Mt. AIRY V.H.F. RADIO CLUB, INC.

# CHEESE BITS

W3CCX
CLUB MEMORIAL CALL

ARRL Affiliated Club

Volume LXIV | June 2021 | Number 6

## PREZ SEZ:

I gave my best June Contest "sales pitch" last month and hope some of you will be joining the planning committee at the Camelback site to help set up, operate, tear down, and most importantly to **Have Some Fun!**

If you are staying at home to operate, the New Packrats Contest Clock suggested by Doc, W3GAD and developed by Mike, N2DEQ may help you to organize your operating time, schedule contacts, keep track of the rovers, and add any personal notes to assist you. The Clock is available on our website under the "Contest" tab to download along with other contest tips. It can be used on your computer, or it can be printed out for hand entries; your choice.

The BOD has been having special meetings to discuss how to get the most contacts and grids by using all modes including FT8 or FT4 while preserving activity on the traditional SSB/CW modes. Let's not get "stuck" on FT8 or FT4 for the times you plan to operate. The digital modes are a great "tool in your toolbox". Do not let the traditional SSB/CW modes get rusty, lost in the bottom of your toolbox. Use all modes to your advantage and switch modes often. When checking the SSB/CW modes don't just listen, **Call CQ!** The July General Meeting will focus on this subject with plans and suggestions from the BOD resulting from our special meetings.

Use any method of assistance that you are comfortable with to increase grid counts and contacts. Your score will be larger as well as the total club score in the Club Completion Category. By all means look for the Rovers like W3ICC/R, NN3Q/R, K0BAK/R, and our other friends who will be roving this coming weekend.

This month is Election of Officers at the General Meeting on June 17th. The nominating committee has come up with a full slate of candidates for this year and it has been published in Cheese Bits per our constitution as well as on our website. As a reminder, nominations are open, up to and including the election. Thanks to Michelle for her 2 years of service as a director.

Also a shout out to Lenny, W2BVH who never ceases to amaze us with outstanding issues of Cheese Bits each and every month. Thanks Lenny! Cheese Bits is unique in that most of its content is provided by our members. Please consider **sending an article** to Lenny in the future.

Mark this on your calendar: We will be having the White Elephant Sale this year at the QTH of Bruce, WA3YUE on August 12th. Our August BOD meeting will be moved to August 19th. Thanks to Bruce for hosting this event over the years!

We have been monitoring the reopening status at the Ben Wilson Senior Center and we are hoping to return to in-person meetings in September.

Pack Rats **CHEESE BITS** is a monthly publication of the
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**PACKRAT 222 MHz REPEATER - W3CCX/R**
222.98/224.58 MHz (PL 136.5) Hilltown, PA

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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:**

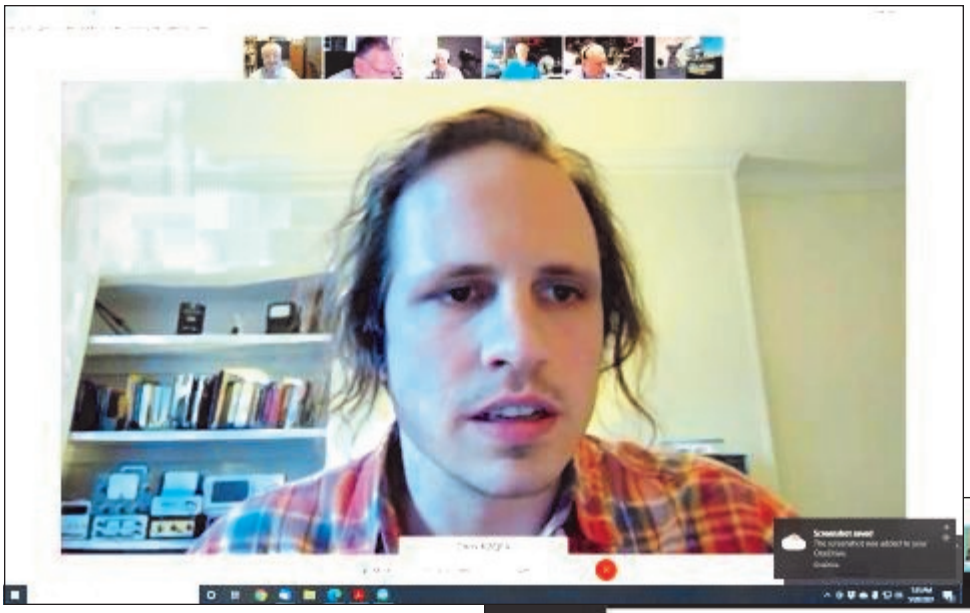
| TIME | FREQUENCY | NET CONTROL |
|---|---|---|
| 7:00 PM | 224.58R MHz | WR3P FN20kb Ralph |
| 7:30 PM | 50.150 MHz | N3RG FM29ki Ray |
| 8:00 PM | 144.150 MHz | K3GNC FN20ja Jerome |
| 8:30 PM | 222.125 MHz | KB1JEY FN20je Michael |
| 9:00 PM | 432.110 MHz | WB2RVX FM29mt Mike |

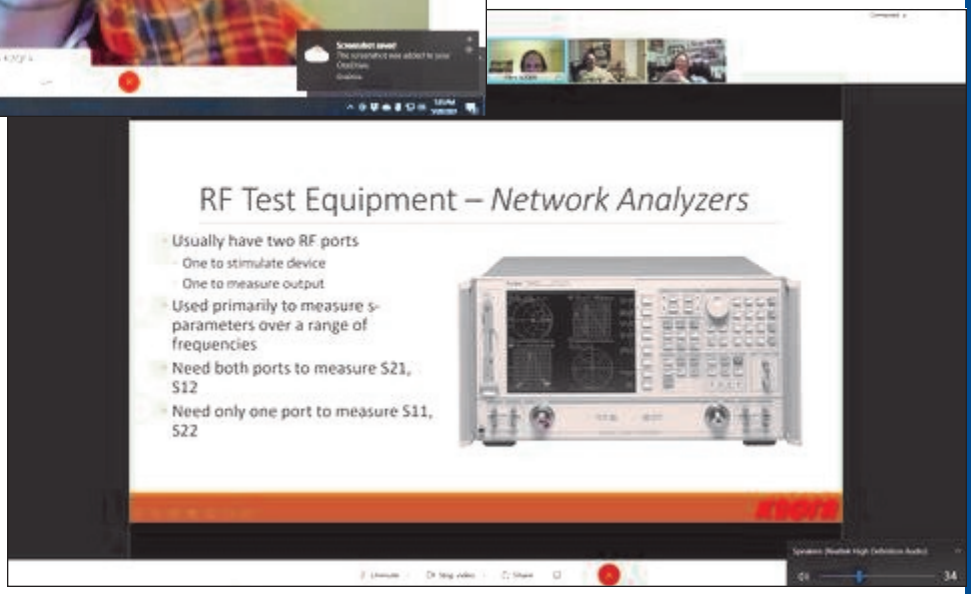
**Microwave Tuesday:**
7:30 Coordinate QSO's on 144.260 for all Microwave bands you'd like to work. Also setup Q's at w4dex.com/uhfqso or **Packrat Chat Page W3SZ.COM**
Visit the Mt Airy VHF Radio Club at: www.packratvhf.com or www.w3ccx.com

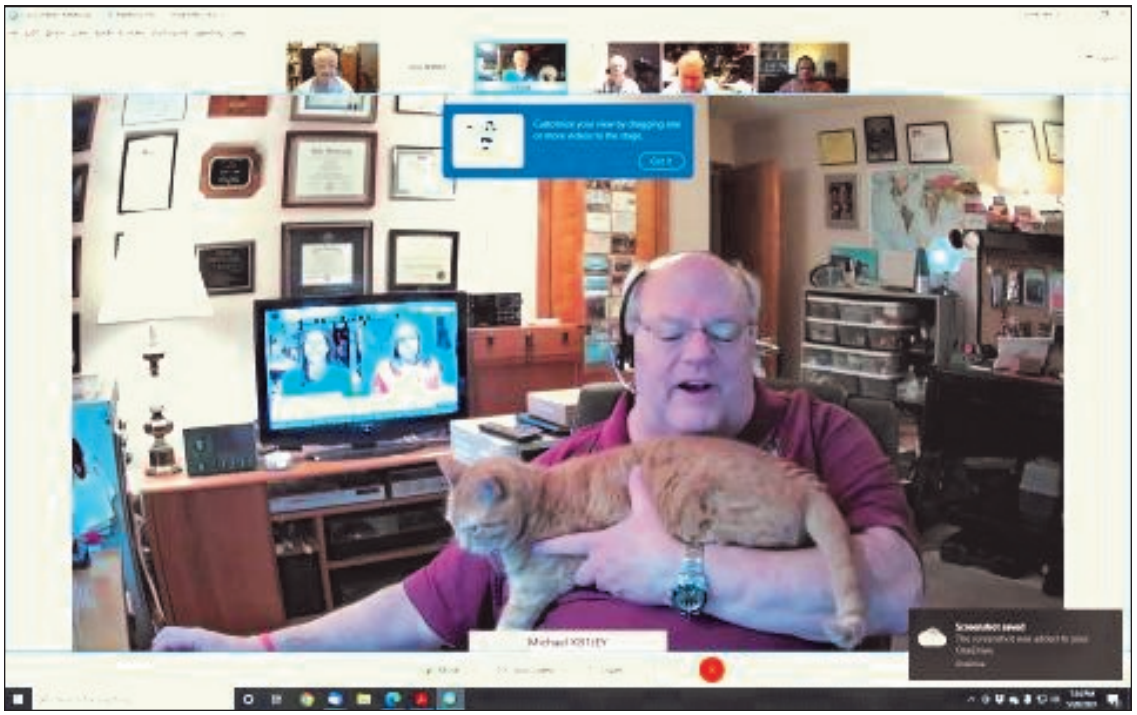
Meanwhile, finish a project on the bench, keep one ear "listening for the weak ones", and the other on the "Magic Band"!

