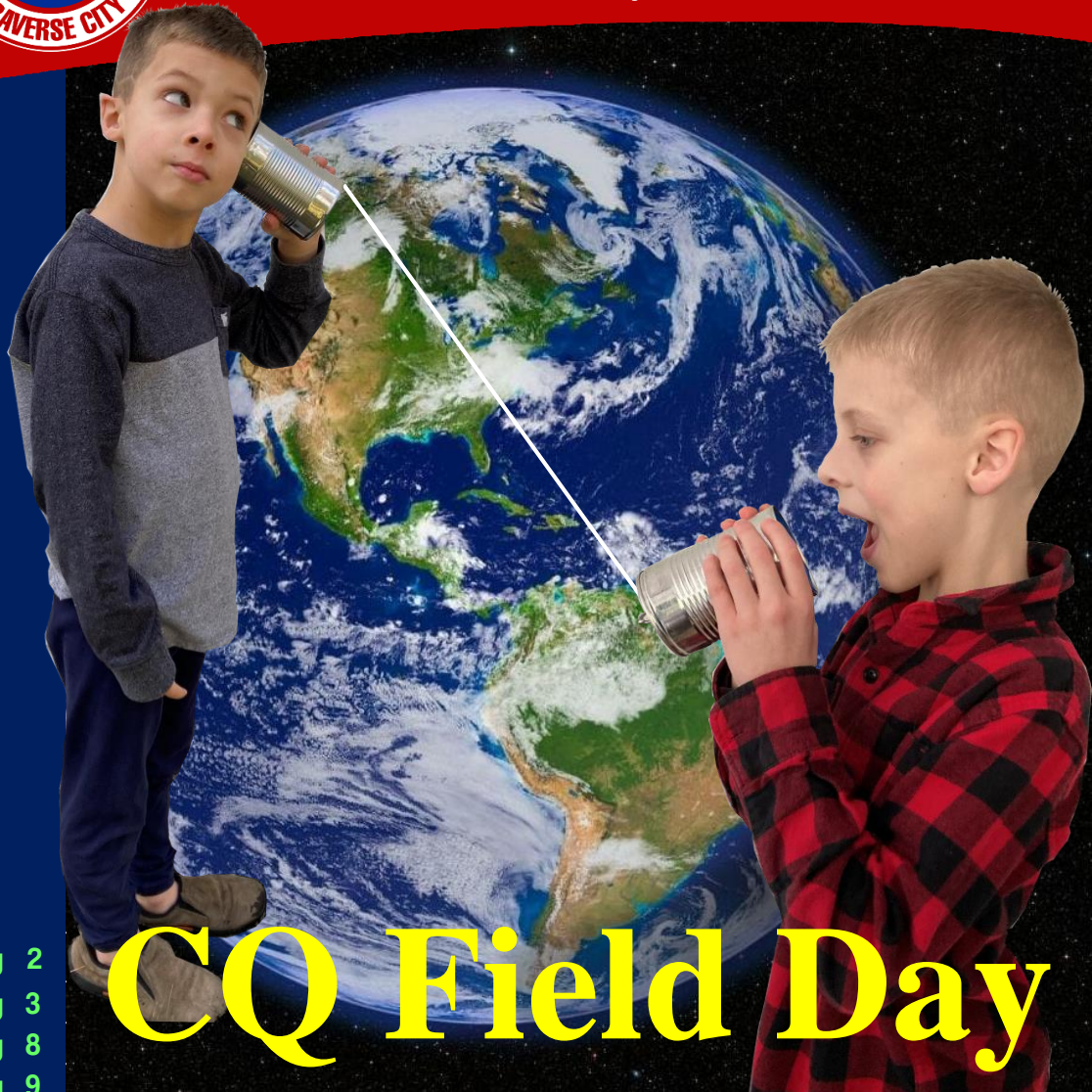




Cherry Juice

Newsletter of the Cherryland Amateur Radio Club

VOLUME ISSUE
51 6
June 2021



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CQ Field Day

Some days, bands are quiet as can be. But during the fourth full weekend in June, all bands light up like Christmas trees as the annual 24 hour ARRL Field Day exercise is on-the-air.

Since the first ARRL Field Day in 1933, radio amateurs throughout North America have practiced the rapid deployment of radio communications equipment in environments ranging from operations under tents in remote areas to portable and temporary structures.

Operations using emergency and alternative power sources are highly encouraged, since electricity and other public infrastructures are often among the first to fail during a natural disaster or severe weather.

To determine the effectiveness of the exercise and of each participant's operations, there is an integrated competitive component, and many clubs also engage in concurrent leisure activities such as camping, cookouts and education.

Continued on Page 3



Affiliated Club #1082



Ernie Abel, K8RCT

Message from the President

You don't have to operate if you don't want too. Many of our members show up just for comradery (and the food). On a warm summer day there is nothing more pleasant than to sit and look across West Bay and enjoy the company.

As we have been doing in the past we haul equipment for the Parker farm on Tuesday preceding Field Day. Vehicles with trailer hitches are always needed for this part of the event.

