B-PLUS

Albany **A**mateur **R**adio **A**ssociation – AARA

May 2023

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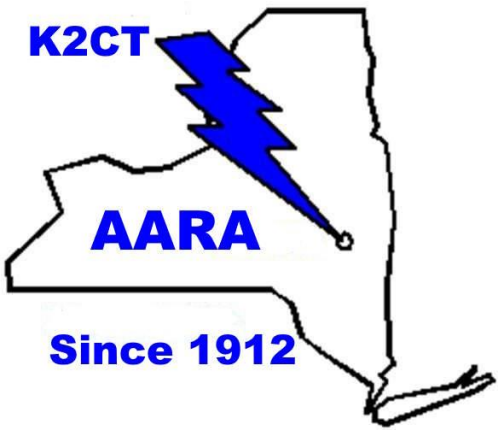
B-PLUS Editor



AARA May Meeting
May 3rd 7:00 PM
Slingerlands Fire Dept.

Skywarn Training
Note the Earlier Time!
See Next Page

PLEASE Pay Your Dues
Dues are $20
Checks can be sent to:

Saul Abrams, K2XA
307 Maple Rd.
Slingerlands, NY 12159

NWS ALBANY SKYWARN SPRING WEATHER SPOTTER TRAINING

Date:
May 3, 2023

Time:
7:00 pm - 9:00 pm

Location:
Singerlands Firehouse
1520 New Scotland Road
Singerlands, NY 12159

This training session will help you become a weather spotter!

SKYWARN® is a volunteer program with trained weather spotters nationwide. These volunteers help keep their local communities safe by providing timely and accurate reports of significant and impactful weather to the National Weather Service (NWS).

Scan for more at
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No prior knowledge or experience needed!
Training is free!

Learn about:
- Hazardous Spring and Summer Weather Events and Climatology
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Scan the QR Code if you would like to register!