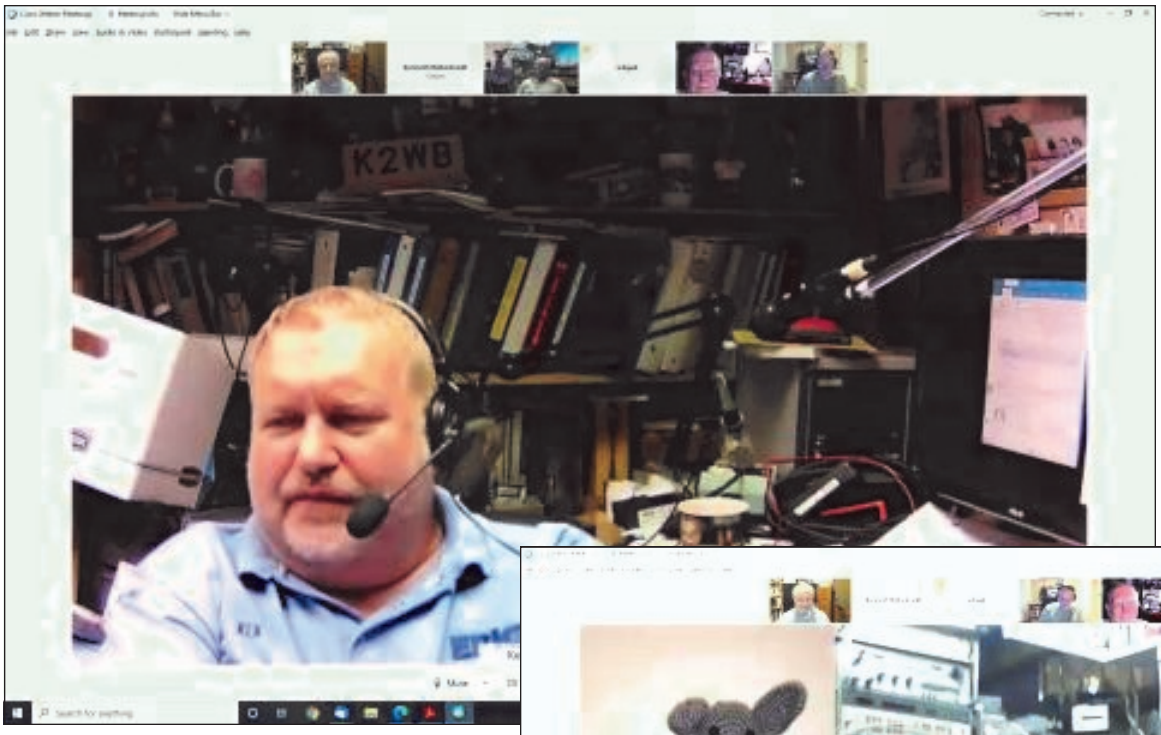
**Vy 73,**
**Bob W2SJ**

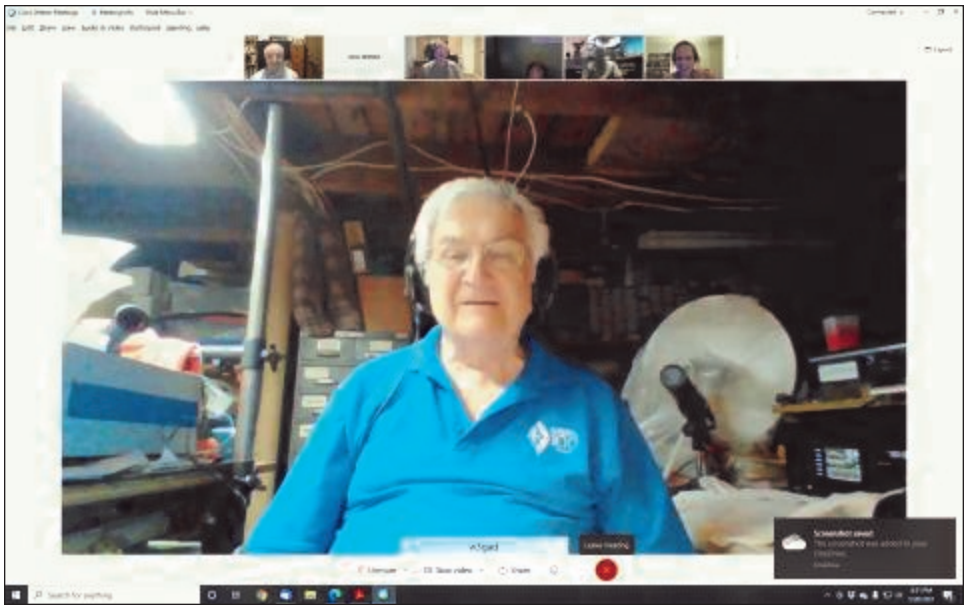
# MAY (WEBEX) MEETING PICTURES

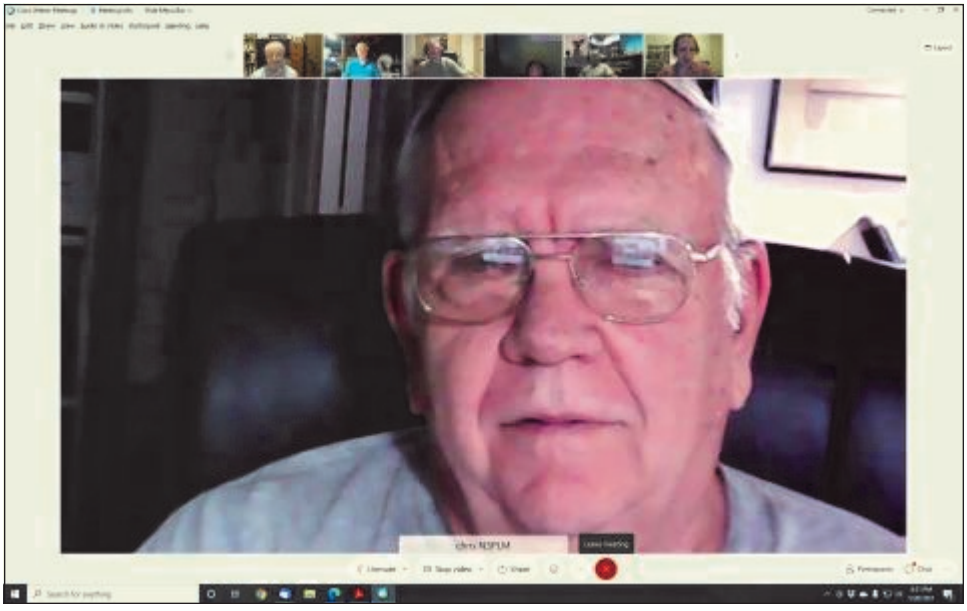







K2WB





# Ham Radio at the South Florida Fair

Yes, there actually was some VHF/UHF at the ham station in YesterYear Village at the fair. Well, perhaps it was the SARNET on 440FM, and the local repeaters on 146FM, but nevertheless, it was a demonstration of communications capabilities on the bands with which we're familiar.

How did I get involved? It was Jeff Beales WA4AW who posted a request on our Boca Raton ARA group for volunteers for the ham radio station at the fair. The fair was finally opened this year for 2 weeks, just as Florida's Governor DeSantis lifted the mask mandate. As I had never attended this fair before, I thought I'd give some time to help staff the display and operate the station.

Before one can volunteer, you need a background check and to sign various waivers. I sent in my forms and was approved and was able to pick up my entry pass and volunteer T-shirt 3 days before the fair started. The fair is about 15 miles from my home here in Florida, and I had no expectations, except to meet some other local hams and do some public relations for the hobby. There was an on-line sign-up for the 14 days of the fair with 4-hour blocks. The fair was open for 12 hours on weekend days and for 5 hours each weekday night. As you can imagine, there were the usual fair rides, scheduled performers and groups, and plenty of food to be purchased from those self-contained trailers hawking all varieties of treats.

I volunteered for a shift on the first day of the fair, arriving early to get a parking spot in the volunteer lot, then showing my pass and getting directions to YesterYear Village, a 9-acre section of the fairgrounds that has a series of wooden structures housing themed displays, an old caboose full of train models and memorabilia, and a central gazebo that always had a musician playing tunes of long ago. My first stop was the sign-in for volunteers, where I entered my ID code in their computer program. They do keep track of the hours spent by volunteers and apparently there are little trinket rewards for those who do many shifts. They also require you to sign out before you leave.

The radio station was minimal—an older Kenwood HF transceiver and a dipole antenna. It had been erected a few days before the fair, but had problems and could not be loaded to transmit a signal. Fortunately, we had our "shack on a belt" Baofeng walkie-talkies and could access several local repeaters and also the Florida SARNET that networks repeaters all over the entire state. We were located in the Olde Fire Station building that had an antique pumper truck and two antique ladder trucks.


Kids really enjoyed being able to climb into the driver's seat, ring the bell and hand-crank the siren. There is a great display of firefighting equipment from over the years and a collection of all sorts of fireman caps and

Florida cont'd...

helmets. Our set-up was rather minimal and our side of the building was an old print shop, complete with printing presses that dated back 100-200 years. There was also a complete shoe repair shop just by the side exit.

The nicest thing about being part of the volunteer crew was meeting a few other ham volunteers and of course the fair visitors who showed interest in what they thought was a dying hobby (we set them straight) and several licensed hams who came by to chat about their experiences.

We had handouts from the ARRL and I also brought along a stack of QST magazines to give out to interested folks. Since the crowds were light, we had plenty of time to chat with each interested visitor. I had a full day of volunteering on the second weekend of the fair and by then Jeff had installed a Hamstick for 20m and when the band was open they had a few dozen DX SSB QSOs. Conditions were not great when I was there, but I did manage to get a few CW QSOs in the log. If I have the chance to volunteer again, I will find the time to continue to be a cheerleader for ham radio. **Rick K1DS** EL96

# Packrat 1296 & 2304 Beacons On The Air!

1296 and 2304 beacons are on the air, we have had several good reports from stations. Both beacons are very strong here at my location.

This continues to be a combined effort from several club members donating valuable time and resources to satisfy requests from the Pottstown club in addition to installing our own equipment.