Then on Friday afternoon we can start setting up the antennas and the radios. Time for an adult beverage! Then on Saturday the actual "contest" starts. This is actually a communications exercise, but we get a bit competitive! The event lasts for 24 hours so if you want to spend the night we will be there. Then on Sunday afternoon everything ends, the antennas are taken down, the radios put away and everything is packed up and hauled away. Did I mention that vehicles with hitches are in demand?

And all start thinking about next year....maybe we should get new antennas, more tents, lobster boil....

Tuesday June 22 at 7:00 PM – meet at the Parker Farm, haul equipment

Friday June 25 around noon – meet at the Cherry Orchard to set-up equipment

Saturday June 26 at 1:00 PM get ready, get set.....GO

Sunday June 27 in the PM everything is taken down and put away- until next year!

So, please come out to the 2021 CARC Field Day and enjoy operating, rag-chewing or the view. I am looking forward to seeing you there.

73, Ernie

K8RCT

There is one event in ham radio that I love the most. It beats out the summer picnic, the Fox Hunt and even the Christmas party. I'm sure that every other ham that has experienced this event that is the one that we all look forward to every year. Come rain or shine, thunderstorms or pandemics we will always show up. You guessed it – FIELD DAY!

Its fun to participate in the set-up and take down and you can try out all the various modes of communications from VHF to Satellite and everything between. I love to operate CW and also FT8. There will be several phone stations on the air as well. It's amazing to watch some of our members operate – they're really good! Sometime just sitting and watching is as much fun as operating.

Then there is the food. Chef Glen always serves up great meals. One Field Day we even had a lobster boil. Who know what Glen has in store for us this year! On Saturday evening is the bring a significant other to dinner event. We bring along our favorite bottle (s) of wine to share. The view is spectacular, the food is great, and the comradery is heartwarming. And yes, there is a port-a-potty for those who need one.



You can Participate from any location - your home, car or out in the field, under the sun and stars!

Continued from Page 1

Operations typically last a continuous twenty-four hours, requiring scheduled relief operators to keep stations on the air

Emergency preparedness

Field Day stresses emergency preparedness. Frequently, entire radio clubs get involved and assemble a portable radio station in a field or park. Some might use quickly deployable portable antennas while other might erect more elaborate radio masts and towers supporting several antennas

Generators, batteries or solar power provide electricity to amateur radio transceivers.

Contest activity and rules

Field Day is an operating event and not a contest. However, it operates exactly like a contest, but without awards. The objective is to contact as many stations as possible in the given time period. Each station exchanges specific information with other participating stations. The Field Day exchange consists of the station call sign, the state from which the station is operating, and a class designator which indicates the number of transmitters concurrently used at the station and the type of electrical power source being used.

The contest portion of Field Day has two purposes. First, to test the group's ability to plan operations that can be effective for an entire twenty-four-hour period, including operator endurance and adequate numbers of operators for a shift operation. Second, is to demonstrate the technical proficiency of the station. Efficiency is judged by being capable of making more contacts during the contest portion of Field Day.

Cherryland ARC will, again, organize and operate a significant field operation. You are very much welcome to join that effort and share in the fun. Come on out! Share the load, the fun and the food. But if you can't. . .

You can participate by going portable, mobile, or from the comfort of your own home. Just download the **2021 Field Day Rules (Here)** Select a Category that works best for you, and start organizing your gear, computers, logging programs or book.

Get ready to practice your radio operating skills on Field Day 2021.



[Download Complete Field Day Rules HERE!](#)

Participation Categories

4.1. (Class A) Club / non-club portable: Club or a non-club group of three or more persons set up specifically for Field Day. Such stations must be located in places that are not regular station locations and must not use facilities installed for permanent station use, or use any structure installed permanently for Field Day. All equipment (including antennas) must lie within a circle whose diameter does not exceed 1000 feet. All contacts must be made with transmitter(s) and receiver(s) operating independent of commercial power mains.

4.3. (Class B) One or two person portable: A Field Day station set up and operated by no more than two persons. Other provisions are the same for Class A except it is not eligible for a GOTA or free VHF station. One and two person Class B entries will be listed separately.

4.4. (Class B - Battery) One or two person portable: A Field Day station set up and operated by no more than two persons. All contacts must be made using an output power of 5 Watts or less and the power source must be something other than commercial mains or motor-driven generator.

4.5. (Class C) Mobile: Stations in vehicles capable of operating while in motion and normally operated in this manner. This includes maritime and aeronautical mobile.

4.6. (Class D) Home stations: Stations operating from permanent or licensed station locations using commercial power. Class D and E stations are limited to 150 W Peak Envelope Power (PEP) transmitter output.

4.7. (Class E) Home stations - Emergency power: Same as Class D, but using emergency power for transmitters and receivers. Class E may work all Field Day stations.

4.8. (Class F) Emergency Operations Centers (EOC): An amateur radio station at an established EOC activated by a club or non-club group. Class F operation must take place at an established EOC site. Stations may utilize equipment and antennas temporarily or permanently installed at the EOC for the event. Entries will be reported according to number of transmitters in simultaneous operation. Class F stations are eligible for a free VHF station.

Club Site: Here's the Plan

Cherryland Amateur Radio Club's field day site is on Leelanau Peninsula at the Kiessel Farm on Fort Road.

