



# CHEESE BITS

**W3CCX**  
CLUB MEMORIAL CALL

ARRL  
Affiliated  
Club



Volume LXV

January 2022

Number 1

PREZ

SEZ:

Happy New Year! Well here we are again starting a new year and still battling the various COVID variants. Maybe this year will be the hat trick for all of us turning the year into one with peace, good health, and prosperity for all! It sure has been nice getting back to in person meetings at the BWSAC and through the hybrid connection to our members who can not attend in person. Please be sure to read the article elsewhere in this Cheese Bits edition from our VP and program Chair, Doc, W3GAD. He will discuss what we need to do to continue to bring our members hybrid meetings in the future.

As I write this, we are only 9 days from the January Contest. Mike, N2DEQ has updated all the contest information files on our website under the "Contest Info" tab when signed in as a member. Please remember to use any of the contest resources available to assist you in having fun and turning in the best score you can for the Club. If you don't use anything else, remember to enter all your operating plans in the W3SZ / K1RZ database. This database has replaced the older "Packrats to look for list" we published a few years ago giving you more info than ever. Your entry in the database makes it possible for all members to know the bands you have and times you will be on the air even if they change right up to the start of the contest. **Go Packrats**, let's put another ARRL Gavel in our collection!

Doc, W3GAD has some good meetings planned for the next few months including:

**January-** Crying Towel – Our January Contest "post mortem" with members "tales of woe"

**February-** Home Brew Night – Bring your favorite home brew project (No Kegs or Flasks) to share with members.

**March-** Update on Practical EME Operation by Rick, K1DS

**April-** ARRL Night combined with Packrats Awards.

If you have suggestions for future meetings, please let Doc know.

The **First June VHF Contest Planning meeting-** will be on Thursday January 27<sup>th</sup> at 7:30 PM on Zoom only. Details and credentials to follow.

The **January 2021 Contest Wrap Up Meeting** is planned for Saturday January 29<sup>th</sup> at 10:00 AM on Zoom only. Details and credentials to follow.

Election of officers is coming up in June. We already have a nominating committee in place consisting of George KA3WXV, Jim WA3EHD, and Michael KB1JEY. Be sure to stock up on extra strength Tylenol as Packrats nominating committees have been known to twist some arms quite severely in the past!

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

222.98/224.58 MHz (PL 136.5) Hilltown, PA

**OFFICERS 2019-2020**

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KB3MTW Michelle London  
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K3GNC Jerome Byrd  
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**PACKRAT BEACONS - W3CCX/B**

Located at FN21be except 2304 which is at FN20dh  
50.080 144.300 222.062 432.290 903.072 903.3 1296.264 2304.3  
3456.200 5760.3 10,368.3 MHz ( 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>
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	KB1JEY FN20je Michael
9:00 PM	432.110 MHz	WB2RVX FM29mt Mike

**Microwave Tuesday:**

7:30 Coordinate QSO's on 144.260 for all Microwave bands you'd like to work. Also setup Q's at [w4dex.com/uhfqso](http://w4dex.com/uhfqso) or **Packrat Chat Page**

**W3SZ.COM**

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

I have always said that this club is about you, not about me. I break from tradition here saving this for last, so you can skip this part if you want.



Having been elected as president of the Packrats has been one of the most rewarding experiences of my life for someone who normally has worked in the background for years quietly helping the club in any way I can. I appreciate all the help I received from our past presidents including KA3WXV, WA3NUF, K1DS, W0RSJ and of course my mentor, K3JJZ during my term. I am also a firm believer in term limits and the Packrats original tradition of changing officers every 2 years. After that time I believe one tends to get stale and it is healthy for the club to change officers who have new ideas on a regular basis. As I write this I will be 72 on January 7<sup>th</sup>. I had a couple health issues this year first with some persistent A-fib, and then a stroke in my right eye which has left me sight impaired and unable to drive at night. These type of events make you step back, do a lot of thinking, and appreciate your family, friends, and personal interests more than ever. In addition, I realized that I have not made a single improvement to my shack and have hardly operated my station during my term. So, I will not be running for re-election this year. "It's been a Blast" as Stan, K3IPM would have said. I am honored and thank you for the opportunity to have served the club in this capacity.

