwide communication, showcasing propagation and global engagement.
- **Specialty contests** may focus on specific bands (e.g., a 10-meter contest), operating times (“sprints”), or unique objectives (like grid-square collection in VHF contests).
- **Field Day** deserves a special mention. While technically an “emergency preparedness exercise” – not a contest – its scoring system and fun spirit make it a hybrid event. With its blend of competition and public outreach, clubs often see their largest member turnout during Field Day weekend activities.

Each contest has its own rules, multipliers, and strategies. This variety keeps things fresh and ensures that different member skill sets find their place.

**SSB vs. CW vs. Digital Modes...and Beyond:** Contesting reflects the rich diversity of amateur radio operating modes.

- **SSB (voice)** contests are often the most accessible for newcomers: speaking into a microphone is intuitive. “Pileups” on SSB can be intense, giving operators a thrilling sense of scale and action.
- **CW (Morse code)** contests reward precision and endurance. Though intimidating to beginners, CW has enduring appeal due to its efficiency, especially under poor conditions. Kids, in general, are particularly fascinated with this unique “dit-dah” language, and it is a great draw for this younger crowd.
- **Digital modes (RTTY, FT8, FT4)** have surged in popularity in recent years, combining the computer age with contesting tradition. Digital contests demand mastery of software integration, propagation awareness, and discipline in timing.
- **Specialized modes** – from satellites to microwave bands – expand horizons further, often drawing niche experts into the contesting fold.



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Encouraging members to try different modes not only diversifies their skills but also broadens the club's overall capabilities.

**Contesting and Club Camaraderie:** Contests build bonds. When members operate in shifts through a long weekend, they share stories, meals, and triumphs. Struggling through a noisy band together at 3 a.m. or celebrating a rare DX multiplier creates memories that transcend the radio waves.

The teamwork required in contesting is unique. Operators depend on loggers, stations depend on antenna builders and deployers, the hourly teams depend on operator scheduling and synchronization, and everyone shares responsibility for the final score. Unlike solitary operation, contesting transforms radio into a collective sport.



Many clubs find that contest weekends rival any other social event on their calendars in creating durable club energy. In fact, long-term friendships often trace their roots back to contesting tents or shacks.

**How a Club Gets Started with Contesting:** For clubs new to contesting, the hardest step is simply deciding to try. Fortunately, the barrier to entry is low.

1. **Choose a contest** aligned with your members' interests and equipment. ARRL Sweepstakes or Field Day are excellent starting points.
2. **Set modest goals** – such as submitting a log, making 100 contacts, or activating a new band.
3. **Use existing resources.** Before investing in dedicated equipment, perhaps a club member volunteers to bring to the club's meeting space his or her home transceiver. As far as antennas: think simple. Even a modest dipole can provide surprising performance in the high-band activity of a popular contest.
4. **Promote inclusivity** by offering roles for all members, from operators to loggers to cooks.
5. **Debrief after the contest** to celebrate successes and brainstorm improvements.

Momentum can build quickly. Success in one contest often inspires greater ambitions for the next.

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**How to Add Fresh Sparks to a Seasoned Club:** It's easy for long-standing clubs to get stuck in the same monthly routines – monthly club meetings, club newsletters, club nets, etc. A pinch of contesting can be a welcome ingredient to take the club's spirit to the next level. And the spices to do so are already resident in most clubs. For instance:

1. **Ask senior club members** to speak at club meetings about prior club contests. Encourage them to particularly touch upon unexpected – but ultimately fun – circumstances that have become club lore. Like the time Norm got his foot stuck in the hole of a temporary tower being dug for Field Day. Goofy circumstances, operating-gear improvisations, and tall tales from the wee hours of an event – all paint a picture of the lighthearted dimension of contesting.
2. **Resurrect contest clippings** from old newsletters and other club archives and give them new life in the club's modern communication environments. Highlighting the exuberance and team pride of prior contesting efforts can ignite a fresh flame within the club. Maybe even rekindle a competitive spirit. "Our club achieved second-place, nationwide, in the 1987 Sweepstakes Phone. Let's see if we can beat that score!"
3. **Team up with a Scout Troop** in an upcoming contest to help the scouts earn their Radio Merit Badge. Contact your local Scout leaders. You may be surprised at how eager they could be to provide an exciting exercise for the kids. The icing on the cake: Your club members get to be "kids" again, too!

It's interesting to note that top-tier contesting clubs also enjoy nurturing fledgling clubs and working with clubs that request a bit of a club-activity nudge. In fact, it is not uncommon for multiple clubs to team up to tackle a big contesting event. The organic nature of contesting – within clubs and between clubs – can add spontaneity and new fuel to just about any group of hams.

**The Role of Elmering New Hams Through Contesting:** "Elmering" has long been the term for mentoring new hams. Contesting is one of the best vehicles for this tradition.

New operators may feel intimidated by complex equipment or the rapid pace of contest exchanges. With a seasoned operator sitting beside them, however, they learn by doing. They absorb rhythm, etiquette, and technical nuances in a supportive environment.

Moreover, contesting provides tangible progress markers. A new ham may start by logging, then graduate to making a few QSOs, and eventually handle a run station. Each step builds confidence. Clubs that emphasize Elmering through contesting not

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only grow their operator base but also pass on the culture of amateur radio itself.

**Contesting's Broader Role: Expanding the Overall Ham Base:** Beyond the confines of individual clubs, contesting plays a significant role in sustaining and growing amateur radio at large.

- **Families:** Contest weekends often become family events. Children log contacts, spouses take turns preparing food, and everyone shares in the excitement. Many lifelong hams trace their first exposure to contests as kids watching a parent or grandparent operate.
- **Students and schools:** Contesting provides a gateway into science, technology, engineering, and mathematics (STEM). University radio clubs thrive on contests, which give students hands-on experience with electronics, computers, and communication theory.
- **Public visibility:** Events like Field Day put amateur radio on display. Passersby who see antennas in the park or local news stories often become curious. Some ultimately earn their licenses, ensuring the hobby's future.
- **Skill development:** Contesting sharpens technical and operational skills that translate to emergency communications – a core justification for amateur radio's spectrum privileges.

