



# CHEESE BITS

**W3CCX**  
CLUB MEMORIAL CALL

ARRL  
Affiliated  
Club



Volume LXVII

March 2024

Number 3

PREZ      March 2024  
SEZ:      **NADA**

Michael sent me a text saying,  
“No Prez Sez this month”

Michael **KB1JEY**

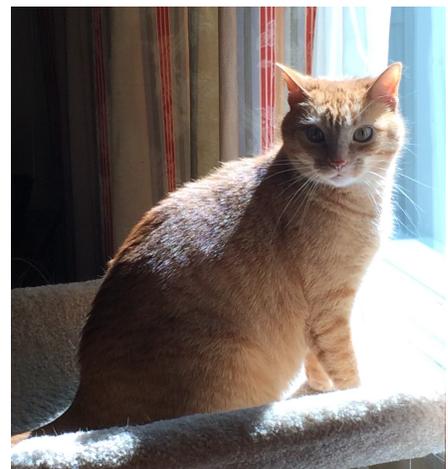


Hello, my name is Drake. I live with Michael, he says that he is my Cat Dad. Michael had to go to the hospital before he wrote the Prez Sez for this month.

I do not know why Michael had to go to the hospital but he has his phone with him so if you want to text or talk to him you can try contacting him that way.

My good friend, George KA3WXV, has been taking care of me for which I am very grateful but I hope Michael comes home soon.

Drake



Packrats **CHEESE BITS** is a monthly publication of the  
**Mt. AIRY VHF RADIO CLUB, INC.** –Abington, PA.

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**W3CCX QSL CARDS:**

Bill Shaw K3EGE

**PACKRAT 222 MHz REPEATER - W3CCX/R**

222.98/224.58 MHz (PL 136.5) Hilltown, PA

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VHF / MUD Conference: Phil K3TUF / George KA3WXV  
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Quartermaster: Bert K3IUV [bsoltoff-at-comcast.net](mailto:bsoltoff-at-comcast.net)  
Membership Chairman: Michael KB1JEY [kb1jey-at-arrl.net](mailto:kb1jey-at-arrl.net)

**PACKRAT BEACONS - W3CCX/B**

144.300 (FN21be), 222.060 (FN20tk), 432.300(FN20tk), 903.300 (FN21be), 1296.300 (FN20dh), 2304.300 (FN20tk), **3456.300** (FN21be under repair), 5760.300 (FN21be), 10,368.017 (FM29jw) **Note: red = temporarily off the air**; see <https://www.packratvhf.com/index.php/on-air> for details)

**MONDAY / TUESDAY NIGHT NETS**

**VHF/UHF Monday:**

<u>TIME</u>	<u>FREQUENCY</u>	<u>NET CONTROL</u>
6:45PM	224.900 MHz	KB3MTW Michelle Even Mondays K3JJZ El Odd Mondays
7:00 PM	Packrat Talk Group	KA3WXV George See Packratvhf-dot-com ON AIR for details
7:30 PM	50.150 MHz	N3RG FM29ki Ray
8:00 PM	144.150 MHz	W2KV FN20os Dave
8:30 PM	222.125 MHz	KC3BVL FM29jw Jim
9:00 PM	432.110 MHz	WB2RVX FM29mt Mike

Visit the Mt Airy VHF Radio Club at: [www.packratvhf.com](http://www.packratvhf.com) or [www.w3ccx.com](http://www.w3ccx.com)

## Editor's Corner

I want to thank all of the contributors to this month's edition of Cheese Bits especially Bert who, although he was going to be away, submitted his column for this month a month early before he left. Scott who has become a prolific regular contributor. Pete, who is a semi-regular contributor, of well thought out articles.

Thanks to Lenny for submitting pictures from the meeting. Unfortunately there were no pictures from the New Jersey remote meeting.

Bert has included references to the **Itchykoo-Park VHF ARS** in the last two months Way Back Machine column. This caught my attention as there was a song by The Small Faces called Itchykoo Park released a few years prior to the editions of Cheese Bit to which Bert refers. Does anyone know the origin of this VHF club?

As usual I must thank my wife who proofreads each edition a few times. She is very good at finding typos and spelling errors.