Meanwhile, finish a project on the bench, keep one ear "listening for the weak ones", and the other on the "Magic Band"!

**Vy 73,**  
**Bob W2SJ**

# DECEMBER MEETING PICTURES







# Commentary from K1WHS on his 222 MHz Yagi Design

This article is derived from an email from Dave K1WHS to Steve N2CEI, Bill K1DY and Warren WB2ONA, Dave was kind enough to edit out a few rough edges, before it made it to Cheese Bits.

You guys had a hand in developing a lot of the gear we used for our MM efforts here over the years. I wanted to update you on "our baby", the 222 antenna. The 222 antenna situation developed along these lines:

1. We built up a 222 MHz quad yagi array with the Rutland design FO-16 yagis and used them for quite a few years up at 100 ft. During that time, I think we all noticed that the 222 position just could not keep up with 144. We noticed the same with 432. It lagged behind as well. Much of this was due to 222 being much less populated than either 144 or 432. As I recall, we felt that 222 was in worse shape, even when compared to 432, though the 432 performance was better than 222 mostly due to activity levels being higher on 432.

2. At some point we decided that 222 needed a face lift, and a better antenna was needed. The year was 2007. Our plan was to make a bigger and higher gain antenna for 222. I sent Bill some \$\$ and he built up a 22 element yagi boom (30 ft) and put the text book element lengths on it. I set up a test range here with the HP 8753D network analyzer set up out in the field. The first set of elements did not look all that good to me. The yagi was a tad low in frequency. We calculated another set of elements and tried them out. It was also not quite where we wanted it to be. Finally, element set #3 hit the target. Gain peaked at 223.4 MHz and I figured that any mutual coupling when we stacked the antennas would drop the max gain point to about 222.8, and we would still have some good wet wx performance with rain drops on the elements. I noted that the gain at 222.0 was only 0.2 dB down from the max gain point at 223.4 with a single yagi.

3. When Bill got the "Go Ahead" he finished up the other three yagis with the corrected element lengths, and I built up an H frame out of sched 40 6061-T6 pipe. We hauled it up in August 2007. Warren and Paul Drexler were here for the raising. I think WA1T was here as well. Warren ran the winch, Paul & Al guided the tag lines, and I followed the array up the tower guiding it around the guy wires. Al remembers that we had to chainsaw a few trees down to get enough room on the ground for the new array. We winched the quad yagi array up. It got installed with no troubles and then we needed to test it out. In the next September contest, Bill worked some ridiculous DX contact Saturday afternoon, I think, with nothing else going on. I believe it was EN61 or someplace like that. The 144 station did not work anything out there that time. I operated the 222 station that weekend too, as I wanted to see how the system was playing. We had the eight element LVA on 222 then. It acted as a good calibration point, and we were aware of how well both antennas had been working before the change. The 4 X 16 element yagis were about as good as the LVA, maybe a slight bit better. The first thing I noticed was that the new 22 el array was a **lot** better! It was hard to judge, but I was sure I was seeing 4 dB improvement over the LVA. This was a huge improvement. It indicated to me that all of our tweaking on the new design really paid off.

4. So here we are in 2020/2021, and I wanted to actually use that 222 array just to see if it was really as good as I had a feeling that it was when we first put it up. I know Bill thought it was much better, and Steve had similar ideas about it. The problem was that it only got used on one weekend a year in September. I wanted to use it regularly. It went on from 2008 thru about 2011 or 2012 in the September VHF Contest, and then our group fell apart. The 222 array sat idle for years. I found a good used MT-3000 elevation rotator this past summer. It was made by K6MYC at M2. Mike has never ever lived in a

