



# CHEESE BITS

**W3CCX**  
CLUB MEMORIAL CALL

ARRL  
Affiliated  
Club



Volume LXVI

April 2023

Number 4

## PREZ

**On the Road Again**  
**April 2023**

**SEZ:** Spring brings ham conferences. My buddy George KA3WXV and I have

two on our calendars: Microwave Update 2023 (MUD), held in conjunction with the 46th Eastern VHF/UHF Conference, April 14-15, 2023 in Windsor, Connecticut. We will also make the pilgrimage to Dayton Hamvention May 19-21, 2023 (Flea Market Spot 7242).

It will be great to see international and other attendees in person at MUD and the Eastern VHF/UHF Conference. One of my favorite parts of MUD and the regional VHF/UHF conferences is to hang out in the testing lab, courtesy of Greg Bonaguide WA1VUG and Rohde & Schwarz. I enjoy seeing the equipment that attendees bring in for testing. I also marvel at the sophisticated gear that Greg brings to the conference. I plan to bring a piece of test gear not in the Rohde & Schwarz product line, a DMMCheck Plus (<https://dmmcheckplus.com>) which attendees can use to check seven functions of their DMMs.

Why did I acquire this piece of equipment? Would you believe as a joke? Tom KA3FQS nudged me to purchase a NOS (New Old Stock) Fluke DMM at the Sussex County Hamfest in NJ prior to the Covid-19 epidemic. Reading the

enclosed instructions, Fluke offered to recalibrate the unit for a “modest” fee. I contacted Fluke and discovered that the “modest” fee was greatly in excess of what I paid for the meter.

So when I spotted an advertisement for the DMMCheck in an issue of QST, I indulged and bought the unit with the factory enclosure and added a Harbor Freight protective case. The truth is that the DMMs that I have inspected with the DMMCheck offer accurate measurements. Bring your DMM to MUD and get its accuracy checked.

On the way back from MUD, George and I are going to stop by Danbury, Connecticut to visit the QTH of W1SMS for a BBQ. Steve indicated that he hoped other Packrats attending MUD would attend. So if you can make it, let Steve know.

Switching the subject to Dayton Hamvention, George and I have no special plans other than to transfer some of the clutter in our shacks to other hams. I am sure that we will visit Jay’s Seafood Restaurant in Dayton for an excellent seafood dinner. We customarily do a pizza night with Packrat friends in attendance.

Personally, I liked eating “fair food” for lunch when I first attended Hamvention when it was

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**Pack Rat Web Site:** <http://www.packratvhf.com>

**SUBSCRIPTION/ADVERTISING MANAGER:**

Bob Fischer, W2SJ 23 Morning Glory Circle, Mullica Hill, NJ 08062 (609) 440-2916 bobw2sj-at-gmail.com

**EDITOR:**

Lenny Winfield W2BVH 709 Lincoln Av., Cranford NJ 07016 (908)-272-0559 lennyw-at-comcast.net

**TRUSTEE OF CLUB CALL - W3CCX**

Mike Gullo WB2RVX (609)-743-6643 MGullo3-at-comcast.net

**W3CCX QSL CARDS:**

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**PACKRAT BEACONS - W3CCX/B**

144.300 (FN21be), 222.300 (FN20tk), 432.300(FN20tk), 903.300 (FN21be), 1296.300 (FN20dh), **2304.300** (FN20dh—under repair), **3456.300**, **5760.3** (FN21be under repair), 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:**

| TIME    | FREQUENCY   | NET CONTROL         |
|---------|-------------|---------------------|
| 7:00 PM | 224.58R MHz | WR3P FN20kb Ralph   |
| 7:30 PM | 50.150 MHz  | N3RG FM29ki Ray     |
| 8:00 PM | 144.150 MHz | K3GNC FN20ja Jerome |
| 8:30 PM | 222.125 MHz | KC3BVL FM29jw Jim   |
| 9:00 PM | 432.110 MHz | WB2RVX FM29mt Mike  |

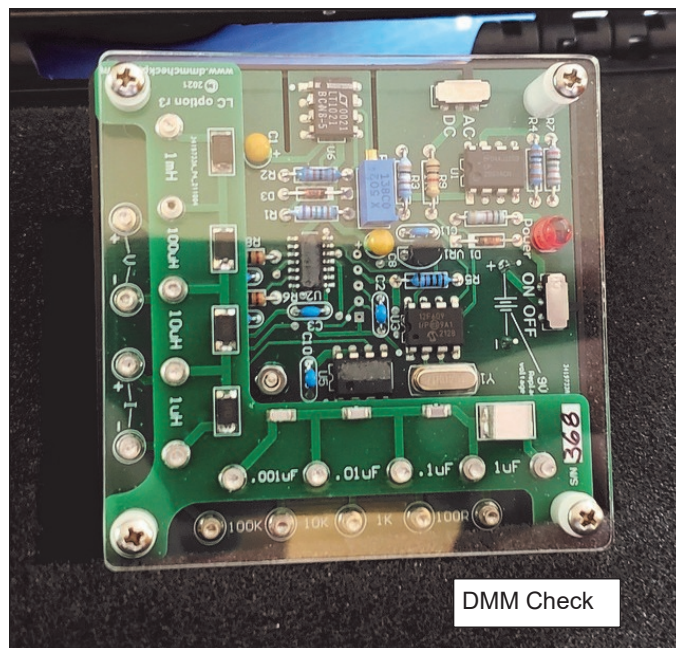
Visit the Mt Airy VHF Radio Club at: [www.packratvhf.com](http://www.packratvhf.com) or [www.w3ccx.com](http://www.w3ccx.com)

relocated to Xenia. Last year, my traveling companions had a different idea. We took in a supply of wieners, brats, sausages, and rolls at Meijer Supermarket and grilled them on an electric grill, powered by my portable Generac generator. Last year's grill broke on the second day but George has acquired a new one for our use.

