



# RF CARRIER

A Publication of the Dayton Amateur Radio Association

June 2025

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**RF Carrier Articles are due:**

| Issue | Due Date   |
|-------|------------|
| Sept  | 8/21/2025  |
| Oct   | 9/20/2025  |
| Nov   | 10/21/2025 |

Submit articles in Word format.  
Send pictures in separate graphic files

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The next DARA General Membership Meeting is June 6<sup>th</sup>, 7 p.m. in the Greene County Expo Center Dining Hall. At this meeting, the annual officer election occurs. In order to vote, you must have been a full member on April 1, 2025. Proof is required. Either via your membership card or checking with the Membership Chair at the meeting.

Our speaker is Stephen, KE8TEY, who will give a presentation: "Portable Power & Solar, Public Service & SET & NVIS & Day to Day."

*This presentation was done at a TNG meeting several weeks ago. It was so good that the TNG convinced our VP Jim AB8YK to invite him to the general membership meeting. Need alternative power for Field Day or POTA? You don't wanna miss this. - Editor*

## Address Change & Membership

Dues are payable July 1<sup>st</sup> of each year. Regular membership dues are \$10 per year, with \$3 additional per family member living in the same household. Contact the Membership Chair Jeff DeVoe K8JTD at PO Box 44, Dayton, OH 45401 to pay dues, change your address or to update any personal information appearing in the DARA Directory.

If you have any questions about your membership or key fobs, you can contact Jeff at [membership@w8bi.org](mailto:membership@w8bi.org)

## DARA Membership Renewal

|                |                 |                  |
|----------------|-----------------|------------------|
| Member ID:     | Dues Amount: \$ | Check No:        |
| Name:          |                 | Call Sign:       |
| Address:       |                 |                  |
| City:          | State:          | Zip Code:        |
| Phone Number:  |                 |                  |
| License Class: |                 | License Expires: |
| ARRL Member:   |                 |                  |
| Email Address: |                 |                  |

Form: DMR0817

## June Elections

Yep, it's time to elect a new slate of officers for the DARA Board. This year there will definitely be a new President, Vice President and Junior Trustee. All of the choices are seasoned past or current board members or committee chairs. The following is a full list of nominees. Most of them have submitted campaign statements (bios as we call them) for publication. So... Let's introduce our candidates.

### **For President: Jim Storms AB8YK**



My name is Jim Storms, AB8YK, and I am running for Dara President. My goals are to continue making DARA one of the premier clubs in the world. A few areas of the club could stand improvements. Additionally, some projects need to be completed. These areas ones on which I plan to concentrate.

It takes a lot of involvement by club members to continue our excellence. Many hands make tasks lighter. I encourage all to participate in the many Special Interest Groups of DARA. Exploration of new areas of interest to increase individual involvement is planned.

I have served DARA as VP for a total of four years (2019-2021,2024), Hamvention Advance Registration Chair for nine years (2017-current), Hamvention General Assistant Chair for two years (2021-2022) culminating in being the Hamvention General Chair two years (2023-2024).

I look forward to serving as President of DARA.

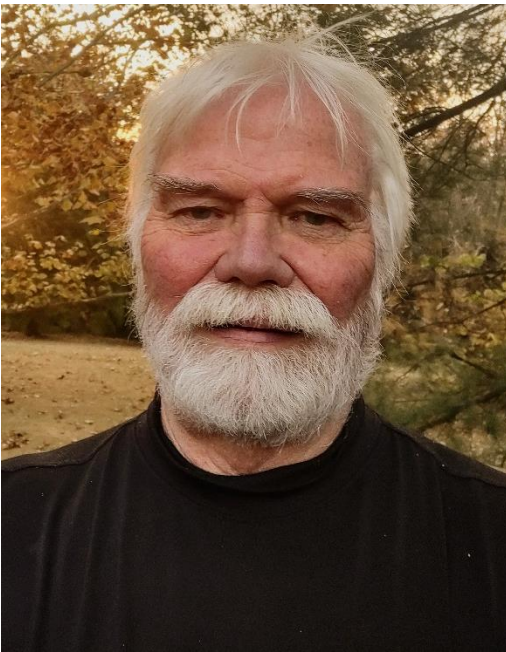
### **For Vice President: Keith Yarger AD8DC**



I am seeking to become the next DARA Vice President. I am active in DARA Thursday Night Group known as TNG , serve as the Hamvention Incoming Mail committee chair since 2016, became the Assistant Membership Chair in 2023, served as DARA Board Junior and Senior DARA Trustee 2023-2024 and currently serving on the DARA Planning Council. I wish to continue to serve the DARA membership, maintaining DARA's great Amateur Radio Reputation and our fantastic clubhouse. DARA and Amateur Radio provides me many rewarding experiences and enables me to meet many wonderful people. Serving on the DARA Board is my way of giving back to the DARA membership. I ask for your support to allow me to become the next DARA Vice President.

