



Monthly Newsletter
April 17, 2024

❖ What's New ?

The creative juices did not flow this month.

Let's fill this space with a description of the item found in the Door Prize Immediate Gratification bag. They are:

- Can of WD-40 Spray
- Scotch #88 Black Vinyl Electrical Tape
- Scotch #33 Black Vinyl Electrical Tape
- DX Engineering logo Desk Note Tablet
- DX Engineering logo Pocket Note Pad
- Velcro One-Wrap (Black Roll)
- Velcro One-Wrap (Colorful Die-cut Ties)
- Velcro One-Wrap (Black/Gray Die-cut Ties – last one --)
- Black Plastic Tie-Wraps (Pkg)

Like Mary's Little Lamb, these items follow AF3I to each meeting. The on-site Door Prize Winner can select one item on-the-spot and avoid the time required by mail-delivery of other items found in The CARC Store.

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An at-home Door Prize Winner can select from the Immediate Gratification items, or The CARC Store items.

❖ On-The-Air Events

April 2024

- | | |
|------------------------------|------------------------------------|
| • Louisiana QSO Party | 6 th |
| • Mississippi QSP Party | 6 th |
| • Missouri QSO Party | 6 th -7 th |
| • SKCC Weekend Sprint-a-Thon | 13 th -14 th |
| • New Mexico QSO Party | 13 th |
| • North Dakota QSO Party | 13 th |
| • Georgia QSO Party | 13 th -14 th |
| • Nebraska QSO Party | 20 th -21 st |
| • Michigan QSO Party | 20 th |
| • Ontario QSO Party | 20 th -21 st |
| • Quebec QSO Party | 21 st |
| • Florida QSO Party | 27 th -28 th |

May 2024

- | | |
|---------------------------------------|------------------------------------|
| • CARC Derby | 4 th |
| • Indiana QSO Party | 4 th |
| • 7 th Call Area QSO Party | 4 th -5 th |
| • Delaware QSO Party | 4 th -5 th |
| • New England QSO Party | 4 th -5 th |
| • SKCC Weekend Sprint-a-Thon | 11 th -12 th |
| • Canadian Prairies QSO Party | 11 th |
| • Arkansas QSO Party | 18 th |
| • CQ WPX Contest CW | 24 th -26 th |

Check the dates. Some contests begin at 0000Z which is Saturday morning UTC, but late Friday night local time.

❖ General Interest and Calendar Items April 2024, and later

Ham Radio License Exam Testing Part 1	<p>Harrisburg Radio Amateur Club (HRAC) test dates are 3rd Saturdays, EVEN Numbered Months, starting at 9 a.m. <i>Location: Vietnam Veterans of America, 8000 Derry Street, Harrisburg, PA</i> <i>Laurel VEC = No Testing Fee ! Pre-Registration, including your FCC FRN, is required.</i></p> <p>HRAC VE Testing Dates appear on our EVENTS CALENDAR: Additional information at their web page: www.w3uu.org Look for the link: License Exams.</p>
Ham Radio License Exam Testing Part 2	<p>South Mountain Radio Amateurs (SMRA) conducts license testing at the Public Safety Center off Claremont Road, Carlisle, PA. Exam sessions are scheduled monthly at 6 p.m. on the third Tuesday of the month. Preregistration is required.</p> <p>Our readers are encouraged to perform their own due diligence to validate any exam session in which they have an interest. Contact: n3tw@arrl.net or smraham@gmail.com There is a modest fee for this testing service. Additional details at their web page. http://n3tw.org/links/getting-licensed/smra-testing-policies/</p>
Ham Radio License Exam Testing Part 3	<p>Keystone VHF Club (KVHF) conducts license testing at the York County Department of Emergency Services. Exam sessions are scheduled the 2nd Saturday, ODD Numbered Months, starting at 10 a.m. Visit https://www.w3hz.com/laurel-vec-testing/ for additional information.</p> <p><i>Location: York County Department of Emergency Services, 120 Davies Road, York, PA</i> <i>Laurel VEC = No Testing Fee ! Pre-Registration, including your FCC FRN, is required.</i></p>
Ham Radio License Exam Testing Part 4	<p>Cross Keys Village Amateur Radio Club in conjunction with Adams County Amateur Radio Society conducts license testing in the Cross Keys Village Harmony Ridge Community Center, Encore Room. Exam sessions are offered on the Third Saturday of Odd Numbered months between 9:30 a.m. and 11:30 a.m.</p> <p>Pre-Registration, including FCC FRN, is required. Online Form at: https://www.w3kgn.org. Look for “VE Examinations” in the left-side menu bar. Laurel VEC does not charge a testing fee for administering license exams. FCC \$35 fee payment required before license issuance.</p>
York Hamfest License Exam Testing	<p>Saturday April 27, 2024. Spring Grove, PA Exam registration begins at 10:30 a.m. Testing Session begins at 11:00 a.m. FREE – No Fee for testing. If you pay to enter the hamfest save your entire ticket and stub. Present ticket and stub at the License Exam Registration Desk and your hamfest admission will be refunded. Info: www.yorkhamfest.org</p>
License Exam Training Class	<p>Ralph Brandt, K3HQI offers license exam training classes from time to time as part of the Keystone VHF Club and perhaps in conjunction with other organizations and events. Contact Info: Ralph Brandt, K3HQI eMail: K3HQI@arrl.net 717.885.3063 or Google him.</p>
License Exam Training Class	<p>The Nashua Area Radio Society (Nashua, NH) offers license exam training classes on a frequent basis. Some are online. Others are conducted in-person. Check their website for current information. https://www.n1fd.org/amateur-radio-license-class/</p>
License Exam Training Class	<p>If you know of any upcoming License Exam Training classes please let AF3I know so that they can be listed here. The ARRL website has a search tool. The classes I found were listed behind the keyword “online”. http://www.arrl.org/find-an-amateur-radio-license-class</p>
CARC Weekly Coffee Time	<p>Every Thursday at 10:00 a.m. Location: Sometimes at Caffe 101 in Boiling Springs, PA. On the corner, across from the clock-tower and diagonally across from the Boiling Springs Tavern. Sometimes conducted as a Zoom Meeting. Check with Richard Johnson N3EPY for info.</p>