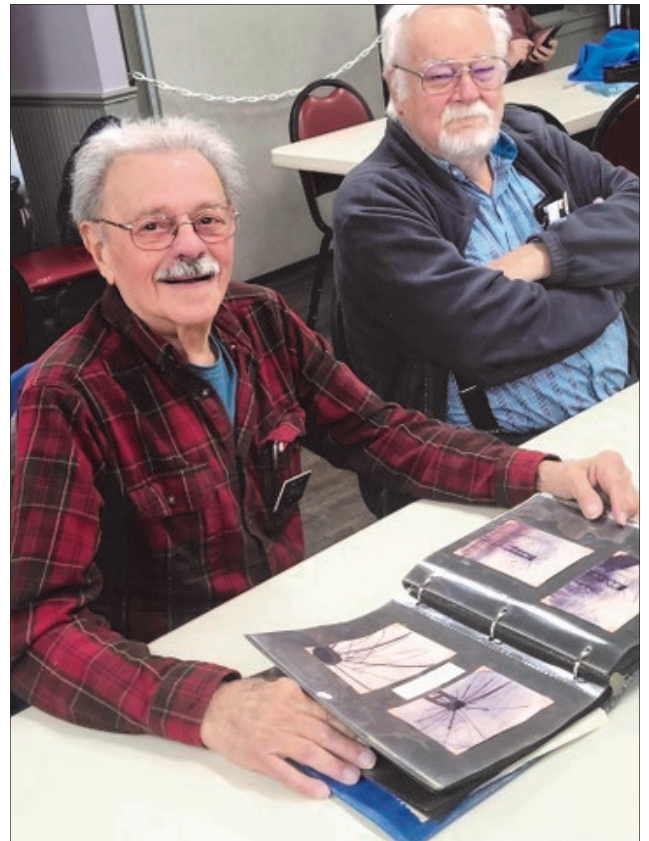


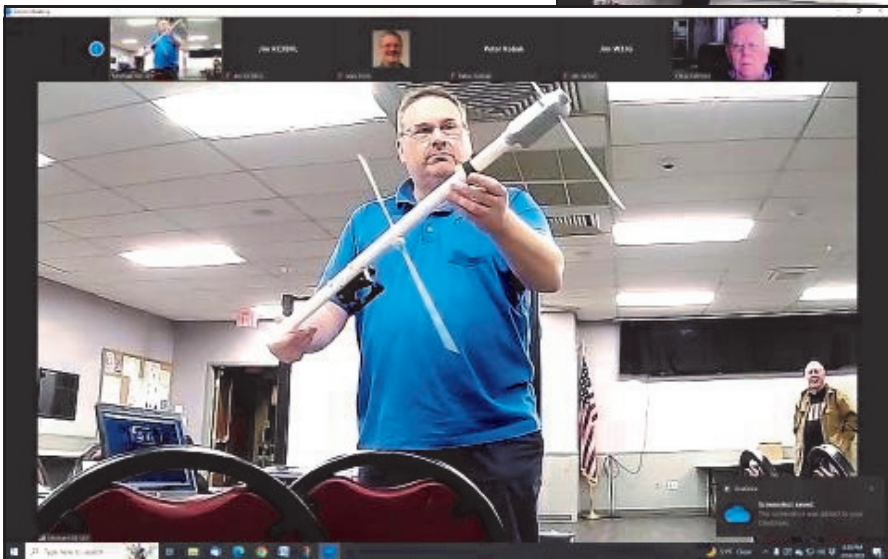
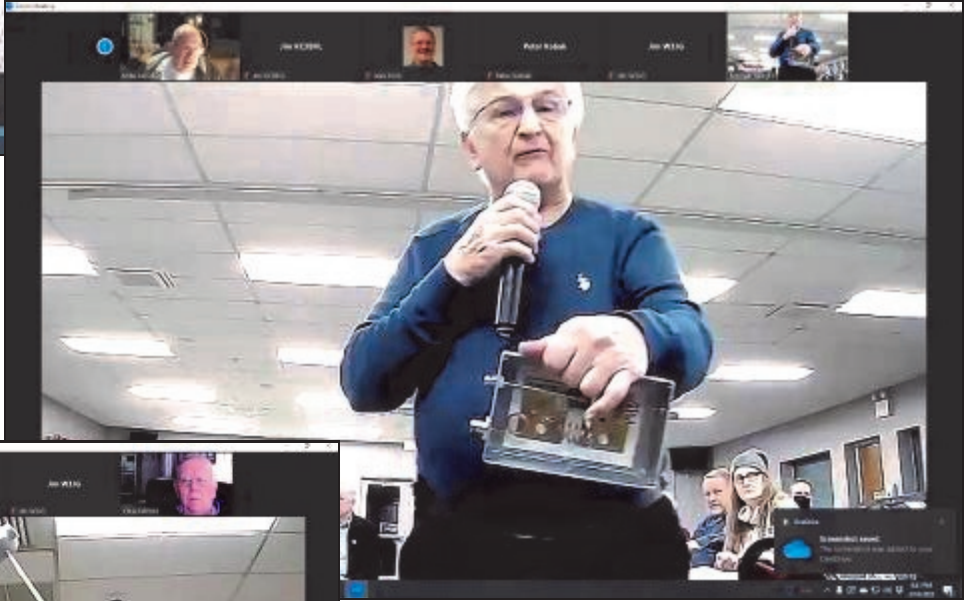
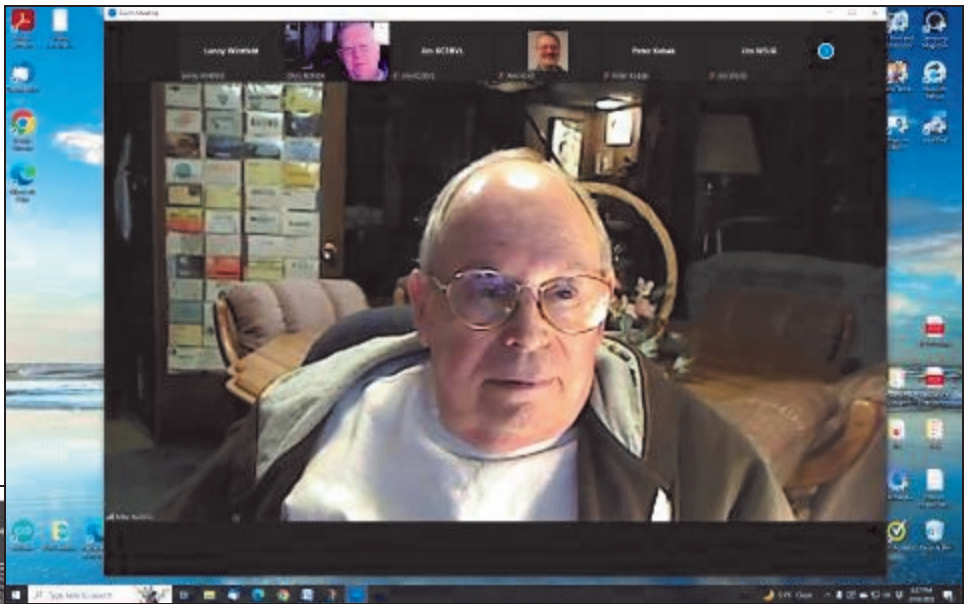
The funny story? When hams stroll by, their first question is whether the generator is for sale. “No” I tell them, “Check your local Generac dealer”. Their follow-up question is “How much does it cost?”. I reply “Check your local Generac dealer.” Some of those hams mistook me for a Generac representative and one labeled me a curmudgeon. As the late lovely Mrs. Davis would often remark “Not my job.”