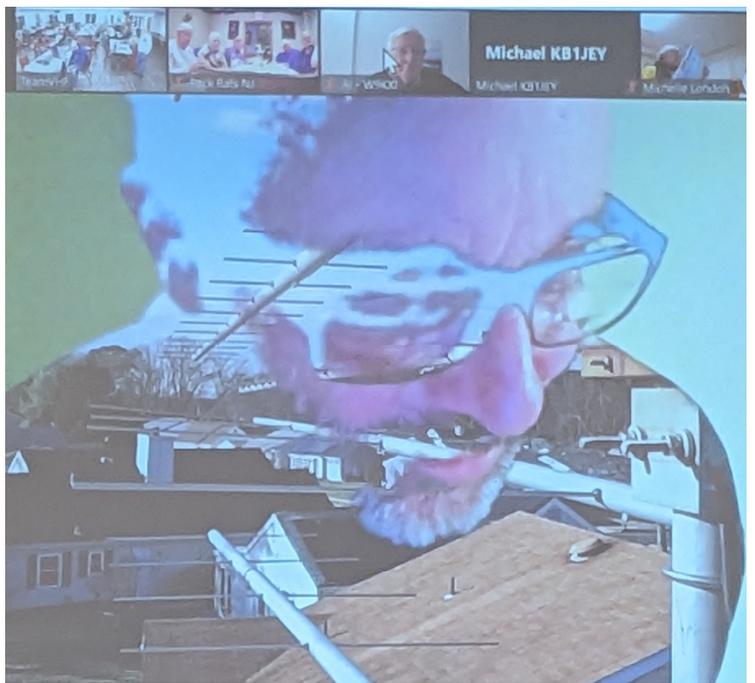
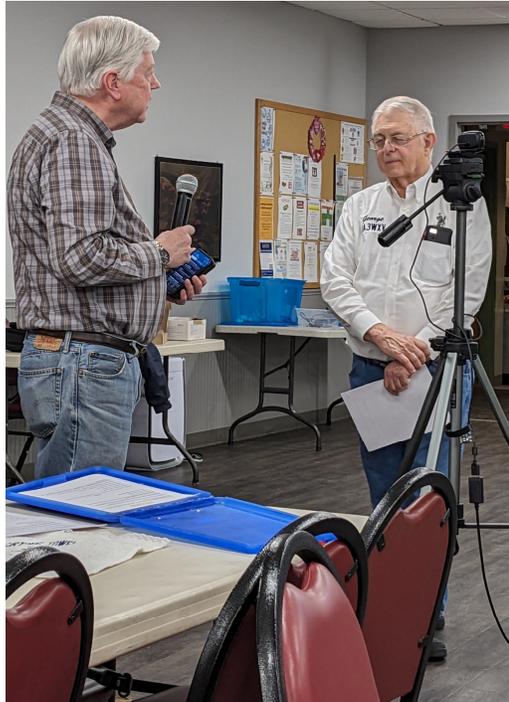
**Tom KA3FQS**

# Our March Meeting

in photos

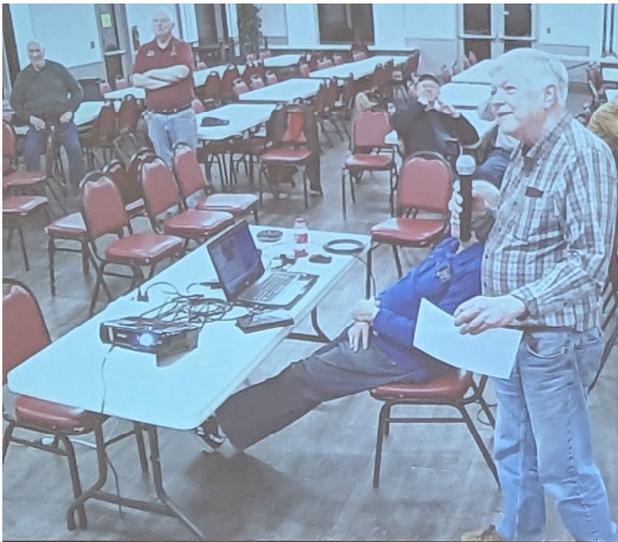
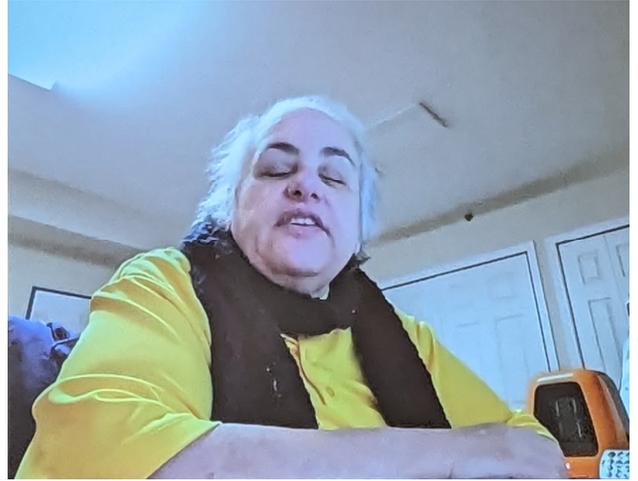
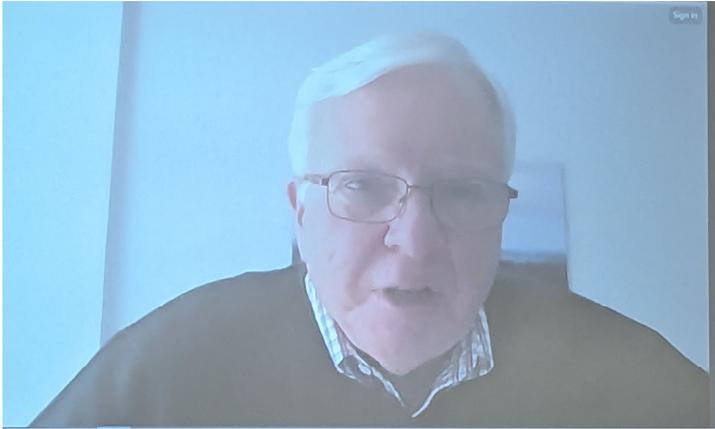
This was the annual Crying Towel meeting where the operator with the best tale of woe from the January contest is presented with an embroidered towel to commemorate their effort. This year's winner was Ray, N3RG, who after spending a great deal of time preparing his equipment for the contest neglected to get enough rest and fell asleep at his operating position.

This was a hybrid meeting with some attending in person and others attending via video link.



# Our March Meeting

in photos contd.