If you have Calendar items that you would like to share with your fellow CARC Members please send them to the Newsletter Editor – Andrew Forsyth AF3I. He can be reached by eMail sent to: AF3I@RadioClub-CARC.com

❖ Cumberland Amateur Radio Club Nets

CARC Two Meter VHF Digital Net	<p>Every Sunday evening at 6:00 p.m. local time. 146.490 MHz FM Simplex. Most likely we will be using OpMode THOR 22.</p> <p>If you have experience using Sound Card Digital Modes you will feel at home with this digital net. Mostly informal in terms of conversation topics.</p> <p>If you have not yet experienced the pleasure of using Sound Card Digital Modes you are invited to seek assistance. CARC Members have all kinds of skills tucked away in remote corners of their universe. Some of these members maintain a low profile. However, if you ask they will spring forth and share their experiences with you. You could send an eMail message to ELMER@RadioClub-CARC.com and one of us will crawl out of our den to help you.</p>
CARC Two Meter Phone Net	<p>Every Sunday evening at 7:00 p.m. local time. 2 meter band. 146.490 MHz FM Simplex. Also available through EchoLink Node 259045 or search for station AF3I-L. EchoLink is great for licensed Amateur Radio operators who have no transceiver and/or no antenna. EchoLink is equally great for anyone who resides or travels outside our local area and wishes to stay in touch. Visit www.echolink.org as a starting point.</p>
CARC Ten Meter Phone Net	<p>Every Wednesday* at 8 p.m. local time. 10 meter band. 28.400 MHz USB In case of other activity of that frequency tune up or down the band a few kilo-Hertz looking for us. *Except Monthly Meeting Night. on the third Wednesday of the month.</p>

Words of Wisdom...

A peacock that rests
on its feathers
is just another turkey.

- Dolly Parton

Clubs are the Backbone of Amateur Radio

Good Clubs are diverse.

Members have varied ages, genders, ethnicities and interests. Our most successful clubs are microcosms of our society and they appreciate the diversity of all members – their wisdom, experience, youth and enthusiasm

The best clubs make great use of the diverse skills and experiences. They recognize that everyone has something unique to bring to the table.

Thanks to Bob Wilson, W3BIG
ARRL EPA Section Manager
Signals Newsletter, March 2024, Page 4

❖ Field Day Bonus Points and Scoring

As part of our March 20, 2024 meeting there was some discussion about Solar Power and how we might leverage that technology for our Field Day event.

There are several places among the FD rules where power sources and RF power levels come into play. It is important that we understand our options. I have three topics:

Alternate Power Sources
100% Emergency Power Source
RF Output Power Levels

Alternate Power Sources

Also described as Natural Power Source in some areas of the FD Rules.

Field Day operations in Class A, B, E, or F that make at least five QSOs using an Alternate Power Source may claim 100 Bonus Points.

An Alternate Power Source is defined as something that is not a motor-driven generator and not a petroleum-fueled generator.

Examples of qualifying power sources can be based on the use of Solar, Wind, Methane, Tidal, Water, or Human (or animal) power.