By keeping clubs strong and welcoming, contesting indirectly supports the health of the entire amateur radio service.

**Contesting is far more than a scoreboard:** It is a catalyst for energy, engagement, and education within ham radio clubs. By giving members common goals, shared experiences, and practical challenges, contesting sustains vibrancy and builds resilience. From mentoring newcomers to inspiring future engineers, contesting connects generations and communities.

In the end, a club that contests together thrives together. The radio waves may carry the signals, but it is contesting that carries the spirit of amateur radio forward.   △

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The MARCONI Project is funded by a grant to the Meriden Amateur Radio Club, W1NRG, from the Amateur Radio Digital Communications Foundation, administered by the ARRL

MARCONI PROJECT:	CONTESTING Program Directors:	Eric Knight, KB1EHE Elsie Mathews, KB1IFZ
	MARCONI Director:	Edward Snyder, W1YSM



# September Radio Active Members

**Constantino Tobio, KA1BMF**, ended the month of August with another family POTA activation, this time at US-1716 Sherwood Island State Park on Sunday the 31st. He made 40 FT8 contacts on 20M inside of an hour on his POTA Performer and reported great band conditions.



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MARC Station Activity Manager, **Rob Cichon, K1RCT**, and his friend, **Shawn Warren, KC1NQE**, enjoyed a successful activation of Sleeping Giant, US-1717, on September 13, logging 40+ QSOS on 40M SSB.

A week earlier, **Constantino Tobio, KA1BMF**, had a quick POTA at Sleeping Giant on September 7. Constantino reported rain that let up when he arrived, but still allowed for setting up in the picnic pavilion.

Reporting great conditions on 20M that day, Constantino logged 35 QSOS in about an hour, including an FT8 contact with Shawn, and a handful of DX contacts.

**Be sure to stop by the CT POTA Activators' Group Seminar at the NUTMEG HAMFEST on October 12!**

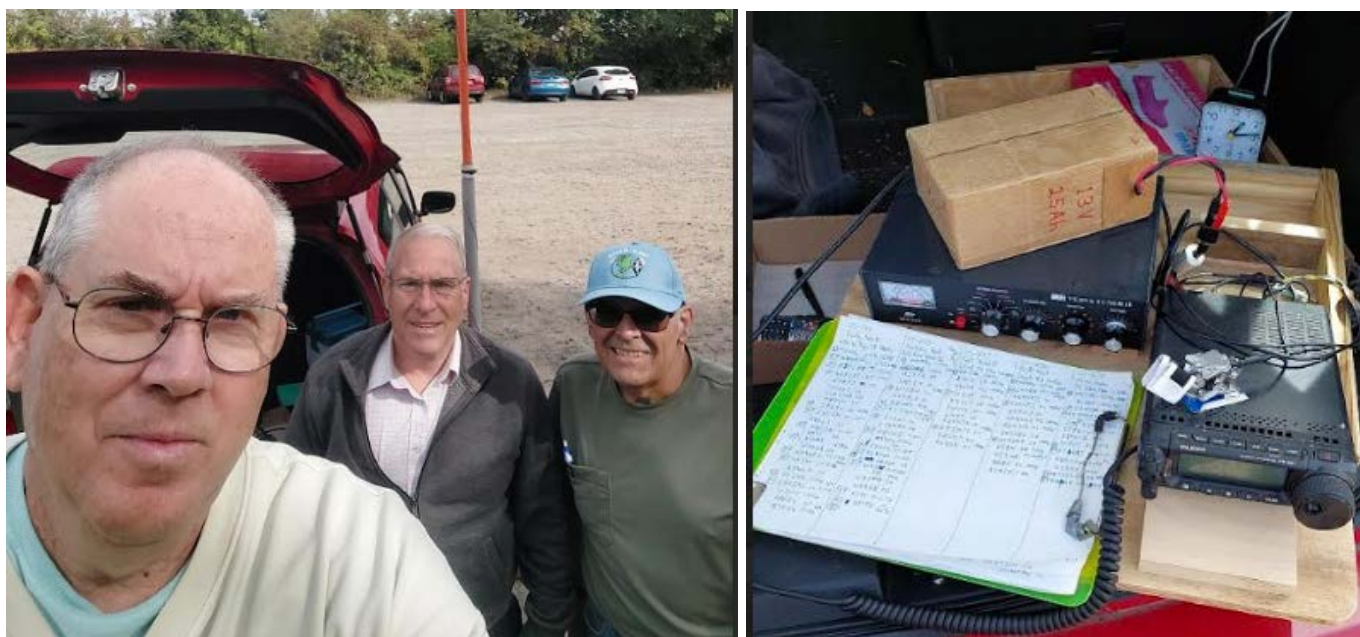


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On Tuesday, 16 September 2025, **Dave NZ1J**, **Ted KC1DOY**, and **Jim KC1TSG** embarked on a five-park POTA rove to southeastern Connecticut. They hit five new parks for them and made 85 QSOs each, a total of 255 for the group.

The parks were: Haley Farm State Park in Groton, US-1675, Bluff Point State Park in Groton, US-1650, Fort Trumbull State Park in New London, US-1667, Harkness Memorial State Park in Waterford, US-1677, and Rocky Neck State Park in East Lyme, US-1711

The weather was perfect for a rove, although band conditions on 40 meters were terrible. They switched to 20 meters and had good luck in each of the parks. We each have multiple Warthog POTA awards, and there is no doubt that we will be shooting for Rhino sometime soon.



**Reporting and photos by KC1DOY and KC1TSG**

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***What's better than a Five-Park POTA Rove? TWO Five Park POTA Roves! Just 3 days later, Ted and Dave were back at it again...***

Too much of a good thing is never too much. On Friday, September 19, 2025, they completed another five park roves spanning Connecticut and Rhode Island. It was a full day operating Barn Island WMA, US-10656 in Stonington, Pawcatuck River WMA, US-6868, Arcadia Management Area, US-6979 in West Greenwich, RI, Carolina WMA, US-6989 in Richmond, RI, and Rocky Point State Park, US-2979 in Warwick, RI. Dave and Ted each made 112 QSOs for a five park Rove total of 224.