place that gets bad weather and his antennas show it. I took one look at the MT-3000 and saw that a big chain drives one side of the H frame and the other side is supposed to just follow along! The frame is driven at only one point. That means that high winds will funnel all of their fury at that one point as well. There are only two u bolts there and that will make a huge antenna and frame act as a pry bar in high winds and stress that one mounting point. I designed a gigantic heavy steel cross bracket and had two 1/4" steel plates welded to it, so the force was now distributed across the entire H frame. With this added strength, I figured the array had a chance to survive. I have since learned that M2 modified their design to eliminate that problem. Later designs are **much** better. After I got the elevation stuff installed this past summer, Steve, N2CEI cobbled together a mast mounted preamp and I rigged up the hardware to get it all installed. I needed a new rotator as the old Prosisstel had been torn apart by high winds over the years. I built up a preamp box with a high powered LC connector coax relay, along with a switch in the shack to activate the tower mounted relay, or select the relay and preamp that was down in the shack. That gave me a means of comparing both preamps. I also kept the ability to switch between the LVA, the Liaison 2 x 8 el yagis, and the 4 X 22 element yagis, but I had to switch the tower mounted preamp off to use the other antennas.

5. Results: The tower mounted preamp outperforms the indoor preamp even on the horizon. I measured 0.8 dB NF on the indoor preamp and 0.5 dB NF on the tower mounted unit. There is 0.5 dB of transmission line loss including the Superflex rotor loop and 1 5/8" feedline. When I elevate, the noise drops and the tower mounted preamp is a lot better. Remember that background noise is a bit lower on 222 when compared to 144 MHz. Quiet sky on 222 has a noise temperature of something like 70-90 degrees K. A 50 ohm load is 290 degrees K. In echo testing using WSJT to measure performance, I see -5 dB when things are lined up. That is **big!** It is a rare time when I can't hear any echo. It is really good just listening with headphones. Echoes are hard to miss. KB7Q says that this 4 x 22 el has been the loudest signal he has ever heard on 222 and I am tied with K5QE with his 320 elements of M2 crossed yagis. I only have 88 elements and four booms. Marshall has eight yagis. When I start sending, I see comments on the chat page like "HOLY COW" what is that!. W4ZST said I burned a hole in the phosphor of his monitor. Joel, W5ZN always kids me that I am showing off. He did that when I started calling K7KQA/portable in Oregon last week. I waited until James had worked all the stations that needed OR for a new one. Then I asked K7KQA if I could call. When I did call, Joel immediately started harassing me for being too loud, so I dropped the power as far as I could to 350-390 watts and made the contact anyway. So it turns out that "K1WHS" is now an adverb that can be used while discussing signal strengths on 222 EME.

This reminds me of two terms we used on the "hill". There is "tight", and then there is "Warren Tight".

Anyway, we all knew that the updated 222 array was a good one, but now we know that it is really good for sure and we were not imagining it. I am amazed at the results it gets on EME. After so many years of lack of use, it is really fun to get to know it better. I wanted to let you guys know, because you all had a hand in making all that stuff work! I wish you all could be here to see it in action. I am tempted to make a big array close to the ground just to try to build up more 222 activity. Imagine eight of those yagis. We could make SSB contacts!

Over the years, with constant winds, a weak spot has shown up just in front of the boom mounting plate. The boom snaps there due to metal fatigue. I have replaced three mid boom sections and double walled it there, but there is one more yagi left that needs the mod. I hope it holds together over the winter. Next spring, Al and I will update it with a new mid boom section one way or the other. The interesting thing is that it takes years before the problem shows up. The array went from 2007 until about 2018 or 2019 before the first failure occurred.

Thanks again guys!

73

Dave **K1WHS**

My wife's family runs a Secret Santa each Christmas. Each family member provides a list of useful gift ideas and then another randomly selected family member becomes a Secret Santa and provides one or more of the ideas as a gift on Christmas day.

This year I put one of those cheap helping hands gadgets from Harbor Freight on my gift suggestion list. Fortunately for me my Secret Santa for this year was a tool guy and got me the "Magnetic Helping Hand, Soldering Helping Hands, PCB Circuit Board Holder" with 3X Magnifying Lamp instead. See the picture below.