Club members have donated professional tower resources, mechanical engineering and materials for antennas, micro controller coding, RF engineering and assembly.

Both beacons are reporting some telemetry, here is a breakdown if you want to track some numbers.

Every 10 min the beacons report: Number of GPS satellites received, PLL lock status, GPS engine status, Heatsink temperature and Forward power. Temperature and forward power is relative, but based on recent data the 2304 beacon is running 9W and 1296 10W.

Two examples:
1296 5 L 0 T637 F 134, so this means 5 GPS satellites, PLL locked, GPS 0 = time locked, T 637, (hot) and F 134, about 10W.

2304 6 L 6 T 243 F 180, equals 6 GPS satellites,. PLL locked, GPS 6 = no time lock, T 243, (not as hot), and F 180 about 9W.

The numbers from 1296 and 2304 are not calibrated on any common scale, strictly relative.

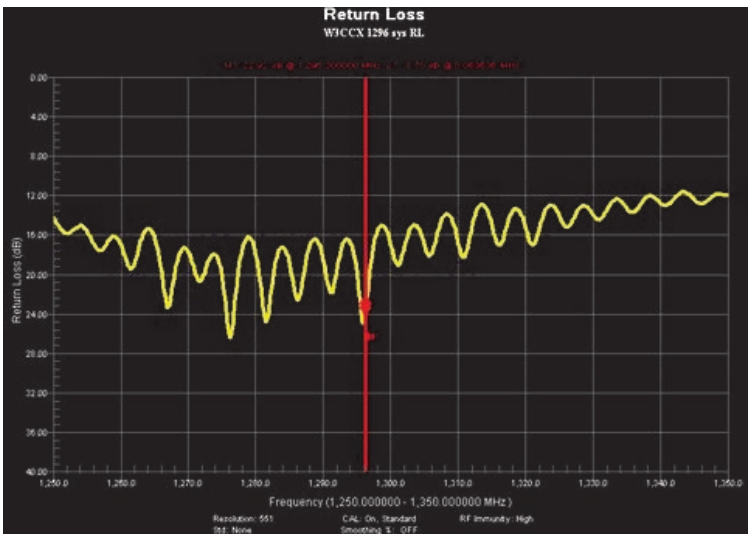
If GPS status is 0, or 1, the frequency should be within a fraction of a Hz, to 300 KHz.

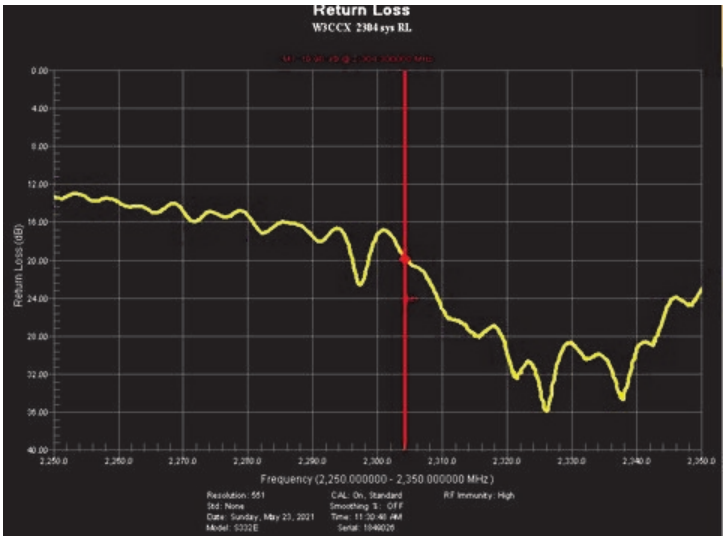
We are planning on swapping out the main power supply in a few weeks, so we will see how performance holds up and look at GPS on 2034. Have fun listening/ **Gary WA2OMY**

**Some additional details and Pictures from Len N3NGE:**

W3CCX BCN1296.300 and 2304.300
On-air 5/23/2021
Located on PAARC tower at Fancy Hill (Boyertown, PA)
Lat / Lon: 40.325871531906984, -75.70410046919653


System return loss 22 dB at 1296 and 20 dB at 2304



# 6M Spring Sprint Reports

**From A2UK:**
All contacts were made using FT8. Most signals were fairly weak many could have been had using CW. This assumes the other stations knew CW.
I got fatigued and left at 10:30. Too bad I didn't stay up. It looks like I missed at least 6 additional grids and Q's. Those were 3 CMxx stations and EN19, EN29 & FN58. Some highlights: I did manage VP9MN in FM72 at the start, DM32, 41, 42 & 52 mid contest. The biggest issue being where to point the antenna. That's one advantage a Moxon has over conventional Yagi's it has a broad pattern.
44 Q's and 26 Grids.

**From KR1ST:**
Another fun Sprint is in the books. I did my best to keep the number of FT8 QSO's below that of the number of SSB QSO's. :) There were brief openings in most directions. I mostly tried to work DX stations when on FT8. I'm obviously not in it to win it. :) Well, having fun is a win in my book, and fun I had! Highlights were working WP4ROQ, WW2Y/R in 3 grids, and working N2SLN/P, all on SSB.
Thanks to the SVHFS for sponsoring the Sprints and thank you for the Q's!

**From N3RG:**
Got on late and stayed to the end. Had fun working phone, cw and digital.

**From N2NT:**
Mostly local. Surprised to get a call from KE6GFI DM34 10 minutes in on SSB.

**From K1DY:**
I didn't have a lot of time to operate for this one but wanted to make an appearance. Decided to run “old school” SSB and CW only, no chat assistance. Conditions seemed pretty flat at the beginning and I worked a few of the New England locals before I had to take a short break. Around 8 I came back and there was a little E-skip to FM06, EM95, EM96. I could only guess things were really hopping on FT-8, but I was happy with what I did in less than an hour of operation. Thanks to CSVHFS for sponsoring and to all who got on.

**From WW2Y/R:**
Thank you for the contacts and thanks goes to CSVHF Society for continuing support of the Spring Sprints. My debut roving adventure was a fun and interesting experience, making 34 contacts from three grids in four hours time. I used two directional antennas, one suspended at 50ft in between trees and one mounted on a 26ft tilt over mast with rotor. The setup inside a RAV4 consisted of a FT-991 transceiver, and a Acom 1000 amplifier driven to 600 watts output. All supplied power was from a Honda EU-2200i generator. Everything worked flawlessly.

I made three contacts with stations from Newfoundland, Canada 45 to 30 minutes prior to the start and they were strong in signal strength. Never heard them again. I traveled to the grid corner intersection of FN20, FN21, and FN11.

Activity on SSB and CW continues to decline significantly. By the time I made it to the second grid stop in FN21 at 0030Z, I only heard N2NT, W2KV, and KR1ST calling CQ. I suspected the masses already migrated to 50.313 MHz,FT8. I spent a good portion of 30 minutes calling CQ without answers as if I was living on a expired planet.

On the bright side being out in the boondocks while I was packing up to go to the next grid, I heard and recorded with my cell phone a Whippoorwill chiming out its nocturnal calls. The exact sound I heard every night while camping during CQWW-VHF in FN24 last July. How cool is that?

I made the 20 minute trek to the final grid stop, FN11 and I was QRV again by 0200Z. I had more time to play digital once the hard core stations on analog modes quickly petered out. I tried MSK-144

6M cont'd

for roughly 10 minutes and worked one local station. Then I switched to FT8 and saw a +13 dB decode from a VE1 station amongst other loud stations. Quickly called him and he responded with a exchange, which seemed to be an eternity due to the warping of space time from the presence of a FT8 black hole. During the next sequence, his signal vanished and I never received a 73 to confirm the contact. If it was FT4, it would have been very likely to complete. Sigh. The amusing part is that while I was trying to complete the contact, I had numerous stations calling me at the same time. With four minutes remaining, I quickly sent a message twice saying "FT4 318"; I moved to 318 and N3RG was the only one who checked in to exchange grids. At the same time, Alex, KR1ST began to call CQ, since he had called me earlier on SSB.

KD4AA and W8ZN were the most distant QSOs for me and I'm glad that N2SLN/P decided to head out at the last minute to his secondary hill top location for activating FN22. Thanks Lu!

**From K3TUF:**
Great to get on and check out the gear. Thanks to WW2Y/R for roving through FN20,21,11.

Phil N8LRG now has a 350 watt BEKO on the band making our contacts easier. He used to run 10 watts in all of our previous Q's. So if you need EN80 on 1296 he's your man make a schedule.
**Bill AA2UK**

Here's the QSO
1326 -24 0.4 1430 #* CQ N8LRG EN80 a7 U.S.A.
1326 -20 0.4 1426 ##
1328 -17 0.5 1431 #* AA2UK N8LRG -20 f
1328 -22 0.4 1433 ##
1330 -28 0.7 1415 #* AA2UK N8LRG RRR d4
1330 -17 0.7 1416 ##
1332 -16 0.6 1418 #* AA2UK N8LRG 73

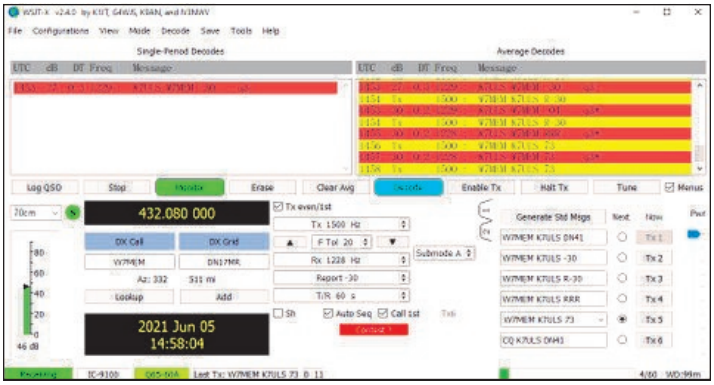
# 1296 MHz DX at AA2UK

Reported 5/25/21
I worked the following stations using FT8 on 1296.174MHz
KF2T FM19ma at 131 miles
KC8YJJ EN90pl at 318 miles
N8LRG EN80vi at 397 miles

Reported 6/7/21
This would have been an EZ JT65C contact but we were able to work using FT8.
123900 -22 0.6 1500 ~ AA2UK N8LRG EN80 *U.S.A.
123930 -24 0.4 1494 ~ AA2UK N8LRG R-24 *U.S.A.
124000 -24 0.2 1495 ~ AA2UK N8LRG 73

Al, **K2UYH** reported a tropo QSO between K7ULS (Eden UT) and W7MEM (Post Falls ID) on 432 MHz using WSJT-X Q65a mode and EME equipped stations. The distance was around 515 mi.