They left earlier than normal with the extra travel time. The duo decided to avoid wildlife management areas as travel within them involves some very poor roads as well as poor cell phone coverage, making for difficult spotting.

Dave and Ted rewarded themselves with a meal at Iggy's Chowder in Warwick, RI, a popular spot that might have been harder to get in if they were roving during the height of the tourist season

~ Ted, KC1DOY



***What's better than 2 Five Park POTA Roves? 3 Five Park POTA Roves! Just 4 days later, Ted and Dave were back at it again with Jim. Here's even more from Ted...***

I'm going to come right out and say that POTA has become one of the most, if not the most, popular activities of MARC. Tuesday, 23 September 2025, saw yet another 5 Park Rove by Dave NZ1J, Jim KC1TSG, and me, Ted KC1DOY.

We covered the following parks: US-10952 Paugussett State Forest, US-1707 Putnam Memorial State Park, US-7545 Wooster Mountain State Park, US-1647 Bennett's Pond State Park, and US-1671 George Waldo State Park

Wooster Mountain is also a state shooting range, which provided a different type of QRN to our activation. We each made 80 QSOs for a total of 240 for the day. Conditions ranged from good to barely readable, but we had a good time. I recommend checking cell phone coverage when choosing a park. Spotting our activation wasn't always easy with a fluctuating one-bar cell signal.

Fall is a great time for POTA or any other outdoor activity, so don't just think about it, make it happen!

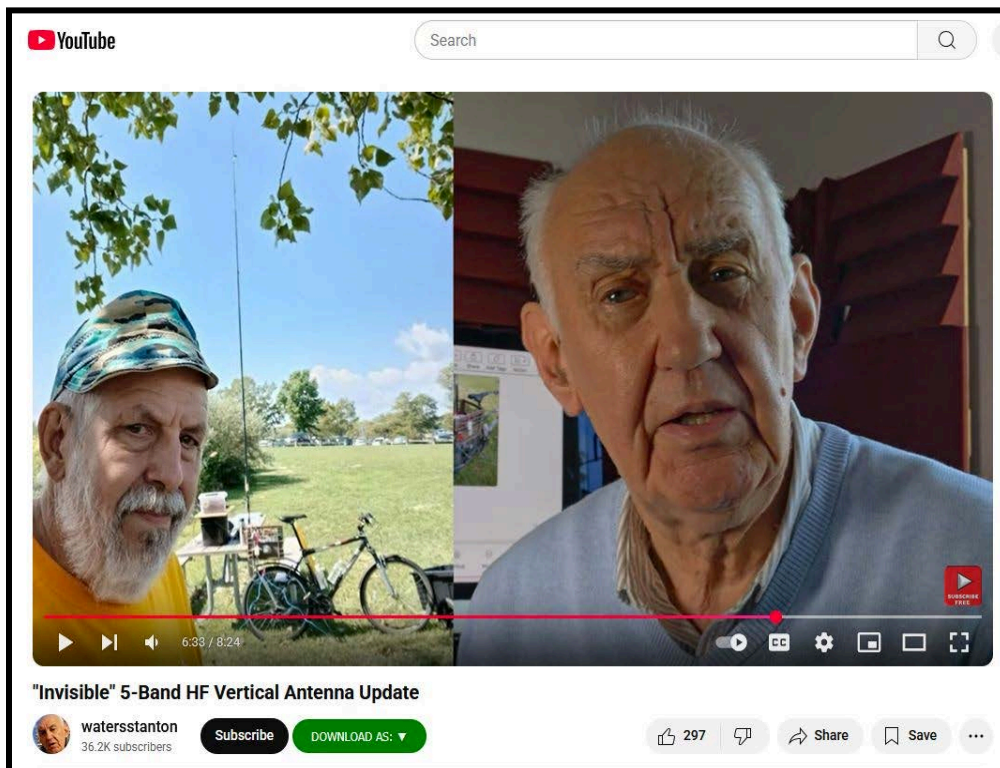
~Ted KC1DOY



**Paul Clark, WA1MAC**, was trying out a new antenna for his bicycle mobile operations (see the August **KeyKlix** for details), comprised of a 13' mounted vertical radiator a \$10 AliExpress 5.4m mast and radials, with either a 4:1 Reliance balun or the little AliExpress Z-Match in September. He discovered both the balun and Z-Match performed equally as well as the other, as did the internal tuner on his Xiegu X6100 and the antenna tuned up fine from 40 to 10 meters in all 3 configurations

But then Paul got a nice surprise as he was wrapping things up. He heard a QSO ending on 30m so he dropped his call, and the other operator in Palmyra, VA, came right back. After 'exchanging pleasantries,' Paul was shocked to discover the X6100 was still set to 0.1 watt output, the low power setting he was using to tune up the Z-Match. Talk about your QRPP!

Paul commented, "You never know... I love this hobby (obsession?)"



Paul got another surprise last month when he and his bicycle trailer POTA rig were also mentioned by Peter Waters, G3OJV, proprietor of Waters and Stanton, on his YouTube video entitled "Invisible" 5-Band HF Vertical Antenna Update, published on September 16. Jump to Paul's mention [here](#) or view the entire video, click [here](#). The video itself provides useful information on impedance matching for this compact and versatile antenna.

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# NEAR-fest XXXVIII

## *New England Amateur Radio Festival*

is this Friday & Saturday!!  
OCTOBER 3rd & 4th 2025

*Gates open at 8 am on Friday and 7 am on Saturday*  
*Advanced ticket holders can get in early, starting at 7 am!*

*Closing ceremonies at 2 pm on Saturday*

*Weather Forecast: 70s - low 80s and Lots of Sunshine!*

**COME TO BEAUTIFUL NEW BOSTON, NEW HAMPSHIRE**

Hillsborough County 4H Fairgrounds ♦ 17 Hilldale Lane ♦ New Boston, NH

GPS Coordinates: Lat: 42.98247 Lon: -71.68227

**Talk-In Event Repeater 444.200+ PL 186.2 Mt. Uncanoonuc, N1PA**

Join us for two incredible days of ham radio, camaraderie, and fun against the backdrop of crisp autumn air and breathtaking New England fall foliage. Explore the legendary NEAR-Fest flea market, where the thrill of the hunt is half the fun, and you're bound to discover treasures (and parts you didn't even know you needed).

