



Cherry Juice

Newsletter of the Cherryland Amateur Radio Club

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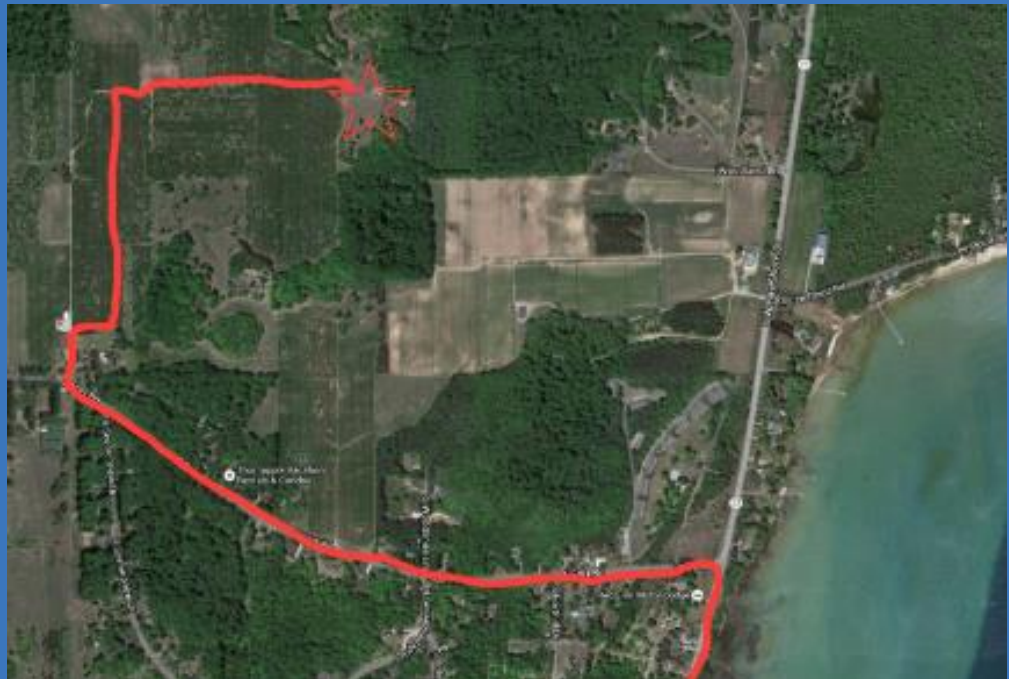
TUNE IN THE WORLD

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June 24-25:

10477 E Fort Rd, Suttons Bay, MI 49682



Click on the Map to view the website!



#1082

President's Corner

Exciting News and Field Day Fun!

Greetings to all...

Repeater Update

Let's start off with some exciting news about our repeaters. First, The new Motorola Quantar repeater for 146.86 is up and running.

This is a major achievement and is already proving to be an excellent performer. Audio quality and RF performance are greatly improved. Even the most casual user will recognize and appreciate the enhancements. I want to thank each and every person who played a part in making this happen.

Our Technical Committee is one talented group of people. Most clubs and groups do not have the technical resources that we do. It is very much appreciated. With this change, along with recent changes to the 442.5 repeater, we are now back on top as a premier quadrant repeater system.

I understand that plans are in motion to convert 442.5 into a Motorola Quantar as well. This is exciting news. Again, thanks to all who assisted in this effort.

Second, we have secured the necessary liability insurance to satisfy the requirements of the updated agreement between WPBN and the Cherryland ARC. This will allow us to retain our position and profile so we can continue our 40+ years of service to the community and emergency communications to the region. We are profoundly grateful to WPBN and for this continued opportunity.

Field Day Update

Field Day 2023 is fast approaching - June 24-25, 2023. Ward, N8WK, is our Field Day Chairman. If you want to help with setup and teardown or operating, please get in touch with Ward.

Mike, KD8REH, be operating a Get On The Air (GOTA) station for new or inactive hams to get acquainted with operating and to have some Field Day fun. Mike will have both a HF station and 2-meter FM station in his setup.

For Project Night on June 20th, we will meet at the farm to collect all our Field Day gear and transport it out to our Field Day site for setup prior to the event. This includes antennas, generators, tents and other equipment for a safe and fun experience. It's a great way to get involved with the nuts and bolts of a Field Day setup.

Let Ward know if you can help. We will publish a Field Day schedule shortly.

Outreach / MakerFest

Our exhibit and demo at the 2023 TADL MakerFest went very well and gave us some ideas for other similar events. It's important for us to participate in these community and educational events to recruit folks who otherwise may not know what the club has to offer. Our new ham program is free of cost to remove any financial barriers from getting started. Want to help? Just ask.



Club Station

I'm pleased to announce we have refurbished the club HF station. It is now installed at the TBARG office and includes a fully functional FT8 setup.

Using the club call sign of W8TCM, this allows members at any license level to use the station on Project Nights and become proficient in all types of HF operations, including digital, SSB and CW.

It's a great way to dip your toes into HF operations without spending a dime and there are plenty of experienced operators to help you along. Give it a try!

Your Privacy

The club has begun to receive solicitations for "free" services and equipment in exchange for our member information. Let me be *absolutely clear* that the club respects your privacy and does not share any personal information about its members.

We take everyone's privacy very seriously and the Board unanimously rejects any requests to share information we have.

If you have any questions, please let me know. You can reach the club leadership any time at: email@CherrylandARC.com

73 Jim WB2LHP

Cherryland ARC's ARRL FIELD DAY 2023!

Greetings, fellow radio enthusiasts! It's that time of the year again when the airwaves come alive with the crackling excitement of the ARRL Field Day. Prepare to dive headfirst into a whirlwind of thrilling challenges, camaraderie, and mind-blowing demonstrations of efficient communications in a temporary setup. Mark your calendars for June 24-25, 2023, because we're about to embark on an electrifying adventure together!