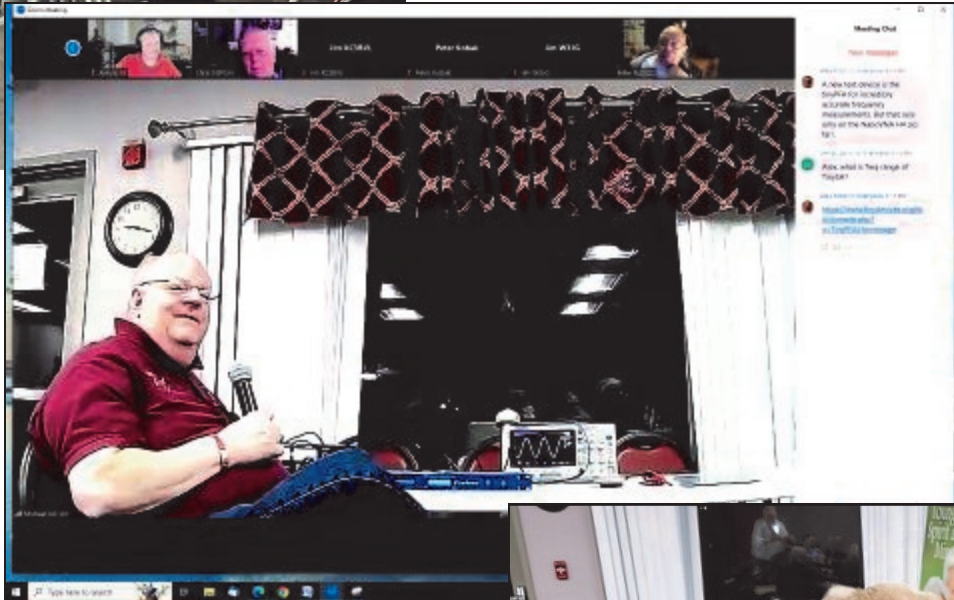
**Michael KB1JEY**



# MARCH MEETING PICTURES (HOMEBREW NIGHT)







Pix by K3JJZ ,  
W2BVH & KC2TN

# 50MHz HIGH POWER LOWPASS FILTER

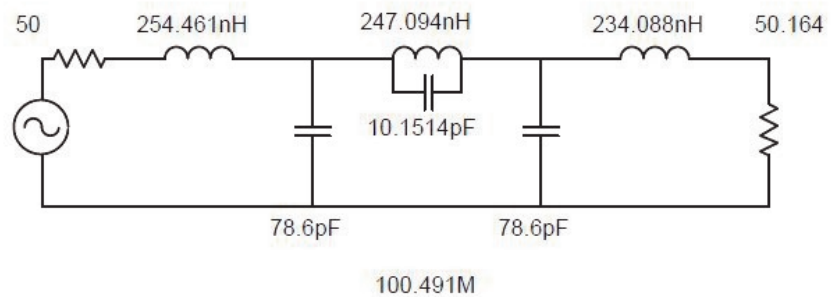
By Doc **W3GAD**

Several years ago I purchased one of the Harris channel 2 amplifier modules. There are Cheese B Bits articles by John Sortor KB3XG and others describing the amplifier and its adaptation for use on 6 meters. One of the challenges is the recommendation to use a bandpass or low pass filter to assure compliance to FCC spurious emissions. Since the 2<sup>nd</sup> harmonic is in the middle of the commercial FM band and the 3<sup>rd</sup> harmonic falls on public service frequencies, and I am not a big fan of attracting attention from the FCC, I needed to find an affordable filter solution.

I first saw the article by Bill Jones K8CU in the November 2002 issue of QST: **A HIGH PERFORMANCE, LOW COST 1.8 to 54 MHz LOW PASS FILTER**. This project is also in the 2020 and 2023 ARRL HANDBOOK. The filter is claimed to be a full legal limit design.

I have been gathering materials for the project over several years including at the MARIO TABLE. As is normal for me, priorities get constantly sidelined by other priorities and ham radio is less important than domestic needs thus the parts sat unused for some time.

I started with the basic layout from the K8CU article but the materials on hand were not exactly the same. Since I was following the spirit of the layout and I chose to take a few liberties in the choice of materials. I replaced the ¼ inch bolts with a collection of nylon spacers with nylon hardware. For the coils I used semi-rigid hardline. To make the changes work I consulted the ARRL handbook for guidance in calculating the capacitance with the different mounting hole diameter and the coil dimensions with a different diameter tubing. The formulas for the calculations