Over the past 40+ years, the club has found an effective layout that balances functional operation and minimizing RF interference during operating times.

CARC Field Day Schedule:

Tuesday June 22 – Haul Equipment from the Barn to the Site

Friday, June 25 Set-up Equipment

Saturday, June 26 – Operating Starts at 1800 UTC (14:00 EDT)

Saturday, June 26 – Significant Other Dinner - BYOB

Sunday, June 27 – Operating Ends 2059 UTC (16:59 EDT)

Sunday, June 27 – Teardown & Pack-up. 2100 UTC – (17:00 EDT)

Tuesday, June 29 – Haul Equipment from the Site to the Barn.



Station Set-up 2021

- CW- All Band – 2 Stations
- SSB - 80/15 Meter Station
- SSB – 40 Meter Station
- SSB – 20 Meter Station
- VHF – Solar Powered Station
- VHF/UHF – All-mode Station
- FT8- All Band Station

Food Planning:

The club provides meals on Friday, Saturday and Sunday, at no cost, but we kindly request that you register to let us know:

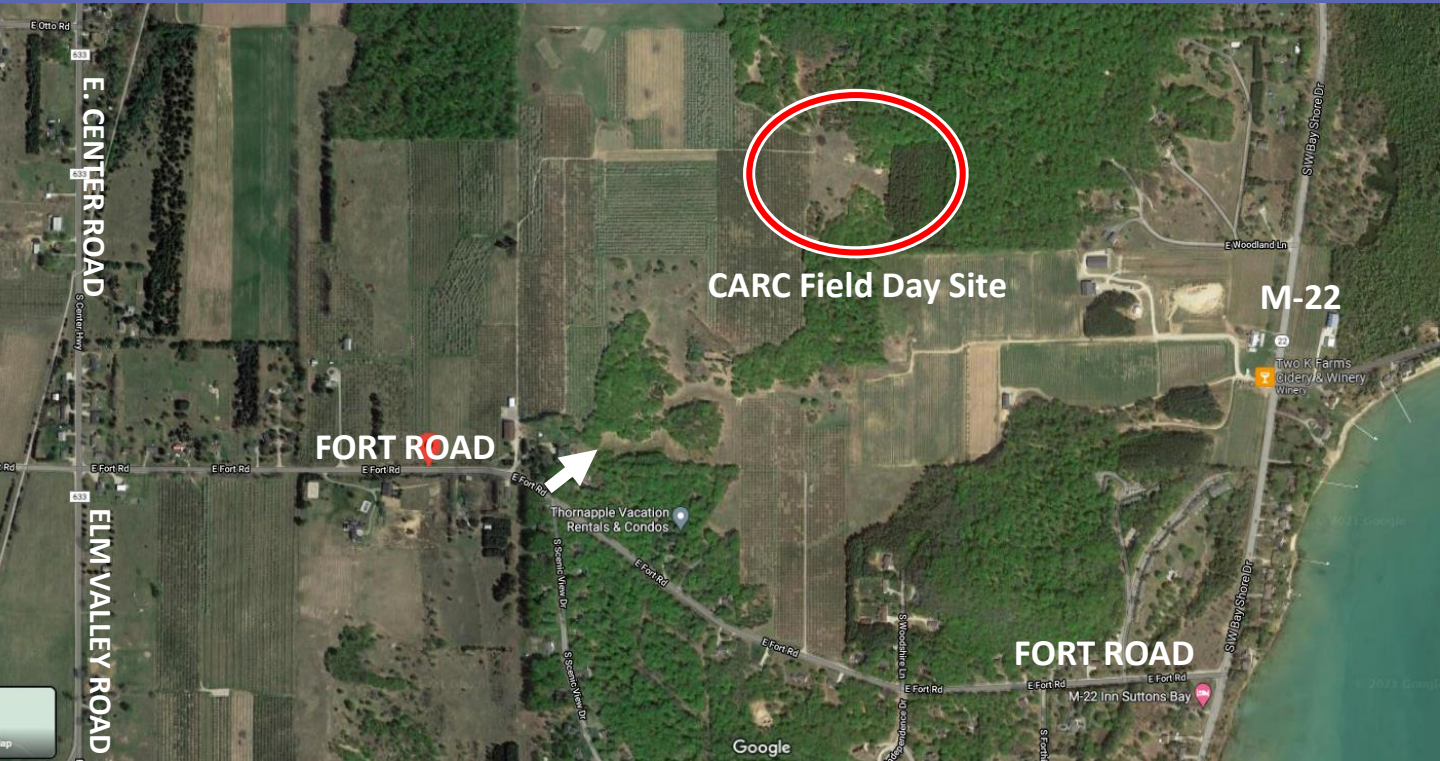


- 1 If you will come to the site
2. Which Meals you will attend
3. If you are bringing guests to the Saturday Dinner

Registered guests will receive plan A food, unregistered guests will receive hot-dogs. - Food is expensive and we need to plan carefully to provide food without waste.

A Registration Form will be sent by email at mid-month.