<https://near-fest.com/>

**FLEA MARKET ♦ GO BOX CHALLENGE ♦ OVERNIGHT CAMPING**  
**LICENSING EXAMS ♦ FOX HUNT ♦ COMMERCIAL VENDORS**





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# NEW from Baofeng, the UV5R MINI

## *A hands-on review by AB1DQ*



Baofeng has introduced a new miniature version of the ubiquitous UV5R. Beyond the compact size, the new inexpensive handheld offers several new features, including a multi-color LED screen, USB charging, Bluetooth programming, CHIRP support, and dual VFO with dual watch and dual PTT. Also new is VHF AM air band reception. Taking a page from TID Radio, the UV5R MINI is available in a variety of colors and remains dirt-cheap, currently retailing for a single Jackson on Amazon.

How much can one expect from a \$20 radio? Let's find out...

### **My Experience**

Because one can never have enough HTs, I leapt at the opportunity to get my hands on the MINI. I discovered, though, that Amazon retailers were only selling the MINI in 2 packs for \$40 and since I didn't "need" 2 radios, Mike, K1LHO, was happy to take the plunge with me. I ordered our radios from Amazon on August 30, and they arrived 10 days later, perhaps via a literal "slow boat from China."

### **What's in the box?**

The radio comes packed in a small, white, corrugated box, with the radio and all accessories in a thin, plastic inner tray. Included was a stubby 2M/440 antenna, a laughably awful counterfeit Nagoya NA-771 whip antenna, a USB cable and AC charging block, a belt clip, an earbud with a microphone, and a surprisingly well-written glossy 21-page English User's manual.

Printed on the cover of the manual were QR codes to download the Android or iOS app. The app, Ola Radio, is published by Baofeng and currently has a 1.7-star rating (out of 5) in the App Store, which I felt was a bit harsh.

### **Pairing and programming.**

Pairing the radio to my phone via Bluetooth was intuitive, and both devices found each other immediately. The app can be used with several new Baofeng radios, and I found it clean and intuitive. The only thing that vexed me was the app's nomenclature for memory sets, "Plan," which is where you can create and store different memory sets.

I was able to quickly program over all of the New Haven County repeaters by entering the repeater name, input and output frequency, and CTCSS code for each



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on my phone. Upon entering the basic data for a repeater, the Next button takes you to the next memory.

The software also has a tab to set the parameters for the frequency mode, band limits, scan settings, etc, and another tab for global settings, including power levels and display settings.

Although programming via the app was straightforward, I encountered frustration when the Bluetooth connection dropped a couple of times. Be sure to save your file to a "plan" periodically and again before attempting to leave the programming screen. Otherwise, your work will be lost - don't ask me how I know this, just thank me for the tip.

One curiosity that caught my attention is that before the app will flash the memories to the radio, a consent/warning screen appears requiring the user to indicate that you hold the proper licenses for transmitting, and will use the radio responsibly. What is particularly cute is that there is a five-second delay after the text appears, supposedly so you will take the time to read the statements you are agreeing to before pressing "Accept." Apparently, they have lawyers in China, too.

### **First impressions and getting on the air.**

Things I noticed and liked initially included that the belt clip neatly snaps into the radio, no fiddly minuscule screw to lose, and the overall size and heft of the radio felt really good in my hand. The build quality of the radio and fit and finish seem to be quite good, with a marginally more premium feel than the standard UV5R.

Like the best HTs out of China, the MINI has the essential flashlight now with a dedicated button on the keypad for steady or flashing illumination.

The MINI is a dual-watch radio with dual transmit. This is a nifty feature as you can set two different frequencies on each VFO, and it is possible to use Memory mode on one VFO and Channel mode on the other. There are two PTT buttons, one for each VFO, so there is no need to hit the A/B button to respond to a call on the other VFO. I like that.

Here are some of my initial gripes. While I like the bright multi-color LED screen, after it times out, you can't tell that the radio is on while monitoring a single frequency with the squelch on; there is no LED or other illuminated indicator that the radio is on. You can program an auto-off timer, though, so that may help prevent finding a dead battery the next time you need the radio.

Like all Baofengs, the MINI has the same annoying female voice announcing every key press - but like all other Baofengs, this can be easily disabled from the menus.

Speaking of menus, I give props to Baofeng for a very clean, nicely nested, and brief menu on the radio. Like the app, the menus were intuitive, and I found it easy to directly enter a frequency or program a memory from the keypad.

There are a couple of useful key functions you should know. Pressing and holding the [0] button opens up the NOAA WX bands - very handy - and to start a memory or frequency scan, you press and hold the [#] key. Beneath the 2 PTT buttons, there is a 3rd button, the SK1 button, which is user programmable. It can be set for the FM Radio, Scan, Search, Vox, Lamp, or "SOS" features. I set mine to FM radio as I don't know any other way to tune to the FM broadcast band.

Another "Easter Egg" I discovered is that pressing and holding the MENU button starts a stopwatch app.

The airband reception was the biggest disappointment in my experience. I had no problem keying in frequencies for Bradley, Tweed, and the NYC airports, but heard nothing on the whip antenna indoors at my home QTH. Worse, while at the JFK airport last month, I was able to tune to pick up both tower and ground frequencies, but the audio was horribly garbled and mostly unintelligible.

If you are interested in picking one up, you can find it on Amazon [here](#).



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**SPECTACULAR SPOOKY SEASONAL SAVINGS**

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Fun Size CANDY ON SALE  
Buy One - Get Two FREE!**





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**CHEESIEST**  
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**EXACTING**  
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## Get On the Air...

# SELECTED EVENTS & OPPORTUNITIES

CONTESTS: Click on hyperlink for more info...