This year, we are determined to create a finely-tuned setup that will leave jaws dropping and antennas buzzing. Picture a well-oiled machine, each of us playing our part to perfection, seamlessly coordinating frequencies, signals, and contacts. We will be a symphony of communication, a force to be reckoned with!

But it's not just about showcasing our technical prowess; it's about the power of coming together as a group. Field Day is a chance to connect with like-minded individuals, forging bonds that last long after the radios are packed away. It's about sharing knowledge, swapping stories, and inspiring one another to reach new heights in our beloved hobby.

And let's not forget the mouthwatering prospect of free meals, courtesy of the culinary maestro himself, Chef Glen. Prepare your taste buds for a feast like no other. The tantalizing aromas will mingle with the excitement in the air, adding an extra dash of flavor to the unforgettable memories we'll create during our time together.

To ensure you don't miss a single detail about this incredible event, make sure to [check our website regularly](#). There you will find all the essential information, including schedules, contests, equipment requirements, and directions to our picturesque location. Trust us, you don't want to miss out on any of the action! In fact – did you know that we'll be sending out sign-ups for the FREE MEALS out in email soon? Make Sure you're [subscribed to the email list](#) so you don't miss the news! Or you can [follow us On Facebook](#) for these updates as well!

So, let's rally our radio troops, charge those batteries, and polish those Morse code skills. The 2023 ARRL Field Day is just days away, and we're counting on you to be a part of this extraordinary adventure. Together, we'll demonstrate the magic of efficient communication in a temporary environment, leaving a lasting impact on all who witness our prowess.

Remember, it's not just a gathering of technical enthusiasts; it's a celebration of fellowship, connection, and the shared love for the power of radio. Join us, and let's make this Field Day an event to remember for years to come!

Hamvention Report – Laura Morrow, WZ8C

I have to admit, I had pretty low expectations of Hamvention for this year. Last year it was really sad to see empty vendor spaces, and low attendance. When I say I was going just to see friends, that's really it, I wasn't expecting much. But I was pleasantly pleased this year. While there are less indoor vendors (due to Hamvention not using two large tents) there was still a great mix of products being offered.

I can say that there were two vendors that were not there last year, that were there this year. The first being Heil, if you didn't know this Bob Heil retired and sold the company. Now don't quote me on all the details behind this as I haven't researched it, but it appears that GigaParts has some involvement with them, because at their "booth" (which was really just a 6ft table) there table cloth had both the Gigaparts and Heil Logo. I don't know if there is some behind the scenes stuff going on, or if Gigaparts brought their own Heil expert to sell products. Either way, their booth was lacking, with only about 3 products out of boxes. If you didn't know this, Heil started a dedicated "Heil Ham Radio" rebranding in May of 2022. While it was nice to see Heil, it wasn't the good ole days like it was when Bob Heil was in attendance with his bright colored tennis shoes and Hawaiian shirts.



Hamvention Report – Laura Morrow, WZ8C, *from pg. 4*



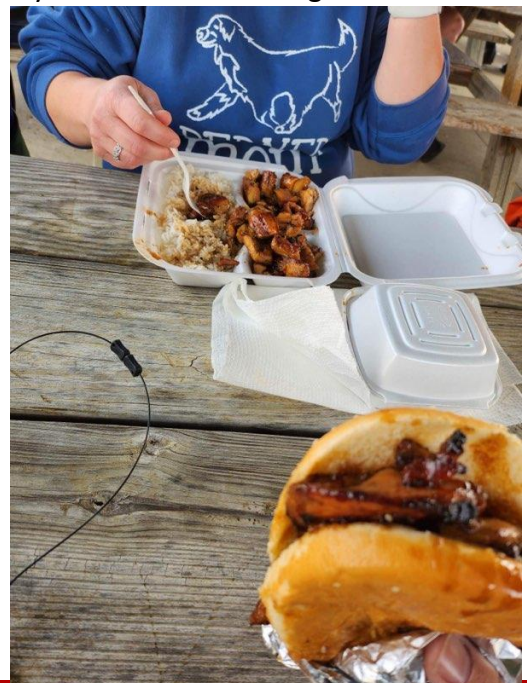
The next vendor shocked me when I saw them...Kenwood made an appearance again at Hamvention. Last year Kenwood didn't attend, and I personally didn't miss them. I have nothing against their employees, so please don't misconstrue what I am saying. But I feel Kenwood hasn't put out a decent Ham Radio product in YEARS. The one reason they were there, was to promote their new HT.

Maybe they had a new HF rig, but when I tell you I didn't waste my time looking, I didn't even stop at their booth. I walked right by. Kenwood has put their R&D money into professional and car audio, they left Ham Radio in their dust. I was honestly shocked that we are seeing new rigs from them, I wouldn't have been surprised if they discounted all Ham Radio equipment manufacturing. Maybe this will be the great comeback of Kenwood? Only time will tell.

Those last two paragraphs make me sound like I am bitter. I promise I'm not! I love Hamvention and the vendors who pay great deals of money to attend!

The flea market was decent, a bit smaller than in years pasts I believe, but still a good turnout. I was surprised at the lack of radios from the 30's, 40's & 50's. Normally I see at least one of those wooden Floor Models with the golden cursive embossing reading "Zenith" but that was not the case this year. I don't know this for a fact because I don't really pay attention to items in this category, but someone had posted on the Hamvention Facebook page that there was a lack of computer parts. But overall, we found some pretty decent treasures this year, which is my favorite part of Hamvention (aside from seeing friends.)

One thing that never disappoints me is the food at Hamvention. Jack (W8KEC, my husband) and I both look forward to one vendor specifically and we pretty much eat their exclusively. That would be the Louisiana Grill. Their Bourbon Chicken over rice is the best "fair food" I have ever had. We honestly crave it throughout the year, its so good! One of the HUGE benefits to having Hamvention at the Greene County Fairgrounds is the ability for all these amazing food vendors!



