



CHEESE BITS

W3CCX
CLUB MEMORIAL CALL

ARRL
Affiliated
Club



Volume LXIII

September 2020

Number 9

PREZ SEZ:

I was thinking the other day about how much of what we do as a club is based on the many traditions the club has followed over the years. One might say “the tea we drink is steeped in tradition”. The themes of 6 of our yearly meetings are a good example: **January-** The January Contest Wrap-Up features a complete analysis of members scores and plans to make the next year's results even better. **February-** The Crying Towel where some members spin their tales of woe about the January Contest hoping to win the coveted crying towel... Owning one is considered priceless! **March** is our Homebrew Night featuring projects designed and built by fellow Pack Rats! **April** is ARRL Night combined with our Awards Night. ARRL officials are invited to attend and special awards are presented such as The Rover Recognition Award, Pack Rat of the Year, Most Improved January Contest Score, Mario Award and others. **July** is the Annual White Elephant Sale, an outdoor event held in recent years at the QTH of Bruce, WA3YUE. While bidding on a variety of radio equipment, *do not* scratch your ear or our “seasoned” auctioneer EI, K3JJZ will proclaim the item as sold to You! The **August** meeting is our annual Pack Rat Picnic held in recent years at the QTH of Michael, KB1JEY and what a host he is!

The club traditions continue...We even have a Sergeant at Arms who escorts prospective members out of the meeting room while the members cast their votes for membership. Another tradition is our Monday Night Nets on 50-432 MHz along with our repeater nets on 224.58 and the DMR 8804 Talk Group. The original nets started shortly after the club was formed many years ago between 1956-58. I am very proud to be a member of a club that has been guided by a legacy of traditions passed down from those who came before us. I'm sure you are proud also. Even Tevye, “The Fiddler on the Roof ” would be envious of our traditions!

This month's meeting program will be “The Anatomy of an N2DEQ Shack Automation/ Antenna Project”, presented by Mike, N2DEQ. The presentation details the amount of essential pre-planning needed to complete a project of this complexity and includes many good pictures.

I am excited to announce a new series by Phil, WF3W that will run in Cheese Bits. It is titled “Member Spotlight” and the spotlight will focus on *You* our members! The first installment appears this month as an introduction to the series by Phil. Have you ever wondered what life experiences our members have had and what paths our members followed on their way to becoming a Pack Rat? Stay tuned, and please

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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 set up 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

step up if Phil asks you for an interview.



