

Quarterly Newsletter of The Keuka Lake Amateur Radio Association

Radio Club Health Check!

Andy Jackson K2CRV, KLARA President

At this year's Hamvention in Dayton, I picked up a flier from the ARRL booth (see attached) titled "Radio Club Health Check." It's a great guide for assessing and strengthening amateur radio clubs like ours. I'm proud to say that KLARA is already doing many of the things on this list—regular meetings, community events, and fostering a welcoming environment for hams of all experience levels. But there's always room to grow!

This club belongs to *you*, the members. Your ideas, energy, and participation are what keep KLARA vibrant and relevant. I encourage each of you to share your thoughts on how we can make our club even better. Want to organize a new activity? Propose a project? Lead a workshop? Now's the time to step up! One idea I'd like to float is hosting a Saturday morning antenna seminar where attendees can build their own antenna. It could be a fun, hands-on way to learn and connect. What do you think? Let's hear your ideas—big or small—at our next meeting or via email to me directly.

Get involved, share your passion, and let's make KLARA stronger together!

Klara Board of Directors

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Second Quarter 2025

Spring to Summer Edition

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Upcoming KLARA Events

·June 11 KLARA Meeting: Gary, KC2YTD and Andy, K2CRV (possibly Joel) to present information of Fox Hunts, Antennas, and Strategies.

- June 21 Rochester Hamfest (RARA)
- · June 28-29 Field Day
- · August 13 KLARA Meeting: (right before the end of season Picnic): Donna, KD2CZY, and Joel, KC2VAW to present POTA everything you wanted to know but were afraid to ask!
- · August 16: Howard Hamfest
- · *August 23:* Picnic, POTA activation, and Fox Hunt
- September 10:KLARA Meeting: Joel, KC2VAW to present: How to Use USGS Topographic Map
- · **December (TBD):** Christmas Party!

News: New, Old or Other

The Klarion needs news. Please consider submitting an article for publication. You do not need to write something original if you don't want to. Perhaps you read an interesting article or posting about the hobby somewhere else and you think club members would like to see it. Send the article or information about it (where you saw it; who wrote it; etc.) to den-nis@w2kdc.us and I will take care of getting permission to reprint.

Question of the Quarter

Does the KLARA UHF Linking transmissions that link all three of our repeaters require an ID?

One of our club members, Glen W3LSW, asked the question: "Why do our repeater link transmissions not provide any identification?" I too was perplexed since I was under the impression that all transmissions required identification. I thought this was a great question, and I checked our 440 MHz link transmissions. Sure enough, no identification (Morse or voice) was used. I inquired with our repeater trustee, Gary KC2YTD, and Gary noted that he struggled with this same question when he was starting to manage the KLARA repeater systems. Why would our link transmissions not require an ID? Gary assured me that it took some time and digging to convince him, but after consulting with other repeater operators, the ARRL, and the FCC rules and interpretations, his concerns were alleviated.

Digging into this question, here is what we found:

FCC Rules on Identification for Automatic Control Repeater Systems:

Identification Requirement (§97.119):

- All amateur stations, including repeaters and their linking systems, must identify with the station's call sign at least every 10 minutes during operation and at the end of communications.
- For our setup, the repeater system (the 2-meter repeaters and their 440 MHz linking transceivers) is treated as a single system. The identification must occur on the repeater's output frequency (the 2-meter frequency users hear).
- The 440 MHz transceivers, functioning as auxiliary stations (§97.3(a)(7)) for linking the repeaters, **do not require separate identification**. Their operation is covered by the repeater system's ID, as they are not independently initiating communications.

Automatic Control (§97.213):

- The KLARA repeaters and linking transceivers can operate under automatic control, meaning they function without a control operator physically present, provided the system ensures compliance with FCC rules.
- The automatic control system (the repeater controller) must be configured to transmit the club's call sign (or the trustee's call sign for the repeater) at the required intervals (every 10 minutes and at the end of use) on the 2-meter repeater output.
- The automatic control system must include safeguards to prevent improper operation, such as responding to unauthorized signals or operating outside permitted frequencies or power limits.