K7ULS had a single 432-9wl 300w 9000' and W7MEM was using 16X15 ele K1FO with 800 watts. An example of what can be done with WDJT and top tier stations.




July QST has published the **January 2021 contest results**.In the unlimited club category, Packrats as the only entry scored just under 1.4 million points with 61 entries; the next closest club score in the medium category was not even half of the Packrat score.

Great to see many Packrat scores in the entry categories, with a number of first place scores, and numerous top ten placements in those categories.

Very 73 to all **K3WGR** ( NN3Q/r)

# Increasing Display Clarity on Yaesu Rotor Controller

Looking for a small project to improve your station? There is always something to do, if you have the time! For a few years I've been looking for a simple solution to make my Yaesu rotor controllers easier to read. I've added LED lamps inside and outside the controllers but still had trouble reading the indicators until now. I found a $5.00 solution! I painted the indicators with white Testors model paint which I purchased from Hobby Lobby for $1.79, Along with a small bottle of thinner and two small paint brushes the total came to under $5.00. I took an old piece of lumber, drilled several small holes in it, and cut up a chop stick from our local Chinese restaurant. The chop stick fit perfectly into the indicators and held them in place while I applied two coats of white paint about ten minutes apart allowing time for the paint to dry before applying the second coat. As you can see in the photos, the white indicators have made it much easier to see the antenna positions from across the room!

Truth be told... replacement LED indicators were about $25.00 per control box of which I have three. The painted indicators cost $5.00 to do three or more control boxes... just say'in

73 de **N3RG, Ray**

## *Homebrew a Power Sensor*

DL5NEG has a brief article on the internet outlining how to build a low-level RF power sensor that works up to 3 GHz. Team this up with a digital VOM and you can make power measurements in the range (approx.) -25 to +15 dBm. It's built on ordinary G10 pcb material that you can carve out the 50 ohm microstrip with an xacto knife. It uses common surface mount components that you may already have in your junkbox. The only unusual part is the detector diode. It's a BAT62-02W Schottky diode that goes for around $0.60

Here's the link:
http://www.dl5neg.de/diodesensor/iodesensor.html **W2BVH**

## 50+ KM. Optical QSO in EU

On May 8, 2021, the group of Polish radio amateurs: Marek SP4ELF, Jurek SP2GUB, Adam SQ2DOL, Piotr SQ4MIK, and Jarek SQ4IOB realized optical communication (481 THz) between the locators KO04nd40DA and KO04fi31GV for a distance of 50.018 km. So they have broken the magic limit of 50 km! Read the details and find links to additional material on this at Over 50 km on 481 THz! Great news from SP - GHz Europe (ghz-europe.com). —Reported to Packrats by Alex KR1ST

Al KB3SIG had some comments on this as follows: That is a great looking setup. The light boxes I built with approximately 3 watt LED's, a simple GasFET front end on a $.10 photodiode, a Radio Shack $10 amplifier and cheap Fresnel lenses from Staples did 29 km on the first try with very strong signals on both ends. I modulated the lights with Arduinos, but the 555 "modulators" we use on the lasers can easily be used with the right LED driver. In the June contest 2 years ago, this got us another grid.

My setup is not as slick looking as theirs and is quite bulky. I'm pretty confident the setup will work at 100+ km. Using similar lights and lenses, KA7OEI and K7RJ made a 173 mile QSO.

It's good to see more people getting interested in this. Maybe someday we'll have a light and receiver on one of the contest towers.

# MEMORIAL DAY 2021 DECK PORTABLE OPERATING

After a long winter and a cold spring it was very nice to finally test the portable setup I've been assembling over the winter on Memorial Day 2021. For a while now I wanted to put something together that I could just throw in the car if I travelled somewhere and would give me the ability to operate from anywhere. I was especially inspired by the stories by Bill, WS3O, in Cheese Bits to do something portable again.

The IC-705 Icom released last year makes for a killer QRP portable rig. Even better is that a small backpack is available that is specifically designed for this rig. The IC-705 does everything the IC-7300 and the IC-9700 (with the exception of 1.2GHz) will do, and more, but at reduced power. The output on the internal HT style battery is 5W on all bands, but goes to 10W on external power. Go check out the IC-705 if you're in the market for something small with a bandscope , that has GPS and Bluetooth on board, and offers wireless LAN capabilities so you can connect your laptop without any cables to run the digital modes (or for logging purposes). You can even connect it to you home wireless network and operate the rig remotely.

I use a 12AH Bioenno LiFePo battery which fits neatly in the bottom of the backpack. That should last through a good long weekend of operating. Even though this battery isn't all that heavy at just over 3 pounds, it helps keeping the backpack upright while operating.

The antenna I am using in the picture is a Super Antenna MP-1. The nice thing about this antenna is that it breaks down in pieces that are less than 12 inches long and so makes for a very compact 40-2m antenna to take with you. It is not as efficient as, say, an end fed half wave wire antenna, but it doesn't require a support if you get the small three legged stand with it. I used the Mini1300 analyzer to quickly tune the antenna. The 3D printed CW paddles (by CW Morse, LLC) were not needed today. I did use Bluetooth bullet type headphones so I didn't have to crank up the audio and disturb the birds in the backyard with all the ham radio chatter. Did I mention that the IC-705 has an amazing array of capabilities?

I operated only on 6 and 10 meters. On 6 meters you will have to roll up the supplied radials to about 5 feet in order to be able to make the antenna resonate. On all the lower bands you can just fully extend the radials. Unfortunately, there was no strong 6m opening while I was playing with this setup. Even though US stations did not hear me, I was able to complete a QSO with Jose, KP4EIT, on SSB. Conditions on 10 meters were a lot better and I had several nice QSO's with stations in Georgia, Florida and Indiana.

This portable setup made for an enjoyable early evening operating session while remembering those who gave their lives for our freedom.

73, **Alex KR1ST**

# KOBAK TV Van June Contest Prep

At the end of last season just before putting my van away in the rental garage for the winter, I managed to build and test a platform for the top of the pneumatic mast and hung LMR400 coax from the platform through an N bulkhead. After retrieving the van in the spring, it spent yet more time with two mechanics, mostly fixing the serpentine belt for the fourth(!) time. Altogether it was at a mechanic for more than eight weeks in the spring. During this downtime I was quite active in POTA, eventually activating my 400th unique park using my small car instead of the van.

After completing my big POTA goal and getting the van back, I turned my attention to the van's VHF capability again. My 6m-23cm log periodic (Create CLP-5130-1N) was my first VHF rover antenna, but as a pre-Packrat beginner, this was probably not a good choice at the time. It has been hanging upside down on the ceiling of my garage since 2014, partially disassembled. I chose to use it on my van to have a low-four-bands antenna without the complication of switching and control lines. It's likely that I'll eventually move up to the individual Yagis I used to use on my minivan rover, but for the first contest effort I wanted to keep things as simple as possible.

Although last year I used Drex's cable grip technique for pulling coax to the top of the mast, this year I built a cable system to give me more options before I start using the big helix cable bundle that came with the van. I used a vinyl covered steel cable for strength, and zip-tied my coax and rotator cables to it. I tried to leave slack between zip tie attachment points to keep most of the weight on the steel cable. The system seemed to work, though the cut zip ties are a hand scratching hazard. Whether it was actually worth the trouble to build isn't clear, but I did it in case I want to run another coax or other lines up to the platform.


Along the same lines of keeping things simple, I decided I didn't have time to install my transverters or medium-power amplifiers, instead opting for the simplicity of my original VHF radio, the jack-of-all-trades ICOM IC-7100 with SSB on 6m, 2m, and 70cm. Getting the antenna up 35-40 feet off the ground resulted in solid contacts on the Packrat nets the Monday before the contest. I also got WSJT working with the 7100 using my existing rack-mounted computer, which was considerably more difficult than the easy-to-interface Flex 6500 radio already installed in the rack.

I was hoping to use my Flex 6500 for 6m because it has already been proven for 6m WSJT in VHF contests, but for some reason the radio itself measured SWR off its short scale (> 4.0), despite my Comet VHF antenna analyzer and the readout on the 7100 being in rough agreement with a good enough 1.5-1.7 SWR. Not sure what the 6500's problem is, but I didn't have time to look into it, especially since using just the 7100 would be simpler albeit not as well performing and lacking the valuable panadapter of the SDR.

While I have a list of items left to do, mostly to get equipment mounted and accessible at the operating position, overall with the successful Monday night net check-ins it looks like I should have at least 3 bands and a decent enough antenna system for the contest. There's an outside chance I could have 222 on a temporary rack, but that's low priority. At the time I wrote this, I didn't have a contest rove plan yet, but I do want to try a few locations in south-central PA along Route 30 that might be a good compromise between height and easy accessibility. My goal for the first contest is simply to use the pneumatic mast for the first time to get used to it under pressure, and of course to always look for CCX first at each new grid.

## 10 GHz (and up) Operation Between Contests

I am part of a small group of microwavers who get on 10 GHz and up, every so many months between contests so folks get use of their portable rigs more than twice a year in the 10 Up. We can study the propagation possible from spots with good scenic views. It helps get the cost per QSO below $100. (Hi) [I have only done this since I started going portable in the last 4 years]. Yesterday I took all the Mid-Atlantic 10 GHz stations on the w3sz/k1rz database and sent invites to them, plus all those entered in the K0SM Rainscatter application (Https://rainscatter.com). The hope being that everyone in the field that day will text / call everyone else in the field and work who they can – independently, since no one station in the group can be able to hit all the stations in the expedition. This method has shown itself to be workable in 4 previously scheduled events over the past year. This time I expanded my sent-to list.