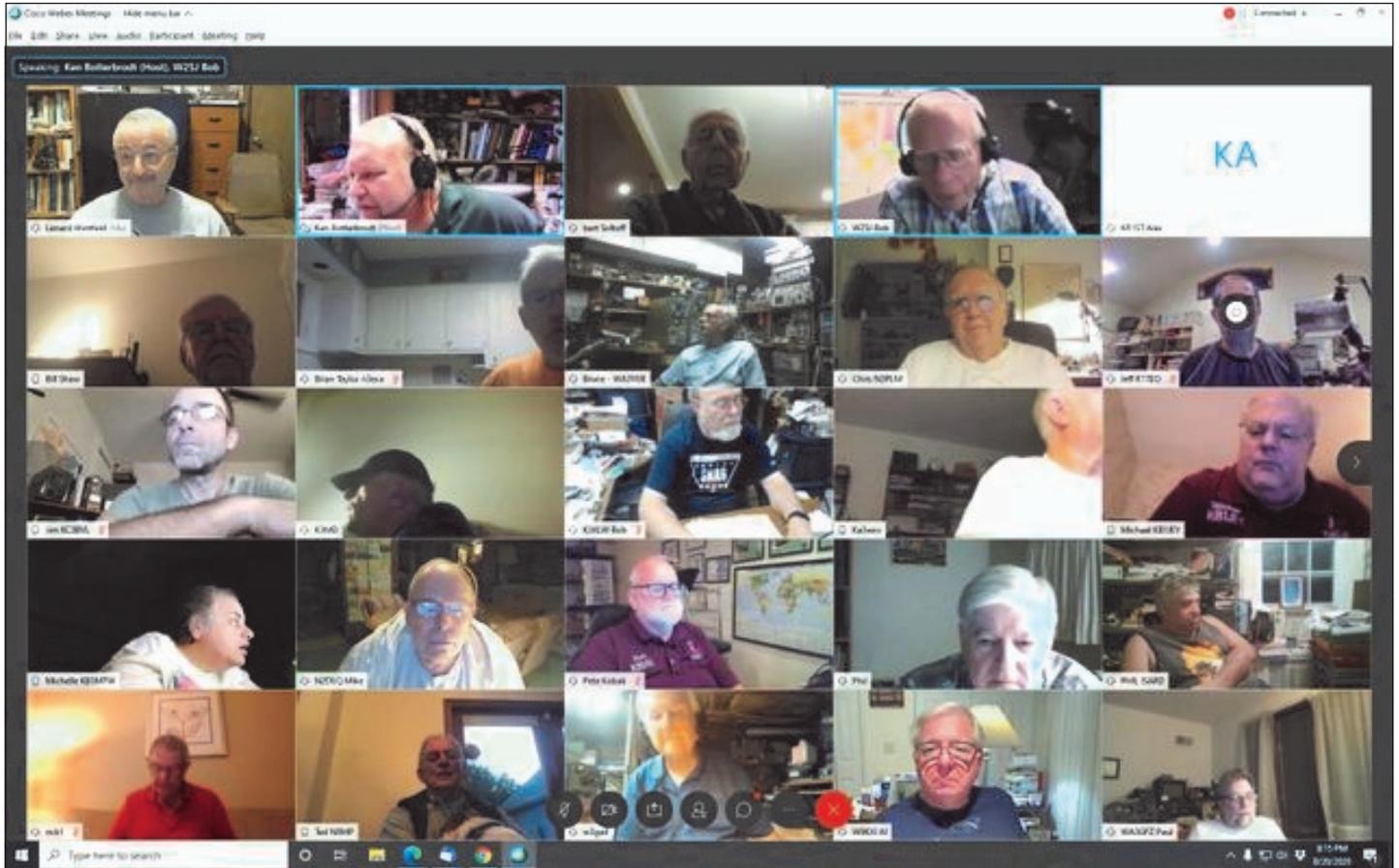
Operating fun:
The ARRL
September VHF
Contest is on
9/12/20 1800Z
thru 9/14/20
0259Z. Be sure to

work our W2EA multi-op station in the Poconos, and all club scores count in the club competition category. The 2M Fall Sprint Contest is on 9/21/20 from 7-11PM local time. Additional bands, dates, and times are listed under “Events” in this issue.