This thing is really nice. The base is made of steel and all of the attachments have strong magnetic bases allowing them to be placed anywhere on the base. There are four goosenecks with clamps on the end, a 3X magnifier with an LED ring lamp for illumination, and four little posts designed to hold a PCB. All of the attachments feel rugged and do a good job of holding the work in place. The only thing that is not supplied is a power supply for the ring lamp. This takes a standard USB power source.

In my opinion this is a tool that belongs in every electronic hobbyist's workshop, especially if said hobbyist is an old guy like me.

It is available on Amazon for the price of \$58.99.  
73, Tom **KA3FQS**



## Beacon Update

1296- Pottstown - The 1296 beacon continues to operate normally, we have had good signal reports from Easton in the north, west past FN10 and strong in SNJ. Telemetry today shows 8 GPS satellites and almost exactly the same RF power as when installed, about 10W. It is received extremely strong here.

2304- Pottstown - The 2304 beacon is also operating normally, power is still reduced 9-10 dB. It is also strong here, and received in SNJ although weak. We did send the Pottstown club some S band filters that may provide selectivity for their mesh network receivers to operate next to our beacon. They are testing and working with us, but this hardware is not likely to be installed before the contest. 2304 will continue to be on at the reduced power level. Telemetry shows 6 GPS satellites, and slightly higher RF power, probably due to colder temp.

903- The 903 beacon has been re-built and is on the air from my QTH now for testing. Reports welcome. Its on a Loop Yagi pointing west and running 10W. Plans are to re-install at Mountaintop soon. We plan to use a 2-way power divider to a Omni antenna like the one on 1296, and a short 6 or 8 EI beam pointing south. The PA will be near the antenna and should provide good coverage to our area. As long as there is no snow at the site, we may get to install this sometime in the next few weeks.

5760- The 5760 beacon is on at Mountaintop, at times it is key down, with no keying sequence, this will be removed and repaired when 903 is installed. Some stations to the west can hear it.

2 Meters—The 2 meter beacon from Mountaintop is being rebuilt, will probably not be on before the contest.

The club owns hardware to build or can move 3, 5 and 10 GHz beacons, again if anybody knows of a tower, rooftop or any site to install these beacons let the BOD or myself know.

Happy New Year! Gary **WA2OMY**

# 222 MHz Recent EME WAS

This December saw the culmination of a new race for 222 WAS. 222 WAS was first completed 37 years ago, in 1983 when WB0TEM and W0VB went to Hawaii with 8 yagis and an 8877. Back then all QSOs had to be made on CW. There was high interest in the first 222 WAS. W0VB made the first WAS along with ten others. Since then no one else had completed 222 WAS until early December when K1WHS QSO'd W5ZN. Joel drove to Oklahoma to give Dave his last state. However, this WAS is not yet official. Dave worked Hawaii back in 1983, but cannot locate all the needed QSL cards!!

After K1WHS' QSO, K5QE and several others sent 222 equipment (2 yagis and 600 W) to NH6Y in Hawaii. Tom had some initial problems, but worked K5QE first (with one yagi) to give Marshal possibly the 11th 222 WAS, followed the next day by WA4NJP to give Ray very likely the 12th and there were several others. At least 5 additional WAS certificates are expected as a results of NH6Y's operation. To my knowledge none of these WAS have been officially confirmed. The ARRL should be ashamed of its WAS certificate services. I have yet to receive a certificate or even written confirmation from the ARRL since my verified application form was submitted last summer.

73 AI - **K2UYH**

## 10 Inches Of Snow At

Here is Paul's backyard on January 3rd. In spite of the snow he worked into EM that afternoon.



## KA1UAG Requests 10G Beacon Reports

Hello all and happy new-year DE KA1UAG David in N.H

Looking for RX reports from my beacon in Southern V.T. 10,368,274.400 or so. Located on Mt. Ascutney, FN33SK in S.E. Vermont.