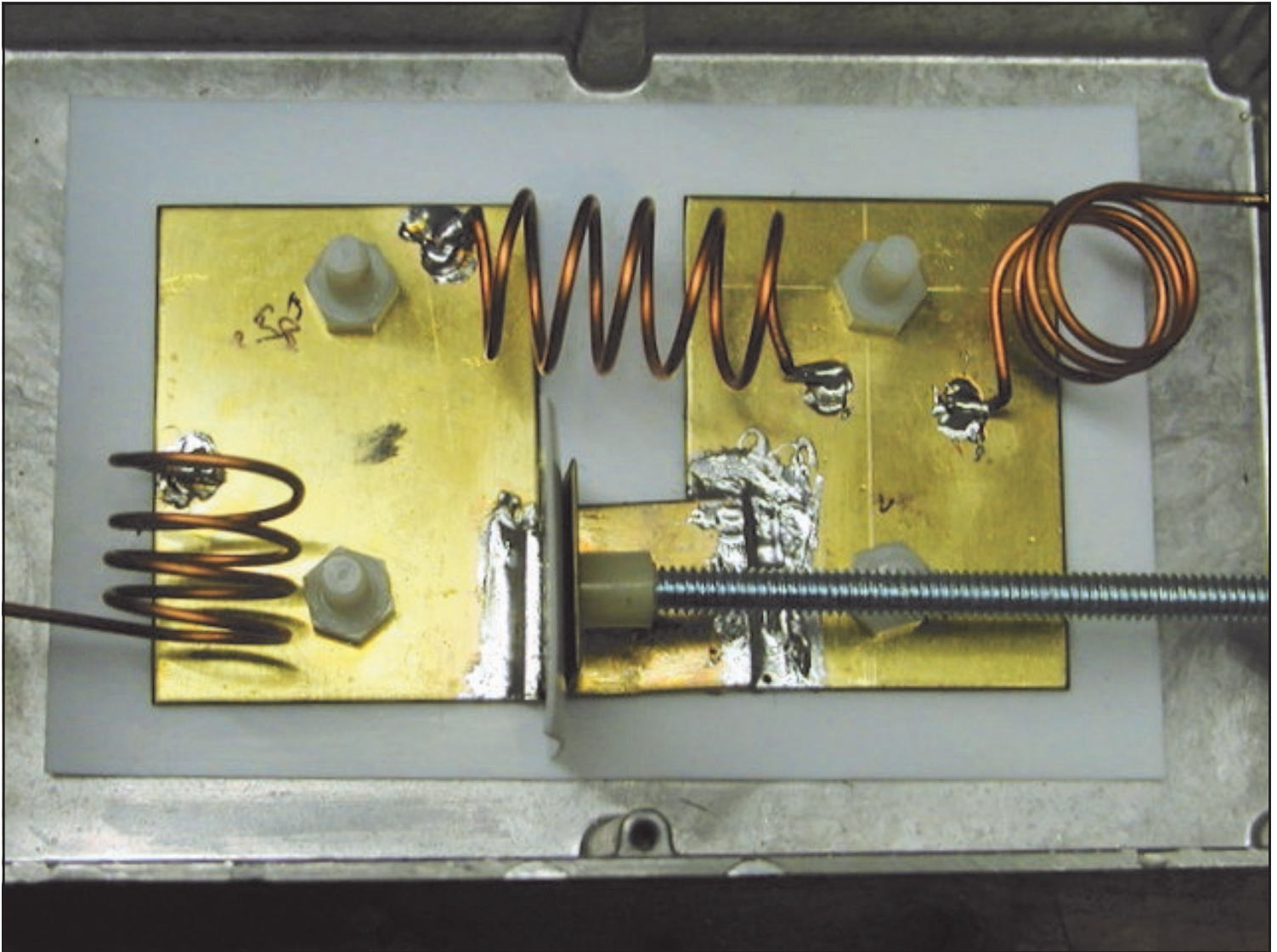
Bandwidth: 4M Family: Manual entry

3/20/2023 1:34:22 AM - Elsie 2.85 - www.TonneSoftware.com



were easy to manipulate giving me new values for the shunt capacitors and eventually for the coils.

Using the new capacitance values in the ELSIE filter calculator (ELSIE is included with the download version of the handbook) I arrived at the needed inductance. Using the handbook again I calculated the proper diameter, length and number of turns required for the 3 coils. ELSIE provided me with expected



performance graphs for Insertion loss, SWR and return loss.

Assembly was straight forward though it does take a hefty soldering iron to make connections to the capacitor plates.

Once assembled I took the filter to work and tuned it on the Rhode Schwartz Network Analyzer and was delighted with the results which exceeded the performance predicted by the K8CU design.

Based on all the static plots it looks like a very good filter. The final test will be to see how the filter performs in the “real world” and look for the junk on the Spectrum Analyzer.

73, Doc **W3GAD**

# Comment and Speculation on the IC-905

[There's been recent comment and speculation on the Microwave reflector and on the 10 GHz and Up reflector regarding the yet-to-be-released Icom IC-905 multiband microwave rig. Below are some comments from those reflectors which you may find interesting. Please take them with a grain of salt, since the product, though announced, has not been released for sale. —W2BVH]

14 Mar 2023 I got an email from DX Engineering telling me that they are ready to take orders on the IC-905. Their price list is below

| Part Number  | Description  | Price      |
|--------------|--|------------|
| ICO-IC-905   | 5 Band Multi-mode Base 2m/70cm/23cm/13cm/5cm       | \$3,699.95 |
| ICO-CX-10G   | Transverter 10.0 – 10.5GHz (0.5W)                  | \$1,099.95 |
| ICO-AH-24    | Antenna – Colinear 2.4GHZ – w/Mount – no coax      | \$399.95   |
| ICO-AH-56    | Antenna – Colinear 5.6GHZ – w/Mount – no coax      | \$399.95   |
| ICO-AH-100   | Antenna – Colinear 10GHZ – w/Mount – no coax       | \$399.95   |
| ICO-AH-109PB | Antenna – Parabolic 10.0–10.5GHz – w/Mnt – no coax | \$1,099.95 |

73 de Mitch N8XS

14 Mar 2023

Yikes !

I see this is a non-starter for Icom. Very neat concept but WAY out of line pricing.

Considering that much of the design is based on existing products where the NRE has already been recovered, and a lot of newer active RF devices are wideband ( i.e, much of the circuitry is shared among the bands), the pricing is whacked. I predict major price adjustments (even half \$ is a stretch).

73, Hugh VA3TO

15 Mar 2023

While I agree the price is steep, consider the cost of an IC705 for an I.F. rig, add a 1296 transverter and amp, 13cm transverter, 6cm transverter, 3 cm transverter and all the RF and control switching not to mention the weather proofing!! While you are below the cost of a '905, think about the microwave newbie's that don't have the interfacing experience we all have and while we all like it or not, there are lots of "appliance operators" out there that can be a huge help to all of us in a contest or MAD days.

I will probably get one to set up at Dayton with real antennas and hope to be able to demonstrate receiving some beacons and hopefully work some of the rovers on "Rover row".

I will have to applaud ICOM for at least trying while Kenwood and Yaesu kinda sit on their butts.