# Operating a Remote VHF Contest Station

Pete Kobak, *K0BAK*

## Remote Ham Radio—Broadening Access to our Special Hobby

With HOAs preventing many ham homeowners from building even modest stations, and the decline of younger generations' ability to purchase a home at all, remotely operated fixed ham stations (along with opportunities to operate portable such as POTA and VHF contest roving) allows access to the hobby to many who cannot build a significant traditional station at home.

There are free-to-use networks of remote stations offered by generous hams, but a few years ago I chose the reliability and support offered by the most successful commercial service—*Remote Ham Radio* at [remotehamradio.com](http://remotehamradio.com) (which I'll abbreviate to "*RHR*" in the rest of this article). For \$99 per year members can access 15 domestic and 2 DX stations (in KP4 & 9A), over the Internet using their own call signs for varying per-minute charges. The cheapest stations starting at 20 cents per minute may "only" have a high OCF dipole; the most expensive stations at more than \$1/min can feature stacks of 20m and 6m antennas on rotating towers and 1500w amplifiers. One station features a 2m EME tower with a 2x2 16el array and a kilowatt, emitting about 200kW ERP, which I've used a few times for terrestrial contacts.

Of course, the vast majority of *RHR* users are on HF, but having 2m and 6m available allows me to participate to a limited degree in VHF contests and VHF SSB nets—especially now with health issues preventing me from physically accessing any station beyond my bedroom. Participating the whole weekend in a contest would require an extravagant spend that I can't afford but being able to get on the air for even an hour or two beats sitting forlorn in a chair.

*RHR*'s simplest access only requires a compatible web browser...I use Chrome on my Win11 computers, and Safari on my iPhone (yes, I make HF contacts over-the-air via my phone). Once you log in and connect to a particular station, you can use your headset to make SSB contacts, a text-to-CW generator, and a built-in browser-only FT8 interface. The remote station is exclusively yours while you're connected to it (and the charges keep on accumulating); disconnecting is just a single button click. Controls include most of those we often need, including rotator control (you can enter a heading, a call sign, or a grid), TX and RX bandwidth, AGC and preamp levels, noise reduction and blanking, automatic notch filter, and split operation. There is also a logging function on the same web page, with an optional connection to LotW (ARRL's Logbook of the World)...which automatically records your remote station's location (DXCC "country", CQ&ITU zones, grid, state, county) in your LotW log.

## Local Ham Software for Advanced Uses of Remote Stations

Those web browser-based capabilities are good enough for most contacts; for instance I've made hundreds of POTA contacts just using my browser. However, advanced users can also utilize local software to: operate with their favorite logger, exploit more WSJT-X modes or other digital modes, and use most any other ham software that interfaces with a radio using COM ports and Windows audio streams. Using local software is vital in a VHF contest: firstly, to use any available WSJT-X mode and exchange (such as FT4, VHF NA Contest Mode, or MSK144), and secondly to use a local contest logger like N1MM+ to provide contest help like call sign history and highlights for new stations or multipliers.

To glue together your ham software with an *RHR* remote station, you use a local installation of FlexRadio's *SmartSDR* software. FlexRadio's brilliant decision to tie their software license to a **radio** rather than a computer **installation** means you can download, install, and use SmartSDR without additional cost because SmartSDR connects to *RHR* radios which are already software-licensed. Instead of using a web browser to access a remote station, you use a locally-installed "Console" executable from *RHR* with a very similar GUI. The difference is that local software is used to make the TCP or UDP connections between the remote Flex radio and your local SmartSDR software without the worry of having IP packets cross through routers and firewalls that you'd otherwise have to configure yourself...the Console software takes care of all that networking hassle for you.

After the *RHR* Console and FlexRadio *SmartSDR* software are installed (along with the ham software you want to use like a logger and WSJT-X), you start the Console and connect to the particular *RHR* station you want to use--just like you can with the browser-based interface. (After station connection, be sure DAX channels are enabled for RX and TX in the *RHR* Console if you want to use digital modes.) While it is possible to use the SmartSDR local GUI to control the remote station, I've found it glitchy and instead continue to use the *RHR* Console executable to manually control the remote station. What you do need from SmartSDR is to start the two independent interface modules: *SmartSDR CAT* and *SmartSDR DAX*.

The CAT module connects to the remote Flex radio via TCP and provides a CAT command interface between your ham software and the remote radio. *SmartSDR CAT* provides this interface by creating virtual Windows COM ports that provide two-way CAT data, and also functions such as sending PTT or CW. *SmartSDR DAX* is the audio interface between the remote radio and local ham software like WSJT-X. The DAX module creates virtual audio connection points recognized by the Windows audio subsystems, but with higher reliability than older solutions like "Virtual Audio Cable" (VAC) software. Within WSJT-X, you configure its "soundcard" input and output to use the appropriate TX and RX audio streams provided by *SmartSDR DAX*.

I am in the minority, I think, of VHF users of N1MM+ who configure it to run and control WSJT-X directly without other software. I find the integration convenient and helps me by showing when N1MM+ recognizes a new call sign or new grid being decoded, since N1MM+ knows about contacts made on all modes not just WSJT-X modes. The configuration of N1MM+ and WSJT-X for this usage is beyond this article, but can be found in the N1MM+ docs link.