Hamvention Report – Laura Morrow, WZ8C, from pg. 4

Today DARA came out with attendance numbers today, and I was happy to see that attendance is on the rise. “The 2023 Hamvention attendance was 33,861, which is more than 2,000 greater than last year and even surpassed the previous pre-pandemic attendance record at the Greene County Fairgrounds and Expo Center of 32,472. General Manager Jim Storms said, “Things went very smoothly due to the dedication and hard work of close to 700 volunteers.”

If you have never attended Hamvention, I highly recommend it. It’s something to experience at least once if your lifetime, if you are like me, one wasn’t enough...this was my 20th Hamvention. Since 2000, I have only missed 2013, 2020 & 2021. Those last two were clearly out of my control. I hope everyone who attended found what they were looking for. Hope to see everyone down there next year!

73!
Laura WZ8C



First Xenia by Tony Miliusis, KE8SBZ

As a new Ham back in 2020, I had heard the term “HamVention” a few times and probably asked myself what the heck it was. It didn't mean much as I was still trying to untangle all the new terms, gadgets and concepts that come with a new hobby with the complexity of wizardry. I soon learned that it is the largest event for amateur radio enthusiasts and was held annually in Ohio. By this time I had attended a few area radio swap meets and found myself still overwhelmed by the concept of looking at a bunch of stuff my brain was not ready to absorb. I pressed on with the desire to learn more, passing my General in the spring of '21. By fall the subject of HamVention was coming up again and tickets were becoming available about November.

One of my favorite weekly activities is having breakfast with some of the local Hams at J&S Airport Restaurant. By February the guys were asking who had bought their tickets for the upcoming convention. I decided to make the commitment and purchased an advanced ticket, 26 bucks (or \$30 at the box office). I picked up on banter of planning early to get a room or camping spot, and opted to pull our small RV. (My wife loves to camp for the sake of camping so I knew she would want to tag along).

Pete, K8WQK, suggested a few camping destinations within a half hour of Xenia's own *Green County Fairgrounds*, where the convention is held, and we made arrangements to camp near each other. Pete has had the experience of attending the event for many years. That gave me a little confidence in wandering into the totally unknown. (Yes, at times, I am a bit of a chicken).



First Xenia by Tony Miliusis, KE8SBZ

From Pg. 7



Ohio is a long way to go and I soon realized the local visitor convention has an appetizing menu of local attractions to fill in time before and after the convention (if that were not to be satisfying enough). The Armstrong Air and Space Museum, National AirForce Museum and Voice of America Museum looked appealing to me (along with a myriad of other cool places). As it were, HamVention in itself turned out to be totally satisfying and I can't wait to do it again.



First Xenia by Tony Miliusis, KE8SBZ *From Pg. 7*



At the fairgrounds there are forums, special speakers, vendors, show & tell, flea market and exhibits galore. There's [Contest University](#), the [QRPARCI's Four Days In May \(FDIM\)](#) QRP Conference, and more, starting Wednesday night before the convention. You can even be a volunteer if you want as one of the local hams, Tom did for a day.



First Xenia by Tony Miliusis, KE8SBZ

From Pg. 7



What I enjoyed the most was meeting up with the local guys and making new friends. A few unexpected purchases, good food, trying an antenna in the campground....The list goes on... I Wish I had never waited!

73,
Tony Miliusis,
KE8SBZ

ARRL Helps Radio Amateurs Comply with New RF Exposure Evaluation Rules

By Scott, WX1J

ARRL Bulletin April, 2023

ARRL The National Association for Amateur Radio® provides free, comprehensive resources to help radio amateurs ensure they are compliant with the new RF exposure rules.

On May 3, 2021, [new FCC rules governing RF exposure](#) evaluations went into effect. While the exposure limits were not changed, the requirement to conduct an evaluation was made more broadly applicable to amateur licensees. A 2-year transition period was implemented to allow existing amateur licensees to conduct evaluations and make any changes necessary to ensure that their station complies with the exposure rules. On May 3, 2023, the transition period ended. All licensees must now conduct evaluations of their current station and reassess compliance when making changes to their stations that would affect exposure going forward.

As detailed in a [May 2023 QST article by Greg Lapin, N9GL](#), the rules now require amateur radio operators to perform station evaluations. The Amateur Radio Service is no longer categorically excluded from certain aspects of the RF exposure rules, and licensees can no longer avoid performing an exposure assessment simply because they are transmitting below a given power level.

The ARRL website features an [RF Exposure landing page](#) with resources, such as an RF exposure calculator, the entire RF Safety section from the 100th Edition of the *ARRL The Handbook*, a video explaining the topic, FAQs about the subject, and more. These tools and resources are available to the public without an ARRL membership or website account. For further assistance with technical matters, ARRL members enjoy the additional resources of the [ARRL Technical Information Service](#), and access to the experts within the ARRL Lab.

Following is a CARC walk-through of the ARRL RF Calculator and the resulting output file that you can use to be compliant with the FCC Regulations.

Complying with FCC Regulation to Measure Your Station RF Etc.

According to the recent deadline requiring each amateur to measure their station RF output levels and determine compliance with safety regulations- CARC has created for it's members a guide of how to accomplish this task in about an hour.

Step 1.

The key starting point is the ARRL Calculator which you can find at

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

Step 2.

Then it's a simple matter of opening a word document, or place of your choice to copy down the results of your entries. – I used PowerPoint

Step 3.

Enter your data in the calculator parameter fields for each amateur band and mode you use.

I started with 80M and worked my way through 70 cm.

Parameters

• Power at Antenna: (Need help with this?) (watts)

• Mode duty cycle:

Conversational SSB, no speech processing (mode duty cycle=20%)

• Transmit duty cycle: (time transmitting)
You transmit for

5

 minutes then receive for

10

 minutes (and repeat).

• Antenna Gain (dBi): (Need help with this?)