Terry Price - W8ZN

15 Mar 2023

I kind of agree, but since they don't include 222 902 3400, those bands still requires separate solutions ... and since the 905 Pout on the bands is pretty low one may still want to add a LNA / PA which again introduces complexities. No doubt it is a step in the right direction, but hopefully one day there will be a do all. I wish Q5 or Demi would make the next step up version of the 5BVUX 144/222/432/902/1296 2.3 / 3.4 / 5.8 / 10

73 VE3KH

15 Mar 2023

I agree. An IC-705 and three transverters @ \$800 and you're at the same cost with a lot less hassle. Not to mention almost no loss out to the antennas. If the 2m/70cm outputs can be used to drive a few more transverters you should be able to have a very neat solution on the tower. Maybe another solution can be created that can use the 10 GHz transverter port for other bands too. Dave N2OA



IC905 cont'd

15 Mar 2023

By my math: An IC-9700 and 3 DEMI transverters is \$1400 cheaper than the IC-905 + 10G module. An IC-9700 is \$200 cheaper than an IC-705 + 1296 transverter. And you get power on 2m and 70cm. 73, John N9ZL

15 Mar 2023

+1 to N9ZL's point. Plus you get much easier integration with antennas, preamps, and power amps. The IC-905 is significantly underpowered. On the plus side for the 905: you can checkbook engineer a microwave station, minus 3400. --73, Rus K2UA

16 Mar 2023

IC-9700 would not fit in my backpack for /P operation, whereas the IC-705 / IC-905 does fit. I'm sure some contesters in UK will be attracted to an all-in-one solution to the microwave bands. Not for me, but neither is the IC-9700  
Stuart G1ZAR/P

16 Mar 2023

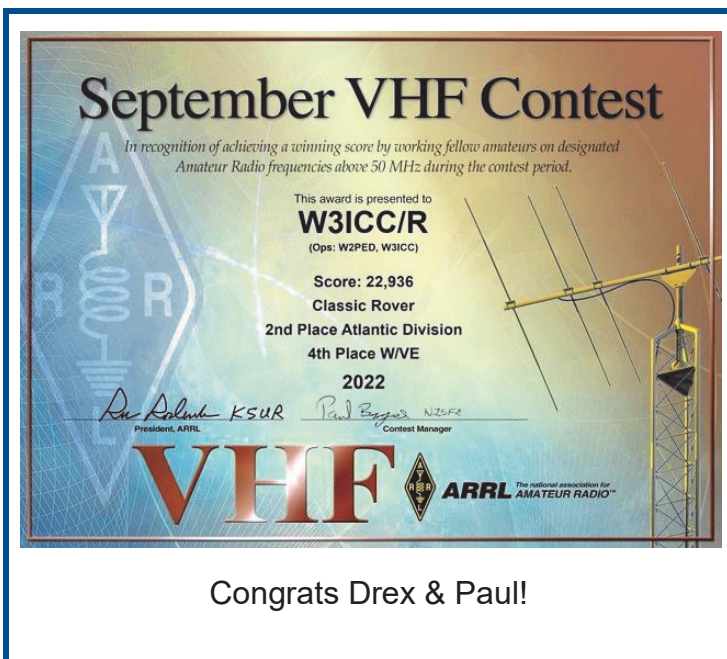
Gigaparts is doing preorders at \$3499.95, so maybe list is \$3500  
<https://www.gigaparts.com/icom-ic-905-vhf-uhf-shf-all-mode-transceiver.html>  
Rich N1OZ

16 Mar 2023

HRO website is showing the IC-905 at the same price as Gigaparts (\$3499.95). Also, both places (HRO & G) are showing \$999.95 for the 10G transverter module (CX-10G). No hints at either when the products will really be available.  
John K9JK

17 Mar 2023

And all the Japanese manufacturers are really bad about announcing product with no prospect of stock for a long time. I suspect these are still 'market test' announcements.  
Oz, N1OZ



Congrats Drex & Paul!



Congrats Pete!

# Pluto Modules for Multiband Microwave

Hisen, KD2TAI, presented his SDR Rover Kit at the QSO Today Ham Expo:

<https://hisenzhang.notion.site/SDR-Rover-Kit-507d380b8cbf42409bbbc8ab439f5d61>

It was an excellent presentation, which he will repeat at MUD. It provides for all 8 bands between 144 and 5760 MHz with **under \$400** in off-the-shelf hardware. Fits easily on a clipboard, as you can see, and could be placed in a box near the antenna(s), powered by PoE, if one were so inclined. Very impressive project!

Now if I were a member of an enterprising VHF+ club with aspirations in advancing the art of radio (what on earth is radio art?), I would propose this as a club project that could also help support Hisen's brilliant work. 73, --Alex KR1ST

[Note 1: Joe Jesson W2JEJ did a similar presentation to the Packrats about using the original ADALM PLUTO module a few years ago. —Not to take away for Hisen's fine article.]

[Note 2: KA3WXV reminds us that there is a similar project, the "Langstone Project" that uses the ADALM PLUTO module and a Raspberry Pi for bands between 4M and 5760 MHz. See [https://wiki.microwavers.org.uk/Langstone\\_Project](https://wiki.microwavers.org.uk/Langstone_Project)

OK, so I guess I'm on this nostalgia kick! Here's a shot from an early 70's Hamarama at the Buck's County Drive-in on Rt 611. W3HQT checking out some of those really good deals that are always available at the end of the event! 73, Bill **K1DY**



I was only giving out points in the **Stew Perry**. Wrote down call signs and some of the grids, but no times. I worked Steve N2CEI in Florida. They were running Dave's call sign, K0DI. I'm not up to 35 WPM, but for a contest exchange, I do ok.

As the 24 hour Stew Perry was a CW only contest, it seemed to me that participation was a little light, compared to other mixed modes 160 meter contests.