**For Secretary: Jack Gerbs WB8SCT:**

Jack did not submit a Bio for publication. He has been the Secretary for the last two years. His minutes of the Board meetings are regularly published here in the RF Carrier. He has been a Past President of DARA and Past General Chair of Hamvention.

**For Treasurer: Michael Kalter W8CI**

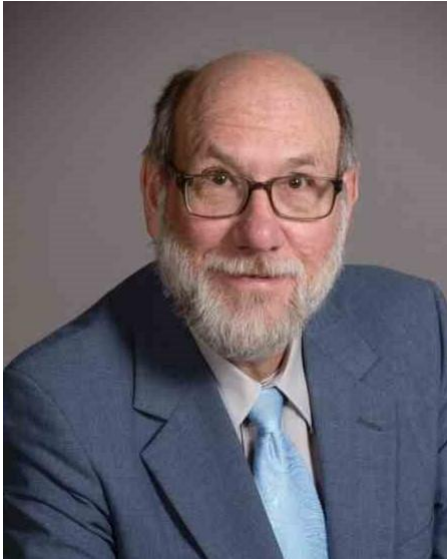
It has been an honor to serve as the Treasurer of DARA/Hamvention. I take this responsibility very seriously and work diligently to uphold our guidelines and ensure timely bill payments. My professional background in mergers, acquisitions, and business turnarounds, along with my master's degree in management, provides a strong foundation for this role.

Within DARA/Hamvention, I have previously served as Senior Trustee and President, as well as holding many positions, including Hamvention General Chair. I have also actively represented the interests of amateur radio operators, notably through my successful work to exempt them in Ohio's distracted driving legislation. Additionally, I volunteer as a primary net control for the National Weather Service during severe weather events.

As a board member, my focus is on identifying solid, workable solutions that serve the best interests of the entire organization, a philosophy I am committed to maintaining in the next term. I also ensure that the club's business needs are addressed effectively. It's important to note that a CPA professionally reviews all monthly transactions.

Thank you for your continued support.

**Michael Kalter W8CI**

**For Junior Trustee: Ron Doyle N8VAR**

I have had the privilege of being the DARA club President, and so I know what I wanted the Planning Committee to accomplish. While they have done a great job for the club while I was President, there are several things I would like to see accomplished. By being a part of the Planning Committee, I hope to be able to influence some of their direction. I won't be trying to change anything the Planning Committee does, but I think I can help improve their processes.

**For Junior Trustee: Steve Keller AE8AT**

I've been a member of the Dayton Amateur Radio Association since at least 2018. That was the year I passed Extra at Hamvention. I currently serve as the Parking Chair for Hamvention, now in my third year in that role. Prior to that, I was Assistant Chair for the Signs Committee, following a couple years as a volunteer. My work with Hamvention has been rewarding, but it's concentrated in the days leading up to and during the event. I'm running for trustee to contribute more broadly throughout the year to help support the club's mission and membership on a year round basis. I regularly support DARA

license exam sessions, I prepare the quiz for the DARA Repeater, and volunteer for at least one public service event reach year.

Professionally, I've spent over 30 years in the aerospace industry. I currently work for the University of Dayton Research Institute (UDRI) where I perform data analytics. Prior to joining UDRI, I worked at a Fortune 50 company where I led project teams across multiple U.S. states plus India and Poland. I was the primary point of contact between my employer and EASA, the European Union's counterpart to the FAA. I hold master's degrees in both engineering and business.

I appreciate the opportunity to serve the club and would be honored to support DARA's ongoing success as junior trustee.

*From the Oval Office of the Prez....*

Ron Doyle N8VAR



We have had another great Hamvention, and I think this one was one of the best, if not the best. There were a lot of 'Youtubers' doing videos and promoting the inside vendors and the Flea Market. They helped the vendors announce a lot of new products. It's really amazing to be part of a show that is such a premier show that all the vendors use it as their main new product announcement platform.