• Operating Frequency (MHz):

☒ Include Effects of Ground Reflections

If you would like to receive future announcements of any FCC news related to RF-exposure or the requirements for amateurs to evaluate their stations, you may **optionally** provide an email address.

Email Address:
(optional)

Comments:
(optional)

Calculate

Results for a controlled environment:

Maximum Allowed Power Density (mw/cm²):

Minimum Safe Distance (feet):

Minimum Safe Distance (meters):

For an uncontrolled environment:

Maximum Allowed Power Density (mw/cm²):

Minimum Safe Distance (feet):

Minimum Safe Distance (meters):

Print Results

ARRL RF Exposure Calculator

Parameters

• Power at Antenna: (Need help with this?) (watts)

• Mode duty cycle:

Conversational SSB, no speech processing (mode duty cycle=20%)

• Transmit duty cycle: (time transmitting)
You transmit for

3

 minutes then receive for

10

 minutes (and repeat).

• Antenna Gain (dBi): (Need help with this?)

• Operating Frequency (MHz):

☒ Include Effects of Ground Reflections

See Next Page for Data Field Descriptions

ARRL RF Exposure Calculator Data Entry Field Descriptions

Power at the Antenna

Read the (need help with this) article it's informative. Second, if you transmit 100 Watts from your Transmitter, and you have an SWR of 1.7: 1 in your field line, of LMR-400 then your transmit power delivered to the antenna is only 95.876 W. You need to have that lower number to fill the field in the calculator. The radiation is based on Watts delivered at the Antenna.

Mode Duty Cycle

This is a dropdown menu and you should run the calculation for that band, if you use two or more modes. Select from the Drop Down Menu:

- Conversational SSB, no speech processing (mode duty cycle = 20%)
- Conversational SSB, heavy speech processing (mode duty cycle = 50%)
- Conversational CW, (mode duty cycle = 40%)
- FM (mode duty cycle = 100%)
- AM (mode duty cycle = 100%)
- FSK/RTTY (mode duty cycle = 100%)
- AFSK SSB (mode duty cycle = 100%)
- Carrier Always On, i.e., for Tuning Up, mode duty cycle = 100%)
- For all others, or if unknown, assume worst case scenario (mode duty cycle = 100%)

Operating Duty Cycle

Think about your Duty Cycle. Enter, on an average, how long your radio is on, and of that time, for how long are you transmitting? This is hard, because it doesn't say per day, per hour, per anything – so you need to consider – your operating time. I operate the radio for 3 hours, and perhaps make one CW or DX contact – but in a contest, my duty cycle is higher- You should record both examples.

Antenna Gain

To complete this- click the ([Need help with this?](#)) link in the calculator to access a table of antennas and gain values- This will help you enter the proper number in the calculator. The input is gain in dBi Decibel increase over an isotropic dipole.

Operating Frequency in MHz

This is straight forward- Enter Frequency in MHz of the center of your typical operating segment of the band. If you only work CW on 40M try 7.040 If you work different modes, or a contest then your station evaluation should include other entries for each band.

40 Meter Band

7.050 – CW DC 25% 50W Dipole

7.075 – FT8 DC 50% 20W Dipole

7.250 – SSB DC 20% 95W Dipole

7.200 – SSB DC 50% 95W Dipole

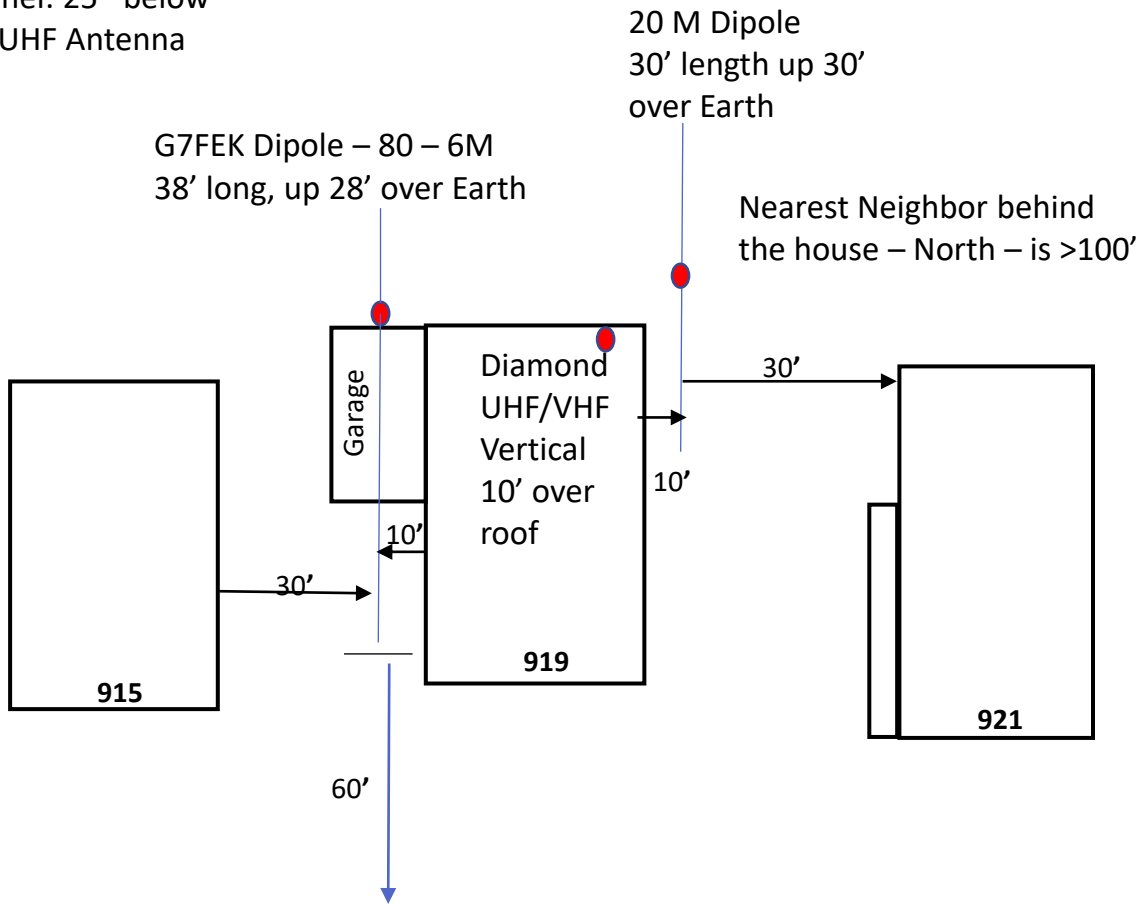
Includes Effects of Ground Reflections

Depending on how far above ground the RF source is located, you should to consider ground reflections