It's C.W. modulated, running 1/2 watt to an 8 slot antenna 3121'. Has slight blockage to due north but everywhere else is in the clear. I'm wondering what the propagation is like during the colder months. So if you have a home or easily set up portable station, and are bored, please give it a listen and either post it to the Microwave reflector or email [ghzdave@aol.com](mailto:ghzdave@aol.com).

I'm contemplating beacons on other bands if there is any interest. Thank you in advance, David, **KA1UAG**

## PLEASE SEND IN 2022 DUES

Club dues are due as of Jan 1st, 2022. 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"

GL in the contest. Dave **W3KM**

# What K2UYH was Up To in 1975

In my work as a librarian at Mercer County Community College, I recently needed to access some of the college's archives held in the library. In the process of my research, I ran into this Trenton Times article from 1975 about Al and his ham radio activities. Martin - 73, **W3PR**

MAR 5 1975

## Allen Katz is all ears ...he tunes in the world

By JAKI KALANSKY  
Staff Writer

Allen Katz thinks antennas are aesthetic. And with that in mind, he has decorated his backyard with a wide assortment of his favorite objects d'art, including a 28-foot dish antenna and a 50-foot tall tower antenna.

Not to be mistaken for a mere collector, Katz is usually busy using his antennas to send and receive radio signals throughout the world. It was from his homebased station that the first reported radio contact by amateurs was made between North America and Rhodesia last year. He also talks regularly with other "ham" operators in France, England, Scandinavia and Australia.

Although all his equipment looks costly Katz contends "it's really a very inexpensive hobby." He builds most of his equipment, because much can't be bought anywhere. The huge dish antenna was a gift to him from Bell Labs.

### Getting a new one

"They just didn't want it anymore because they were getting a new one," Katz mused, "so I took it off their hands." Bell Labs alerted him about the dish when they learned of his successful attempt at receiving radio communications from the Apollo moon transmitter.

Katz, who heads the electronic engineering and technology program at Trenton State College, has been an amateur radio enthusiast since the age of 13. Four years ago he received his Ph.D. in communications theory from Newark College of Engineering. He then accepted an offer from Trenton State to take on his present post.

The energetic 32-year-old professor is interested right now in the possibilities for using the moon for satellite communications. He explained that the moon may be used as a passive satellite to reflect radio signals on a

wide frequency range back to earth. "It's sort of like using the moon as a big mirror," Katz said.

His students frequently visit his home at 1621 Old Trenton Road in West Windsor to experiment with the equipment and listen to other amateur stations. Right now his students are working on a part for a future amateur repeater satellite.

### Amateur satellites

Katz feels that the development of amateur satellites is important for educational purposes. Amateur satellites are the only ones whose signals are accessible to the public. "By using amateur satellites," Katz added, "teachers and students may pick up and transmit radio signals with minimum of equipment." He also said that there are other countries interested in using the moon for communications, with 30 stations already experimenting with the principle and new ones being set up regularly. Japanese amateurs are setting up their first such station this month.

When Allen Katz pulls himself away from his radio receiver he spends his time with his wife, Sally, a speech pathologist, and their 4-year-old daughter, Alisha. How does Mrs. Katz feel about his hobby. Katz smiled and said, "She puts up with it."

And what do the neighbors say? According to Katz, they have been "quite reasonable" and few problems have come up in the four years that the family has lived in its present home. "Occasionally some one will blame my antenna for fouling up their television reception," Katz said, "But that's impossible because my signals are high above TV signals, and besides I do more listening than transmitting."

It is not unusual that someone driving past Katz's home will stop and ask about the massive antennas. He usually doesn't mind, though, because he really loves to talk about his hobby and show how it works. After all, that is what it's there for.



Staff photo by Calvin Solidav

*The huge dish antenna in the backyard of Dr. Allen Katz, center, dwarfs him and two friends, Douglas Moser, technical assistant at Mercer County Community College, and Paul Lamhut, a Trenton State College student.*

## **Lance W7GJ Does the First 6M EME Activation of Marquesas / Austral Islands in French Polynesia**

Lance's summary:

"Thanks again for all the contacts! And special thanks to all the supporters whose contributions made the first activation of each of these DXCC on 6m EME possible.