We have a lot of things coming up that you, the club members, can participate in. Our Club Elections is the main event of our next club meeting. Field Day is just around the corner. I know there are lots of clubs doing Field Day and DARA is also going to participate in Field Day this year. This is a great time to test your gear for portable operations, to see how your equipment will operate out in the field, and how different antennas work. And you also get to make contacts with other hams doing the same thing. I encourage everyone to get out and participate in DARA's or another club's Field Day.

July will be a month of rest for the club, and we will start back up in August with our annual picnic. There are a number of great contests coming up if you would like to try your hand at that. And of course, the club will be participating in most of those contests. October will be the annual Jamboree-on-the-Air (JOTA), which is the largest Scouting activity in the world with over 1 million youth worldwide participating. DARA will be helping the Miami Valley Council put on a great JOTA station where Scouts can make contact with other Scouts and maybe make new friends.

73 de Ron, N8VAR

## *Words from the Vice President*

Jim Storms AB8YK



It has been a pleasure to serve as DARA VP for the last year. I am looking forward to continuing to serve the club as an Officer. The program this month may be a repeat for TNG people, but they found it interesting. I thank Stan for not submitting his items at homebrew and saving them for our General Meeting.

Individual member involvement is key to keeping a club strong. I challenge you to find new areas of service within the club. Help keep us a vibrant group.



## *The Secretary's Corner*

Jack Gerbs WB8SCT



There was no Board meeting in May and the previous month's minutes haven't been reviewed and approved. But we will get them in the RF Carrier when they are approved. - Editor Sam N8VES

## **H**AMVENTION APPENINGS

From the General Chairman  
Brian Markland N8UDQ



### **A Tremendous Hamvention 2025 – Thank You!**

Dayton Hamvention 2025 was a resounding success, and we have many reasons to be thankful.

Both Friday and Saturday saw strong attendance, contributing to a total turnout of 36,814 amateur radio enthusiasts! Visitors from all corners of the globe converged at the Greene County Fair & Expo Center. Fantastic weather during show hours made for an ideal experience as attendees explored the flea market, exhibitor booths, forums, and demonstrations.

This year's **Youth Tech** area was buzzing with excitement. One of the highlights was a special field trip on Friday from the Community STEAM Academy, bringing **73 students and their chaperones** to discover the magic of amateur radio and technology. From soldering projects to engaging hands-on exhibits, the future of our hobby was well represented.

From in-depth technical forums to exciting new product announcements, there truly was something for everyone. Whether you were searching for the latest gear, diving into digital modes, or reconnecting with friends, Hamvention delivered.

None of this would be possible without the dedication and support of so many:

- Our hardworking **Committee Chairs and Volunteers**, who spent countless hours making sure everything ran smoothly.
- Our **vendors and exhibitors**, who showcased innovation and inspired conversations.
- Our **international guests**, who remind us that amateur radio is a truly global community.
- And our partners at the **Greene County Fair & Expo Center**, **Greene County and Xenia Township officials**, and the **Greene County Sheriff's Department**, who helped ensure a safe and welcoming environment for all.

As we wrap up this year's event, we're already looking ahead. Planning for **Hamvention 2026** is underway, and we can't wait to welcome you back.

In the meantime, exercise your **Radio Independence**—whether it's activating a park, a summit, helping your community, or simply checking into a net. Keep the spirit alive, and we'll see you next year!

Brian Markland - N8UDQ  
General Chair  
Dayton Hamvention

**RF CARRIER*****Fox Hunt!***

Got another one this month. Find all the handhelds and you could win a \$10 Kroger gift card! Search all the pages of the RF Carrier. Be careful, some of them are barely visible and partially hidden behind pictures and graphics. Find them all and send an email to [n8ves@yahoo.com](mailto:n8ves@yahoo.com) with the subject HANDHELD. Tell us your name and callsign (if you have one) and the correct number of handhelds in the RF Carrier. Those who email the correct number will be listed in next edition of the RF Carrier. Submit your entry by no later than June 25<sup>th</sup>. Two lucky people from all the correct entries will be chosen to win a \$10 gift card at the next general membership meeting (must be present to win). You need not be an amateur radio operator or a member of DARA to win. Only one entry allowed per person. Can you find them all?

## 2025 Field Day

Nancy Krodel KC8RMT and Sam Anderson N8VES are still looking for a few volunteers to help with Field Day this year. Plans are to be at the Wright State University field shelter on Zink Road in Fairborn. Reservations are being finalized and we will have access to the restrooms directly behind the shelter. The shelter also has electric power and “may” have lighting. My YL (not X... she’s younger than me...) works there. So getting the reservation should not pose a problem. We need volunteers for food prep, antenna setup and tear down as well as other duties. The “team” would like to have at least three more. Prelim plans are for 3 Alpha on commercial power. That could change to 4 or even 5 depending on who attends and brings equipment and radios before the first contact. Wanna do Field Day with us? Contact Nancy KC8RMT at [KC8RMT@gmail.com](mailto:KC8RMT@gmail.com) or Sam N8VES at [n8ves@yahoo.com](mailto:n8ves@yahoo.com).