Club Site: How to get there



From Traverse City, follow M-22 North onto Leelanau Peninsula. Turn Left onto Ford Road and follow it to the top of the hill. Signs will guide you to turn right into the Keissel Farm location. Please drive slowly and cautiously. Follow the white Arrow signs through the orchard roads. Take care to park away from set-up locations.



Club Site: Food & Radios

Food and operating radios is the theme of Field Day - Tradition has Glen K8SGZ cooking great food every year – and sharing it with spouses, significant others, kids and friends in a family dinner setting on Saturday Night. Be sure to register when you receive your email invitation.

Radio operations continue throughout the night, so stop in, listen in and see what it's like.



Significant Other Dinner – Saturday Night



Work in process by Glen, K8SGZ Master Chef



Hope AA8SN and Mark, KD8EDC Operating CW



Joe KC8RLU Operating the 40 Meter Station



Ward N8WK (L) and another ham (R) operating the 20 Meter Station



Arthur KB8MKQ Operating on Field Day

Club Site: Set up, Tear down



Last minute touches on the 40M switchable dipole



Antennas are a GUY thing



Ken, W8QKP, adjusts the 20 meter Yagi

Setting up, maintaining and dismantling antennas is a critical part of Field Day operations. Both require detail planning, heavy lifting, patience and care.

These skills are best learned by doing - Volunteer to help set-up and take down the half a dozen antennas at the Field Day site. It's an experience!



Wide open fields filled with people, radios and antennas for Field Day weekend with a beautiful view

News you can use



The San Francisco Amateur Radio Club (SFARC) will activate a sailboat on San Francisco Bay as the inaugural event in Boats on the Air (BOTA).

The event is on **Saturday, June 5, 1-4 PM PDT**. Inspired by the success of programs like SOTA, POTA, and IOTA, BOTA will feed into the passions of amateur radio and boating. The sailing vessel *Auriah* is a 37-foot-long Beneteau Oceanis with a home port of Sausalito, California. "The main rule of BOTA is that the boat must be under way during the activation. No anchoring, mooring, or tying to a dock is allowed," said Kent Carter, AJ6NI. "The plan is for us to be moving 100% under sail power during that time. In addition to being a fun activity, it is hoped that BOTA will further emergency preparedness and experimentation with amateur radio. **"Activation frequencies are 7.115 MHz (CW); 14.325 MHz (SSB); 18.100 MHz (FT8), and 146.52 MHz (FM simplex).** For more information or [contact](#) BOTA.

[CWops promotes the continual improvement of CW proficiency](#) across a broad range of activities. They establish and support a range of events and programs that allow members to continually learn, practice and improve their CW skills.

Receiver Sensitivity Review by Brand, Make Model- News Flash from Jerry, W8RQM, Livonia.

Jerry sent this link to Sherwood Engineering, Denver, CO. It's simple and no ads. Just the receiver comparisons for all the gear we have, and are considering.

<http://www.sherweng.com/table.html>

Receivers are sorted by Third-Order Dynamic Range Narrow Spaced - or- ARRL RMDR (Reciprocal Mixing Dynamic Range) if Phase Noise Limited.

If you love data- This is your new home!

You might be a Ham if . . .

The only time you get up at 6am is for a ham-fest.

Someone in a music shop asks you what bands you like and you answer two meters and seventy centimeters.

A bank clerk asks you to spell your name and you do so phonetically.

A band opening is more important than a grand opening.

Sight-seeing on holiday amounts to looking at rooftops for antennas.

The radios in your car are worth more than your car.

Your child's schoolteacher calls you on the phone to ask why your child identified countries on the world map as JA, ZL, VE, G, UA and XE.

If you refer to your house as "Ohm, sweet Ohm".

Submitted by Dave K8WPE

There is always the question; "what to use to clean, lubricate, and protect portable loops, & other electronic things used outside, and assembled or disassembled from time-to-time"

Many people feel *The DeOxit* products are excellent but plain *DeOxit* is just a cleaner.

- *DeOxit Gold* has a protectant.
- *DeOxit Shield* is made for outside use and has a protective shield. I use the plain *DeOxit* to spray the light connectors on the four trailers I use every year for boats and trash. It just cleans the metal parts.

There is a whole family of *DeOxit* products. I have another one I use for potentiometers and my roller inductor in my antenna tuner but can't remember the name of it. This one was highly recommended for the Buddipole and other connectors used in portable situations.

WD40 was mentioned and seems to have worked but is not a cleaner or protectant, just a drying lubricant. Hope this helps as the out in the field weather is approaching. Field Day too! *DeOxit* products are not cheap but a little goes a long way. Is has saved the day for years on my older rigs I was working on, especially audio equipment. Oh, the good old tube days. Ha!