The operation from Rimatara in the Austral Islands with 120 contacts is currently the most successful 6m EME DXpedition I have made so far.

Many single yagi stations were worked, which is quite an accomplishment, given the fact that my portable single yagi station is really undersized for reliable 6m EME operations. There also were many other stations copied but not worked. Thank you very much for trying, and I hope to be able to complete with you on future trips."

You can see the detailed reports for each of the two islands by clicking the links at

<http://www.bigskyspaces.com/w7gj/>

In some browsers the reports are wider than the window. You can reign it in with 2 or 3 entries of Ctrl + - (e.g. control and minus sign).

Alternatively if you use this (gigantic) URL, you'll get a 19 page PDF of the complete Dxpediton report with great pictures. Well worth reading!

<https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.bigskyspaces.com%2Fw7gj%2FFO%2520DXpedition%2520Summary.pdf&data=04%7C01%7C%7C1cd9745491cb4530438908d9ba83eb07%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C637745898008694769%7CUnknown%7CTWFpbGZsb3d8eyJWljoIMC4wLjAwMDAiLCJQIjoiV2luMzliLjBtIl6Ik1haWwiLCJXVCi6Mn0%3D%7C3000&sdata=keB3z8oXuq9xiy6qGgJTUrVXG9AcaSSwt4CPmsH4FXs%3D&reserved=0>

—**W2BVH**

## **Reminder: WSJT \$DX Usage in the January Contest**

Contesters wanting to use the \$DX QSY function in Tx5 will definitely need to learn how, before the contest.

Here is some advice from K1JT.

:

If you start a QSO with someone you know has additional bands, and you want him to QSY with you:

- Turn off Auto Sequencing
- Select your desired QSY message in Tx5,
- Finish your QSO with manual message sequencing.

**There is no need to send 73 after RR73 is received.** Send your QSY message instead.

73, Dave **W3KM**

## **K0BAK July CQ VHF Results**

Pete reports as follows:

"With 4,888 points, I was #10 of U.S. rovers in the July CQ VHF contest, which barely placed me in the top half of competitors. But I did appear to have the top score on the East Coast."

## **K1DS Contest Plans in Florida**

George Sinchak- WA2VNV and I are planning to operate the Boca Raton Amateur Radio Club VHF station next weekend. Our club call is N4BRF and we're in EL96. We'll have 100 watts on 6m to a 5-element beam. We'll do some SSB if the band is open, and likely a lot of FT8. We also have 144, 222, 432 & 1296 with some power and beams, but unlikely that will be in play with you all in Packrat land. I alerted Leon N1XKT to the activity and hope he can get on the air with the gang a bit. I have to help him get operational on the digital modes this summer when we're back up north. GL to all. 73, Rick **K1DS**

## **Arduino Connected to an HT**

Here's an article on hooking an Arduino Board to an HT to send text messages over APRS. If a gateway is connected it can also send emails and SMS messages to cell phones. Worth a look. <https://spectrum.ieee.org/ham-radio-text-hacking>

—**W2BVH**

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

Nibbles from Janaury1972. Vol. XV Nr 1  
de K3IUUV Bert  
*(author's comments in italics)*

**“Our Prez Sez”.** Prez Don, **W3CJU** commented on the upcoming contest, suggesting “we will still be hearing ‘CQs’ in our sleep.” *(Yes, that did happen!)* He revealed that the idea of a Packrat Hamfest, which had been discussed for some time, was about to become reality. A chairman and committee will be making plans to start a Hamfest this year. *(Note that this began the long tradition of Packrat Hamfests, 50 years ago.)*

**2 Meter / 220 / 432 Report.** Joe, **W2EIF**, reports the 2-meter band activity was very good up to November 15<sup>th</sup>. At that point it dropped off due to winter conditions and “holiday duties of various operators!” He noted that “If you want to subscribe to the North East VHF Association newsletter, send \$1 to **K1ABR**.” The December 10 -14 meteor shower was a bit disappointing, but **K2RTH** on Long Island did manage to work **K9HMB** in Chicago on 220 MHz. He also heard **K4IFL** from FL, on meteor scatter.