As we have announced before, the Dave Kalter Memorial Youth DX Adventure (YDXA) is holding only one trip this year. July 17-22 to PJ2T in Curacao. Please get on the air that weekend and contact these kids. This is a popular DX station to contact and these kids will certainly create a HUGE pileup. But don’t let that stop you from trying to contact them. I’m sure they will LOVE hearing from DARA members.

More information is available on the [youthdx.org](http://youthdx.org) website.

Dave Kalter KB8OCP was a big supporter of youth in amateur radio as is his brother Mike W8CI and DARA. Please consider a generous donation to the YDXA. Your donation directly supports these kids. The youth that are chosen are some of the most active young hams in their communities and inspire other kids and classmates to earn their licenses and thus insure a bright future for Amateur Radio. Remember... Inspire, Mentor and Donate. These kids can’t thank you enough for YOUR support.

## Charles Kaiser KD8JZR – Silent Key



It with great sadness we announce that Charles Kaiser, KD8JZR is now a Silent Key. He passed on May 6, 2025. Visitation is Saturday June 21 at 10-11am with a service following at 11am. It is being held at the Salem Church of God. Services are being handled by Kindred Funeral Home, Englewood where you can find his obituary.

During his physical trials he was missed by all of us and with his passing even more. Charles gave of himself to the DARA club willingly and served in many positions on the DARA Board including Hamvention General Chair.

Please keep his wife and family in your prayers as they grieve over his passing.

The family has asked donations in his name to be made to Hospice of Dayton or Salem Church of God.

DARA Board

Charles was an exceptional member of DARA. Humorously funny, serious and extremely dedicated. A mentor with great advice. A leader, a teacher and most importantly a listener. The kind of leader we strive to be. He will be missed and remembered for a long time. Fair thee well Charles. 73 and we shall meet again. - Editor

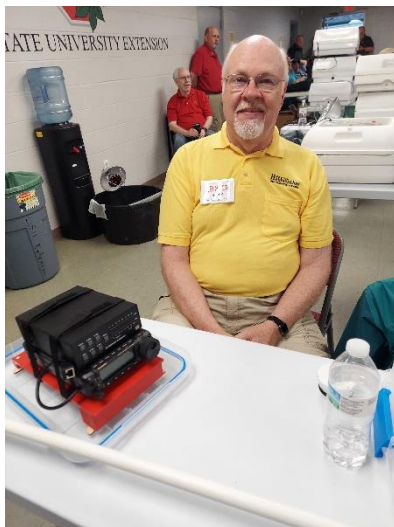
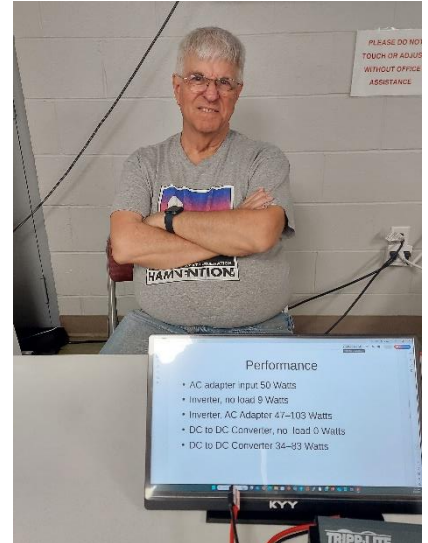
## May Meeting Highlights

This year's Homebrew Night entries were just fantastic and very innovative.



Sharon Tessneer KC8JRS is a big winner with her "Butt Warmer" package and shows you can keep comfortable while activating POTA on a park bench on a cool spring day.

Bob Baker N8ADO demonstrated his backup power supply solution to run his computer with an inverter. Bob was also a \$50 R&L winner.