[DeOxit Product Line Link](#)

Dave K8WPE

Design Your Own Coax Choke Baluns

Basic rules-of-thumb for home-builders – easy-to remember – no complex math – with examples

By John Portune W6NBC

Basic rules-of-thumb for home-builders – easy-to remember – no complex math – with examples By John Portune W6NBC In developing new ham antennas, I have painfully learned the importance of testing an antenna prototype through a 1:1 choke balun. On-paper, concepts that “seemed promising,” when it became an actual antenna often gave unpredictable results until I included the balun. Using a 1:1 choke balun for all my design work is now “standard operating procedure.” Yes, there are other types of baluns. Though to me, the 1:1 choke balun is the most universally useful balun type. Even most of my commercially built antennas have them have one. They’re effective, inexpensive and simple to make. One merely winds a few turns of the coax directly in the feedline. Voila, that’s all; what could be easier? A well-known example, found widely for the HF bands on the internet, is the HF “ugly balun,” Figure 2. Many hams seem to just naturally think to wind a balun neatly on a PVC form as in Figure 1a. Figure 1b is another neatly wound coax balun, but on a handy 3D printed quick-form. Don’t, however hesitate to scramble wind a coax balun as a random bundle secured with zip ties, Figure 1c. My favorite way to make a scramble-wound choke balun, Figure 1d, is to loop the windings back through each other to form what is called a Torus Knot – no zip ties needed. All the baluns in Figure 1 are for VHF and higher. One particular practical advantage of a coax balun over other types, is that it can live out “in the weather” – no sealed box, no connectors no messy tape or sealants.

Yes, coax baluns can be large. Some may consider them ugly, but they are effective for a very wide range of balun applications. Most important to many is that they are easy to make and inexpensive. Let’s now see how to build one. First you need to choose one of the build it-yourself methods above. Next you need to determine the number of turns and the diameter of the coil for a given band. Some may consider this difficult; isn’t. Fortunately, three easy-to-remember math-free rules-of thumb that will get you there. The Starting Point The first derives from the primary responsibility of ALL baluns: to keep transmitter RF inside the feed coax. Baluns can also serve other functions other than choking off shield RF, but that is the important one. RF being carried by coax should exist ONLY between the outside surface of center conductor and the inside surface of the shield or braid. It should not be allowed to find its way onto the outside surface of the coax, where it is technically known as common-mode current. Failure to realize the importance of this fundamental reason for a balun ultimately forced me to begin using a 1:1 choke balun during antenna development. Common mode current (RF on the shield), before then had been keeping me from seeing the performance I knew should be there. Stopping Common-Mode Current A choke balun stops RF on the shield by introducing an impedance (more technically a reactance) in series with the outside of the shield. Any common-mode current will then be choked off when it encounters the coil’s reactance. The amount of reactance must be relatively high in comparison to the working (characteristic) impedance of the antenna system – 50 Ohms in

most ham situations. Standard engineering practice suggests that a reactance be at a minimum of four times the system impedance, or 200 Ohms, is enough

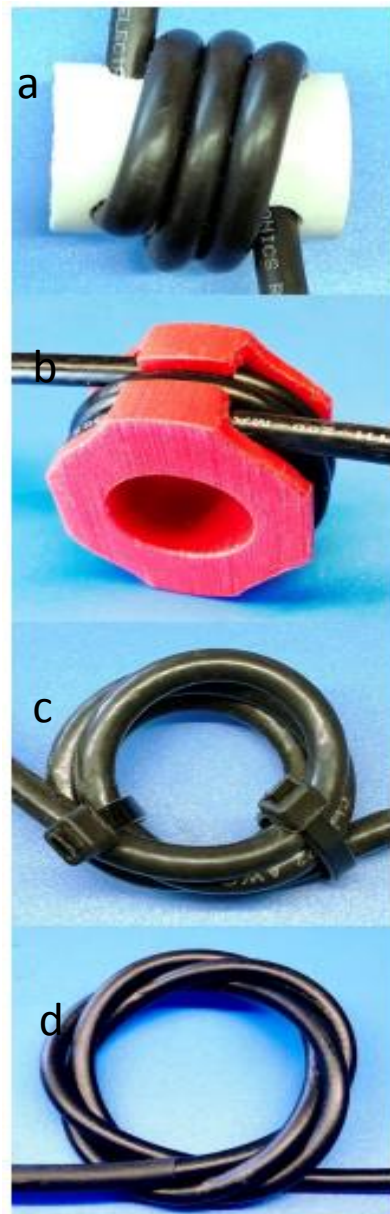


Figure 1: a: neatly wound on a form; b: a handy quick form, c: scramble wound with zip-ties, d: scramble wound as a torus knot.

Continued on Page 10

Design Your Own Coax Choke Baluns

Continued from Page 9

Coax Choke Balun Rule-of-thumb 1:

The coax choke coil must have a reactance of at least 200 Ohms in a 50 Ohm antenna system, at the frequency of operation.

You can make it larger, but 200 Ohms is a satisfactory starting point. Many published designs suggest more, and that is fine. Translating Coil Reactance into Windings

Coax Choke Balun Rule-of-thumb 2:

(1) convert Ohms to Microhenries and then (2) convert Microhenries to turns and coil diameter.

Most RF handbooks have the math formulas to do both. I find on-line calculators much easier. Here, without endorsement, are the two that I use. (1) Reactance to inductance: <https://www.electronics2000.co.uk/calc/reactance-calculator.php> (2) Inductance to turns and coax coil diameter <https://www.allaboutcircuits.com/tools/coil-inductance-calculator>

Let's now look at two practical examples. Try the the two steps with the calculators for yourself; the process is straight forward.