Whichever logger you use, it needs to be configured to receive and send CAT commands provided by virtual COM ports from the *SmartSDR CAT* module. Typical COM port handshaking (speed, data bits, stop bits, etc.) needs to be compatible between the settings in your logger and the virtual COM port from *SmartSDR CAT*. Note that multiple COM ports and COM control signals can be configured in *SmartSDR CAT*; for instance, beyond CAT control, you can create additional COM ports to accept a PTT signal or Winkeyer commands for CW, and then configure your logger or other ham software to send the signals.

While we can use the *RHR* Console to change bands and modes, you can also use your contest logger like N1MM+ to change bands and modes, which many contestants prefer. In turn, if you've configured N1MM+ to control WSJT-X, you start WSJT-X from N1MM+ (by typing "FT8" into the logger's call sign field for instance). You can then change the remote radio's frequency to the appropriate digital sub-band by using the WSJT-X band dropdown control, which sends frequency and mode change commands to N1MM+, which then subsequently sends the appropriate CAT commands to the remote radio. (You can also configure WSJT-X to use other helper software for CAT control, or directly handshake CAT to *SmartSDR CAT*.)

This article is not meant as a tutorial for setting up local ham software to connect to *RHR* radios, but at this point if our configuration has been successful, we should be:

- Manually controlling the radio and rotator with the RHR Console software.
- Sending and receiving band, mode, and frequency info through our logger such as N1MM+.
- Sending and receiving audio between the remote radio and WSJT-X.
- Sending sub-band changes from WSJT-X via N1MM+, via other software, or directly.

By using a local installation of WSJT-X, you can use any WSJT-X mode, and you are in control of your local computer clock's accuracy for WSJT-X decoding. In this scenario, to make a contact on SSB instead (this is a fanciful example in VHF contests): close WSJT-X, wait for the WSJT-X connection to the logger to drop, then enter "SSB" into N1MM's call sign field. This will change the mode in the remote Flex radio from "DIGU" (for WSJT modes) to "USB" (for VHF bands); I've also found you must turn off TX DAX in the RHR Console. Then you use your headset for voice contacts; similar steps can be used for making CW contacts.

*For more details on configuring local ham software to interface with RHR remote stations, look for videos on the RemoteHamRadio channel on YouTube.*

### Station Accessibility for All

The availability of remote ham stations, some for free and some for a price, allows greater accessibility to hams in any circumstance to operate good stations. While the example in this article focused on my limited usage in a VHF contest, most remote station users will find web browser access sufficient for casual HF use. I hope more hams who can't build a significant home station will find remote station usage to be a good substitute compared to not operating at all.

## Quick Portable 6Mtr Stressed Moxon from Par

**AA2SD/R** -Thanks to all fellow Club members and operators that participated in the Antenna Test of the Par Moxon Antenna SM-50 on 6 Mtrs from the Delaware Ebright Azimuth location. We had excellent participation from the Pack Rats and SJRA Members.

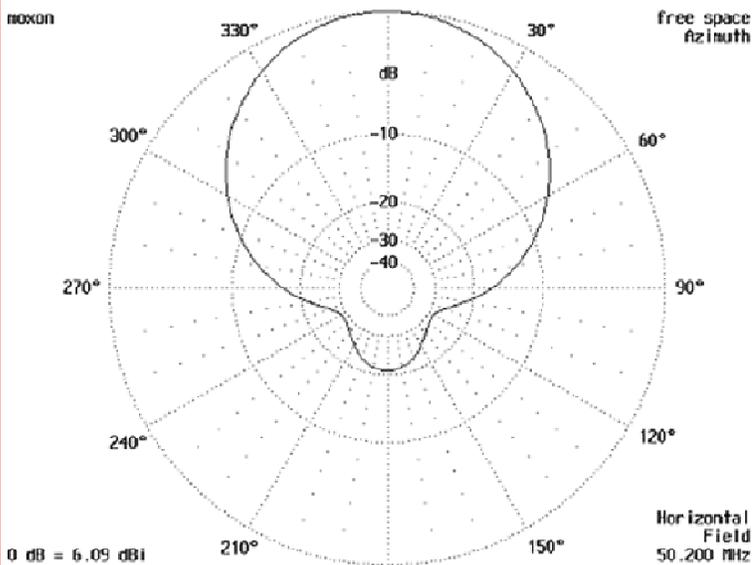
This antenna performed well with a very quick set up. Par claims the following specifications of 5.8 DBi and 17DB F/B. The drive element is constructed of a 7 feet section of  $\frac{3}{4}$  aluminum and the antenna breaks down for convenient storage. This antenna is ideal for a quick Rover Setup or mountain topping. If you live in a restricted HOA home, you can quickly set this antenna up on a fence pole or deck area to work some contacts like I do at home. I plan to use this during the June ARRL contest, for quick set ups as I move from overlook to another location.

Follow the You Tube Here

<https://www.youtube.com/watch?v=5xC3o029LYI>

Fellow Rat and Rover

**Scott AA2SD/R**



# The Wayback Machine

In CHEESE BITS, March,  
1974. Vol. XVI, # 3

de Bert, **K3IUU** (*author's comments in italics*)

**"Our Prez Sez"**. Prez Dick Huntzinger, **W3FQD** reviewed the results of last month's homebrew night meeting. The members displayed a wide variety of equipment, some of which is described briefly as follows: **W3HMU**, Tony had a 6-meter amplifier using a 4-400 tube with 1-kw input. **W3KM**, Dave had a 6-meter SSB transverter. **W3SAO**, Frankie showed his original 1951 novice transmitter for 2-meters, using a 6J6 final with 2.5 watts input. **K3BPP**, Walt showed a 432-MHz amplifier, class-C 1kw. **W3RJW**, Ron, a Frequency counter. **K3JJZ**, El, an automatic "CQ" caller for contests (*This was probably based on an 8-track tape player*). **W3FQD**, Dick, FM adaptor for AM rigs.