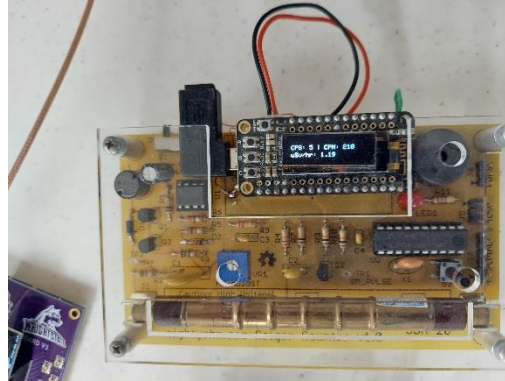


Mark Tessneer KB8ZR showed us a great "To Go" with an HF Radio, a tuner and a portable push up mast.



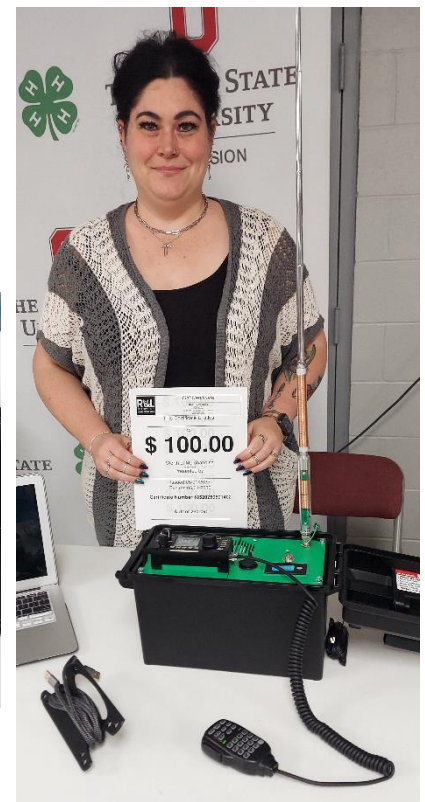


Jeremy Hong KD8TUO always impresses us with his innovative projects. This time with some radioactive elements. This ain't yer average ordinary Geiger counter....



Jay Slough K4ZLE and his magnetic loop antenna is also a \$50 R&L winner. Jay submitted an article on this nifty antenna. It appears later in this edition.

And the Best of Show winner is Liz Klinc KE8FMJ with her complete emergency Field Day box.



## May Door Prize Winners



Bob Pusch WD8NVN  
Antenna Book



Jim Gifford N8KET



Tom Gross KD8VLS



Chester Howes K8NYC



Sam Anderson N8VES



Delmar Crickmore KC8ADU



Bob Neben K9BL

## Sample Exam Questions

T2C01

When do FCC rules NOT apply to the operation of an amateur station?

- A. When operating a RACES station
- B. When operating under special FEMA rules
- C. When operating under special ARES rules
- D. FCC rules always apply

G3C01

Which ionospheric region is closest to the surface of Earth?

- A. The D region
- B. The E region
- C. The F1 region
- D. The F2 region

E2C01

What indicator is required to be used by US-licensed operators when operating a station via remote control and the remote transmitter is located in the US?

- A. / followed by the USPS two-letter abbreviation for the state in which the remote station is located
- B. /R# where # is the district of the remote station
- C. / followed by the ARRL Section of the remote station
- D. No additional indicator is required

## Simple Mag Loop Antenna

Jay Slough, K4ZLE

Some quick background information: A Magnetic Loop antenna is NOT going to compete with a beam. Bandwidth is typically very narrow. However, a mag loop is easy to construct, it will give reasonable performance, does not require a tower or other major support structure, does not use any radials, and will possibly not be objectionable to HOA compliance police!