Station Description

919 Washington Street
Traverse City, MI 49686

WX1J Operating Location
is in a Basement North
West Corner. 25 ' below
the VHF/UHF Antenna



Radio Transmitters are Standard Kenwood TS-2000, TS-480 and QRP Xcvrs. VHF is Kenwood TM-V71
There are no Linear Amplifiers- and I run 75 - 90 W HF and 5 - 10 W VHF 5 W on UHF - DMR.

I have one page like this for each band and mode in that band

This is the screen-shot of the data entered and calculated results in the bottom half. I just copy/past that image into my PowerPoint file as a new page, and calculate the next one.

SAR Calculation for 40 M CW Portion

Parameters

- Power at Antenna: (Need help with this?) (watts)
- Mode duty cycle:
- Transmit duty cycle: (time transmitting)
You transmit for minutes then receive for minutes (and repeat).
- Antenna Gain (dBi): (Need help with this?)
- Operating Frequency (MHz):

☒ Include Effects of Ground Reflections

If you would like to receive future announcements of any FCC news related to RF-exposure or the requirements for amateurs to evaluate their stations, you may **optionally** provide an email address.

Email Address: (optional)	<input type="text"/>
Comments: (optional)	<input type="text"/>

Calculate

Results for a controlled environment:

Maximum Allowed Power Density (mw/cm²):

Minimum Safe Distance (feet):

Minimum Safe Distance (meters):

For an uncontrolled environment:

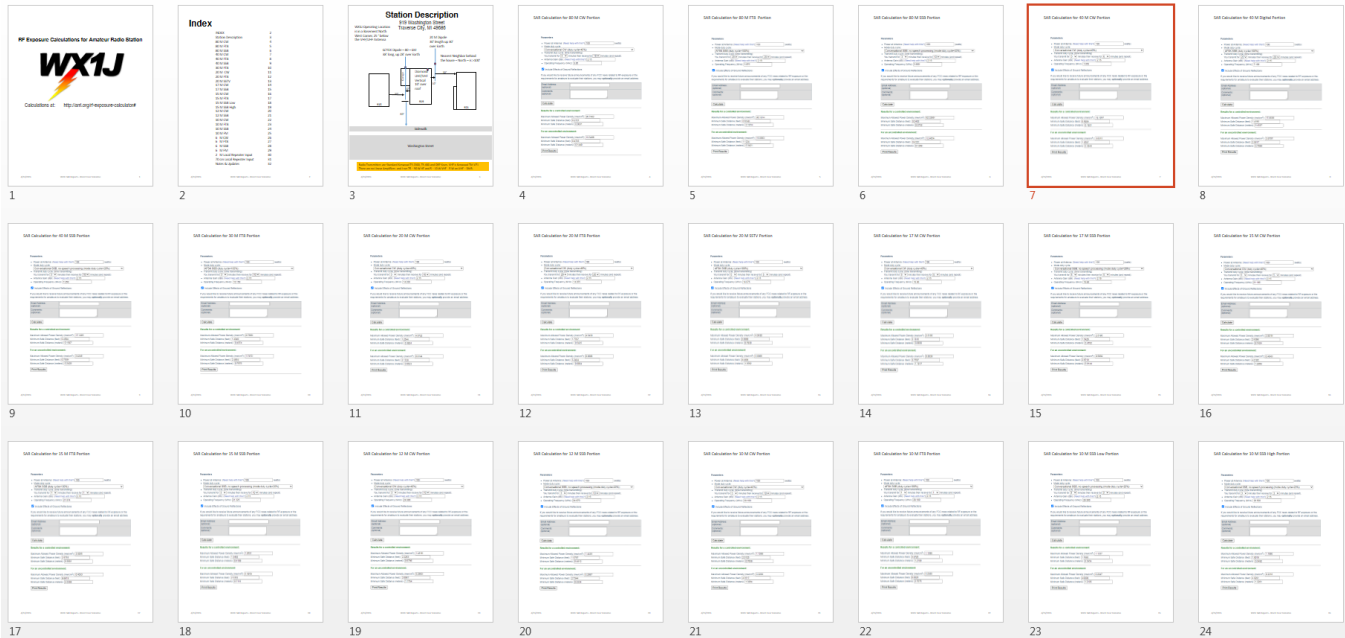
Maximum Allowed Power Density (mw/cm²):

Minimum Safe Distance (feet):

Minimum Safe Distance (meters):

Print Results

That gives me 24 pages documenting every mode I transmit.



The process of documenting my station took a little over one hour, but I went through everything thoroughly and erred on the conservative side- or worst-case-scenario.

It's not that difficult – just takes some time – but it is now required that you maintain a log and update it when you change your station configurations.

For example, I left the Transmit power at 100, because I rarely use all 100 watts and I have either line-loss or SWR that would reduce that figure. So it's a cannot go above figure.

Same with transmit time- I rarely transmit for a long time- and when I do- it's FT8. but I left the transmit times higher than I usually transmit- so that's conservative as well.