- |  |                                |
|--|--------------------------------|
| • <a href="#">10-10 Int. 10-10 Day Sprint</a>              | 0001Z-2359Z, Oct 10            |
| • <a href="#">Makrothen RTTY Contest</a>                   | 0000Z, Oct 11 to 1559Z, Oct 12 |
| • <a href="#">ORP ARCI Fall OSO Party</a>                  | 0000Z-2359Z, Oct 1             |
| • <a href="#">Oceania DX Contest, CW</a>                   | 0600Z, Oct 11 to 0600Z, Oct 12 |
| • <a href="#">Scandinavian Activity Contest, SSB</a>       | 1200Z, Oct 11 to 1200Z, Oct 12 |
| • <a href="#">SKCC Weekend Sprintathon</a>                 | 1200Z, Oct 11 to 2359Z, Oct 12 |
| • <a href="#">PODXS 070 Club 160m Great Pumpkin Sprint</a> | 2000Z, Oct 11 to 2000Z, Oct 12 |
| • <a href="#">4 States ORP Group Second Sunday Sprint</a>  | 0000Z-0200Z, Oct 13            |
| • <a href="#">NTC OSO Party</a>                            | 1900Z-2000Z, Oct 16            |
| • <a href="#">JARTS WW RTTY Contest</a>                    | 0000Z, Oct 18 to 2359Z, Oct 19 |
| • <a href="#">10-10 Int. Fall Contest, CW</a>              | 0001Z, Oct 18 to 2359Z, Oct 19 |
| • <a href="#">Worked All Germany Contest</a>               | 1500Z, Oct 18 to 1459Z, Oct 19 |
| • <a href="#">Stew Perry Topband Challenge</a>             | 1500Z, Oct 18 to 1500Z, Oct 19 |
| • <a href="#">Asia-Pacific Fall Sprint, CW</a>             | 0000Z-0200Z, Oct 19            |
| • <a href="#">Run for the Bacon ORP Contest</a>            | 2300Z, Oct 19 to 0100Z, Oct 20 |
| • <a href="#">ARRL School Club Roundup</a>                 | 1300Z, Oct 20 to 2359Z, Oct 24 |
| • <a href="#">SKCC Sprint</a>                              | 0000Z-0200Z, Oct 22            |
| • <a href="#">CQ Worldwide DX Contest, SSB</a>             | 0000Z, Oct 25 to 2359Z, Oct 26 |
| • <a href="#">ARRL Sweepstakes Contest, CW</a>             | 100Z, Nov 1 to 0300Z, Nov 3    |

STATE OSO PARTIES:

- |  |                                |
|--|--------------------------------|
| • <a href="#">Nevada OSO Party</a>       | 0300Z, Oct 11 to 2100Z, Oct 12 |
| • <a href="#">Arizona OSO Party</a>      | 1500Z, Oct 11 to 0500Z, Oct 12 |
| • <a href="#">Pennsylvania OSO Party</a> | 1600Z, Oct 11 to 2200Z, Oct 12 |
| • <a href="#">South Dakota OSO Party</a> | 1800Z, Oct 11 to 1800Z, Oct 12 |
| • <a href="#">New York OSO Party</a>     | 1400Z, Oct 18 to 0200Z, Oct 19 |
| • <a href="#">Illinois OSO Party</a>     | 1700Z, Oct 19 to 0100Z, Oct 20 |

## Hamfests...

- [NEAR-fest XXXVIII](#)  
10/03/25 8 AM - 10/04/2025 2 PM - Hillsborough Fairgrounds, New Boston, NH
- [Nutmeg Hamfest, ARRL Connecticut State Convention](#)  
10/12/25 8 AM - 1 PM - Maloney High School, Meriden, CT
- [SECARS Fall Auction](#)  
10/18/25 - Our Lady of Lourdes Parish Hall, Gales Ferry, CT 06335



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## *Weekly W1NRG Nets... On the Air all week long!*

### *Sunday:*

**ELMER NET**

**SUN 7:30 pm VIA ZOOM**

See the MEMBERS AREA of the website for access

### *Monday:*

**NEW HAVEN/MIDDLESEX SKYWARN NET**

**MON 7:00 pm W1NRG/R 147.360+ PL 162.2 Hz**

**6 METER SSB NET**

**MON 8:00 pm 50.175 MHZ USB**

### *Tuesday:*

**2 M FM NET**

**TUE 7:00 pm W1NRG/R 147.360+ PL 162.2 Hz**

**10 M 10-10 CASTLE CRAIG NET**

**TUE 8:00 pm 28.375 MHZ USB**

### *Wednesday:*

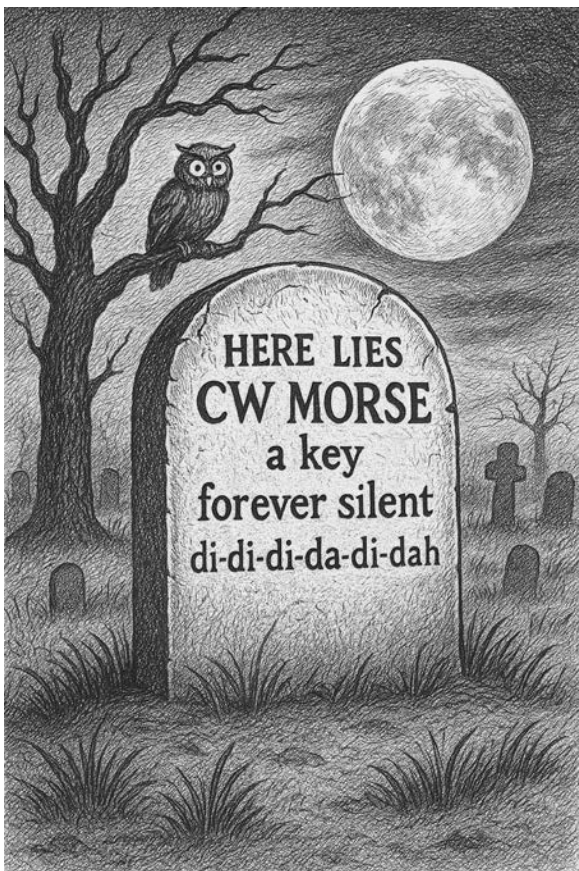
**JUST PUSH THE BUTTON NET**

**WED 7:00 pm W1NRG/R 147.360+ PL 162.2 Hz**

### *Saturday:*

**COFFEE CUP NET**

**SAT 9:00 W1NRG/R 147.360+ PL 162.2 Hz**



## *OEM Saturday Open House...*

### *It's the place to be!*

Come to the OEM at 143 Hope Hill Road on Saturday Mornings for the MARC Weekly Open House.