No I do not do this email for the 10 GHz and Up contest as this is already an organized contest event. But I do use mine and Rogers 10GHz-Up reflector https://groups.io/g/10GHz-Up/ to have the active 10 GHz-Up operators put in their 10 GHz-Up Plan into the w3sz / k1rz DB…and then everyone prints and/or carries their device to the field to know when to work who. Same deal as all the VHF+ contests.

All that said, if you are free Saturday June 19th go out to one of your spots and we will try to work you on 10 GHz from the Skyline Drive in Virginia. Use the Path Profile method on https://w3sz.com/map.php to see what the path profile is, remembering that signals that can get off your site can sometimes climb over distant ridge lines – beyond Line-of-Site. Where the fun begins.

73, **Dave K1RZ** FM19jh

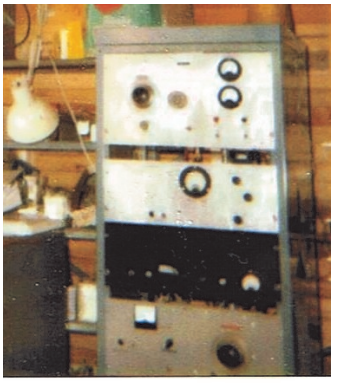
# KIDY "THE EARLY YEARS" AND BEYOND

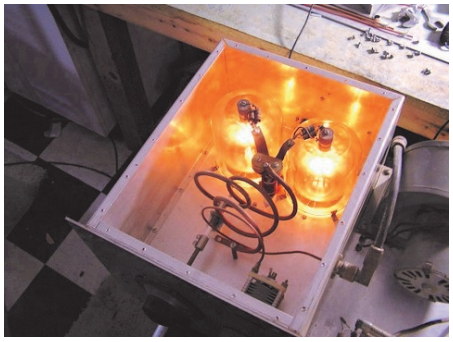
[Continued from April 2021 Cheese Bits pp.14]

I apologize that the "timeline" of the following jumps back and forth a little. What the heck..

So, after college I am in the Philadelphia area and "back on" VHF. Well, 6 meters at any rate. I had a little money from a "college summer job workplace insurance settlement" and wanted to get a Drake TR6 but they had just stopped making them so I settled for a Swan 250. Oh well. As it says above, I soon became very aware of the Mt. Airy VHF Radio Club (Packrats) and thought I would like to join. Tony, K1SFF/3 (now W3HMU) lived just down the road in Ottsville and I told him I wanted to join the club. Well Tony said, "you can't just join, you have to be asked!" This scared me a bit, but I started attending meetings anyway. As far as I can tell my first "appearance" at a Packrat meeting was March 21, 1973. My life was about to change! I became a member in May 1973. I was still K1JDY/3. This was JUST IN TIME to participate in the June contest in Hilltown and I was pretty darn psyched!!! Since it seemed like I was going to remain in 3-land for a while, I applied for a 3 call and received W3HQT in June 1974. Being a diehard VHF contester and now a Packrat and a ham who enjoyed home brewing, I soon started moving up the bands. First was a handbook based 2 meter transverter with 6360s and a companion 5894 dual tetrode PA running 70 watts or so. Next came 432 with another handbook design using 6939 dual tetrodes followed by a pair of taxicab rig 2C39 stripline amplifiers. I still have that one and here are the pics: 2C39's, one GE and one Motorola for those with the keen eyes! Note the Johnson butterfly variable capacitors in the dual tetrode stages. Missing is a short hose from the squirrel cage blower to the 2C39 amps. Duct Tape remnants are still on there!! This rig put out 30 or so watts and drove a homebrew 4CX250 to a few hundred watts.

I don't remember what the heck I was using on 220 back then, I'm pretty sure a "Hamtronics" solid state transverter was involved. It was probably a transmit converter and a receive converter (Janel?) that I may (or may not) have linked to the same LO for transceive. I also picked up a Clegg Zeus for 6 and 2M AM. Back in the early 70's there was an EASY 100 QSO's to be made in a VHF contest on 2M AM!!! BUT time marches on and somewhere around that same time I built a 6 meter transverter with a pair of 6146's in the final and a big amp using a pair of 3-500Z's.. The following pic is the rack from around that period.. bottom to top, 2M 5894 amp, 2M transverter, 6M transverter, 3-500Z's. Sorry it's pretty fuzzy! (the pic I have is a Polaroid!)





To the left is the inside of that same 6M KW. Note the "shorted turn" plate tuning on the "L" network.. You just don't get a picture like that with LDMOS FETs!!! This thing worked GREAT!!!

So, I became heavily involved with the 'Rats especially interested in contests and always looking for a challenge. Eventually the challenge became the W3CCX EME station. The EME station came about when Al Katz, K2UYH, got his new 28ft Kennedy dish and wanted to unload his 20 ft stressed "chickenwire" dish and the Packrats said, sure!! Here's a picture of


the actual label that came on the roll of chickenwire we covered the dish with once it came to Revere. To this day if I say "reverse twist" to Tony (W3HMU) or Walt (K3BPP) they instantly go into sort of a "dream state"!

Suffice it to say that in regards to this EME adventure, I had the desire, some of the technical knowledge and the REAL ESTATE needed to pull this off. At the time I was a motorcycle mechanic working at Stan's Cycle Shop in Danboro (near Doylestown). My co-worker, Steve, had been a classmate of mine in high school and we were close friends and eventually bought a 10 or so acre farm together in Revere, just north of Ottsville off of Rt 611. The barn became the location of my ham shack after I was banished from the house when my quad array of 12 element KLM 2M Yagis landed on top of the house and one Yagi boom crashed through Steve's bedroom window in a wind storm.

The W3CCX EME shack was in the Southeast corner of the barn on the ground floor (dirt floor and stone walls). Needless to say this was less than "basic", but with a good "moon shot", horizon to horizon! As for the 432 EME station, its the construction was a team effort, W3HMU Tony, K3BPP Walt, myself, WA3NGK (W3IIT) Harry, K3ZSG (W0RSJ) Bill, WA3JUF (W3KM) Dave, WA3NFV Danny, K3IUV Bert, and many others helped. A lot of the construction took place in the winter months and there were many post-workday sessions in the farmhouse drinking Red Zinger tea!! (Celestial Seasonings chamomile for the uninitiated). Tony and Walt and I ran the station and kept up with the skeds. The actual station itself was a homebrew exciter of mine. It was CW only with a VXO for frequency control with a "big knob". Seriously! It gave us about 10Kc of transmit tuning, plenty for EME at that time. And we used my old 4X250 432 amp and an 8938 amp that Tony built in the K2RIW "half wave stripline" configuration. Walt designed a switchable dual polarity dish feed with two "EIA standard" dual dipole over reflector antennas and a bunch of Transco Y relays. The preamp was at the antenna and we were using bipolar transistors like NEC V578's etc with MAYBE a 2dB noise figure. Preamp designs were from Joe, W1JAA (now W1JR). (I think the GaAs FET hadn't been invented yet, or at least was not available to us.)

At first this was just another cool VHF activity. For me, VHF contesting was my primary concern. That fact was recognized by the club and I became Packrat June contest chairman in 1975. But wait, things were about to change. We were headed to South America!!! The HK1TL EME expedition of 1976 has been well documented so I won't go much into that here just check out the Packrats website.. BUT, I will digress a tiny bit and tell one story from my HK1TL experience. Part of the reason to make this trip to South America (beyond just showing the Packrats I could do it), was to work our W3CCX EME station back home so we could get WAC on 432. That meant we needed to keep the "home station" intact and have a team there to man the station when we were in Colombia. Dave Mascaro, WA3JUF, was part of the team but I really didn't know who would be operating the station during the HK1TL sked. I was operating the HK1TL end (see pic at right) and, remember everyone, these skeds were on CW in REAL TIME. A transmitter, a key, a receiver with a "tuning knob", a set of headphones, that's it!

After acquiring the W3CCX signal, maybe a minute into the sked I recognized Dave's "fist" on CW and knew he was the operator. I remember how "connected' that made me feel to this day! I'm not knocking digital modes, BUT this just doesn't happen on WSJT-X!! Anyway, onward…

Soooooooo,.. I am deeply embedded in the 'Rats and active on 6-1296 with high power and big antennas. In 1978 I had the honor to be elected "el presidente" of the club. This was a big turning point in my life, not only because I had never really been recognized as a "leader" before, but because I got to know Harry Stein, W3CL, who I became very close friends with and to this day still consider to be one of my most important mentors! He had a pretty modest VHF station in the back room in his home in Glenside. Collins S-line (or KWM2?) with 62S1 transverter for 6 and 2 is what I remember. I'm not sure of the other bands, but he'd get on for all the operating activities. As president, I would meet him at his place each month with my "Prez Sez" article for Cheese Bits (he was editor) and we would spend a couple hours chatting often with a snack served by Harry's wife, "long suffering Sylvia". I liked his "war stories". Harry was in the Navy during WWII and stationed in Brazil installing radio communications systems out in the jungles. The story that stuck with me most was about the daily trip back from the transmitter site to the camp where they would walk along a ditch that had been dug to run feedlines and other cables. The boa constrictors or pythons liked to get down in the trenches during the day because it was cool, but in the evening, when the crew was "walking home from work" the snakes would reach up and try to grab the legs of whomever was walking by! Harry was at least a generation older than me and at first observation we couldn't have been much different, but I think you can see the mutual respect and admiration between two hams in the picture (right)!!