The Purple Crystal

An Article About Repeaters by Joe N8CN

146.86 is now a Motorola Quantar @ 125W

On Tuesday May 30th, Drake N8DMH messaged me “It’s Ready.” I responded: “Let me get the kids to bed and then let’s do it!” We headed up to WPBN, and the light was already fading. Carrying the 60lbs of steel down the rocky slope to the entrance, Drake is careful not to slip. I’m toting the Service Monitor, and I’m mentally calculating the years it’ll take me to pay off the price of damage repair if my footing isn’t precise.

Long story short, we’re in and out before midnight. I’ve never been so thrilled to unscrew the screws and un-rackmount a Yaesu Repeater before in my life. I had lost count of the number of times it had locked up or malfunctioned. “Good Riddance” was among the phrases cursed toward it that evening.

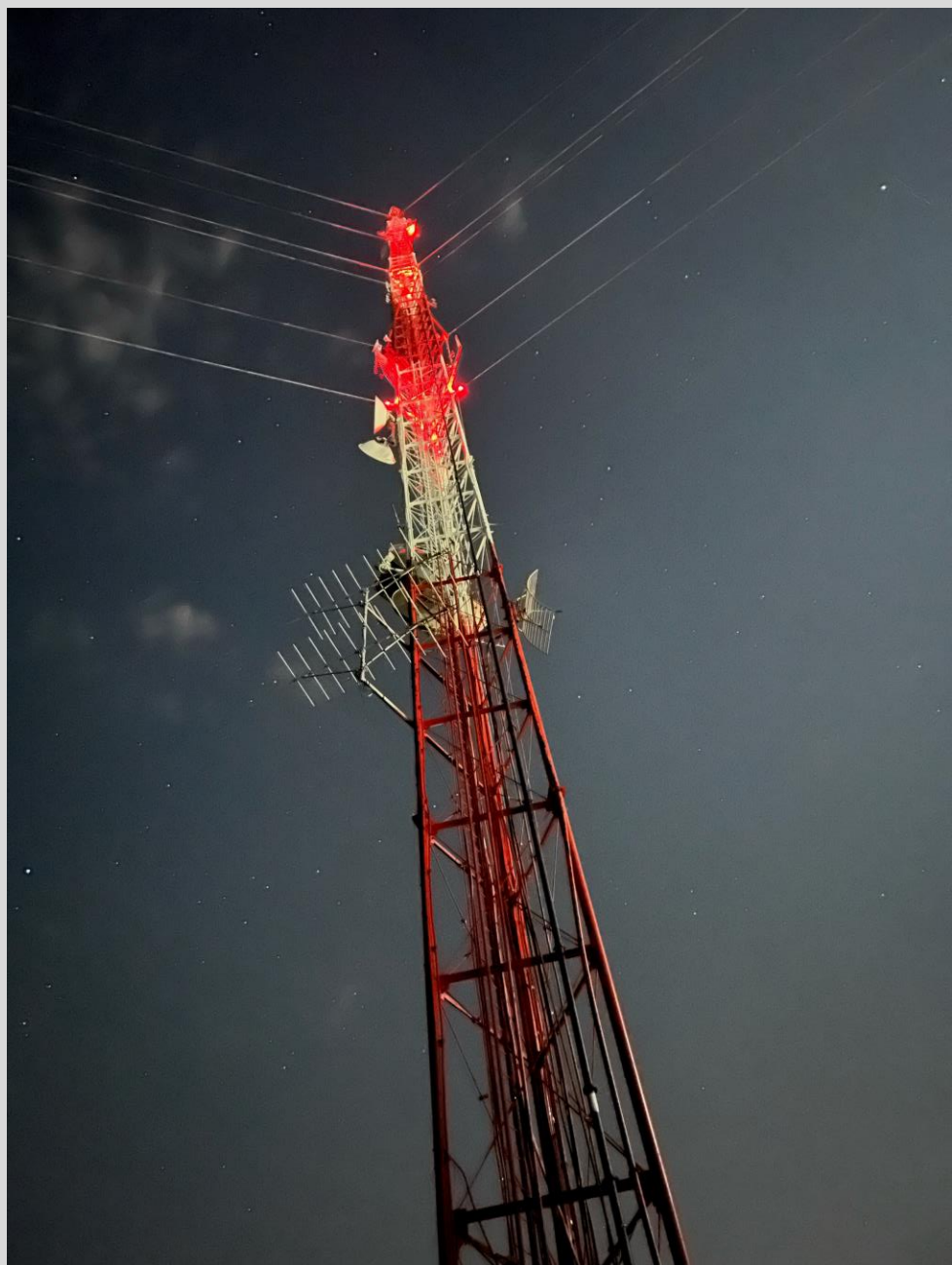
With the rack holding the two repeaters and miscellaneous control elements looking more professional than ever, we performed some tests after the equipment swap and also enjoyed some ad-hoc programming (mostly on the computer side of things) and then drove off into the night to enjoy the new coverage.

As we packed up the tools and parts and looked at the night sky, an impromptu challenge presented itself: who could take the best picture of the antenna tower hosting our site, at night?

Drake, armed with his iPhone, and myself, armed with a Samsung A52, iPhone12, and a Nikon D5100, took to the task.

The picture to the right is what won the prize that night. It’s from Drake’s iPhone, and it is absolutely amazing. Nothing that I captured even came close to the contrast and detail shown here. This was what I felt was the best shot of the 5 that he submitted in time for the article.

On May 31st, the greater Grand Traverse Ham Community woke to a different courtesy tone, extended range, and better reception. And all of the same features we had enjoyed before – Echolink, Allstar, Hamshack Hotline – all working perfectly.