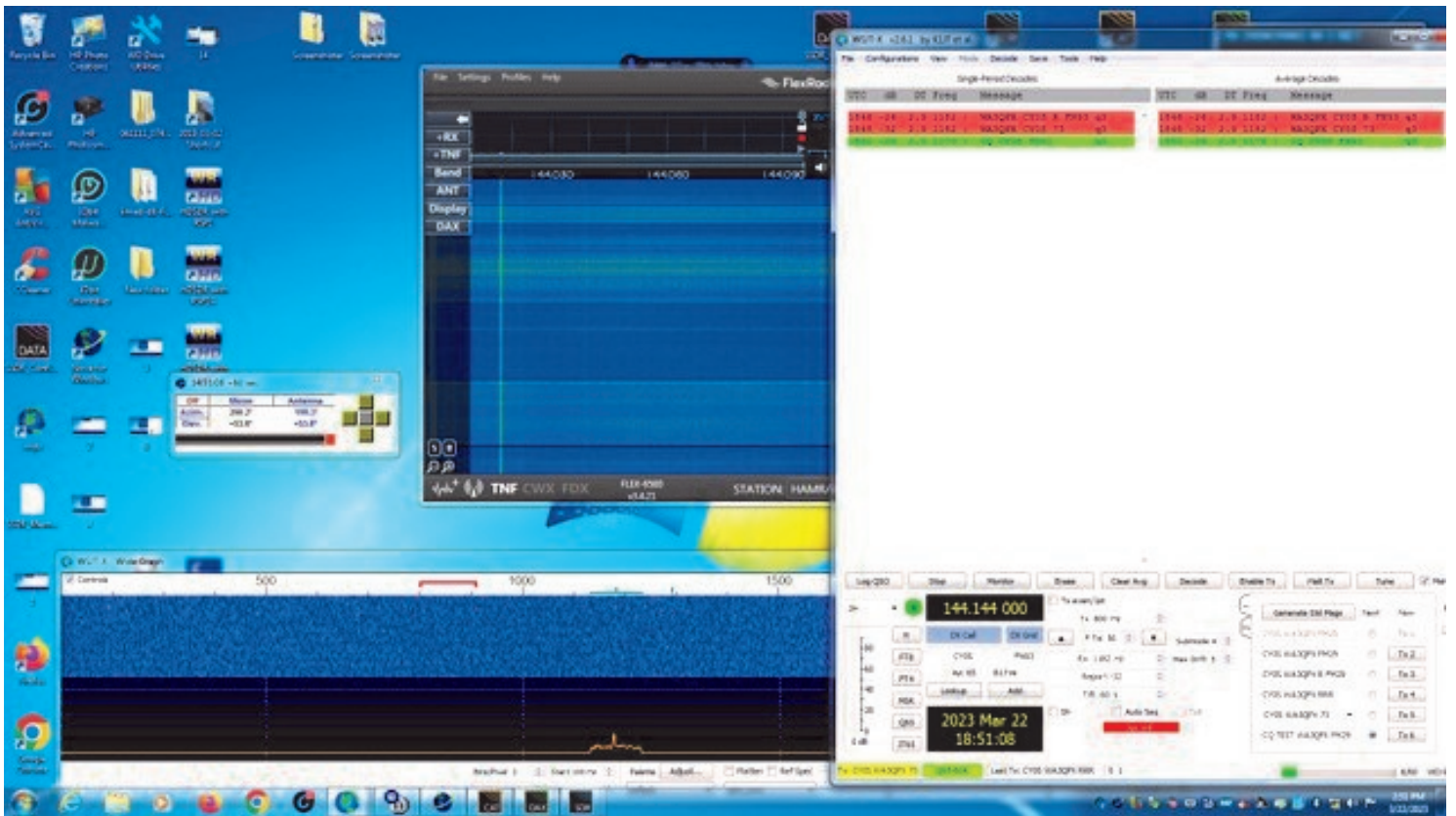
I finally trimmed down my wire antenna enough where it loads fairly well on 160 meters. Just in time for the minimal summer activity on 160 meters! Haven't checked out how well it does or doesn't work on 10 meters.

Warren **WB2ONA**

Pete and Rick met at the 2023 Orlando Hamcation



# WA3QPX works CY0S 2 Meter EME



Paul says: Tnx Joe and WSJT team for new mode Q65A ,Copied -32 db signal . Quite remarkable.



## **First EME QSO with WSJT**

DF2ET describes his first WSJT EME QSO at <https://www.florian-wolters.de/posts/first-eme-qso/>

He was using conventional satellite equipment: an IC-9700 on 70 cm with a 10 element yagi. He was running only 75 watts. Pretty sketchy, but he pulled it off. Worth reading; nice pictures!

## **Watch "What's inside the 2nd oldest TV Tower / Transmitter in the West" on YouTube**

Here's another fascinating tour of a TV transmitter location. It has antennas on a 1000+ foot tower and transmits 800KW ERP. It's at [https://youtu.be/W\\_U9pFfXjYA](https://youtu.be/W_U9pFfXjYA)

I just want to share a few thoughts on the June VHF contest...

Last night (3/17/23) checking into Jim's nets I heard comments regarding the age of people at the Packrats meeting and although I didn't agree with the comments, I couldn't dispute the age factor! Jim had the best comment of all... he said he doesn't drive forward looking in the rear view mirror! In other words, he doesn't look back and compare because he's new and not a part of the past...he looks forward and can contribute to what's coming and not what has already happened! I agree with Jim 100% and he is a contributor that will shape the future of our club.

I think we can all agree we need to reach out to younger folks who have interests in what we do and be an "Elmer" or mentor. The June contest is a good way to do just that. In a perfect world we'll sit an inexperienced operator next to an experienced operator and hope a little of what he or she does will rub off. Our operating positions are equipped with dual headphone jacks and we encourage you to sit in and listen.

If each of us makes an effort to reach out to a younger person that expresses interests in weak signal, contests, EME, microwaves, etc. we'll have another generation of Packrats.

Last year the June contest was a lot of fun and this year will be a whole lot better.

73 de  
**N3RG** Ray

Hi Warren (WB2ONA),  
I should be at MUD. Maybe I'll run into you.  
Yesterday was a fun day. Henry, KT1J and I worked 2200M to complete the **Worked All Bands (WAB)** award. See:  
<http://www.wa1mba.org/wab.htm>

Been working on it for over 15 years... Feels good to finally get it done.

Mike **N1JEZ**

**Note: There are 29 ham bands ranging from 2200M to 300+ GHz including several in the 100—300 GHz range.**  
—W2BVH

## How many LEDs can you light up with a hot dog?"

Shahriar Shahramian, the host of his own YouTube channel has a very well equipped home lab. He worked his way down a list of important questions / problems he might attack at home. He had to reject such problems as Nuclear Fusion, the Theory of Everything, Quantum Computation and several others as too broad for his limited home lab. But there is one burning unsolved question that needs answering which is suitable for his instrumentation and his training: "How many LED's can you light up with a hotdog". He was able to measure the complex impedance of a Hebrew National hot dog, and with a bit of analysis was able to calculate what appeared to be a reasonable solution. He then put the calculations to the test. Watch as he makes his measurements, calculates the theoretical number of LED's and then tries to confirm his calculations with a practical test on the bench.

Don't think this is a half baked (roasted?) experiment, Shariar has a PhD and works at Bell Labs in NJ. He is also Adjunct Associate Professor at Columbia University's engineering school.

A very nice video, apropos of the month.

<https://youtu.be/JUbPuZQe-00>

—Lenny W2BVH

# ***The Wayback Machine*** **In CHEESE BITS, 50 Years Ago**

Nibbles from April 1973. Vol. XV Nr 4 de  
K3IUV Bert  
*(author's comments in italics)*

**“Our Prez Sez”.** Prez Walt, **K3BPP** reported that he appointed Dave, **W3ZD**, as chairman of the 1976 Atlantic Convention (*We always started planning well in advance for important projects*). He also reported that “The aluminum for the 20-foot dish was at my doorstep today. Moon-bouncers take note and get ready for some construction!”