**From the Book Rack.** Paul, **K3WEU**'s monthly column covered the book “The ABCs of Integrated Circuits” by Rufus Turner. \$2.95 softbound, published by Howard Sams. 96 pages. This book describes the fundamentals of integrated circuit designs and applications. Intended for students, hobbyists and others with knowledge of transistors and similar devices, who will find it ideal for getting

acquainted with the newest member of the semiconductor family.

**Channel 13-3/4.** A new column, started by Paul, **WA3HIT**. Paul reported on current activities by hams interested in ATV, and promised to make the column a monthly. He included a list of 26 currently active ATV'ers in our area. I noted that they included (and *still active after 50 years*) hams: Ron, **WA3AXV** (now **W3RJV**), Dan, **WA3NFV**, and myself, Bert, **K3IUUV**. He noted that an antenna party on November 6 successfully installed his new 432 beam, after which they received ATV test signals from Ron, **W3ZKO**.

**Technical Topics.** A nice description and summary of mods to the ubiquitous HAM-M rotor control box was provided by Jack, **W2AXU**. He described mods to accomplish: 1) Continuous indication of the position of the antenna; and 2) Instantaneous calibration of the meter full rotation position. While these changes are not new, this was a good place to collect the details for the members. *(Note that later design control boxes incorporated these changes in their design.)* If you still have an older, unmodified control box, here is a good reference for the modification details. Parts list and schematic were included.

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

From Lynn, **W3NSI**. 1) The “Hustler Monitor Match” from Newtronics uses the car antenna and matching devices to provide four isolated outputs (receive only). AM BC band, 26-50, 140-175, and 300-500 MHz. Price \$12.95. From Avcom, the FM-201, a two-meter FM transmitter module and amplifier. 1-watt output for the transmitter, and 10-watts from the amp. Assembled and tested

for \$50, with the amplifier available for an additional \$30.

**Calendar. January 16**, the famous Crying Towel meeting. "Be sure to bring an extra handkerchief for those tears of sadness and laughter at the mishaps of the other guy." Visitors always welcome. **February 16**, regular meeting, topic Home-Brew night. Your chance to compete in one of the 5 categories: Most Unique; Outstanding Surplus Project; Solid State Project; Measuring Devices; and Most Ambitious Project. Reminder. Don't forget to bring a couple of items for Mario, for the raffle table.

**Swap Shoppe. By W3ZRR.** *(Always nostalgia. Now we use the club reflector.):* For sale by Ralph, **K3MPZ**, a collection of Teletype equipment. Model 15 unit, 30 or 40 manuals, spare parts and a partially completed W2JAV design TU (terminal unit). "Total for all, \$50. Come and get it." Also, a Gonset Communicator II for \$15. From Don, **W3CJU**, an SX100, an SX42 (*I got it, held it, and just passed it on to Gary, WA2OMY for his museum*), and a BC-342. From Ellis, **W3IXL**, a Drake 2-C with "Q" multiplier and calibrator, like new, \$185. Also, a Hammarlund HX-50 all-band SSB transmitter for \$160. Lastly, a "make offer" for an NC300 Receiver from Bob, **WA3IOX**.

**Ads.** *The January 72 issue included 30 business card size ads, plus the half page cover ad from club member Ham Buerger (the all-new Clegg 22'er MK II). 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*

*currently, contact the ad chairman, Bob, W2SJ.*

**Miscellany.** *Postage for this issue was a single 8-cent Eisenhower stamp. (7 double sided, 8-½ x 11" sheets). As usual, many "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 W3SO, 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. Have 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](mailto:K3IUV@ARRL.net))



# Events

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

**January VHF Contest - Contest** - January 15-17, 2022. See <http://www.arrl.org/january-vhf> for rules and details. Also see the "Contest Info" tab at the Packrat web page (after signing in) for club specific info.