Join us starting at 9:00 AM to meet fellow club members in a social setting and participate in various ham radio activities.

**REMEMBER...**

**SOMETIMES  
WE HAVE  
DONUTS!**

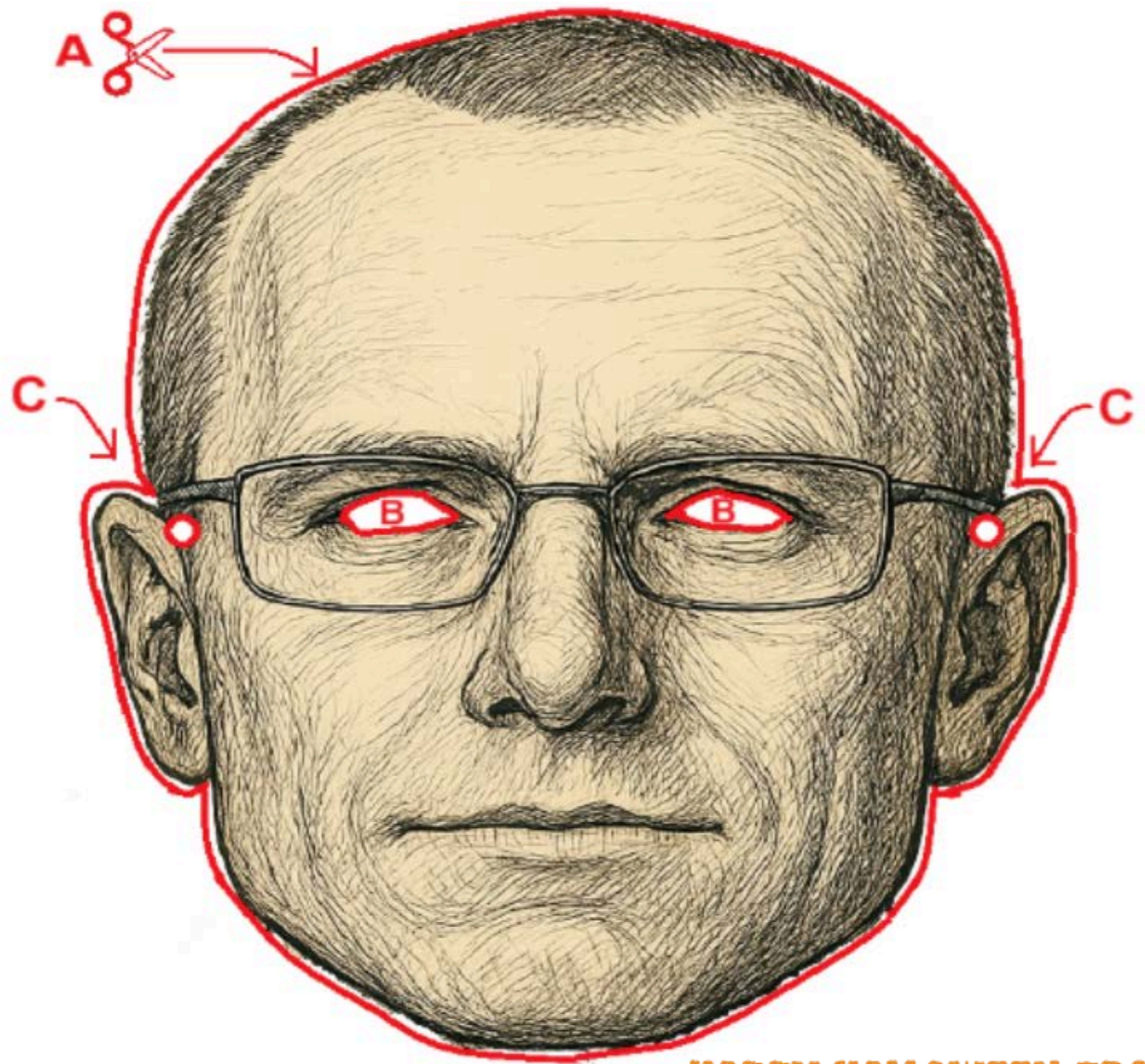




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- B.) CUT OUT EYES WITH ONE OF DAD'S RAZOR BLADES.**
- C.) TIE SOME TWINE FROM MOTHER'S BASKET OF SORROWS TO THE HOLES ABOVE THE EARS TO TIE MASK TO YOUR THICK SKULL.**

**HAPPY HALLOWEEN FROM  
Key Klix!!!**

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# Key Klix *Klassified* - Buy, Swap & Sell...

*NOTE: UNLESS INDICATED OTHERWISE, Photos below are not of the actual items, but are included solely for reference purposes.*

## ITEMS FOR SALE

### Quansheng UV-K5(8) 5W UHF/VHF HT \$15

Condition: Unused / Like new - no box  
Bought to hack & mod, never did.