Questions? Contact us!
alb.stormreport@noaa.gov

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Upcoming Hamfests

Orange County Amateur Radio Club Hamfest

May 7th, Sunday

8am until 12 noon

Black Rock Fish and Game Club

5 Pleasant Hill Road

Mountainville, NY 10953

Details at: http://ocarcny.org

East Greenbush Amateur Radio Assoc. Hamfest

June 3rd, Saturday

8am until 1pm

East Greenbush Town Park

99 Town Park Rd, East Greenbush, NY 12061

Details at: https://www.egara.club/events

Saratoga County Amateur Radio Assoc. Hamfest

September 9th, Saturday

Gates open at 7am

Saratoga County Fairgrounds

162 Prospect Street

Ballston Spa, NY 12020

Details at: http://k2dll.org

Fred's Sandbox #4

Two dipoles spaced apart X plus Y axis and fed 90 degrees out of phase

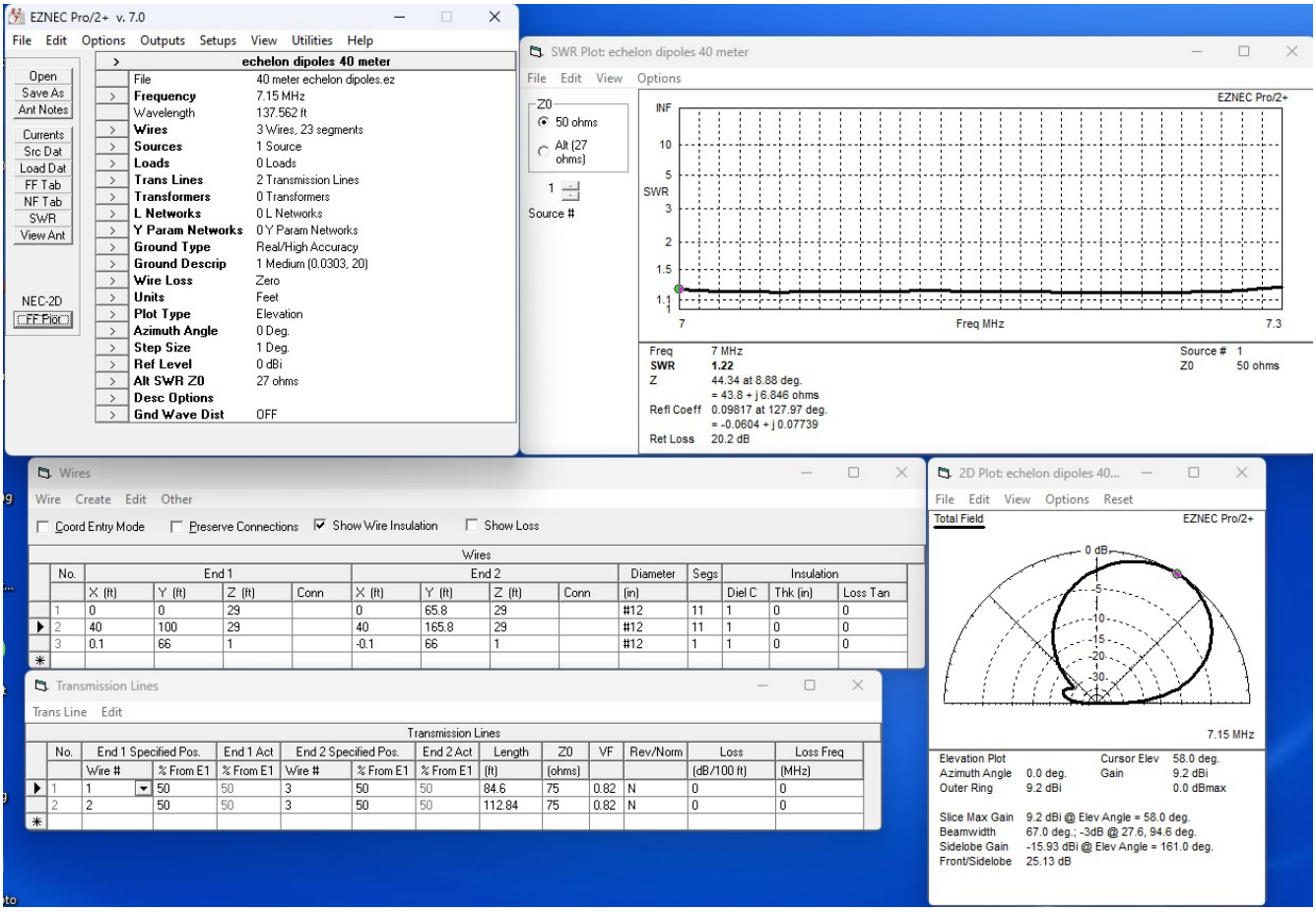
Yeah, it sounds complicated, but it isn't. Let's say you start with a 2 element wire beam for 40 meters with 40' of element spacing, make the elements identical lengths, and feed both elements, one with 84.6' of 75 ohm coax, the other with 112.84' of 75 ohm coax, then add them in a TEE connector. This 75 ohm coax transforms each 50 ohm antenna to 112 ohms, and when parallel connected to the other antenna nets 56 ohms, a good match to 50 ohms. (Well, not exactly, but that's the beginner's version). Next, take the reflector and move it sideways 100'. That gets you the gain and F/B ratio of a 2 element beam, no interaction between the elements, and incredible VSWR bandwidth. Where does the bandwidth come from? Because one of the two coax lengths are ¼ wave longer than the other, it transforms the resistive part of the impedance in the opposite direction of the other feedline. It works like this, at the center frequency, each antenna is 50 ohms, but drops below 50 ohm below the center frequency and rises higher than 50 ohms above the center frequency. The second antenna's impedance is transformed in the opposite direction because it has an extra 1/4 wavelength of coax in it's feedline. It kinda sorta adds like this:

below center frequency 40 ohms + 60 ohms = 50 ohms
center frequency 50 ohms + 50 ohms = 50 ohms
above center frequency 60 ohms + 40 ohms = 50 ohms

But wait, there's more:

The extra ¼ wavelength of coax also changes the sign of the reactive part of the antenna's impedance. So, when one antenna is capacitive the other is inductive and vice versa. This gets very close to eliminating the reactive part of the antenna's impedance across the entire band.