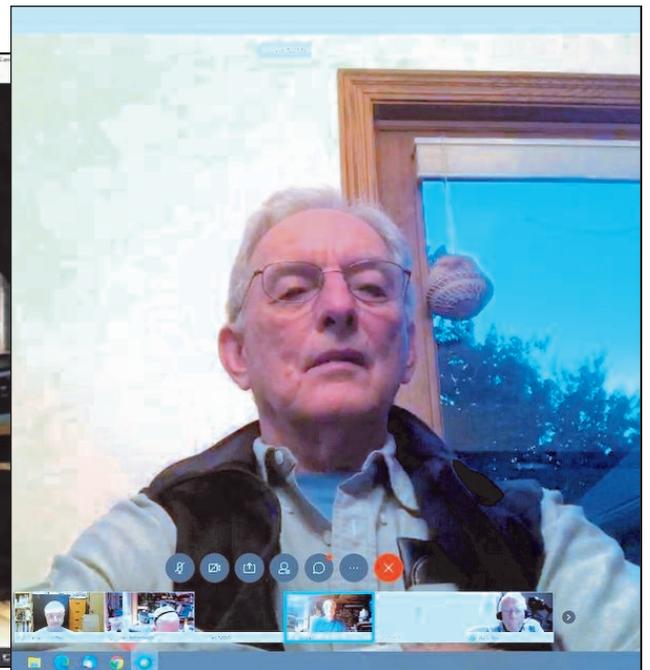
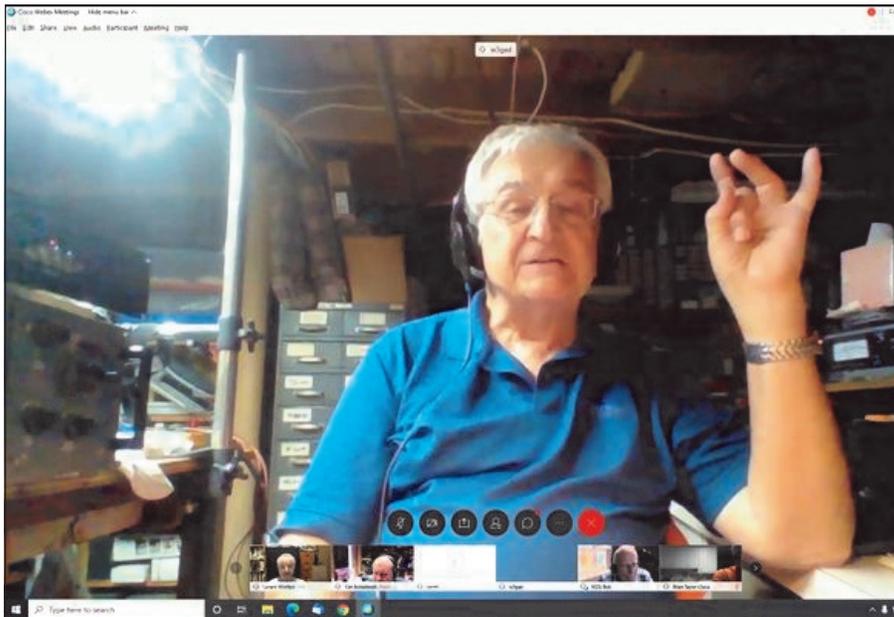
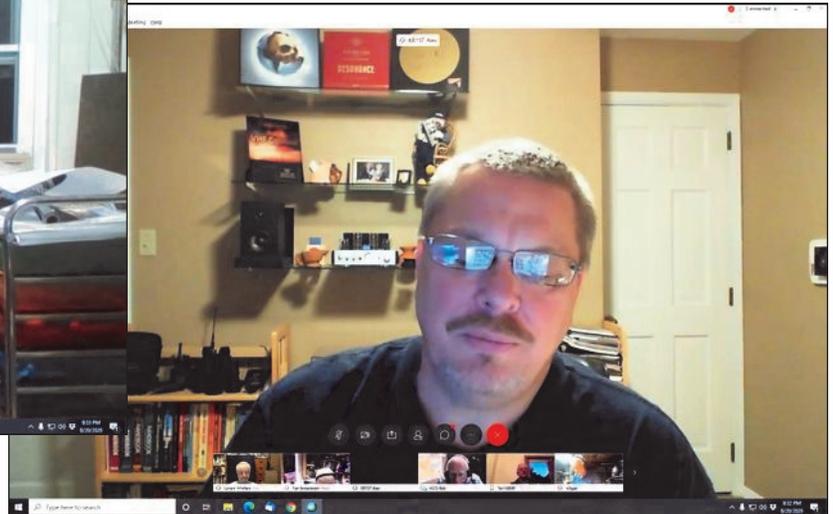
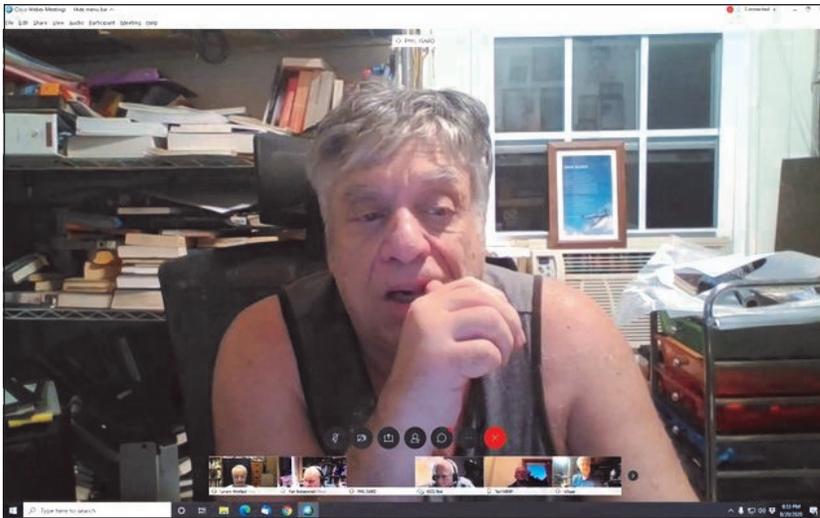
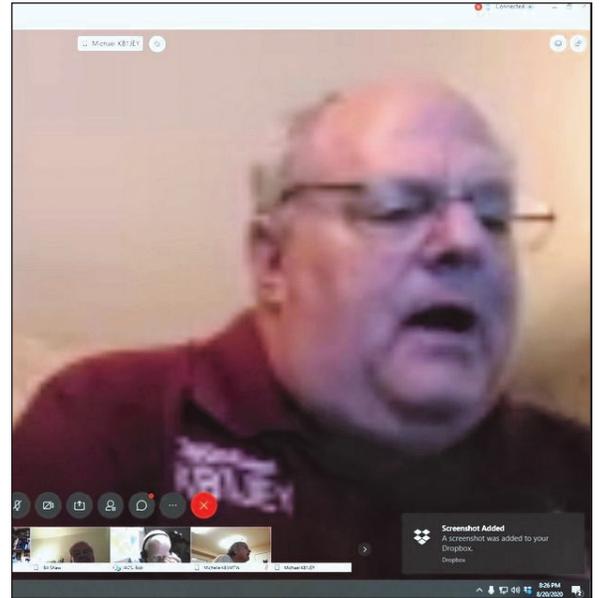
Meanwhile, finish a project on the bench, keep one ear “listening for the weak ones”, and the other on the “Magic Band”!