Specifics for the KLARA Setup:

- Ensure the repeater controller is programmed to automatically transmit the club's call sign via CW, voice, or another permitted method <u>on the 2-meter output frequency</u>.
- The 440 MHz linking transceivers must operate within the auxiliary station frequency range (420–450 MHz, typically 430–440 MHz for auxiliary links in most U.S. regions, avoiding satellite or other restricted sub-bands). In New York, confirm with the local frequency coordinator (e.g., UNYREPCO or another regional group) to ensure the 440 MHz link frequencies are coordinated and compliant.
- The licensee (Gary, the club trustee) is responsible for ensuring the automatic control system is properly configured and maintained, including periodic checks to verify ID

So, in conclusion, the KLARA repeater system is operating in compliance with the FCC rules and commonly established repeater protocols for linked systems. The FCC's Wireless Telecommunications Bureau has repeatedly confirmed these rules' interpretation. We are including relevant FCC and ARRL information that further solidifies the conclusion that, "the link transmissions do not need to send an ID!"

Best 73!

Andy (K2CRV) and Gary (KC2YTD).

Relevant FCC Regulations

§97.119 - Station Identification:

Text: "Each amateur station, except a space station or telecommand station, must transmit its assigned call sign on its transmitting channel at the end of each communication, and at least every 10 minutes during a communication, for the purpose of clearly making the source of the transmissions from the station known to those receiving the transmissions."

Application to the KLARA Setup: This rule applies to the N2AAR repeater system as a whole. The identification must occur on the 2-meter repeater output frequencies (the primary user-facing channel). The 440 MHz linking transceivers, as auxiliary stations, are part of the repeater system and do not independently initiate communications, so they are covered by the repeater's identification (e.g., "N2AAR" or "N2AAR/R").

Reference: 47 CFR §97.119.

§97.3(a)(7) - Definition of Auxiliary Station:

Text: "Auxiliary station. An amateur station, other than in a message forwarding system, that is transmitting communications point-to-point within a system of cooperating amateur stations."

Application: The KLARA link 440 MHz transceivers are auxiliary stations because they transmit point-to-point to link the 2-meter repeaters. They operate as part of the N2AAR repeater system, not as independent stations, and thus do not require separate identification.

Reference: 47 CFR §97.3.

§97.213 - Telecommand of an Amateur Station:

Text: This section covers automatic control, stating that stations under automatic control must comply with all Part 97 rules, including identification, and must have safeguards to ensure proper operation.

Application: The N2AAR repeater system, including the 440 MHz auxiliary links, is under automatic control. The repeater controller's identification on the 2-meter output satisfies the ID requirement for the entire system, including the auxiliary links.

Reference: 47 CFR §97.213.

§97.201 - Auxiliary Station:

Text: This section specifies that auxiliary stations must operate within designated frequency bands (e.g., 420–450 MHz for your 440 MHz links) and under the control of a licensed operator or automatic control system.

Application: While this section does not directly address identification, it reinforces that auxiliary stations are part of a broader system (the KLARA repeater network) and are subject to the same control and identification rules as the primary station (the repeater).

Reference: 47 CFR §97.201.

FCC and ARRL Guidance and Interpretation

The FCC does not publish a single, explicit document stating "auxiliary stations do not need separate identification." Instead, this is inferred from the structure of Part 97 and industry practice, as

clarified by amateur radio organizations and FCC interpretations:

ARRL Guidance:

The American Radio Relay League (ARRL), the primary amateur radio organization in the U.S., provides guidance based on FCC rules. The ARRL's FCC Rule Book and website explain that repeater systems, including auxiliary links, identify via the primary repeater output. Auxiliary stations like the KLARA 440 MHz link transceivers are not required to transmit separate IDs because they are components of the repeater system (Not intended for operators to transmit or receive on).

Reference: ARRL's The FCC Rule Book or the ARRL website www.arrl.org/fcc-rules-and-regulations. You can also contact the ARRL's Regulatory Information Branch for clarification.

Note: While ARRL guidance is not legally binding, it is widely respected and aligns with FCC enforcement practices.

FCC Enforcement Letters and FAQs:

The FCC's Wireless Telecommunications Bureau occasionally issues enforcement letters or responds to inquiries about repeater operations. <u>These consistently emphasize that identification must occur on the primary output (e.g., the repeater's 2-meter frequency) and do not mandate separate IDs for auxiliary links.</u>

Access: You can search the FCC's website www.fcc.gov for "amateur radio enforcement" or contact the FCC's Wireless Telecommunications Bureau directly for specific inquiries.