Example 1: A 2 Meter 1:1 Coax Choke Balun Calculator (1) translates the 200 Ohms of reactance at 146 MHz to 0.22 μ H of inductance. Calculator (2) next translates 0.22 μ H of inductance into 3 turns of 0.2 in. diameter coax (RG-58 or LMR-200) on a 1 in. diameter form. This balun seen in Figure 1b, wound on a handy 3D-printed quick form. The 3D printer file (.stl) for this coil form is available free for download at <http://w6nbc.com/3d/> and arrrl.org/qst-in-depth

Example 2: A 160 Meter and Higher 1:1 Coax Choke Balun Calculator (1) computes that a reactance of 200 Ohms at 1.8 MHz needs a coil of 18 μ H. Calculator (2) next computes that an 18 μ H coil requires a minimum of 12 turns of 0.4 in. diameter coax (RG-8 or LMR-400) coil wound on a 5 in. diameter Schedule 40 PVC form. See Figure 2.



Figure 2: The minimum 160m and higher ugly balun.

Shown is a typical “ugly balun” widely described on the internet in a variety of lengths, diameters and coax types. You may use more inductance if you wish, or more turns and a larger diameter. Many references do. This is fine, as lower frequency balun also works on higher bands. A Word on Scramble Winding Some may be wondering about randomly winding a coax balun, Figure 1c & 1d. It's quite okay. A neat coil on a form, Figure 1a, is not essential.

Rule-of-Thumb 3: A scramble-wound coil has less inductance than a neatly-wound coil.

Studies suggest de-rating a scramble-wound coil by roughly 40%. As a fan of home-brew ham antennas, my design “mantra” is to now use a balun on ALL antennas, even commercially-build antennas. One might use a 4:1 balun, for example, for the needed

impedance transformations in an OCF HF dipole, but for most other balun applications, a simple coiled-coax 1:1 choke balun works very well. I have a good example at my QTH on the SO-239 “unbalanced output” jack of an automatic antenna tuner that feeds a multi-band 20 ft. HF flagpole antenna with 450 Ohm or open-wire window line. A short coax

stub with a coiled coax choke balun, connected to the output of the tuner, takes care of both the balance issue and keeping common-mode RF off of the coax run from my rig to the tuner. A 1:1 choke balun, whether in coax or as ferrite cores/beads, to me is the most useful form of the balun. It eliminates unwanted RF on the shield

stub with a coiled coax choke balun, connected to the output of the tuner, takes care of both the balance issue and keeping common-mode RF off of the coax run from my rig to the tuner. A 1:1 choke balun, whether in coax or as ferrite cores/beads, to me is the most useful form of the balun. It eliminates unwanted RF on the shield.

About the author:

John Portune, W6NBC is an ARRL member and frequent contributor to QST. He addressed the Cherryland ARC membership at a meeting last fall. He has been licensed for 55 years and has held an Amateur Extra-class license since 1972. John has a BS in physics and also holds FCC Commercial General Radiotelephone Operator and FCC Radiotelegraph licenses. He retired as a broadcast television engineer and technical instructor at KNBC in Burbank, and then from Sony Electronics in San Jose, California. You can reach John via e-mail at jportune@aol.com or through his website at www.w6nbc.com

FOR SALE BY OWNER

VHF Rigs & Ants by Joe Novak, W8TVT

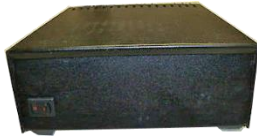
Contact Scott, WX1J- wx1j@arrl.net, 248-495-3665

Package 1: \$100.00



Motorola Moxy, w/ Mic & Astron RS-12A PS
Radio set 442.5 MHz W8TCM Repeater

Package 2: \$100.00



Motorola Spectra, w/ Mic & Astron SL-114M PS

Package3: \$100.00



Kenwood TK-762G, w/ Mic & Astron RS-12M PS

W8TVT Antenna prices are referenced 10% below QTH.com



\$200.00

Mosley TA-33
Antenna, In its Box
Not assembled Assy
instructions included



\$200.00

Cushcraft A3S
Antenna, In its Box
Not assembled. Assy
instructions included

HF Rig by Ken Musson, W8QKP

Contact Ken: kmusson@charter.net



Kenwood TS-430S HF All Mode XCVR



Kenwood PS-53 Power Supply



Kenwood MC-60 Desk Mic

Amazon to require FCC certification

By Dan Romanchik , KB6NU

Here's an interesting notice from Amazon:

Action required for radio frequency device listings on Amazon.com
This article was originally published February 1, 2021, and it has been adjusted to reflect a new estimated date for this change.

As part of our ongoing efforts to protect our customers and enhance the customer experience, Amazon is updating the requirements to offer radio frequency devices. This will affect some products you offer or have previously offered. Starting in Q2 2021, in order to create new listings or update existing listings of radio frequency devices you will need to fill in the FCC Radio Frequency Emission Compliance attribute. In the attribute, you must do one of the following:

1. Provide evidence of Federal Communications Commission (FCC) authorization – either an FCC certification number or contact information for the Responsible Party, as defined by the FCC.
2. Certify that the product is exempt from FCC requirements.