**Calendar**. March 9-10, Worldwide VHF Contest, sponsored by the **ItchykooPark VHF ARS**. March 21, Club meeting, with speaker **W3BVD**, Frank, discussing "logic design using integrated circuits." April 26-28, Dayton Hamfest (*It's been around a long time*). May 4, Ladies night at the Buck Hotel A super evening is planned, get your tickets early. August 11, the annual Packrat picnic at the Ft Washington State Park.

**New Products of Interest to Hams**, **W3NSI**, Lynn somehow always managed to find at least 3 interesting new items. This issue included:  
**1).Spectrum** International's 1296 receiving converter. The unit covers 1296 – 1300 MHz, and has a standard IF of 144 MHz. They can also supply a 10 or 6-meter IF on request. Priced at \$85.95. **2). Ultraline Company** offers the CC-1000 operating console. Best used in a corner, the top is curved in a 90-degree arc between the two end sections which each have three drawers. Two matching shelves are included. No price given.

**3).Spectronics Inc.** offers a Digital Display. The model DD-1 has a 6-digit readout and will display both receive and transmit frequencies. Accuracy specified as 100 Hz. The unit is provided assembled and calibrated for \$169.

**SIX Meter Report**. Rich, **K3ACR** reported moderate activity this month, with a lot of it still on AM "crystalled" frequencies of 50.2, 50.4 and 50.55. He notes that **K3EEP**, Erwin is employed with the Philadelphia Electric company, and has been given authority to investigate noise sources from their equipment. Contact him for help.

**220 Construction Notes**. Dick, **W3FQD** submitted two articles for equipment construction for 220 usage. The first one was "Add FM capability to your 220 MHz AM transmitter." He provided a schematic, parts details and discussion on how to modify your existing equipment so it would work with the club's new FM repeater. The design used a 3-pole switch to go between the two modes, and only a minimal number of parts was needed. He received good signal reports from other repeater users. The second article provide design and construction details for a compete 222.98 Modulator, for those that might not have an AM unit to start with.

**Contest results**. A full table of the contest results was included. It showed 65 members participating, with 65 logs submitted. Total club score was 581,117 points. (*Remember the old scoring was different, and was based on sections, not grids*).

**Official Bulletin Nr 463 from ARRL**. This bulletin noted that the **FCC** has simplified application procedures for repeater stations. A number of parameters have been changed from application requirements to logging requirements. Change to certain equipment parameters may be introduced without reapplication. New forms are available.

**Membership**. Visitors at the January meeting included Dave, **W2HX**, A.G.Wentzel, **WA3UXM**, Greg, **WN3VYZ**, Mark, **WA3VJC**, Marc, **K2SMZ**, John and **W3MAT**, Horace. **K1SFF/3**, Tony, officially received his new (*current*) call, **W3HMU**.

.... Wayback cont'd

**Tidbits.** QST announced the newsstand price was going up to \$1.00 each, based on “increased paper and distribution costs.”

**Swap Shoppe. By W3ZRR.** *(Always nostalgia.*

*Now we use the club reflector. For sale by Randy, **WB2SZK**, An **Eico** 753 80-40-20 SSB-AM-CW rig for \$100, two 16-element collinear antennas for 432 MHz, \$4 each, a **Heath** QF1 Q multiplier for \$4, and some other equipment. Also wanted by Randy was a 4CX-1000A socket. From Joe, **WA3QNS**, a HyGain Tribander, “in good shape” for \$50.*

**Ads.** *This issue included 24 “business card” ads, including one from current member Phil, **K3TUF** for his Clegg activity. It also included the half page back cover ad from club member Ham Buerger; however, no sale details were included. I note the current Cheese Bits Ad complement includes only 4 small ads, a ¼ page from Beko and a ½ page from Down East. If you'd like to join them, contact the ad chairman, Bob, **W2SJ**.*

**Miscellany.** *Postage for this issue was a single 8-cent “Flag” stamp. 5double sided, 8-½ x 11” sheets). (Don't forget, current postage went to 68-cents in January, and a penny postcard now costs 51-cents!) As usual, many other “folksy” comments about members, their families, and activities were included in this edition of Cheese Bits. If interested, or for more detail on any of the above items, visit our website ([www.W3CCX.COM](http://www.W3CCX.COM)) and read the full issue scanned by **K3IUUV** (me), and posted on the website by Bill, **WS3O**, our webmaster. I have also posted the club Officers history, club Membership history, and Packrat Inventory (updated frequently) on the **W3CCX** website. These files are password protected, and only accessible to registered members. Are you registered? I hope you enjoyed reading these bits of nostalgia as much as I did in writing the article. If yes, you might let me know. Thanks to those that did.*

*thirty, de **K3IUUV** (comments or corrections to: **K3IUUV@ARRL.net**)*



## International EME 2024 Conference

August 9<sup>th</sup> to 11<sup>th</sup>, 2024

TCNJ Trenton, NJ

<https://eme2024trenton.org/>

### EME101

#### *An Intro to EME*

A full day course Friday August 9<sup>th</sup>, 2024

TCNJ Trenton, NJ

<https://eme2024trenton.org/eme101/>

### 1296 MHz Activity Night

There's an informal 1296 activity night in the NY/NJ/PA/CT region (and beyond) every Monday night starting around 9:30 pm (or so) on 1296.110. No coordination, just jump in and say hello W2BVH