Practical Interpretation:

In practice, repeater systems like N2AAR use a single call sign (e.g., "N2AAR/R") transmitted on the repeater output to cover all components, including auxiliary links. This is standard in coordinated repeater systems across the U.S., as confirmed by frequency coordinators like the Upstate New York Repeater Council (UNYREPCO).

Rochester Hamfest (RARA)

We will be hosting an information booth/tent at the hamfest – so far we have the following volunteers to man the info booth: K2CRV, KD2EH, W2KDC, KB2TDH, N2FMS and others (if I missed your call, I apologize, so please let me know if you are willing to man the booth).

Joel, KC2VAW and Donna, KD2CZY will be providing brochures for the table.

2025 ARRL Field Day: FAQ with the Contest Program Manager

Q: I'm interested in participating in Field Day for the first time this year. How can I find a club near me that's hosting Field Day so that I can join in on the fun?

A: You can search for nearby Field Day sites with the Field Day Site Locator at www.arrl.org/field-day-locator. The tool provides locations, talk-in frequencies, and contact information for sites located throughout the Unites States and Canada.

Q: Which digital modes are allowed during Field Day?

A: Any digital mode that can support the required Field Day exchange may be used.

Q: I plan on operating portable during Field Day as a single operator. Am I allowed to operate from multiple locations throughout the event? Class B (portable) stations are fixed stations.

A: All equipment must be located within a circle whose diameter does not exceed 300 meters (1,000 feet). The only Field Day operating class that's allowed to operate from more than one location is Class C (mobile). A mobile station must have all equipment in or on the vehicle and must be capable of being operated while in motion. For example, you can't mount a telescoping mast to your trailer hitch and erect a full-sized beam or vertical antenna.

Q: Where can I find out more about ARRL Field Day?

A: There's a wealth of additional information available at the ARRL Field Day website, www.arrl.org/FieldDay. Click on the Rules and Resources link where you'll find rules, information packets, and more answers to frequently asked questions. There's also a FAQ published in the 2025 ARRL Field Day Guide, starting on page 57 of the June issue of *QST*.

Borque says that if there's a specific question that's not covered here, in the Field Day guide in *QST*, or on the website, contact fdinfo@arrl.org.

RADIOCAS CONNECTS

www.arrl.org



PERformer Quarterwave Vertical Antenna Submitted by Rick Torey

Hey Rick! Thanks for reaching out via Messenger ② Sure, I'll attach my *free* antenna PDF plans for the *ARRL™ QST Award*-Winning PERformer to get you started! And please check out my new Antennas Primer at the cloud link below, you may enjoy reading it! I'm also available to speak to your <u>Amateur Radio Club Meeting</u> via Zoom, let me know if they're interested.

And if you have not done so already, watch my recent one-on-one *YouTube*™ interview with Michael Martens, KB9VBR, on my PERformer quarterwave antenna, as well as my other halfwave designs. We talk about my original inspiration for the antenna and how I designed it.

I am happy to share all my portable antenna designs at the cloud links below: **PERformer Quarterwave Vertical for 40M**-6M with two elevated radials, as well as the **Challenger OCF Halfwave Vertical for 20M-6M** and **Dominator EF Halfwave Vertical for 17M-10M** requiring no tuner or multiple radials - just a linked counterpoise wire. And if you would like to try something exciting, I just added a *parasitic director* to the Dominator transforming it into a **2-Element Vertical Beam for 17M-10M**!

I have been using the PERformer in my activations for almost five years with amazing success. A couple years ago, I put the Dominator together to get lower angle of radiation and more gain on the bands for fantastic DX. Most recently, I introduced the Challenger which is positioned between the other two antennas in terms of performance. They each have an optimal use case.

Take a look at the attached and let me know if you have any questions, I'd be happy to help 2 73 KJ6ER, Silicon Valley

Cloud Drive File Links (KJ6ER):

YouTube™ Interview with Michael Martens, KB9VBR –<u>youtube.com/watch?v=cClmWBYzNaE</u>
ARRL™ QST 2024 Antenna Design Competition –<u>bit.ly/AntennaDesignCompetition</u>

KJ6ER Antennas Primer – bit.ly/KJ6ERAntennas Primer

PERformer 40M-6M Quarterwave Vertical –bit.ly/KJ6ERPERformer

Challenger 20M-6M OCF Halfwave Vertical -bit.ly/KJ6ERChallenger

Dominator 17M-10M EF Halfwave Vertical -bit.ly/KJ6ERDominator

Dominator 17M-10M EF Halfwave 2-Element Vertical Beam -bit.ly/KJ6ERDominatorBeam

Greg Mihran, KJ6ER Campbell, California www.qrz.com/db/KJ6ER gmihran@me.com (650) 714-7577

KLARA Now using ExamTools

For ARRL Licensing Exams Online and In Person

by Gary D. Stratton



ARRL VE Teams - Go Digital in 2025

In 2025, the ARRL VEC is moving to a completely digital program. Printed booklets and supplies shipments will be discontinued as we shift teams to the ExamTools examination system for online or printed amateur radio exams.