As a reminder, per Amazon policy, all radio frequency devices must comply with FCC regulations and all applicable state and local laws, including registration and labeling requirements. Amazon also requires you to provide accurate information about your products on the product detail page.

You may not be aware that you are selling products the FCC considers radio frequency devices. The FCC broadly classifies as radio frequency devices any electronic or electrical product that is capable of emitting radio frequency energy.



According to the FCC, almost all electronic or electrical products are capable of emitting radio frequency energy. Examples of products that are regulated by the FCC as radio frequency devices include, but are not limited to: Wi-Fi devices, Bluetooth devices, radios, broadcast transmitters, signal boosters, and devices with cellular technology.

FCC guidance on what is considered a radio frequency device can be found on the Equipment Authorization – RF Device page on the FCC website. We will follow-up with additional information, including a help page, closer to attribute launch.

For more information, see Amazon's Radio Frequency Devices policy. You can also bookmark this article for future reference.

Some are saying that this is an effort to control the sales of Baofengs. Others point to other radiators, such as LED lights and solar charge controllers. The reddit discussion of this new policy pretty much dismisses this new policy.

One comment notes, "This has nothing at all to do with buying radios, it's just Amazon trying to cover their @\$ses over the likes of 'Rugged radio' (and others) selling uncertified radios as something they're not." I think that this could be interesting if Amazon really got serious about this. I'm not sure that even Amazon has the wherewithal to really do this kind of policing, though.



About the Author:

Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog (KB6NU.Com), the "No Nonsense" amateur radio license study guides (KB6NU.Com/study-guides/), and often appears on the ICQPodcast (icqpodcast.com). When he's not testing new keys, he teaches online ham radio classes and likes to work special event stations and state QSO parties

FCC Updated Radio Frequency Exposure Rules Become Effective on May 3, 2021 (ARLB011)

The following bulletin from the ARRL is to all licensed amateur radio operators

The FCC has announced that rule changes detailed in a lengthy 2019 Report and Order governing RF exposure stand

ards go into effect on **May 3, 2021**. The new rules do not change existing RF exposure (RFE) limits but do require that stations in all services, including amateur radio, be evaluated against existing limits, unless they are exempted. For stations already in place, that evaluation must be completed by May 3, 2023.

After May 3 of this year, any new station, or any existing station modified in a way that's likely to change its RFE profile - such as different antenna or placement or greater power - will need to conduct an evaluation by the date of activation or change.

The Report and Order can be found online in PDF format at,

<https://docs.fcc.gov/public/attachmets/FCC-19-126A1.pdf>.

The Amateur Service is no longer categorically excluded from certain aspects of the rules, as amended, and licensees can no longer avoid performing an exposure assessment simply because they are transmitting below a given power level.

"For most amateurs, the major difference is the removal of the categorical exclusion for amateur radio, which means that ham station owners must determine if they either qualify for an exemption or must perform a routine environmental evaluation," said Greg Lapin, N9GL, chair of the ARRL RF Safety Committee and a member of the FCC Technological Advisory Council (TAC).

"Ham stations previously excluded from performing environmental evaluations will have until May 3, 2023, to perform these. After May 3, 2021, any new stations or those modified in a way that affects RF exposure must comply before being put into service." Lapin said.

The December 2019 RF Report and Order changes the methods that many radio services use to determine and achieve compliance with FCC limits on human exposure to RF electromagnetic fields. The FCC also modified the process for determining whether a particular device or deployment is exempt from a more thorough analysis by replacing a service-specific list of transmitters, facilities, and operations for which evaluation is required with new streamlined formula-based criteria. The R&O also addressed how to perform evaluations where the exemption does not apply, and how to mitigate exposure.

Amateur radio licensees will have to determine whether any existing facilities previously excluded under the old rules now qualify for an exemption under the new rules. Most will, but some may not.

"For amateurs, the major difference is the removal of the categorical exclusion,"

Lapin said, "which means that every ham will be required to perform some sort of calculation, either to determine if they qualify for an exemption or must perform a full-fledged exposure assessment. For hams who previously performed exposure assessments on their stations, there is nothing more to do."



The ARRL Laboratory staff is available to help amateurs to make these determinations and, if needed, perform the necessary calculations to ensure their stations comply. ARRL Laboratory Manager Ed Hare, W1RFI, who helped prepare ARRL's RF Exposure and You book, explained it this way. "The FCC did not change any of the underlying rules applicable to amateur station evaluations," he said. "The sections of the book on how to perform routine station evaluations are still valid and usable, especially the many charts of common antennas at different heights." Hare said ARRL Lab staff also would be available to help amateurs understand the rules and evaluate their stations."

RF Exposure and You is available in PDF format for free download

from ARRL at,



<http://www.arrl.org/files/file/Technology/RFsafetyCommittee/28RFSafety.pdf>

ARRL also has an RF Safety page on its website at,

<http://www.arrl.org/rf-exposure>.

The ARRL RF Safety Committee is working with the FCC to update the FCC's aids for following human exposure rules - OET Bulletin 65 and OET Bulletin 65 Supplement B for Radio Amateurs. In addition, ARRL is developing tools that all hams can use to perform exposure assessments.