Here's a brief summary of what has been changed on 146.86:

- **Added receive Filtering.** The Motorola Quantar has a pre-selector and is specifically tuned for the Amateur Radio frequency range of VHF after some technical modification. Unlike the dual-band wide-receive Yaesu repeaters, this is purpose-built, and has amazing sensitivity and selectivity on receive.
- **Moar Power!** The Motorola Quantar will transmit 125W continually without breaking a sweat. Compared to the belabored 50W output of the Yaesu series, we've more than doubled the output of the system, and we're not nervous it'll melt itself into slag after each MESH net.
- **Cleaner Audio.** The Quantar's audio path availability is pretty adept, and was a perfect match for the repeater controller selected. This also lent to easy professional fine-tuning of all of the audio stages with the service monitor to ensure that all the receive audio pathways, courtesy tones, synthesized speech IDs, and such, are all spot-on perfect.
- **Reverse-Burst CTCSS.** Do you know how CTCSS Started? With Analog reeds. A trick to 'stopping the reed vibration' to quiet a signal faster, back in the day, was to reverse the phase of the CTCSS tone, to work "against" the reed vibration, and BAM the audio would stop immediately. Today, that's all done digitally, but is also built-in to the Motorola Quantar. Check to see if your radio supports this – many do! If you enable it, when you un-key after talking, nobody will hear a "squelch crash" because the repeater will respect your reverse-burst tone. If your receiver supports it, turn it on – you'll never hear the squelch crash when the repeater stops transmitting. The \$25 baofeng radios support this, as do many others. Try it out! You'll be amazed by the clean sound of the net!
- **Modular Design.** Before May 30th, if our repeater system had any issues, we did not have a super back-up-plan. We had "a few options" in the way of temporary repeaters to replace things with, but nothing super fast. The Quantar is modular, and supports swapping of modules like the exciter, receiver, PA, and other components. And we have access to spare modules. If the club's repeater suffers a malfunction, we are now more protected from long-term of super-involved replacement and repair situations. That's great news!
- **Standardization!** We're planning to deploy the same type of system to the digital DMR 442.5 UHF repeater at some point. We'll already be very efficient at the implementation and operation of the new equipment.

So, as you can see – the club is in a pretty nice spot now. Following the new Quantar going on the air, we've received numerous compliments of the added coverage areas, and overall really great reports of both signal strength improvements and improved receive coverage.

Every Rose Has Its Thorn: We are STILL noticing that on some weaker signals, especially distant stations or handhelds on lower power or at a distance, that we have an intermittent "crackling" type of noise. We've noticed that there are "patterns" to this strange interference, and the Technical Committee has some ideas on next steps to take.

Believe it or not – replacing the Yaesu repeater was one of those steps. The Yaesu repeater had ZERO additional filtering compared to any FTM-400 or other dual-band mobile radio you'd see in the market today which also was built to be a general-coverage receiver. For a repeater, this is SUPER BAD NEWS because you're connecting it to an antenna WAY UP in the sky and surrounded by other high-power, close-proximity analog and digital signals mixing in amazingly complex patterns and reacting to each other in interesting and surreal ways. Commercial repeaters are typically purpose-built so that they "filter out" at the hardware level, anything that is not "what they want to repeat." By contrast, a mobile radio capable of receiving broadcast FM 79MHz up to 124AM up to 144FM up to 155NFM up to 168MHz FM up to 220 FM up to 425MHz FM up to 472MHz FM is going to react to all of the other transmitted signals in those areas that are close by, their mixing by-products and harmonics, and who knows what else.

While this step did not completely eliminate the issue, it's much less prominent. If you have access to the archived Broadcastify live-feed recordings, you can easily compare those to present-day and hear it for yourself.

But this does tell us that there are a few other areas to inspect next. As part of the upgrades, we've had Brook N8OCX and Drake N8DMH completely analyze the performance of the feedlines, patch cables, duplexers and antennas. All of the components of the system routinely test better than we'd expect, and we can see no obvious cause to the interference.

This is what we call, in the industry, "*an interesting condition.*" My Dad always said, that's the last thing you'd ever want to hear a doctor say about your condition. You want it to be a "simple, routine" problem, because that means there's a canned solution to get back to normal. "Interesting" is bad... So, we haven't been that lucky yet. But we're getting closer. ☺