MC W3CL PRESENTS OUR PREZ W3HQT WITH THE PACK RAT OF THE YEAR AWARD

Moving along.. After Colombia, I was "noticed" by Packrat charter member, Elio Coluzzi, W3RZU, who worked at Solid State Scientific, an RF transistor manufacturer in Montgomeryville. I guess my "drop out" days were over. Al hired me in the product engineering department and all of a sudden I had a different working environment from the motorcycle shop (understatement). A new salary situation gave me the opportunity to do what I had always wanted, build my own house on a mountaintop. Well the house got built and the site was the ridge on Green Lane, near Pennsburg. Not a mountaintop but well above average terrain and a great shot south and west. As I started to settle in to my new location, I would occasionally work N3CX on 6 and 2. He lived nearby. One day this short, husky, buzz cut, "angry" guy shows up banging on my front door, "Are you the guy interfering with my TV? I'm going to hacksaw down your tower!" he says. I am pretty much freaked out and quickly he says, "nah, I'm Dave, N3CX". Dave wasn't a club member yet so I really had no idea who he was. He had a few 807's with him (good thing, our beer of choice was Yuengling Lord Chesterfield Ale), and we settled in chatting and became great friends. Dave worked at channel 29 in Philly as a transmitter engineer and ACTUALLY grew up in Glenside, near W3CL. Harry was actually the reason Dave became a ham as I remember (they were both Navy guys too!).

Quickly moving on here. I was getting the itch to move back to New England and after a brief move to Haycock Township, we packed up and moved to Maine for the final adventure which is still going on. Before we left, I put up the 120ft tower in Haycock and all I had time to do was get on 1296 from there. I had this quad array of 45 element loop Yagis that I wanted to put up top. They were all together on an H-frame. My idea was to take the array apart haul everything up one piece at a time and reassemble. Dave, part of the antenna party, says, nah, let me climb up there carrying the whole thing. Which he did! I still have a vision of this guy with a LOT of antennas on his back about 3/4 of the way up the tower. Dave died of cancer in 1995. I was already up here in Maine for a decade but we stayed in touch. The year before he passed away he did a "goodbye tour", visiting friends around the country and I was on the list. Not sure when, maybe fall of '94, Dave comes by with a CASE of Yuengling Lord Chesterfield Ale in 12 oz. returnable bottles (readily available at the drive-thru beer distributors in PA at the time). We spent a couple

K1DY cont'd

days finishing it all off while spinning yarns. Even with nearly 30 years of cleaning the shop, I can't bring myself to toss that case.. It's still right there 5 feet away from where Dave and I sat. here it is:


N3CX DNA!!!!
The move to Maine happened in Fall of 1982. That will be the next chapter. It includes the "Down East Microwave" adventure. Stay tuned!!! Bill, K1DY

# Wooden Satellite to Launch by Year's End

The WISA Woodsat project, being sponsored by plywood supplier WISA in an unconventional PR initiative, is poised to place a wooden satellite into orbit by the end of the year. The idea is to test the suitability of treated wood as a low-cost and widely available material for space applications. The IARU posting for Woodsat indicates that several amateur radio experiments will be on board as well as photo downlinking, including selfies.

The wooden satellite is based on a basic, versatile CubeSat format, Kitsat, which is designed with educational use in mind. It retails for just $1,500. Based in Finland, the Woodsat project began with students across the country contributing parts to a CubeSat launched by balloon. The satellite will be a 10-centimeter cube weighing 1 kilogram, covered on all sides by coated birch plywood from WISA Plywood. Nine small solar cells will power the satellite, which will orbit at an altitude of 500 - 550 kilometers.

As the sponsor explained, "WISA Woodsat will go where no wood has gone before. With a mission to gather data on the behavior and durability of plywood over an extended period in the harsh temperatures, vacuum, and radiation of space in order to assess the use of wood materials in space structures."

Once in orbit, Woodsat will be able to extend a selfie stick to capture photographs of the wooden box as it hurtles through space at 40,000 kilometers (24,800 miles) per hour. This will allow the mission leaders to monitor the impact of the environment on the plywood.

The satellite would downlink its telemetry and images from two cameras using amateur radio frequencies.

"The wooden satellite with a selfie stick will surely bring laughter and goodwill," added mission manager Jari Mäkinen of Arctic Astronautics. "Essentially, this is a serious science and technology endeavor. In addition to testing plywood, the satellite will demonstrate accessible radio amateur satellite communication; host several secondary technology experiments; validate the Kitsat platform in orbit, and popularize space technology."

An April 23 Engineering and Technology article has more information. -- Thanks to AMSAT News Service via JoAnne Maenpaa, K9JKM; E&T, and the IARU

Sent to Cheese Bits by **Al, K2UYH**

Artwork by Lexie, W2SJ's granddaughter

# Member Spotlight!

## By Phil WF3W

### FOUNDATION OF AMATEUR RADIO
### aka TOOL GUY


***THAT's THE STORY OF MY PACKRAT CAREER:***
***PEOPLE ALWAYS STEPPED-UP TO HELP ME AND IT's TIME FOR PAYBACK***

Michael Davis, KB1JEY
1st Licensed: about 20 years ago
Favorite Activity: Fixing things: mechanical, electronic, computer
Favorite Mode: PHONE
Offices: Director 2008-2009; 2014-2015
Picnic Chairman 2016 - present
Recording Secretary 2015-present
Additional claim to fame: Sartorial splendor of Packrats

Michael's Amateur Radio origins dip into history, about 20 years, in Connecticut Yankee territory, Milltown to be specific. An avid biking fan, he participated in organized bicycle rides, most notably diabetes.
Cell phones, back then, were unwieldy — read: *analog* — and coverage, if I'm using the term correctly, sucked. Add-in mountains and there was an obvious problem. Resolution was quite handy, in the form of the Middlesex Amateur Radio Society. Although unstinting in devotion to facilitating communications, there were never enough hams. In a fateful year, Michael asked a, not very, silly question, viz., how does one become a Ham? And that was all the invitation needed to gain entrance to the well-equipped club van, and as history is wont to turn-out, Michael being readily embraced by "MARS".

Before the electron cloud could dissipate, Michael was a Novice. He purchased an HT, and external amplifier, which led inexorably, into "all of this", in his singular expression. The next Ham milestone was translocation to Pennsylvania and signing-up with Warminster ARC. Soon, Michael could schmooze among these hams, and one in particular, Mark Hinkle, pointed-out, Michael should visit with Rick Rosen, **K1DS**.

Rick was a Packrat. As usual among confreres Rick & Michael hit it off. After a few conversations, Rick handed Michael an application and an invite to a meeting. Herein lay the prospect of helping meet virtually, all his goals, in hamming. The first Packrat meeting attended, Michael met a Ham really into weak-signal work, Joe Taylor, whom he did not know from a hole in the wall [or pulsar]. Joe perused the application, and in true professorial aplomb said, if Rick thinks you're OK and the 2nd sponsor was Joe. The next thing this month's spotlight member knew, he joined the renown rank of 'Rats.

This elevation resulted in some shack shifts:

- Transceiver that did the lower 4
- Microwave capability up to 3456 [not quite "fully" functional]
- 54 ft crank-up [You definitely want to read Cheese Bits articles for the flavor of the adventure, including the permitting and getting the hole for the base dug and filled with concrete]

HEATHKIT GR-81 regenerative rcvr

This was built in HS. In WWII, Michael's dad was assigned to a GCA – Ground Controlled Approach - trailer, which guided through the muck and, perhaps, in battle damaged aircraft. GCA was the first, American use of microwave radar, allowing his dad to begin his education in radio & electronics. He was responsible for igniting Michael's interest in electronics. In college he bought a Heathkit AR-14 FM-only stereo receiver kit. Paid the same as for assembled but had the kit-building bug {https://www.google.com/search?source=univ&tbm=isch&q=Heathkit+AR-14+images}

A Heathkit 5MHz o-scope was added. Then a plenitude of test gear:

Top-to-bottom:
IG-5280 RF oscillator
IG-5282 AF oscillator
IM 5284 VOM
IT 5283 signal tracer, and IB 5281 RCL Bridge

Even before focusing on Amateur Radio, Michael possessed a copy of the ARRL Handbook.

His background "rarely" comes-up in Hamming, viz., finance specifically financial analysis for the Connecticut Hospital Association, circa 1979. While employed by the Association, as assistant VP of finance, Michael was assisted by a, large Monroe calculator. Electronics caught-up with him and his Monroe, in an impressive edifice named the TI 990 16-bit minicomputer. To switch it from COBOL to FORTRAN, he had to come in after business-hours to swap out the 5 MB removal disk (as featured in the James Bond movie *For Your Eyes Only*). Fortunately, he lived only 2.5 miles from the hospital association — never known as a nexus for partying — where he prepared his daily reports in FORTRAN. His present employ is in the service of Horizon Blue Cross Blue Shield of NJ, in government programs as a financial / accounting analyst.

Leaving the association for greener environs, he found BC/BS of Connecticut impressed with his computer skills. The SVP who would be his boss ordered HR to "Hhire him. We need him!" Don't worry about salary or lunch breaks. This led to the biggest item in his life, the SAS program — Statistical Analysis System, now a vigorously defended registered trademark. His interest in SAS, was augmented by their HQ's locale, viz., the NC triangle area, adjacent to Duke University, awarding Michael a Masters in Health Administration.

Our members talk a lot about electronics but truth to tell, our group is, largely, social. We spend a lot of time dealing with people, i.e., organizing things. As our luck would have it, Michael is supremely fitted to this task. His commanding voice and pay-attention presence, outlined the logical way to do things and that invariably, is how they evolved.

Living in a happy, healthy family environment, when his dad was absent, Michael found things to fix and he fixed them. This eventuated in the distinct protocol of *Tool Guy's* paradigm for fixing:

Find how to fix something
Purchase the specialized tool(s)
Purchase the correct part(s)
Get it done

The corollary to the above is being prepared for the next task, and upon this was built the edifice that is Michael's Way. He has the knowledge and the gear to do stuff.

Learning by doing has stood him in good stead in employment opportunities. On TV, he spotted a solicitation from Lowe's to participate in a *hiring fair*. Wandering in to the Willow Grove location, he promptly took a seat in front of a computer monitor and was asked to pick the most desirable position seen. Emblazoned on the screen was PT: Tool World. Michael recognized himself, THAT's ME! I love tools! Some months later, handed an "unacceptable" week-end, work schedule, he decided to part from a store with many of his most cherished delights. Shuffled to the "big boss", he immediately volunteered, "Michael we really like you" – an opinion whose basis Michael was at a loss to understand – "would you consider one day per week"? He felt he owed them for a variety of things and picked Sunday.