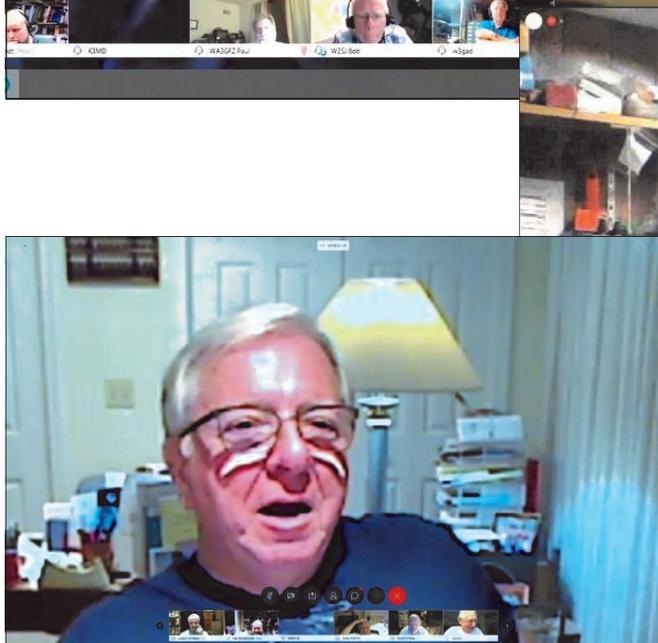
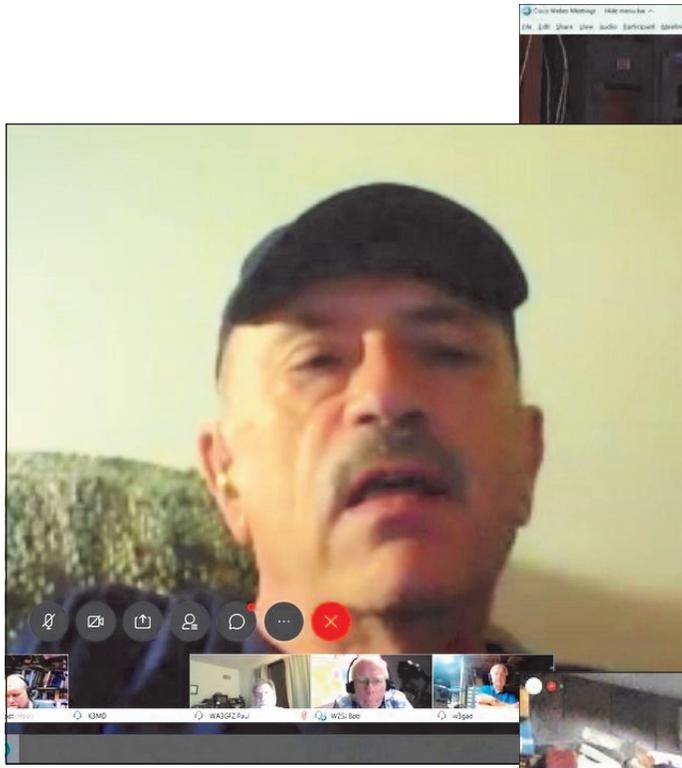
Vy 73,
Bob W2SJ

August (WebEx) Meeting Pics









WW2Y 2020 6 Meter Fall Sprint

August 23, 2020

Many thanks go to individuals of the Southeastern VHF Society for sponsoring the Fall VHF Sprints.