### KC3BVL UHF+ Tuesday Net

Packrat, Jim KC3BVL conducts a Tuesday night net with schedule as follows: 7:30PM—903.100, 8:00PM—1296.100, 8:30PM—2304.100

### KC3BVL VHF Friday Net

Packrat, Jim KC3BVL conducts a Friday night net with schedule as follows: 7:30PM-144.160, 8:00PM-50.160, 8:30PM-222.150, 9:00PM-432.160

Reminder: there are 3 FT8 VHF / UHF Activity Contests each month. For info see: <http://www.ft8activity.eu/index.php/en/>

For those interested in an online "Contest Only" event calendar for VHF+, see <https://www.qsl.net/n2sln/contestcalendar.html>

### Meteor Shower Calendar

Here's a Meteor Shower Calendar showing the dates for all the Meteor Showers in 2024. They're correct for our location in the Northeast. <https://www.timeanddate.com/astronomy/meteor-shower/list.html>

## PLEASE SEND IN 2024 DUES

Club dues are due as of Jan 1st, 2024. Go to [https://www.qsl.net/w3km/MtAiryRC\\_Dues.htm](https://www.qsl.net/w3km/MtAiryRC_Dues.htm) and use the "check here" link to see if you already paid. If not, enter your callsign and click on "PayPal" Dave **W3KM**

### 222 MHz Activity Night

There's been an informal 222 activity night in the Northeast (and beyond) every Tuesday night starting around 7 pm (or so) Eastern Time. ON4KST is being used by some to coordinate Q's when direct CQ's are weak. W2BVH

Call for Papers and Presentations for the 47th Eastern VHF/UHF/Microwave Conference, April 19-20, 2024, in Windsor, CT. Sponsored by the North East Weak Signal Group (NEWS).

details at <http://www.newsvhf.com/>

Presentations or papers are welcome on VHF, UHF, microwaves, and higher. All aspects welcome, technical and non-technical - operating, contesting, homebrewing, roving, software, EME, surplus, antennas, test equipment, amplifiers, SDR, 47 GHz superregen, attracting lightning, whatever.

Your winter project might be a good candidate—take some pictures.

Send submissions and questions to: w1ghz <at> [arrl.net](mailto:w1ghz@arrl.net)

73  
Paul W1GHZ & Mark K1MAP

The Packrat web page now has a dedicated tab for the Fall Sprints:

<https://www.packratvhf.com/index.php/fall-sprints>

This page will be used for Fall Sprint announcements, Sprint Rules publication, sprint awards recognition and other sprint news of interest.

Check back as work progresses.

The Fall Sprint Committee

# Editors At Large

From AI Katz **K2UYH**

## 48th Annual Trenton Computer Festival (TCF)

Saturday, 16 March 2024, 9:00 am to 5:00 pm ET <https://TCF-NJ.org>

The Theme is Generative AI (Artificial Intelligence). The Keynote Speaker is Brown Prof. Michael Littman, speaking on "Conveying Tasks to Computers: How Machine Learning Can Help". Advance Adult Admission \$15 / In Person \$20 / Children (12 & under) Free

Hosted at The College of New Jersey (TCNJ) <https://tcnj.edu> and TCNJ School of Engineering <https://engineering.tcnj.edu/> in Ewing, NJ

TCF is back again with in-person activities & talks. This year will provide the availability of one-way streaming ZOOM Talks – see [tcf-nj.org](https://tcf-nj.org).

A day of digital/software/technology-related talks, workshops/tutorials, demonstrations & exhibits and vendor sales.

The speakers grid, with dozens of talks, has 11 separate topic tracks.

**The EV Car Show will return** (Weather Permitting).

- Featured Speaker: Joti Balani, "Generative AI: The Evolution of Human-Machine Relationships"
- Featured Speaker: Sarah Nagy "Unlocking ROI on Data"
- Featured Speaker: Alianna Maren and Lee Goldberg (mod.), How to Make Artificial General Intelligence Work for You
- Trading Using Neural Networks – Donn Fishbein
- Machine Learning for Object Identification – Joe Jesson
- A full track on GAI in Music and the Arts organized by Rebecca Mercuri
- Workshop on Putting Generative AI to Work Creating Art & Literature– Lou Judice
- Quantum Computing for Everyone – Barry Burd
- Hands-on Arduino Workshop for Beginners – Katalin Frolio
- One-day Updated Hands-on OOP University on Object-Oriented Programming with the latest info on Python, Java, and the basics of OOP.
- A full day of presentations on IT professional topics (ITPC on Friday).
- HamCram (Get an amateur radio license in a day)
- **BattleBots Competition in the TCNJ Brower Student Center**

Questions? Please contact AI Katz, TCF2024 Chair at [alkatz@tcnj.edu](mailto:alkatz@tcnj.edu)

Faculty Listing: <https://engineering.tcnj.edu/engineering-faculty/allen-katz/>

# Editors At Large continued

**From Gary WA2OMY**

The W3CCX 2304 beacon antenna installation



**From Walter Murphy**

Hamfest season starting and many Hamfests to attend. Some NJ Hamfests

March 9, 2024 Cherryville NJ Hamfest <http://www.qsl.net/w2cra>

March 16, 2024 New Jersey Antique Radio Club Parsippany, NJ <http://www.njarc.org>

April 20, 2024 Splitrock ARA Landing, NJ <https://splitrockara.org/hamfest/>

## **45th Annual Sussex Hamfest July 14, 2024**

Sussex County Fair Grounds

37 Plains Road

Augusta, NJ 07822

GPS

Lat. / Long: 41° 08' 10.2" x 74° 43' 01.9"

(decimal 41.136200 x -74.717233)

Indoor sales, Tailgating, VE Session, refreshments and Door Prizes.