Pursuit of the Alternate Power Bonus Points does not have any strings attached to the RF Power Output levels other than the typical scoring multiplier.

We have a proposal on the table to take a shot at earning these Bonus Points by using Solar Power. Bill Wagaman, N3GTY is our Solar Power advocate.

100% Emergency Power Source

Field Day operations that power all of their transmitting equipment from an Emergency Power Source may claim 100 Bonus Points for each transmitter (up to 20) represented in

their Entry Class. (A GOTA station, or a Free VHF station are not included in the Entry Class count and therefore do not earn 100 Bonus Points.) The actual wording of the rule fails to capture the intent that receiving equipment must also be powered from the emergency power source.

RF Output Power Levels

Field Day rules and scoring formulas define three RF output power levels

QRP defined as all QSOs for the entire Field Day Operation were made using no greater than 5 watts and powered by Battery or Solar. When scoring, the QRP power level is entitled to a 5X multiplier.

Low defined as all QSOs for the entire Field Day Operation were made using no greater than 100 watts. When scoring, the Low power level is entitled to a 2X multiplier.

High Classes A, B, and C are permitted to use up to 500 watts RF output power. When scoring, the High Power level is entitled to a 1X multiplier.

With tongue-in-cheek, there also is a fourth power level

Too High – anything greater than permitted by the FD rules.

- In the case of Class D, E, or F that is greater than 100 watts.
- In the case of Class A, B or C that is greater than 500 watts.

If a “Too High” power level is detected the entry is subject to disqualification.

Recommendation:

The Alternate Power Source Bonus Points seem to be a practical fit for our style of operation.

If we need to temporarily shut down one of our Class 3A rigs for the span of time needed to make five solar power QSOs then so be it.

We need to identify the five solar power QSOs in our FD Supporting Documents. In other words, the owner and operator need to keep track of which QSOs were made using Solar Power.

❖ Field Day Site Plan

I thought we should have some discussion on the topic of Field Day Antenna Placement.

The accompanying satellite view of Shaffer Park is intended to supplement our memory of the site layout.

In prior years we operated Class 3A. We had three rigs and three antennas. We seem to end up with all the antennas compressed into a 30 foot swath around the cabin. We need to make better use the most distant parts of the park property.

For 2024 we are on a path of adding a GOTA Station and will need a rig and some type of multi-band antenna.

For 2024 we are on a path of adding a Free VHF Station and will need a rig and compatible antenna(s).

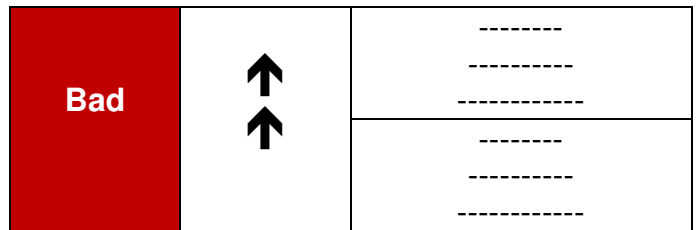
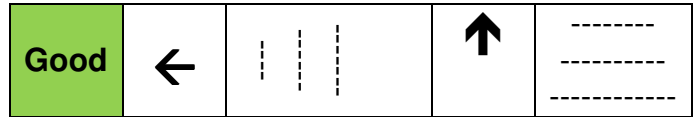
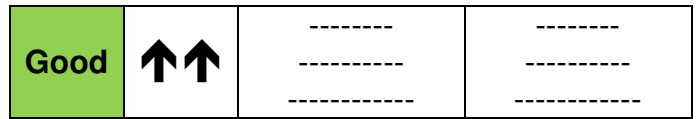
In prior years our FD operations triggered a lot of complaints involving inter-station interference. We know that antenna placement and positioning can contribute to interference problems. It would be good to deal with those problems beforehand so that our Field Day weekend can be pleasant and productive.

Key concepts for harmonious antenna placement include:

Wide separation helps. This approach then triggers a need for longer feed lines.

Position horizontal antennas so that one antenna is not pointing into the radiation pattern of another. Tip-to-Tip placement helps. Right Angle placement could help but

it probably sends our RF in the wrong direction. Front-to-Back In-Line placement hurts.



Bandpass Filters will help reduce harmonics when placed on the output of lower-band transmitters that could interfere with higher band receivers. e.g. 80, 40, and 20 meter transmitters, and 40, 20, and 15 meter receivers. I know we use transceivers so the prescription should call for bandpass filters on all 80-15 meter rigs.



Editor plans to bring an easel pad, markers, and tripod to the April Meeting for sketching.