**Calendar.** April 25 (note date change), regular meeting. Topic will be converters, how and why they work (and sometimes don't!). Lots of hardware will be displayed. April 27-28, Dayton Hamvention. A bus sponsored by Penn Wireless offers r/t fare of \$25. May 5<sup>th</sup>, Ladies Night Banquet at The Buck Hotel. May 16<sup>th</sup>, general club meeting, with topic **ARRL** night. Tom, **W1SL**, Technical Editor of QST will be the guest speaker. June 9-10, the QSO party at Hilltown. Tony **K1SFF/3** (now **W3HMU**) is the chairman.

## **New Products of Interest to Hams.**

**W3NSI**, Lynn's always interesting article offered up the following new items: 1) Regency EC 175 counter is now available. Offering a 6-digit LED display, it covers 5 Hz to 175 MHz. It features an oven-controlled crystal oscillator reference. Priced at \$449. 2) G.E. Varistor (MOV). These Metal Oxide Varistors will clamp incoming voltage spikes to a predetermined value, and provide excellent transient protection.

Prices approximately \$1.50 to \$3.00, depending on power rating. 3) An Electronic Synthesizer, the RP Electronics model MFA-2 will provide a crystal reference channel over the entire two-meter band in 10 kHz steps. It is adaptable to 6, 8, 12, 16, 24 or 48 MHz output in use. Available as a kit for \$180.00, or assembled and tested for \$210.00.

**VHF Report.** Joe, **W2EIF** noted that activity on all the bands has been low, possibly because there have been no openings on 6 -meters. However, there have been continued contacts to Ohio and Michigan at the low end of two-meters. A weekend contest from March 10-11, conducted by the Ichykoo Park Club of Hagerstown, Md, did provide some activity through 220 MHz to many Packrats. Joe received a number of requests from stations in Ohio, for the “1296 converter information package” that was distributed to Packrats last year. So, we may expect some activity there sometime soon.

**ARRL Bulletin Nr 419.** The ARRL filed strong opposition with the FCC concerning the proposal to raise license fees. Docket 19658 points to drops in licensees as a result of the 1964 and 1970 fee actions. The full text of their petition will appear in the May issue of QST.

**Membership.** Visitors at the March 21<sup>st</sup> meeting included Al Katz, **K2UYH**, Doug Moser, **WA2LTM** and Bill Olson, **K1JDY/3**. Voted to membership was George Kugler, **WA3SPR**.

## **Armed Forces Day Communication**

**Tests.** Armed Forces Day will be observed on May 19, 1973.

Departments of the Army, Navy and Air

Force will conduct communication tests between military radio stations and amateur radio stations "to demonstrate the partnership and mutual respect" between the military and the amateur radio service. A table of frequencies to be used was included. Test will include CW, RTTY, and SSB transmissions. Properly received messages will be eligible for awards.

**Some Thoughts on Contacts and Sections in Contests.** Dave, **W3ZD** (*chairman for the June test*) provided a nice discussion and inspiration for perseverance during contest operation. He discussed the score gains made by individual contacts as well as added "sections." And he closed by reminding the members to "work the club on every band from your home QTH (*our perennial cry*).

**OSCAR VI.** Bill Murphy, **K3ZSG** (now **W0RSJ**) provided a very detailed article on the new Oscar VI amateur satellite. It included Orbital predictions and antenna tracking. Future articles will cover ten-meter downlink reception, and the two-meter uplink transmissions. He included tables showing sample orbital information and encouraged the members to make active use of this new tool. (*A tidbit later in this issue pointed out that Bill has worked 45 stations through Oscar VI, including 16 states. Also, he has worked four counties. Mexico, Canada, Norway and France. He has earned well over the 1000 points needed to obtain the ARRL Satellite DX achievement Award, and is waiting for arrival of the QSL cards.*)

**Swap Shoppe. By W3ZRR.** (*Always nostalgia. Now we use the club reflector.*) For sale by Harry, **WA3NGK**, a

Polycomm 62B Transceiver for \$75 and a 6-meter squalo for \$3. From Ron, **WA3AXV** (now **W3RJW**) a Ham-Scan SB-620 for \$85 and a low band dummy load, 100 watts, \$2. Bill Murphy, **K3ZSG** (now **W0RSJ**) offered: 1) Parks 432 converter; 2) a Drake CC-1 Converter console; 3) a Heathkit HO-13 Ham-scan; 4) a 432 transmitter "on the air ready to go" with 2C39 driving a 2C39; and 5) a 220 xmitter, homebrew 5894 plate modulated, 100-watts, rack mounted. No price given, but it looks like Bill was cleaning house. (*Do you remember all that stuff, Bill?*) From Gene Bond, **WB2UVB**, a collection of parts including 4-65A tubes for \$4 and 811As for \$4.50.

**Ads.** *The March 73 issue included the half page back cover ad from club member Ham Buerger (Astatic GD-104 microphone with stand for \$25.) The usual 23 business card ads were included in this issue. 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. (7 double sided, 8-½ x 11" sheets). (Don't forget, current postage went to 63-cents on January 1st, and a penny postcard now costs 44-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 K3IUV (me), and posted on the website by WS30, our webmaster. I have also posted the club*

Wayback cont'd

*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 **K3IUV** (comments or corrections to: **K3IUV@ARRL.net**)



## Hams on the Moon Mission Crew

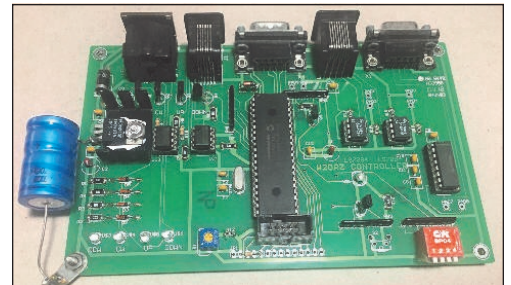
The Artemis II mission to the moon, scheduled for some time in 2024 has 3 of 4 crew members who are hams. The crew is Commander Reid Wiseman, KF5LKT, Pilot Victor Glover, KI5BKC, Mission Specialist 1 Christina Hammock Koch, and Mission Specialist 2 Jeremy Hansen, KF5LKU. More details can be found at the ARRL web site: <http://arrl.com/news/nasa-names-three-hams-for-artemis-ii-moon-mission-crew>

## W2DRZ Controllers CT-2 Antenna Controller

Hi. This month I am featuring the W2DRZ Antenna Controller. It can be used to automatically track the moon, and also to provide handy control of your terrestrial antennas. It can connect to a variety of position sensors, but the easiest to use is the potentiometer that is already in your rotator. You can directly connect the pot to the controller and it will read out your current position (see below). Then, using the free tracking program, DrzTrack, you can track the moon or sun, or automatically aim the antenna at known station locations.