- Admission \$8
- Indoor Tables \$25
- Tailgate Space \$25 includes One (\$8) Admission
- Each Additional person \$8

**Phone: 973-862-8124 - Email: [hamfest@scarcnj.org](mailto:hamfest@scarcnj.org)**

# Editors At Large continued

From Phil **WA3NUF**

**47th EASTERN VHF/UHF/MICROWAVE CONFERENCE:  
APRIL 19-21, 2024  
Hilton Garden Inn (860)-688-6400  
555 Corporate Drive, Windsor, CT 06095  
(I91 exit 38 to Day Hill Rd.)**

4/18/24 **THURSDAY** Early Arrivers  
6-9pm Meet in bar

4/19/24 **FRIDAY** LODGING  
12:30pm Early Arrivers Lunch - meet K1MAP (413-222-9292) in Lobby  
2:00-5pm Afternoon Workshop TBD  
6:00pm HOSPITALITY ROOM (BYOB due to Hotel rules)  
7:30pm Indoor SWAP/SELL & VENDORS.

4/20/24 **SATURDAY** REGISTRATION, TALKS, AUCTIONS, TEST LAB , VENDORS & MORE.

Schedule Details Coming SOON  
7:30am REGISTRATION BEGINS  
8:15am OPENING ANNOUNCEMENTS  
8:30am TALKS BEGIN (see SCHEDULE):  
11:30pm LUNCH (Grinders at Jim's Restaurant)  
1:15pm TALKS RESUME  
4:15pm TALKS CONCLUDE  
5:00pm NEWS MEETING - W2AAU  
5:30pm Pre-Banquet Hospitality Room  
7:00pm BANQUET BUFFET (7 PM - 8:30 PM)  
8:20pm Tom Kirby Award Presentation  
9:00pm DOOR PRIZE EXTRAVAGANZA, Michele Clement W1MKY and Don Twombly W1FKF

Schedule Details Coming SOON  
Super Test Lab up to 122 GHz

4/21/23 **SUNDAY**  
9:00-11am VHF+MW SWAP/SELL at Vintage Radio & Communications Museum

**\*\*NO EARLYBIRDS\*\* & VENDORS (8AM setup),**  
(included with Registration- Please contact Mark Casey K1MAP for details)

EVERY REGISTRANT IS ELIGIBLE FOR PRIZE DRAWINGS.

More info at [https://www.newsvhf.com/latest\\_newsletter.pdf](https://www.newsvhf.com/latest_newsletter.pdf)



# Sussex Amateur Radio Association

## - APRIL 20, 2024 -



# Delmarva Amateur Radio & Electronics EXPO

**Centrally and conveniently located...within 2 to 3 hours of major cities:**  
Baltimore, Philadelphia, Wilmington, Washington DC, and Virginia Beach as well as Eastern PA and Southern NJ

**NO SALES TAX - MORE VALUE FOR VENDORS AND GUESTS - FREE PARKING**  
Bring The Family And Enjoy A Weekend At The Beach!

### Past Vendors & Exhibitors

ARRL  
Beebe Hospital  
Fisher Cable  
Call Stuff  
Direct Tools  
GnG Electronics  
Satellite Sam  
Hamsource.com  
HRO (Ham Radio Outlet)  
Magnum Electronics  
Quicksilver Radio  
Redicall Communication  
The RF Connection  
Towaco Imaging  
Verizon

### Events & Attractions

ARRL State Convention  
Tail Gating  
Great Food  
Blood Pressure Testing  
Chinese Auction  
Raffle...Big Prizes!  
License Testing  
Guest Speakers/Forums  
QSL Card Bureau/Card Checking  
Door Prizes!

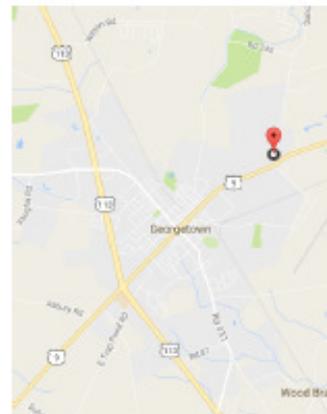
**Guests Pay \$8 To Enter!**  
(Under 18 FREE!)