**2M Spring Sprint -Contest-** Monday April 11, 2022, See <https://sites.google.com/site/springvhfupsprints/home/2022-information> for details.

**222 MHz Spring Sprint -Contest-** Tuesday April 19, 2022, See <https://sites.google.com/site/springvhfupsprints/home/2022-information> for details.

**432 MHz Spring Sprint -Contest-** Wednesday April 27, 2022, See <https://sites.google.com/site/springvhfupsprints/home/2022-information> for details.

**Microwave Spring Sprint -Contest-** Saturday May 7, 2022, See <https://sites.google.com/site/springvhfupsprints/home/2022-information> for details.

**6M Spring Sprint -Contest-** Saturday/Sunday May 14-15, 2022 (2300Z—0300Z) See <https://sites.google.com/site/springvhfupsprints/home/2022-information> for details.

**June VHF Contest - Contest** - June 11-13, 2022. . See <http://www.arrl.org/june-vhf> for rules and details.

**Firecracker - Hamfest** - July 2, 2022. Sponsored by HRAC. Harrisburg PA. Details at: <http://www.w3uu.org/firecracker/>

**222 and Up Contest - Contest** - August 6– 7, 2022. Details to follow.

**10 GHz and Up Contest (Round 1) - Contest** - August 20 –21, 2022. Details to follow.

**September VHF Contest - Contest** - September 10-12, 2022. Details to follow.

**10 GHz and Up Contest (Round 2) - Contest** - September 17-18, 2022. Details to follow.

**EME - 2.3 GHz & Up – Wknd 1 - Contest** - September 17-18, 2022. Details to follow.

**EME - 50—1296 MHz – Wknd 2 - Contest** - October 15-16, 2022 Details to follow.

**EME - 50—1296 MHz – Wknd 3 - Contest** - November 12-13, 2022. Details to follow.

## KC3BVL Friday Net

Lately Packrat Jim KC3BVL has been conducting a Friday night net with schedule as follows:

7:30 pm	144.160
8 pm	50.160
8:30 pm	222.150
8:45 pm	1296.160
9 pm	432.160
9:15 pm	1296.160

**Reminder: there are 3 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>

## 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

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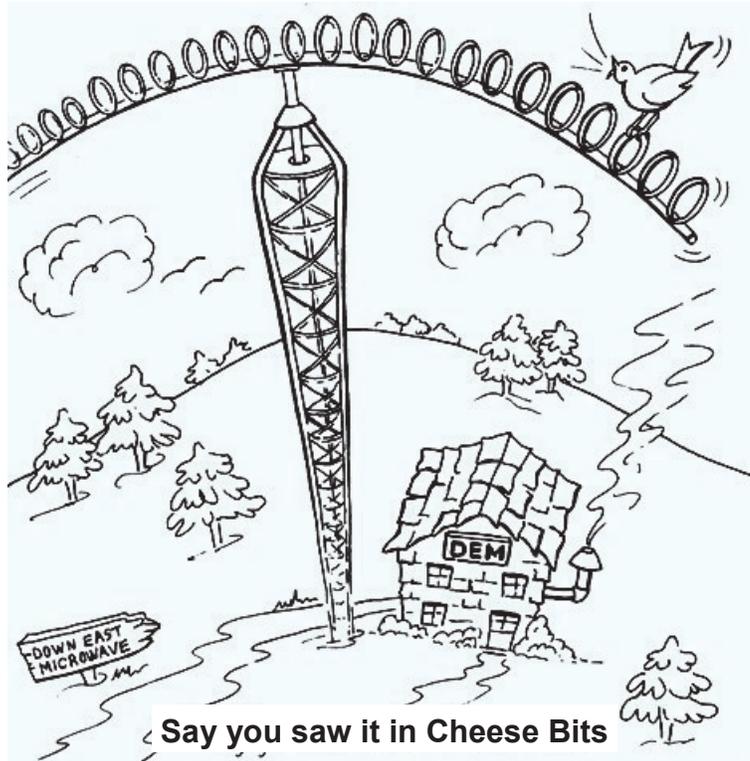
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