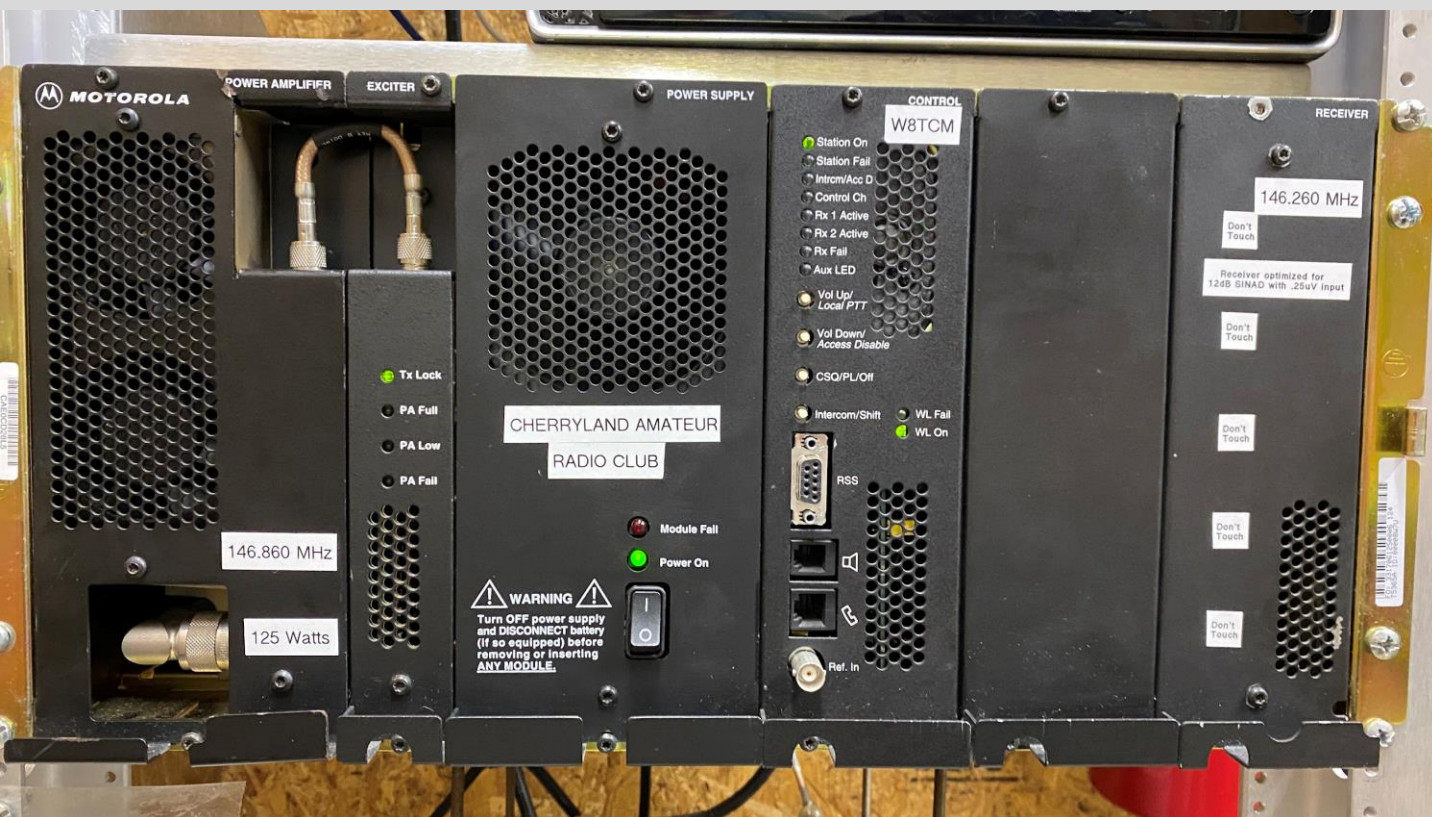
73, Joe, N8CN

PS – there is somehow a rumor circulating that the 146.86 repeater has been converted to narrow-band. **This is false.** All of our repeaters use standard Amateur Radio VHF FM channel allocations, sanctioned by MiARC, at bandwidth 25kHz.

Doing anything like this would be a super bad idea, and would be a departure from [ARRL](#), [FCC](#), and [MiARC guidelines](#). It would also introduce confusion and use issues for the typical Amateur Radio operator. The mission of the Cherryland ARC is to be a general purpose Ham Radio club which engages with all Hams and future Hams alike, and works toward their common goals to serve the membership and community in the best ways possible. Making a change like changing the bandwidth of an analog FM repeater to a nonstandard operating method would be in direct opposition to the goals and missions of the club.

We're not sure where this rumor came from, but if you have questions on what the differences are between wide-band and narrow-band FM signals, and the typical bandwidth of channel spacing that is used, and how those are coordinated, we encourage you to reference any of the numerous sources available online for this information, including sites like the FCC, the ARRL, and the MiARC, or really any other reputable authoritative source on the organization, allocation and collaborative control and policing of radio spectrum resources.

One more thing – depending on the radio you purchase, sometimes radios “geared toward commercial use” will default to 12.5kHz bandwidth. **YOU NEED TO CHANGE THIS TO 25kHz or you'll have issues using amateur radio repeaters.** 😊



CARC Membership Application Form

Last Name: _____ Nickname: _____

Callsign (if any): _____

Street _____ State: _____

Email: _____ Zip: _____

Phone: _____

Occupation: _____ (if applicable)

ARRL Member? Yes No

Please complete the form above and mail
along with your payment to:

Ward Kuhn, N8WK
1114 Peninsula Drive,
Traverse City, MI 49686

Membership Plans

Single Membership \$ 24.00

Family Membership \$ 26.00

Student Membership \$ 5.00

* All members live in the same household

ADDRESS CHANGE!

The club no longer has a PO Box. Please use:

Cherryland Amateur Radio Club

1114 Peninsula Drive, Traverse City, MI 49686

2022-23 Great Lakes Div. ARRL Sanctioned

Hamfest Calendar

ARRL Sanctioned Hamfests through September 2023:

6/17/23 - [Midland ARC Hamfest](#), Midland MI

6/18/23 - [Monroe Hamfest](#), Monroe MI

7/15/23 - [GMARC Trunk Swap](#), Shelby MI

9/17/23 - [Adrian Hamfest](#), Adrian MI

9/23/23 - [TOMARC & Thunder Bay ARC Hamfest](#), Gaylord MI

Coming Highlights

June

CARC Board Meeting 6-Jun

FIELD DAY 24th-25th

Project Nights 13,20,27

CARC Club Meeting 27-Jun

July

CARC Board Meeting 4th

Project Nights 9,16,30

CARC Club Meeting 25-Jul

August

CARC Board Meeting 1-Aug

VE Test Session 12-Aug

Project Nights 8,15,22

CARC Club Meeting 22-Aug

UPCOMING VE SESSIONS

6/17/23 - Midland ARC, Midland MI

- ARRL VEC

- 10am @ Midland Swap, Salvation Army.

- No walk-ins. Registration Required.

- Contact: Dennis K Kilpa, 989-948-5427,

n8erf@arrl.net.

8/12/23 - [Cherryland ARC](#), Traverse City MI

- ARRL VEC

- 1pm @ Traverse Area District Library

- Walk-ins Welcome but pre-reg preferred.

- Contact: Hope Francisco AA8SN,

231-218-0622, hopeaa8sn@gmail.com.

Cherryland Amateur Radio Club

President

Jim, WB2LHP

Board Member

Mark, KC8ZAP

Vice President

Mike, KD8REH

Board Member

Drake, N8DMH

Treasurer

Ward, N8WK

Board Member

Scott, WX1J

Secretary

Hope, AA8SN

Cherry Juice Editor

Joe, N8CN