**Inside spaces \$15.00 - 1st Table**  
**Tailgaters : \$15.00 - First Space**

**For Information**  
**Contact Jamie, W3UC**  
**(410) 202-7690**

hamfestdelaware@gmail.com

### HAMFEST LOCATION:



**Cheer Community Center**  
20520 Sand Hill Rd.  
Georgetown, DE 19947

### HOST HOTEL:

Tru Hotel by Hilton  
301 College Park Drive  
Georgetown, DE 19947  
(302) 515-2100  
www.hilton.com

**JOIN US IN TAX FREE DELAWARE!**

**Gates open at 6:00 A.M.**  
**Expo begins at 8:00 A.M.**

### Schedule

6:00 AM Gates Open  
7:30 AM Tailgating  
8:00 AM Indoor expo venue opens  
Restaurant available  
12:00 PM FCC testing -No test fee, pre-registration required  
Last test seating at 12:30 PM

### Speakers Forums

ARRL Update  
Others

**TALK-IN: SARA Repeater**

147.090 mHz PL 156.7

*Schedule subject to change*

The Delmarva Amateur Radio Electronics EXPO is sponsored by Sussex Amateur Radio Association

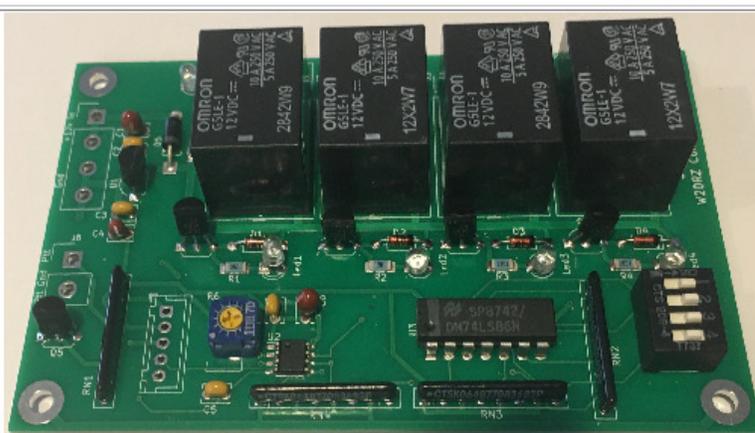


**www.radioelectronicsexpo.com**

Follow us on Facebook at Delmarva Amateur Radio & Electronics

## W2DRZ Controllers New Product Announcements

### SEQ-3 Sequencer



Our Sequencers, SEQ1 and SEQ2, have proven quite popular and we have sold almost all that have been made. But we discovered a small problem with the original design that caused a random time delay when activating or releasing the PTT line. The delay is not very noticeable except when using slow sequence rates. But we felt that this required a new design. The new design uses an interrupt driven microprocessor that instantly responds to changes on the PTT input.

Savings on board cost and component reduction have allowed us to reduce the price from the original \$67 to \$59 for the new SEQ3.

See our web pages for full information about these sequencers: [www.w2drzControllers.k2txb.net/NewProducts.htm](http://www.w2drzControllers.k2txb.net/NewProducts.htm)

### Kenwood TS-2000 services

*We are now able to offer some limited repair service for owners of the venerable Kenwood TS-2000 transceiver.*

1. Repair failed back lighting of the digital display, by installing LED lights (with necessary circuit changes).
2. Replace old backup battery.
3. Adjust master oscillator to be within 20 Hz of correct frequency on 2 meters. (for higher bands the error will be greater due to increased drift with fan operation).
4. Fan Modifications.
5. Fix incorrect 1296 MHz output module bias, in early models.
6. Fixing other faults, details to be worked out, but on a case-by-case basis.
7. See our service page for more details: [www.w2drzControllers.k2txb.net/Services](http://www.w2drzControllers.k2txb.net/Services)

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HLV-1400* 4,300	HLV-770* 3,150	HLV-800* 4,950	
HLV-2000* 5,250	HLV-1470* 4,580		

**\*P<sub>out</sub> in Watts • WSJT Full Output Rated • 220 MHz and 70 MHz models on request**

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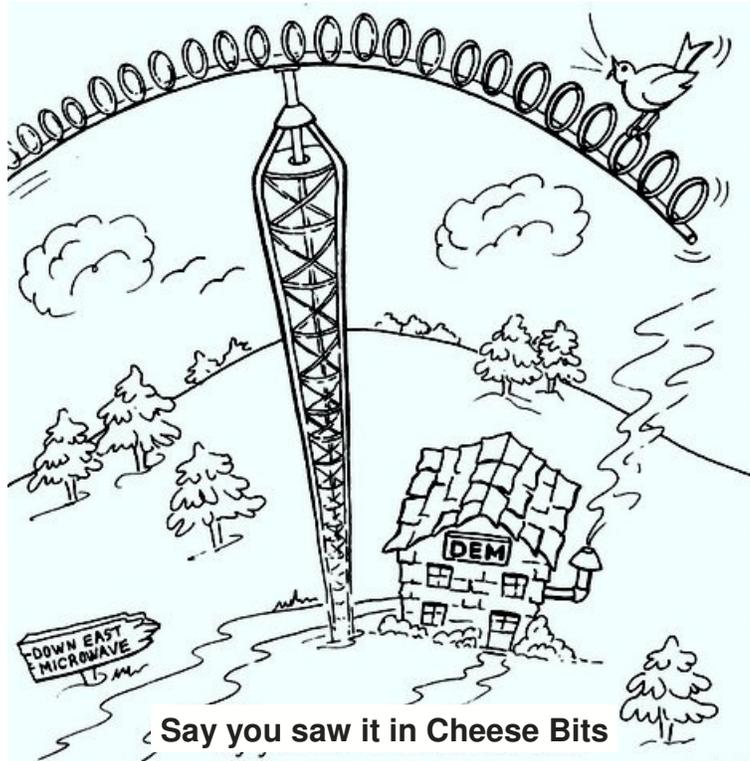
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