I spent about a week prior to this past weekend's 6m sprint looking for a portable location, somewhere in FN11. Why FN11? Ever since the multi-operator contest crews at K3UZY and K3YTL evaporated from existence nearly a decade ago, FN11 has become a rare grid square. FN11 is in close proximity to population centers inside neighboring grid squares that are located in the Mid-Atlantic States, Western New York, Eastern Pennsylvania, and Southern New England. At Red Rock Mountain, a summit located in Ricketts Glen State Park, Rob, N3RN has tried sustaining the momentum of post K3YTL efforts by having a scaled down "staffed" version, but he eventually gave up due to the lack of the critical mass needed for support to keep going forward. He still occasionally operates from home.

As of last Friday, I didn't succeed in finding a place to operate and I resigned myself to the fact I may need to use my station at home, which is plagued with RFI emanating from most critical azimuth headings. I also have a hill's base very close to me rising 160 feet. To make matters worse, there are dense tall trees towards the southwest, attenuating signals further. If I were to operate from home, I was planning to set up the station plus a portable antenna mounted on a painters' pole attached to the 2nd story balcony.

So it's Saturday at 9am and my contest juices are flowing. I begin to have fleeting thoughts about acting on a last minute effort to operate from somewhere else that would be more interesting and gratifying than being at home with a limited setup. A place I really admired since my youth was Wapallowpen Creek gorge, near the town of Berwick. There I enjoyed various recreational activities. They included trout fly-fishing, hiking, swimming and diving beneath waterfalls, scrambling up the old DuPont black powder mill structures scattered alongside the creek, and camping by the rushing water. My grandfather, a civil engineer on my mother's side of the family purchased this property from DuPont approximately a century ago as he planned to build a hydroelectric dam. It never came into existence due to the Great Depression, WWII, and financial troubles.

There's a place I've driven by every time on the way to and from Wapallowpen that is off of Rt.80, which is elevated relatively high compared to the valleys below and I wondered what it would be like to operate VHF from there. I thought to myself, what do I have to lose by asking the owner for permission? It's now, or never. At 10am, I called the owner to cordially ask him if it is okay for me to set up the mast and antenna near my car and operate my radio for the sprint? He asked me "Are you going to trip the circuit breaker?" I told him no, even though I was planning to bring my Acom amplifier! He said "Yes you



can do it.” I was shocked and elated (no pun intended). Then I thanked him.

After we hung up, I literally scrambled quickly as if I was experiencing an adrenalin rush. I threw my Penninger “Tipper” mast including a rotor, antenna, radio, laptop, amplifier, portable tables, associated radio stuff, numerous bottles of drinking water plus snacks, and my clothing bag into my car. I was flying up and down the stairs countless times once again! (Similar to a quote coined by Rob, K2WI who said two decades ago that “My feet never touched the stairs on the way down to reset a circuit breaker that had tripped a couple of minutes before a major 160m DX contest!).

I hit the road at 12:15pm and arrived at the site by 2:30pm. Like my trip to FN24 a month ago, it was 90 degrees and muggy once again. I’m outside with the sun beaming billions and billions of photons down on me while setting up the mast and antenna and scoping out the available guy rope tie points in order to avoid local pedestrian or vehicular traffic. I erred on the side of caution for obvious reasons knowing I most likely want to return, especially on good terms!



All of the gear was ready to use by 6pm and I quickly ate a sandwich and jumped into the shower to get cleaned up. At the start of the sprint, my first contact was using SSB with KD4AA in FM17. Initially, that was a flushing moment of encouragement, but the activity really became light and very slow for the rest of the sprint. I was lucky to work someone in my own grid, N3RN. Thanks Rob!

After half an hour, it seemed as though everyone got sucked into FT8's event horizon once again due to the enormous tug of its gravitational well and they never returned. (Just like a super massive black hole in our own galaxy's center engulfing all the surrounding matter in its wake).