JUNE 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30	31	1	2	3	4	5
SMASH Net 3.935 MHz 9:00 AM	TBARG & MESH Net 146.86 MHz 8:00 PM	Board Meeting 7:00 PM Salvation Army	 SkyWarn Net Training 146.86 MHz 8:00 PM	Round Table Net 146.86 MHz 7:00 PM		
6	7	8	9	10	11	12
SMASH Net 3.935 MHz 9:00 AM	TBARG & MESH Net 146.86 MHz 8:00 PM	Project Night- At Salvation Army HQ		Round Table Net 146.86 MHz 7:00 PM		
13	14	15	16	17	18	19
SMASH Net 3.935 MHz 9:00 AM	TBARG & MESH Net 146.86 MHz 8:00 PM	Project Night- At Salvation Army HQ		Round Table Net 146.86 MHz 7:00 PM		
20	21	22	23	24	25	26
SMASH Net 3.935 MHz 9:00 AM	TBARG & MESH Net 146.86 MHz 8:00 PM	Club Meeting In Person at Salvation Army HQ 7:00 pm	HAM EXAM Workshop 7:00 - 9:00 PM on Zoom 271957716	Field Day Preparation	Field Day	Field Day
				Round Table Net 146.86 MHz 7:00 PM		
27	28	29	30	1	2	3
SMASH Net 3.935 MHz 9:00 AM	TBARG & MESH Net 146.86 MHz 8:00 PM	Project Night- At Salvation Army HQ	 SkyWarn Net Training 146.86 MHz 8:00 PM	Round Table Net 146.86 MHz 7:00 PM		

HAMFESTS are back in action

Saturday, June 5 W8IRA Independent Repeater Association Hamfest will be at 8AM-Noon Spacious Indoor & Trunk Sales Hudsonville Fairgrounds, Hudsonville MI

Saturday June 12 - Luce Amateur Radio Society will be holding their annual Swap Meet from 0900 to 1200. At the Luce-West Macinac County Fairgrounds, Newberry, MI - **VE Testing will be available after the swap.**

Here is a current listing of Great Lakes Division ARRL Sanctioned hamfests for 2021 as of May 27.

Date	Hamfest	Location	State
6/19/2021	GMARC Trunkfest	Shelby Twp	MI
6/20/2021	Monroe Hamfest	Monroe	MI
7/10/2021	Mansfield Mid Summer Trunkfest	Mansfield	OH
7/10/2021	Cave City Hamfest	Cave City	KY
7/17/2021	GMARC Trunkfest	Shelby Twp	MI
7/17/2021	NOARS Fest	Elyria	OH
7/18/2021	Van Wert Hamfest	Van Wert	OH
8/7/2021	Columbus Hamfest	Columbus	OH
8/21/2021	GMARC Trunkfest	Shelby Twp	MI
8/28/2021	Cincinnati Hamfest/Ohio Conference	Cincinnati	OH
9/11/2021	Greater Louisville	Shepherdsville	KY
9/11/2021	GRAHamfest	Grand Rapids	MI
9/18/2021	Cadillac Hamfest	Cadillac	MI
9/18/2021	Richmond Hamfest	Richmond	KY
9/18/2021	GMARC Trunkfest	Shelby Twp	MI
9/18/2021	CMARC Hamfest	Okemos	MI
9/18/2021	Mound ARA Swapmeet	Miamisburg	OH
9/19/2021	Adrian Hamfest	Adrian	MI
9/26/2021	Cleveland Hamfest	Berea	OH
10/2/2021	VetteCity/Great Lakes Convention	Bowling Green	KY
10/16/2021	Muskegon Color Tour Swap	Muskegon	MI
10/24/2021	USECA Hamfest	Madison Hgts	MI
10/31/2021	Massillon Swap	Massillon	OH
12/4/2021	Fulton Co Winterfest	Delta	OH
12/5/2021	L'anse Creuse Swap	Madison Hgts	MI

Coming Highlights

June

Board Meeting	JUNE 1
Sk,ywarn Training Net	JUNE 2
Project Nights	JUNE 8,15
Club Meeting	JUNE 22
\ Haul Equip to FD Site	JUNE 26-27
Field Day - Operation	JUNE 26-27
Project Night	JUNE 29

July

Board Meeting	JULY 6
Sk,ywarn Training Net	JULY 7
Project Nights	JULY 13,20
Club Meeting	JULY 27

August

Board Meeting	AUG 3
Sk,ywarn Training Net	AUG 4
VE EXAM-100 PM	AUG 7
Project Nights	AUG 10,14
Club Meeting	AUG 24
\ Club Picnic Sayler Park	
Project Nights	AUG 31

CHERRYLAND AMATEUR RADIO CLUB

President	Ernie, K8RCT		
Vice President	Glen, K8SGZ		
Treasurer	Ward, N8WK		
Recording Secretary	Hope, AA8SN	Board Member	Mark, KC8ZAP
Communicating Secretary	Joe, KC8RLU	Board Member	Drake, N8DMH
Cherry Juice Editor	Joe, N8CN	Board Member	Scott, WX1J