Michael sees his job, minimally, as a *pointer*, i.e., he points to where shoppers can find their needs. But he goes one step further, as he loves to do, and gives customers the **Big Picture:**

**Marry the wrong man or women and you have made a decision that is often hard to fix, especially if kids are involved. Graduate from the wrong college, or with the wrong degree, and you have sunk your resources in a direction that won't be easy to fix. But if you buy the wrong tool or other product and it doesn't work for you, just come-on back and exchange for refund or a more suitable tool. Tools usually don't cost all that much.**

He especially diverts people from getting hung-up on mere brand names.

The premier Big-Box Store philosopher also has discussions dealing with what is in the store. Why to buy, allows Michael to segue into marketing and finite resources inherent in any store. He is happy to advise, not only what the right tool for the job is but where to obtain it, be it another emporium or online or another person. Any person sporting a red vest is not the only Delphi. Openness, honesty and frankness, i.e., truth, is his way, and we profit from it perpetually.

The **Tool Guy** come Packrat has, of course, ruminations about Amateur Radio. Michael maintains friendship / camaraderie has remained unchanged since his tyro days. The *spirit of Elmering* has been constant and comes to the fore whenever any of us needs help, guidance or expertise. We reach-out, find who can help and, in an atmosphere of total reciprocity, give back to our radio community. Michael has had the fortune of visiting about two-thirds of the shacks of Hams of his acquaintance. This continual melding

and sharing, keeps his friendships alive and thriving. One of Michael's most sentient attitudes {shared by this writer} is acquiring Ham-related things before you need them. A great way to help others. You ride shotgun over someone's microwave project and they feel inclined to pitch-in with a mangled transverter. Our fellow-gal-ship is a prospering, 2-way highway.

One more compelling observation Michael has is hams want to make what they have work for them in lieu of "what should I buy?", not necessarily confined to disposable income. Since lockdown, we're not going places and it is possible we may have to defer projects until interacting is the norm – again. Or find novel ways to help each other. It was this unimpeachable rule-for-living that enabled Michael to cease banging his head against his shack-to-be wall, trying to master Morse: a friend clued him in to FCC impending abolition of code — Element 1 — for General & Extra.

More interesting was Michael's desire to do more digital, which he finds not as satisfying for a quite simple but powerful, reason, viz., he likes to talk with people. Verbal give & take is a lot more fun, particularly during a contest when you make points, then have a short conversation. The kick available from hamming is dependent upon the Ham. In this regard, Michael joins El, **JJZ**, eschewing contesting. He does it for the club without a *killer instinct*. Multi-op stations are a great way to learn about each other. In between contest highs, converse. Let the RF bless those who thrive on all-out efforts, of course.

Liking to homebrew / build is natural to him but if something can be had at less than a king's ransom and does what he needs it to do, he will purchase. He point's-out, this distillation to make or buy has roots in finance, i.e., deciding if your time is valuable enough to throw money at something. If you can get it ready-made, the folks in Asia have figured out how to make it faster and cheaper than you can. And this introduces us to Michael's supreme talent.

Michael knows where to buy stuff! Whether potential buyers in Lowe's or club members, he is empowered to solve the questions "what do I need" and "where do I buy it?" Michael can tell you where to go [where to secure items]. He does not think of himself as the Amateur Shopping Network, rather a person who is connected. He talks with people, other people seek-out his advice where to make smart purchases. No matter the storage medium, he remembers verbal interactions and employs that knowledge to help his circle -of-friends. His expertise is embellished by ingesting the work of authors, publications, and knowing Mr. Google is his friend.

The more of our senses we bring into an experience, the more we further personal skills and know-how. Building gear isn't just soldering and fastening components to a PCB. All the sights, smells and tactile-based, muscle-memory, are impossible to garner alone from reading. Reading + doing, = life-long education.

Alas, Michael knows the greatest challenge, in our most fabulous hobby, is finding time to do all we wish to accomplish. Retirement eases this constriction. Honoring the Packrat name, e.g. Michael has assembled the pieces & parts for microwave – minus the band recently stolen – but needs time away from everyday commitments to get on the air. Overall, most of us would say we're doing pretty well. If challenges for future times remain, it's OK. Life has been pretty good.

Michael doesn't see our consortium proffering test sessions ably covered by WARC & Philmont. Someday we'll probably perfect the online way. Michael laments club projects enjoined by COVID, remembering, fondly, the transceivers modified for 2304.

He is not quite settled on how we take our hobby and club into the future. Michael wants to see, simply, people **doing** Ham Radio, ala contesting, home-brewing, measuring. We need our life's blood doing more than joining a club or organization representing us, then sitting back. A place to start is find *low-hanging f*

*fruit*, things that our people can do, which reemphasizes club projects. He feels strongly, we must get more Hams into club-station events, e.g., June & January.

As far as lockdown, in toto, Michael feels good about what we have done – setting aside actions that can not be done, e.g., White Elephant Sale & Auction, in person meetings and our beloved Mario Table. Peruse the spectrum of things that can be done and hamming and club have done very well. On computer monitor, I viewed most of Michael's extravaganza-laden shack and had to agree he as well as most us can participate in, virtually everything we did before the pandemic. In prediction mode, by summer he is confident we will be released to do "some stuff". Without regular meetings, there may exist a diminution in clothing sales due to lack of forums in which to preen. Activities we could not do, those we lament, can all be "fixed" during signs of normalcy. Here's to Michael & Nostradamus.

When it comes to money, to do what you want to do, sometimes it's necessary for an outside observer — read: XYL — to say, "I think we need to do this first". This can be likened to any management issue: sit-down with your family, figure-out what is important to them, be there for them. Use your time well and ask yourself: *do you really* need to do this activity? Mow the lawn or hire it out. Can you buy something as opposed to chewing-up your own valuable time? Can you just "skip it"? How are you going to use the weekly hours left to you? Here are guidelines:

Don't cheat on sleep time
Don't cheat on nutrition
Don't cheat needed medical care

However, even in lean times, there is always a way to get on a band with little money. It's the community we enjoy that proffers solutions, e.g., borrowing gear that goes unused, sold for a song. The only difference between having money and being buck-challenged, is ordering online for instant gratification, or commiserating if a desired item can be home-brewed, or built from a kit. Young Hams succeed best by making friends! Find more experienced hams, hang-out in their shack, pick their brains and don't forget: reading is an open doorway to the universe. If you wish to update your search methodology, go on the Internet. There exists most everything online. Go find it, remembering the net is a tool, never a crutch. Michael is a staunch advertiser for ARRL. They have everything. Not just books, either. Take the Technical Service {try our Resource Program}. If you can't locate something "Ham", at ARRL, it does not exist. Future frequency spectrum issues can be relegated to microwaves. Everybody who owns a transistor is going to be vying for microwaves. The real barrier to going forward in any facet of hamming is not money, know-how or gear. It is time.

Michael has thoughts on the impact of digital. Digital modes offer a way to reach states, lands, hemispheres otherwise unreachable. Digital will be enduring. Even CW can be enjoyed without the purist's passion for this first digital mode. Michael can't think of anyone smarter than our own Joe Taylor, and he feels someday, any mode will be able to occupy the tiny slices of spectrum FT-4/8, etc. need occupy today. Digital must evolve however, where it can be used for rag-chewing. Think of the evolution in ham radio: code was king until **AM** became "we need only half a carrier", thus **SSB**; digital still involves getting RF/EMF from transmitter to receiver and back again, and is in infancy. It will evolve to where we can have conversations. Add-in DSP, ADC, DAC and we are off into the unknown. It may not be, simply, going back to basics, or what we had; more than any guise with which we are familiar, communication will look different than it ever has.

In this vein, Michael is adamant that contesting — amassing points to "win — is not the true enduring feature of Amateur Radio. That satisfaction is left to having conversations [what Michael and I did to produce this enduring interview]. Yet, there are many differences between computer-conversing and face-to-face exchanges. The Conquest of Mars will not be official until Humans walk on the Angry Red Planet.

Spotlight cont'd...

Moonshots culminated in Neil Armstrong walking on the lunar regolith. There will always be a preferred place for people to meet. Michael cites Dayton as the zenith of perfection: meeting and interacting with people you talked to "only" on a radio, or never met. What is the nature of what we can't get or do not acquire on radio? Our universe is defined by what we know and think. Until you walk around the tailgates and go to exhibits, you don't know what exists. You can't know what you should be looking at. Walk through Dayton and you master the possibilities, in thought, dreams and commitment.

Always the forward-looking guy, Michael is content having access to Amateur Radio's robust history. His focus is on how Amateur activities will evolve. He's not gnashing teeth over how many enter our ranks, rather how do we make our most fabulous hobby more relevant today to those already joined to us? If we're going to be successful, it is not what we did but what we do. Volunteer organizations can't coerce people. We have to offer them things they wish to do. We have to provide the means for them to succeed in personal goals, commensurate with the organization's goals.

Since we use radio frequencies at the pleasure of the people – the supposed power that exists – we need to demonstrate, in real-world situations, we can provide what is needed, e.g. emergency. We have organization skills, logistics, vehicles for moving damaged equipment, etc. Amateurs can look at the world and advise others what they need to do to make things work.

Ham Radio is fun and it is sufficient reason to exist. Let's make it more fun! For the future, Michael would "like to see" an analog to radio shack: need it, go to it, buy it. Relying on what is seen on a computer monitor leaves something to be desired. Michael does not fear the future. There are more licensed hams today than ever. Will it evolve the way we want it to evolve? The future will exist. Who will mold it in the form we want?

We end with a personal invite to all who read this: If there is anything you want out-of or from the Packrats OR Amateur Radio, Michael's expertise is at your disposal. Contact him through any useable channel or mode, including a phone.

It is possible, however remote, he may not have the answer, but at least he'll know you asked the question.