Email JIMMY AB1DQ - [james@ab1dq.com](mailto:james@ab1dq.com)



### Daiwa CN901HP SWR/Power Meter \$175/BO

Condition: Very good  
Will handle 2,000 watts

Email DON W1BRY [d.chepurna@snet.net](mailto:d.chepurna@snet.net)



### Kenwood HS-5 headphones \$75

Email DON W1BRY [d.chepurna@snet.net](mailto:d.chepurna@snet.net)



### ICOM IC-R10 Receiver \$200

Condition: Mint in box

Email JOE N1LES [jmurray407@aol.com](mailto:jmurray407@aol.com)



### RadioShack Pro2096 Dig Scanner \$185

Email JOE N1LES [jmurray407@aol.com](mailto:jmurray407@aol.com)



### Heathkit VF1 VFO \$65

Condition: Very Good

Email RICH KB1FGC [Marzo7088@yahoo.com](mailto:Marzo7088@yahoo.com)





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**Ameritron ALS 600W Amp** **\$850**  
Condition: Good  
Email RICH KB1FGC [Marzo7088@yahoo.com](mailto:Marzo7088@yahoo.com)



**Bendrix Straight Key** **\$50**  
Condition: Good  
Email RICH KB1FGC [Marzo7088@yahoo.com](mailto:Marzo7088@yahoo.com)

**5 FT Pull Down Projection Screen FREE**  
Condition: Good - come & get it.  
Email AL N1API [n1api@cox.net](mailto:n1api@cox.net)

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**Kenwood TS680s HF+6M transceiver** **\$325**  
Condition: Exc. w. Hand mic, power cord  
Email: FRANK KC1CAB [KC1CAB@snet.net](mailto:KC1CAB@snet.net)  
\*\*\* ACTUAL ITEM DEPICTED \*\*\*



**Astron RS-20M 20amp power supply** **\$100**  
Condition: Excellent  
Email: FRANK KC1CAB [KC1CAB@snet.net](mailto:KC1CAB@snet.net)  
\*\*\* ACTUAL ITEM DEPICTED \*\*\*



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**Icom 7300 HF/6M transceiver** **\$775**  
Includes:

- Icom power connector to Powerpole Adapter
- Icom Hand-held mic
- Harbor Freight Apache case, orange
- Side rails, nifty guide, factory box and manual

Email HAROLD WJ1B [WJ1B@arrl.net](mailto:WJ1B@arrl.net)



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us what you're looking for.

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# EDITORIAL PAGE

## *Letters to the Editor*

Want to comment on something you read in KeyKlix? We welcome all feedback, good, bad and ugly (but civil). Write to [keyklix@w1nrg.com](mailto:keyklix@w1nrg.com) with your comments with "LETTER TO THE EDITOR" in the subject line. All letters acknowledged and messages deemed to be of communal interest and that advance the conversation shall be printed in this space.

## *Desperately seeking an Editor*

**Key Klix** has a long and storied history, renowned for consistently providing informative and entertaining content for the local ham radio operator for decades. Now at a crossroads, and to keep this tradition alive, we are actively seeking the right person to take on the duties of Editor permanently.

Are you a bona fide radio cuckoo? Do you relish MARC, and are you active in club events? Do you have a creative vision and possess the mad skills to implement your aspirations? Are you willing to make an earnest commitment to serve in the editor's role for a sustainable period?

**IF SO, WE WANT TO HEAR FROM YOU!** Submit your letter of interest to [president@w1nrg.com](mailto:president@w1nrg.com)

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**Key Klix** is *your* newsletter, and we rely on our fellow members to share their latest radio news to provide engaging content for all. Contributing is a great way to connect with other members who may share or want to learn more about your particular areas of radio interests. Please drop us a line with articles, logs, news of what is happening in your shack, and photos are always most appreciated. Keep Key Klix Kool by sending your news, updates, articles, and photos to [KeyKlix@w1nrg.com](mailto:KeyKlix@w1nrg.com),

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## **Key Klix** OCTOBER 2025

*Has been brought to you by*

INTERIM EDITOR	-	JIMMY SURPRENANT, AB1DQ
PHOTOGRAPHER	-	TED RENZONI, KC1DOY
BIOGRAPHER	-	BOB BIANCUR, WB1GYZ

*Thank you to all of this month's contributors, including...*

AB1DQ  KB1EHE  KB1FZ  KC1DOY  KC1OYN  
KC1TSG  KC1TSM  NZ1J  W1HLP



# MEMBERSHIP ROSTER

*The Meriden Amateur Radio Club is*

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<b>K0OZ</b>	Brian Boccuzzi 25	<b>KC1RBY</b>	Sergio Frutuosa 25	<b>N1NIS</b>	Noah Ludecke 25
<b>K1BTR</b>	Bryan Ragaini 25	<b>KC1RLQ</b>	Eric Barbour 26	<b>N1OKF</b>	Bob Parisi 25
<b>K1DMS</b>	Dave Sack 25	<b>KC1SA</b>	Stephen Allen 25	<b>N1OKR</b>	Frank Ciccone 27
<b>K1JCF</b>	Joe Farrell 25	<b>KC1SDA</b>	Richard McHugh 25	<b>N1OQC</b>	Mike Johnson 25
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<b>K1LYP</b>	John Yusza 29	<b>KC1STF</b>	Julian LoRusso 27	<b>N1PQQ</b>	Greg Cartier 26
<b>K1MAL</b>	Chris Altieri 26	<b>KC1SYU</b>	Jim Cosgrove 25	<b>N1QYB</b>	Bill Witecki Jr 26
<b>K1MMK</b>	Michael MacKennedy 27	<b>KC1TAD</b>	Tom Dipinto 26	<b>N1WCL</b>	David Blasko 25
<b>K1MRE</b>	Mike Easter 25	<b>KC1THU</b>	Mike Zelladonis 26	<b>N1XXU</b>	Andy Purchia 25
<b>K1NEG</b>	Nelson Goewey 26	<b>KC1TKY</b>	Bob Hourigan 26	<b>N1YLN</b>	Edward O'Lena 25
<b>K1PET</b>	Debbie Purchia 25	<b>KC1TKZ</b>	Mark Bonitatebus 25	<b>N1ZN</b>	Jim Savage 25
<b>K1RJC</b>	Rick Castaldo 26	<b>KC1TOV</b>	David Tomlinson 25	<b>N2TAG</b>	Dave Taglianetti 25
<b>K1RCT</b>	Rob Cichon 25	<b>KC1TPN</b>	Rick Foster 25	<b>N2YCH</b>	Conrad Trautmann 26
<b>K1SCI</b>	Stuart Isaac 26	<b>KC1TSG</b>	Jim Drexler 25	<b>N7VGA</b>	Dennis Hanlon 26
<b>K1SMD</b>	Silas Moeckel 25	<b>KC1TSK</b>	Richard Pagano 25	<b>NA1L</b>	Dale Clift 25
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<b>K1TDO</b>	Todd Olsen 25	<b>KC1TSM</b>	Ellen Cosgrove 25	<b>NR1B</b>	Bill Huggins 25
<b>K1TGX</b>	Jerry Molaver 30	<b>KC1TSN</b>	Chuck Caron Jr. 26	<b>NZ1J</b>	Dave Tipping 26
<b>K1UD</b>	Butch Chatfield 25	<b>KC1TSP</b>	Dale Fortin 25	<b>UT3UY</b>	Anatoly Kirilenko 25
<b>K1VDF</b>	John Blevins 26	<b>KC1TST</b>	Mike Boccuzzi 25	<b>W1AJK</b>	Andrew Kazimer 25
<b>K1WJL</b>	Dave Swedock 25	<b>KC1TSW</b>	Charles Caron III 25	<b>W1BJG</b>	Judy Wilkins 25
<b>K1XJ</b>	Kevin Buchanan 25	<b>KC1TSX</b>	Mike Barile 26	<b>W1BRY</b>	Donald Chepurna 27
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<b>KA1BED</b>	Bill Green 26	<b>KC1UJQ</b>	Mark Kirschner 25	<b>W1NDT</b>	Robert Lombardo 25
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<b>KA1JTG</b>	James Hartzell Jr 25	<b>KC1VCU</b>	John Mandeville 25	<b>W1RCI</b>	Ron Isaac Jr. 25