The full details for installing and using the controller and software are on the web site at: <http://w2drz.ramcoinc.com>. The web pages also have information on enclosures, connectors, and other related products. Regular price \$270,. Price for Packrats and readers of Cheese Bits: \$199. **To Order, email [k2txb@comcast.net](mailto:k2txb@comcast.net), or call 856-866-6611 .** 73, Russ K2TXB

In the Ad, I mentioned connecting the potentiometer in your antenna directly to the controller. This can only be done if the maximum voltage output from



the pot is no more than +5 volts. There are a number of antennas that meet this specification, but make sure yours is correct. Higher voltages can damage the CT-2 controller. For example, you can directly connect the CT-2 controller to a Yaesu G5500 control box. The G5500 box supplies power to the CT-2 as well as the required 0 to +5 volt outputs from the azimuth and elevation rotators. You can do the same with the Yaesu G800 - G1000 series rotators. Some of them have a special DIN plug that provides all the signals and voltage . Others will require opening the Yaesu control box to connect to the remote control terminals. You can also bypass the control box and connect directly to the rotator pot output. In this case you might have to rewire the pot connections in the rotator to provide the necessary voltage. If you do that, the existing control box would only be able to be used to provide the power to turn the rotator, and you could more easily do that with a 12 volt power supply. All rotator control would then be done via the CT-2 controller. An arrangement like that would normally only be used for EME antennas, but one could also use it in a case where the original control box was not available. See [w2drz.ramcoinc.com/din8jack.htm](http://w2drz.ramcoinc.com/din8jack.htm) for wiring and pin-out details.

The DrzTrack program has a special mode for control of terrestrial antennas, called the local control panel.. Use this link: [w2drz.ramcoinc.com/LocalControlPanel.htm](http://w2drz.ramcoinc.com/LocalControlPanel.htm) for details.

For all other information use the tabs and indexes in the web page [w2drz.ramcoinc.com/index.htm](http://w2drz.ramcoinc.com/index.htm).

# Events

**For inclusion, please direct event notices to the editor.**

**(For contests, see Ray's "2023 VHF and Up Contests.pdf" document at the "Contest Info" tab on the club web site. Many repeated here for convenience)**

**2M Spring Sprint -Contest—** April 10, 2023. 7:00 - 11:00 Local See <https://sites.google.com/site/springvhfupsprints/home/2023-information> for details.

**Microwave Update—** See details on the next column of this page.

**222 MHz Spring Sprint -Contest—** April 18, 2023. 7:00 -11:00 Local See <https://sites.google.com/site/springvhfupsprints/home/2023-information> for details.

**432 MHz Spring Sprint -Contest—** April 26, 2023. 7:00 -11:00 Local See <https://sites.google.com/site/springvhfupsprints/home/2023-information> for details.

**York Hamfest - Hamfest -** April 29, 2023. Spring Grove PA. Sponsored by York Hamfest Foundation. See <http://yorkhamfest.org> for details.

**Microwave Spring Sprint -Contest—** May 6, 2023. 8:00AM -2:00PM Local See <https://sites.google.com/site/springvhfupsprints/home/2023-information> for details.

**Warminster Hamfest and and ARRL EPA Convention—** May 7, 2023. Bristol, PA. See <http://www.k3dn.org/hamfest> for details.

## **Microwave Update**

Microwave Update 2023 (postponed from 2020, 2021, and 2022) plus Northeast VHF/UHF Conference April 14 & 15, 2023 Hilton Garden Inn @ Bradley Airport, Windsor, CT

Microwave Update (MUD) is an international conference dedicated to microwave equipment design, construction, and operation. It is focused on, but not limited to, amateur radio on the microwave bands.

Details for registration and hotel coming very soon at [microwaveupdate.org](http://microwaveupdate.org)

## **KC3BVL UHF+ Wednesday Net**

Packrat, Jim KC3BVL conducts a Wednesday night net with schedule as follows: 7:30PM—903.100, 8:00PM—2304.100, 8:30PM— 432.160, 9:00PM—1296.100

## **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

**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 2023. They're correct for our location in the Northeast. <https://www.timeanddate.com/astronomy/meteor-shower/list.html>

## **222 MHz Activity Night**

### **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,

There's been an informal 222 activity



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## PLEASE SEND IN 2023 DUES

Club dues are due as of Jan 1st, 2023. 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"

**AS OF 4/8/23 15 DUES REMAIN UNPAID !**

Dave **W3KM**

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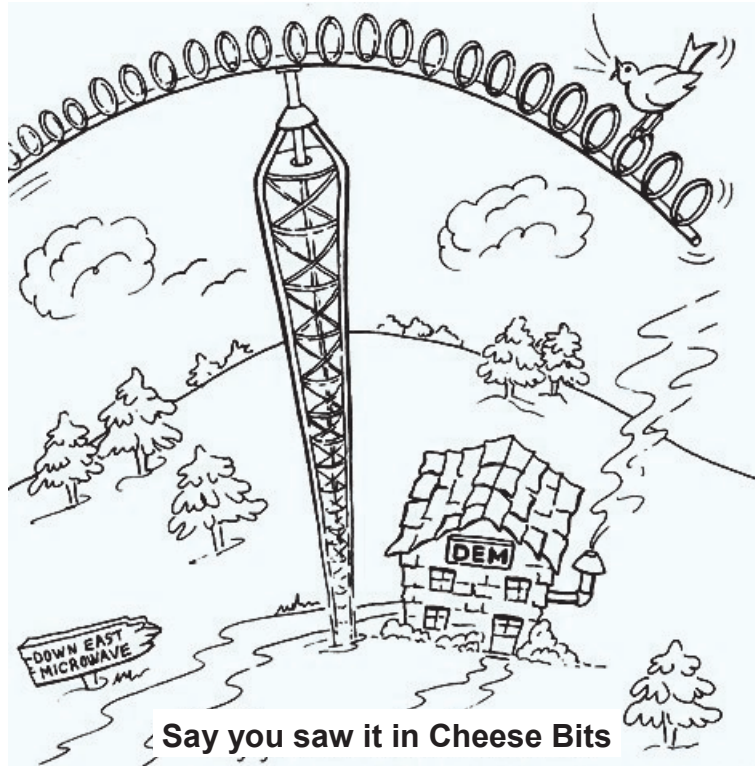
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