REMEMBERING

| | | |
|---|---|---|
| Wilford "Willie" Jones, W3UMI | CHARTER MEMBER | SK 7 9 65 |
| Horace Deacon, W3AJF | CHARTER MEMBER | 3 10 99 |

**In keeping with the Packrat constitution requirements The following is a list of the BoD slate for 2021/2022**

If any additional Packrat would like to run for any position on the BoD Please Email the President of the Nominating Committee so we can add you to the slate.

The Election will be held in the June General meeting.

| | | |
|---|---|---|
| President | Bob | W2SJ |
| Vice President | Doc | W3GAD |
| Corresponding Secretary | Jim | WA3EHD |
| Recording Secretary | Michael | KB1JEY |
| Treasurer | Dave | W3KM |
| New 2 year term Director Bruce | WA3YUE | |
| New 2 year term Director El | K3JJZ (He rotated off this year but we convinced him to run for another 2 years) | |
| Director - holdover to serve second year | Jim | KC3BVL |
| Director - holdover to serve second year | Jerome | K3GNC |
| Honorary Director - holdover | George | KA3WXV |

The Election Committee George KA3WXV, Michael KB1JEY, Jim WA3EHD

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

Nibbles from June1971. Vol. XIV Nr 6
de K3IUV Bert
(*author's comments in italics*)

"**Our Prez Sez"**. Prez El, **K3JJZ** (*also editor at the time, and our current auctioneer*) noted his pleasure in accepting the January contest gavel for the club (*for top score in the country*) from Bill Dunkerly, **WA2INQ**, the ARRL speaker at the May meeting. He noted that both Bill and the Atlantic Division Director Connie Mac, **W3EPC** were presented with Packrat pins at the meeting. (*The Packrat Pin was a lapel pin crafted for club members. It featured the Packrat Rat symbol [the radio rat]. Few remain [I've still got mine]. Officers. Might it be time to create a new one*?) El noted this was the last issue before the June contest, and asked "What are you doing to help? (*Still a good question. He plans to be there this year - 2021, 50 years later, participating in the equipment setup*. *Will you be there*?)

**Nominations**. Nominations for Officers, 1971-72 were listed. While you won't recognize most of the calls (*now SK*), two familiar and still active names were Walt, **K3BPP** for Vice-President, and Ron, **WA3AXV** (now **W3RJW**) for Director (*50 years ago*!). (*Check next month's column to see who was elected*.)

**Hilltown 1971 Progress Report**. Bill Murphy, **K3ZSG** (now **W0RSJ**), reported on the preparations for the June contest operation, when the club would be operating from Hilltown. He noted that last year we missed the top honors in the country by only a few hundred points. This year the club wants to try for the top! For the last several months, the band chairmen have been lining up all the equipment needed, and laying out detailed plans. "Now it is up to you." "The very least any of us can do for the club is to get on the air and give the club contest points." (*His words are still true today. If you can't help this year at Camelback, dust off the rigs and provide some contacts*.) Band chairmen were listed, and included were Ron, **WA3AXV** (now **W3RJW**) for 6-meters, and Bert, **K3IUV** for 1296.

**Ladies Night Report.** Helen (Mother Rat, xyl of **W3SAO**, and originator of the club newsletter Cheese Bits) provided a detailed report of the 1971 Ladies' Night. She noted that **99 people** gathered together for an evening of fellowship and fun. Highlights of her report are shown below (*might stimulate renewed interest in a modern Ladies' Night*?);

Each lady received a corsage of pink carnations and a bracelet of stones from different countries as a souvenir.

The Prime Rib Roast of Beef prepared "as only the Buck Hotel can" was excellent.

This was also the 15th anniversary of the Packrats. The history in pictures and awards was assembled and displayed by Frankie, **W3SAO**. A collection of the gavels won in the last 10 years of the January contest was also on display.

Lee, **K3MXM,** assembled a display of member's QSL cards, together with

their pictures.

El, K3JJZ (*the Prez*) presented the awards for the high scores in the January contest. Each member scoring > 10,000 points received a beautiful Packrat lapel pin (*see my note in the Prez Sez entry above*). A plaque for the top score was awarded to Stan, **K3IPM** (*recently SK*).

The "Packrat of the Year" Award was presented to Bert, **K3IUV** (*that's me*). It still hangs on my shack wall.

A special award, "The Packrat of the Decade", was presented to Frankie, **W3SAO**.

**New Products of Interest to HAMS**. From Lynn, **W3NSI.** A 5-digit counter by Pagel Electronics is available for $295. Usable to 60 MHz, it used a 1 MHz crystal Oscillator as the time base, adjustable to the WWV standard. (*Sounds pricey to me.*) Heath announced the availability of a pre-scaler to use with their IB-101 counter. This will make the counter usable to over 175 MHz Cost will be about $100.

**AREC Report.** Submitted by Paul, **WA3HIT**. Paul was the EC (Emergency Coordinator) for the AREC (Amateur Radio Emergency Corps) in the Philadelphia area Since assuming that role in 1969, he worked very hard to build up preparation and participation in training for emergency operation. He reported active emergency nets are now operating on each HF band, as well as 6, 2 and 220. He included a discussion of the current activities and plans for a 24-hour monitoring service.

**Calendar**. Next meeting, June 16. The agenda will include elections and a guest speaker (Bob, W3MR) who will talk on International Radio regulations. July 21, first outdoor meeting will be the White Elephant sale (another Packrat tradition). August 8, the Packrat Picnic. To be held as usual at the Fort Washington State Park. Bigger and better each year. August 18, second outdoor meeting at the QTH of Bert, **K3IUV** (*I was there*!). Movies and slide night. And September 15, the annual Auction at the QTH of Dave, **W3ZD**.

**Membership.** New member Carl, **WA3DJF** was welcomed into the club.

**Swap Shoppe. By W3ZRR**. *(Always nostalgia. Now we use the club reflector.*): For sale by Mrs. DeRosa, a Hallicrafters SX-85 with Q-multiplier. $60. Wanted by Carl, **WA3BIV**, a copy of the instruction manual for a Gonset 2-meter Communicator. For sale by Herm, **K3GOZ**, a Gonset Communicator (*He should have gotten together with **WA3BIV***!) For sale by Mel, **K3DXC**, 300-feet of RG11/U. Price $10 (what a buy).

**Miscellany.** *I still didn't get any feedback on my April Fools offering. Did anyone catch it? Or maybe no one thought it was funny? How about a comment. A prize for the first responder. Postage for this issue was a single 8-cent Eisenhower stamp. (6 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**) and read the full issue scanned by **K3IUV** (me), and posted on the website by*

# Events

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

**June VHF Contest - Contest -** June 12-14, 2021. See http://www.arrl.org/june-vhf for rules and details.

**Firecracker Hamfest and ARRL Convention- Hamfest -** July 3, 2021. Harrisburg, PA. See http://www.W3UUu.org for details.

**Murgas ARC Hamfest & Computerfest - Hamfest -** July 4, 2021. Plains PA. See http://hamfest.murgasarc.org for details.

**Sussex County ARC - Hamfest -** July 18, 2021. Augusta, NJ. See http://scarcnj.org for details.

**CQ WW VHF Contest - Contest -** July 17- 18, 2021. Details to follow.

**222 and Up Contest - Contest -** August 7– 8, 2021. Details to follow.

**10 GHz and Up Contest (Round 1) - Contest -** August 14 – 15, 2021. Details to follow.

**September VHF Contest - Contest -** September 11-13, 2021. Details to follow.

**10 GHz and Up Contest (Round 2) - Contest -** September 18-19, 2021. Details to follow.

**EME - 2.3 GHz & Up – Wknd 1 - Contest -** September Date TBD

**EME - 50—1296 MHz – Wknd 2 - Contest -** October Date TBD

**EME - 50—1296 MHz – Wknd 3 - Contest -** November Date TBD

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

…. Wayback cont'd

***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**)

The British TV Show "The Secret Life Of…" had an episode on the "secret life of radio" many years ago. It explained radio, how it evolved and how its used. It's totally non-technical and fun.

This episode has since been re-mastered and it's posted on YouTube. It's about 30 minutes long.

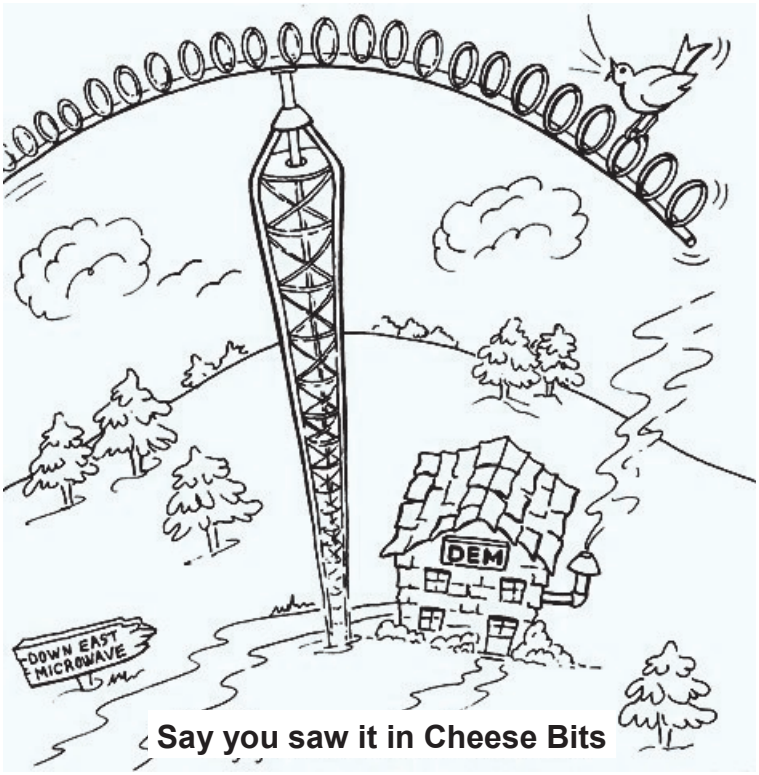
Find it at:
https://youtu.be/LMxate9gegg

**—W2BVH**

Cheese Bits
709 Lincoln Avenue
Cranford NJ 07016


**TO:**

# MT. AIRY VHF RADIO CLUB, INC.




Say you saw it in Cheese Bits