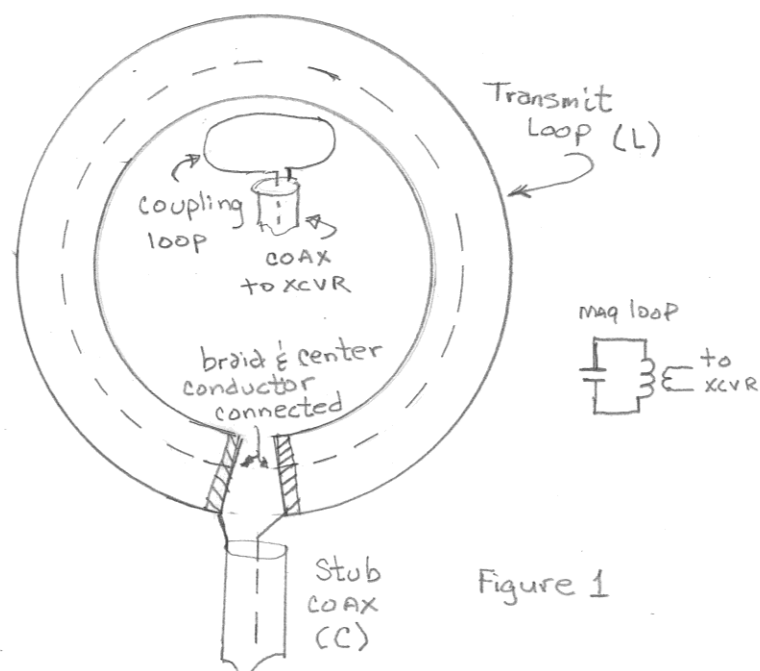


Figure 1 is the pictorial/schematic of one that I made for personal experimentation. It consists of nothing more than a resonant tuned circuit fed with a coupling loop. A loop with a diameter of about 3 feet can be used on any frequency from about 10 MHz to 30 MHz

The one I built and brought to the DARA homebrew night was constructed from a 10' 6" piece of RG213 coax I had in the scrap pile collecting dust. I used a stick of ½" PVC that I notched at the top to retain the coax. I used old bicycle safety flags to maintain as much of a circular shape as

possible. One does not have to duplicate exactly what I did to have an effective antenna (Wooden dowls, fiberglass rod, fishing pole cast offs, etc. can be used for structure components). I also would not use anything smaller than RG213 sized coax for the loop. It would be more efficient to use something of greater diameter for the loop material



Commercial implementations are tunable using some form of variable capacitance. Capacitors capable of handling even moderate power are typically large; therefore, costly and more difficult to obtain. This implementation avoids that issue by using open ended coax stubs as resonating capacitors -one stub for each band segment. Photos 1 and 2 show how I attempted to make that a simple activity.

Due to skin effect, the effective part of the loop itself is the outer braid; however, I tied the center conductor to the braid to get as low a DC resistance as possible. That is why the SO238 is insulated in photo 1. I used RG213 for the stub as well. At the lower frequencies with 100 watts the voltage

across the capacitor is in the neighborhood of 4,500 volts. RG213 has a breakdown voltage rating of 5,000 volts. I would not use anything smaller for the stub unless one is running QRP. For instance, the breakdown voltage for RG8X is 1,500 volts.

It is important that all connections between the transmitting loop and capacitor be as low resistance as possible, or the efficiency will suffer greatly. One does not have to use the method I did with PL259/SO238 connectors. A terminal strip could be used with star lock washers or other inventive options could be used. As an example, if one were interested in a single band segment, the stub could be soldered directly across the loop.

Determining the stub length is not difficult but can be tedious. Using an antenna analyzer or Nano VNA start with a piece longer than needed and trim in small segments making sure the center conductor is not shorted to the braid until resonance is achieved on the desired center frequency. My stub for the high end of the CW portion of the band/ FT8 frequency on 20 m is 9" in length and measures 23 pfd. After getting the proper length, I "painted" the open end with fingernail polish for further insulation.

As shown in figure 1, the coupling loop is simply a shorted loop 1/5 the diameter of the transmitting loop and could be fed with smaller coax. I made mine with AWG #12 solid copper wire. A larger diameter wire could be used but does not fit inside the solder cup of a SO238. Better coupling and better matching can be achieved by making the coupling loop more elliptical, giving more surface to surface interaction.



The radiation pattern of a mag loop is a bidirectional figure 8 along the plane, not broadside. This directive pattern is another advantage of a mag loop. As mentioned in the opening paragraph, a mag loop does not require a tower or great height to be effective. It works well on something no higher than a camera stand or on a picnic table (possible POTA antenna?).

While this is not my primary antenna, it has been fun to experiment with it and I may incorporate it as a Whisper radiator for 30m.

### **SAFETY ADVISORY**

Note that very high voltages are developed across the stub (capacitor). Do NOT touch the loop or capacitor while transmitting!



**DARA Repeaters**

W8BI 146.94 (-600 KHz) CTCSS 123 Hz

W8BI 223.94 (-600 KHz) CTCSS 123 Hz

W8BI 442.10 (+5.0 MHz) CTCSS 123 Hz

W8BI ATV 421.25 (439.25) 144.34 Common Audio

**DSTAR**

147.105 (+600 KHz) W8RTL^^C (^ Denotes a space)

443.050 (-5.0 MHz) W8RTL^^B

1283.50 (-12 MHz) W8RTL^^A DV

1249.00 Simplex W8RTL^^A DD

Test Answers:

T2C01 D. FCC rules always apply

G3C01 A. The D region

E2C01 D. No additional indicator is required