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<b>KB1CXK</b>	Joe Clarizio 26	<b>KC1VRG</b>	Robert Shemo 25	<b>W1UFO</b>	Mike Cei 25
<b>KB1EHE</b>	Eric Knight 25	<b>KC1VSO</b>	Patricia Lentz 25	<b>W1UKX</b>	Greg Gherardi 25
<b>KB1FGC</b>	Richard Guerrero 25	<b>KC1VUM</b>	Matthew Erff 25	<b>W1YSM</b>	Ed Snyder 25
<b>KB1HAX</b>	Bill Reyor III 26	<b>KC1VVC</b>	Joel Helfer 25	<b>W2OFR</b>	Mark Dickson 25
<b>KB1IFZ</b>	Elsie Mathews 25	<b>KC1VZI</b>	Joe DePaolo 25	<b>W2TT</b>	Ross Lambert 25
<b>KB1JL</b>	Eric Olsson 25	<b>KC1WEX</b>	Len Guercia 25	<b>W3APC</b>	James Cook 25
<b>KB1LWS</b>	Jeanne Gherardi 25	<b>KC1WFB</b>	Lloyd Saberski 25	<b>W9OTW</b>	Deborah Foss 26
<b>KB1MFU</b>	John Ramadei 25	<b>KC1WHD</b>	Craig Scully-Clemmons 25	<b>WA1BAR</b>	Michael Barr 25
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<b>KB1TMC</b>	Clare O'Lena 25	<b>KC3UKG</b>	Storm Murrell 25	<b>WA1JKR</b>	John Rogus 29
<b>KB1TTV</b>	Jonathan Martin 26	<b>KD0BMW</b>	Marty Crandall-Grela 25	<b>WA1K</b>	Jack Chapman 25
<b>KB1YFJ</b>	Glenn Couture 25	<b>KD2TLD</b>	Patrick Lacombe 25	<b>WA1MAC</b>	Paul Clark 25
<b>KC1BQP</b>	Paul St.Amand 25	<b>KE1AU</b>	Bob Kaczor 26	<b>WA1SFH</b>	Douglas Sharafanowich 25
<b>KC1CAB</b>	Frank DiTerlizzi 26	<b>KE1AV</b>	Dave Sanford 25	<b>WA1TRY</b>	Rich Aubin L
<b>KC1DOY</b>	Ted Renzoni 27	<b>KE2ECC</b>	Phillip Gallanti 26	<b>WA1ZVY</b>	Jim Martin 28
<b>KC1HFO</b>	Johannis Stodis 25	<b>KF6LU</b>	Andrew Buza 25	<b>WB1DMK</b>	William D'Agostino 25
<b>KC1IHK</b>	Scott Mowerson 25	<b>KK7NLS</b>	John Condon Jr 25	<b>WB1DQT</b>	Bill Bacon 25
<b>KC1ISI</b>	Kristin Olsson 25	<b>KO1J</b>	Randy Whitehouse 25	<b>WB1GFI</b>	Stan Hiriak 25
<b>KC1KQH</b>	John Kasinskas 25	<b>KO4EEL</b>	Tom Williams 25	<b>WB1GYZ</b>	Bob Biancur 25
<b>KC1MJZ</b>	Michael Berube 25	<b>KR1U</b>	Bob Eslinger 27	<b>WB8IMY</b>	Steve Ford 25
<b>KC1NHE</b>	Reed Hansen 25	<b>KS1WK</b>	Seth Kolasinski 25	<b>WJ1B</b>	Harold Kramer 27
<b>KC1NQE</b>	Shawn Warren 25	<b>KX1USA</b>	Rob Messercola 25	<b>WV2LKM</b>	Steve Waldmann 25
<b>KC1NRD</b>	John Lujick 27	<b>N0HIO</b>	David Koerner 25	<b>WX1W</b>	Mary Duval 25
<b>KC1NRQ</b>	Bruce Childs 25	<b>N1AKN</b>	Jeff Dwyer 26	<b>WY1U</b>	Tim Mik 25
<b>KC1OCS</b>	Richard Dewick 26	<b>N1API</b>	Al Kaiser 30		0 Lucas Molloy Y
<b>KC1OGL</b>	Paul Randazzo 25	<b>N1BRI</b>	Brian Beegan 26		0 Spencer Rygiel Y
<b>KC1OWD</b>	Kevin Van Keuron 25	<b>N1FNE</b>	Rod Lane 26		