Note that this would be an easy and effective Field Day antenna. The take-off angle is optimum for 40 meters daytime and twilight. I hope to try it next Winter Field Day.



You probably notice that I play with EZNEC very often. All EZNEC versions are currently free to download on the EZNEC website. I suggest that you get your free copy while it is still available.

A Digital Look at Ham Radio History

By Dave Galletly KM2O

I was recently alerted to a new resource that is available, free of charge, to everyone, including ham radio operators. The Digital Library of Amateur Radio & Communications (DLARC) has been opened for general use. This

resource contains a treasure trove of materials of interest to hams, experimenters and SWL's and is now at your fingertips.

DLARC is a portion of the massive project that is The Internet Archive (archive.org), an outgrowth of a site that has tried to capture lost websites, The WayBack Machine which presently hosts over 805 billion web pages.

The Internet Archive describes itself this way: "The Internet Archive, a 501(c)(3) non-profit, is building a digital library of Internet sites and other cultural artifacts in digital form. Like a paper library, we provide free access to researchers, historians, scholars, people with print disabilities, and the general public. Our mission is to provide Universal Access to All Knowledge."

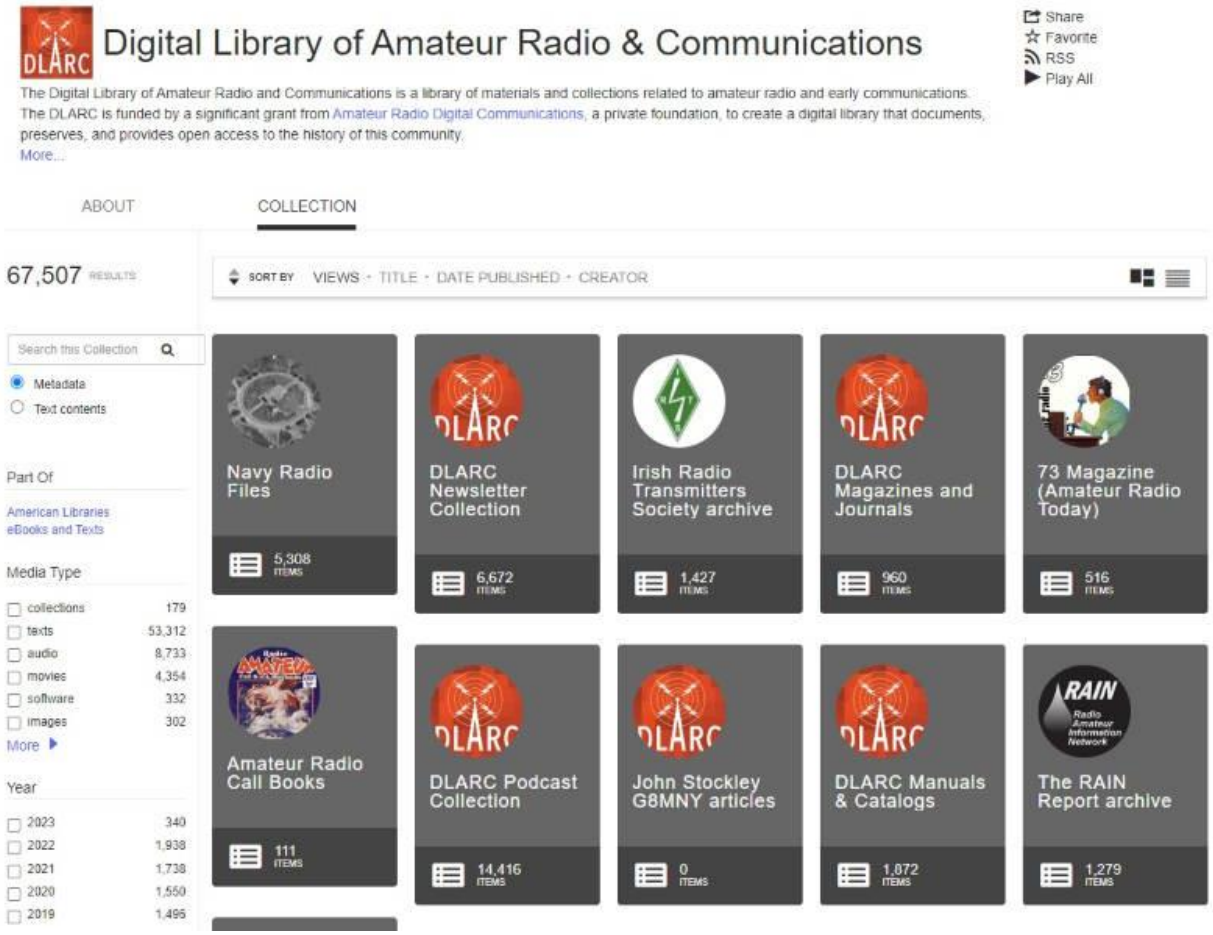
"All Knowledge" includes amateur radio, so under the guidance of Kay Savetz K6KJN DLARC has been developed. Open the direct link to DLARC (https://archive.org/details/dlarc) and you will be greeted with a glimpse of the collection, a display of tiles which will open to individual copies of the named resource. (See screenshots)