Licensing exams for obtaining the Technician, General and Extra classes will now be done **online** (using the internet). For **in person** exams such as at our Hamfest in Howard, NY or the Elmira Hamfest will be using printed exams that we grade electronically using the smartphone. The **in person** exams can also be done on laptops, iPads or tablets.

The results of the exam sessions are uploaded the same day of the exams. This makes the time much shorter before getting your new license or upgrade notification via email from the FCC. We currently have 9 volunteer examiners on the N2AAR ExamTools Team. And we want to increase that number over time. So if you are interested please contact Gary Stratton for becoming a VE or any questions plus joining the team. If you have a computer and a camera/audio you have all the tools you need for online VEs. His phone number is 585-520-5514 and his email is strat-ton.gary@gmail.com or keukalakeara@gmail.com

ExamTools: Amateur Radio License Exam Tools to learn more about it.

https://hamstudy.org/ Great tools for studying!

The "Jankapotamus" Computer and other nifty arrangements or How I learned to Relax and Enjoy Portable Operations

By Joel Fiske (KC2VAW)

What in the world is a "Jankapotamus" computer ... and why on Earth would I want one?

In it's simplest form the Jankapotamus is a concept rather than a specific thing or brand. It is really a made up word (or portmanteau) composed of "janky", a slang term indicating an item which is of somewhat lesser quality; POTA (for Parks on the Air ... really a stand in for portable operations); and "mus", which is intended to (and does) make everything sound cool!

At it's most basic it's a small, light, cheap, laptop which is still able to perform a myriad of tasks for a portable ham station. Could be an older (one which you have already replaced) cell phone (although I think you will be a lot happier with an older laptop / notebook ... bigger screen).

Base processor could be either 32 bit or 64 bit; either a Celeron or a early version of Pentium. You will need to check and see if your software can run on a 32 bit processor. In a lot of cases this is no problem, although as time marches on newer software versions will be 64 bit only.

Operating system? Yes, you will need one! These computers will probably ship with Windows 10 Pro, which will be O.K. ... for now. Microsoft has a lamentable tendency to make operating systems obsolete when newer versions hit the market. Windows 11 has been out for a while now, so Windows 10 is near the end of it's life. I believe the last date I have heard is October 14th, 2025. Will this mean a Windows 10 machine will stop working then? Not at all! These machines will still function very well, but there will be no security updates. You can run a Jankapotamus computer until the hardware falls apart ... as long as it is not connected to the internet (which is where the security updates come in)!

If you feel really adventurous you can try Linux. I am very fond of Linux Mint, but there are a lot of very good versions (called "distros") out there.

Member Achievements!

Awarded to Andy, KC2CRV:



12 Days of QRZ (2024) #17356

Granted: 2025-04-08 00:43:31 (K2CRV)

Endorsements:

40M Mixed



30 Years of QRZ #51041

Granted: 2025-04-08 00:43:02 (K2CRV)

Endorsements:

5 Band Mixed
 10M Mixed
 17M Mixed
 20M Mixed
 40M Mixed
 80M Mixed



Master of Radio Communication - Europe #50100

Granted: 2025-04-08 00:41:45 (K2CRV)



United States Counties Award #48228

Granted: 2025-04-08 00:41:06 (K2CRV)

Endorsements:

- 100 Counties Mixed
- · 250 Counties Mixed



Grid Squared Award #76223

Granted: 2025-04-08 00:40:25 (K2CRV)

Endorsements:

- 10M Mixed
- 20M Mixed



World Continents Award #64104

Granted: 2024-03-25 19:15:09 (K2CRV)

Endorsements:

10M Mixed

Awarded to Glen, W3LSW:



The Klarion wants to recognize all member achievements. If you or another mem ber are recognized by an organization, send the information to dennis@w2kdc.us and we will include it in the next edition of the newsletter.