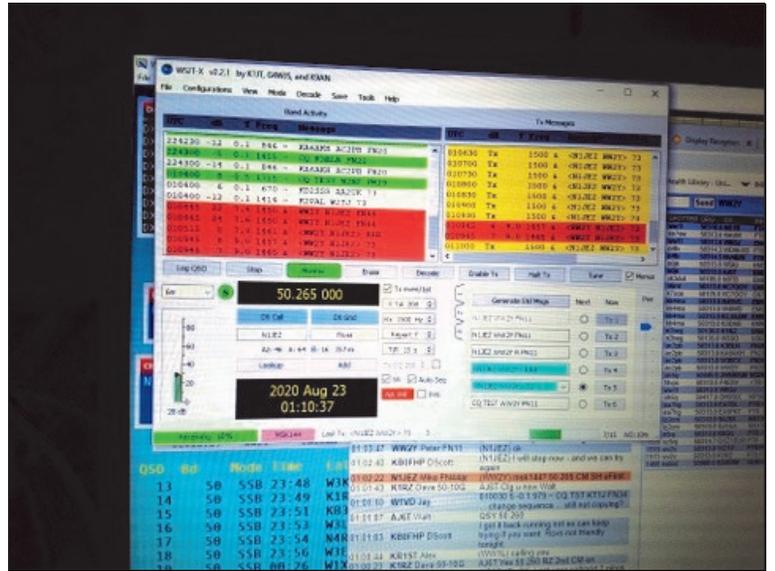


I committed myself to hammer away using SSB and CW as much as I could and to resist the temptation of FT8. I succeeded. I only worked one station on FT8 during the entire time. However, I did manage to work several stations on FT4. I'd wish people would wake up to its benefits. I guess it's hard to overcome the inertia of the masses. They sustain the momentum once started, only to have the critical mass disintegrate and eventually scatter.

At about 3.25 hours into the sprint, I was pleasantly surprised to hear a healthy amount of meteor scatter activity while using MSK-144 mode and I was hearing decodes from multiple stations at once. I

thought to myself this is cool and began to jump into the fray. I only worked three stations, but it was fun. I must mention Jim, KO9A who has a really acute set of ears and he runs 100 watts for an easy contact. The curious thing was that several big guns seem to be not hearing me after the initial exchange segment of the contact and never completed. Alex, KR1ST and others experienced the same phenomenon.

There were a fair number of the usual suspects that were absent during the sprint. This is a continuing trend and it's accelerating quickly. I think now is the time for sponsors of all VHF contests to act in restoring and promoting activity ASAP. I could imagine that the commercial interests are licking their chops only to strip our precious radio spectrum away from us. Especially, when there are several 3 KHz channels out of 4 MHz that are active on 6 meters, for example. That would really be a significant bummer if we sit back and do nothing! There's so much at stake and we can turn this around if we take action now.



How about having separate VHF contests that are analog and digital specific? Or, how about creating dedicated FT8/digital VHF contests? Could you imagine introducing SSB, CW, FM (10m), and every digital mode in a single CQWW or ARRL DX HF contest? It will disperse activity so much that it would lose its critical mass and people would lose interest. I feel this is the unintended consequence for current VHF contests. Another solution is to allow QSO points for each mode, similar to the ARRL 10m contest, IARU radio sport HF championship, WRTC, State QSO parties, etc. Possibly, a knowledgeable person or a group of brilliant individuals draft up a better solution to solve this festering problem from getting worse. Let's put our creative minds in gear.

73,
Peter WW2Y

Some More Recent 1296 MHz QSOs at AA2UK

8/9/2020

Well having finally gotten my power back around 1AM this morning I thought I'd try some JT65C on 1296MHz. I worked Phil N8LRG who runs an ICOM IC9700 at only "10 watts" to a pair of 55 element loopers with an external LNA and Gary KE8FD who runs an ICOM IC9100, a single 55 element loop Yagi and 60 watts with no LNA. The prop mode is Tropo but not a full fledged opening. Some might call it brute force but obviously at the power levels of the Ohio stations not so. It's not aircraft scatter but occasionally I see short enhancements that may be caused by AS. You need a stable LO. This is critical. DEMI transverters need GPS lock with an ApolLO local oscillator for stability.

P.S. Worked KE8FD again on 8/25/20 23cm.