As you tour the site you will find newsletters, magazines, videos, call books, manuals, and catalogs. The entire published run of 73 magazine is here, along with the RAIN Report, This Week in Amateur Radio, Glenn Hauser's World of Radio, Popular Electronics magazine as well as QST. Items that are no longer under copyright are available just by clicking. Copyright restricted material is available on an hourly lending basis by registering with archive.org. This is free.

DLARC is made possible by a grant from Amateur Radio Digital Communications, a private foundation. Material for this archive, including club documents and newsletters are being actively sought by Archivist Kay Savetz K6KJN. To contribute content to this project, email kay@archive.org.

K6KJN recently delivered a web presentation on DLARC for RATPAC. The YouTube video of the session is available at: https://www.youtube.com/watch?v=sOg-01vFFC4

Take some time and enjoy this new way of finding articles, podcasts, recordings, manuals and schematics.


Digital Library of Amateur Radio & Communications
The Digital Library of Amateur Radio and Communications is a library of materials and collections related to amateur radio and early communications. The DLARC is funded by a significant grant from Amateur Radio Digital Communications, a private foundation, to create a digital library that documents, preserves, and provides open access to the history of this community.
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audio 8,733
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More
Year
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2022 1,938
2021 1,738
2020 1,550
2019 1,496
Navy Radio Files 5,308 ITEMS
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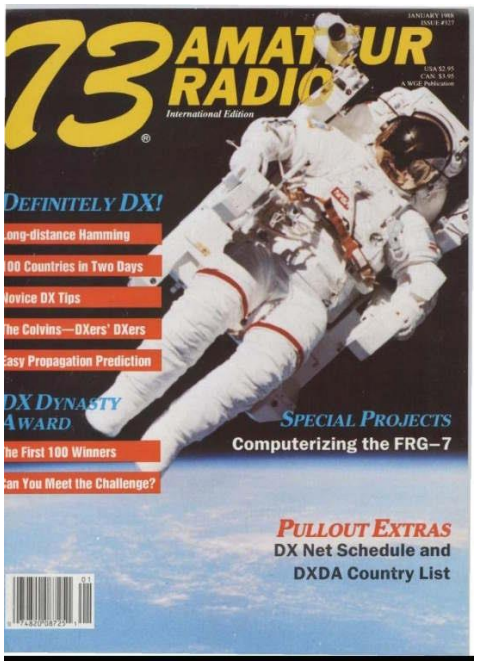
DLARC Manuals & Catalogs 1,872 ITEMS
The RAIN Report archive 1,279 ITEMS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SPECIAL PROJECTS
Computerizing the FRG–7
PULLOUT EXTRAS
DX Net Schedule and
DXDA Country List

Save the date:

Field Day 2023 is June 24-25 with set up on Friday, June 23.

AARA will be at Thacher Park (Hailes Cave) jointly with the Troy Amateur Radio Association (TARA)

Important Links:

Find a license class in your area: www.arrl.org/class

Find a license exam in your area: www.arrl.org/exam

The Eastern Iowa DX Bulletin:

http://www.eidxa.org/EIDXBulletin.html