73, **Bill AA2UK**

Arecibo Dish Fail

About a 100' section of the 1000 foot Arecibo dish was destroyed when one of the support cables holding up the 900 ton feed collapsed and hit the dish. A brief YouTube video showing some of the details can be viewed at <https://www.youtube.com/watch?v=4V3VCt24tkE>

—**W2BVH**

Part of WW2Y's article in the August Cheese Bits is excerpted in the ARRL Contest Update on the internet, along with a hyperlink to the August issue. See <http://www.arrl.org/contest-update-issues?issue=2020-08-19>. Congratulations Peter!

—**W2KV**

NN3Q/R 222 AND UP CONTEST ROVE

The August rove was planned for two grids, and possibly a third: #1 stop on the rove was Hogback FM08us at 3400' asl in Shenandoah National park, Virginia; #2 stop was Blue Knob Ski Area FN00rg at 3100' asl; the possible third stop would be FN11sa Mount Olympus at Bloomsburg University 941' asl. That looked like it could be done, however with long separation distances operating time would be cut, night driving was a factor and I wanted to limit hours spent with bright lights in my mirrors.

The NN3Q/r 222 & up rove for the contest started with the idea to install a new linear actuator on the microwave mast. At about 45 pounds or so (dish, antenna array, micro box, cables, and mast) it was becoming difficult to raise and pin the mast by myself. Probably a design flaw but normally with two operators it is not all that difficult to do.

After some searching I was able to procure a linear actuator and the necessary aluminum, and mounting hardware to manufacture the two mast attachments. The micro array is mounted on a Ham M rotor and uses an aluminum outer mast and a steel inner mast. This allows sufficient mechanical support as well as providing the pinning capability we need to rotate the array as well to stop the windmilling effect when driving.

The project was finished and the actuator worked to raise and lower the mast. While I only got 16" of movement, it was sufficient to get well above the roof of the rover van, as well as stretch out the cables. Longer actuators can be used but re-engineering the entire micro array would be needed..

On the morning of August 1 with the van loaded with water for washing hands, an electric Coleman cooler and the drinking water cooler all set and my final check completed is when the first whoops of the trip happened. While opening the rear door I somehow caught the electric control cable for the actuator and in pulling on the cable dislodged both connections to the Anderson power-pole. I was set to leave in 20 minutes (or be late for Hogback) - fixing the connector was not going to happen, so two cables each with alligator connectors were put into use. That **worked** for the entire contest.

On the road to the National Park entrance no problems; Climbing the mountain in Shenandoah National park is quite an experience for rovers. Overhanging tree limbs often require maneuvering the van to the opposite lane, and on blind curves that is not at all a good idea, so our ascent was slow and cautious (trying to do this at night would be a disaster in many ways).

Arriving at Hogback I was greeted with a very heavy layer of clouds. Actually I was in the clouds. Never before while operating have I had a cloud drift through the rover van! I am sure the microwave propagation was compromised with the constant presence of clouds.

The operation went well and contacts, and points were being made. I did make it to FN31: K1TEO was the longest QSO. Operating went well , although I thought activity was down.

At 1830 EDT N9ZL/r arrived on site, we quickly ran the bands and I took off for Bedford, PA as my overnight.

What was supposed to be a 2.5 hour trip turned into a four hour journey. Heavy rains on I-81 north slowed traffic to a crawl as the cell seemed to follow us for many miles . Exiting I-81 at Winchester, VA for the drive up US 522 to Hancock, MD was again fraught with rain and more rain..So much rain the little town of Berkeley Springs, WV had street flooding and road closures. About a mile North of town I came to a complete stop, in the rain, as the road ahead was closed due to an accident. Stopped for 45 minutes it was a good place to have dinner which I had in the cooler.

The drive to FN00rg was easy and dry; at the ski lift area I quickly parked the van on the top of the hill. At times I was in the clouds and at other times I could see 50+ miles. Microwave propagation changed with the accumulation and dispersal of the clouds. This site works especially well in an arc from North to Southeast.

The 2.5 hour drive to FN11sa up I-99 to I-80 past Happy Valley was easy and on cruise control for most of the time. I set up in a wheat field just behind the University maintenance buildings and in 45 minutes I had I worked W3SZ, and N3RG as high in the bands as we could go.

SUMMARY:

600 mile rove traveling through four states.

91 Q'S 77,000+ points, highest single QSO point was with K1TEO 3456.100 5,170 pts

I now feel running to FN11sa from FN00rg at the end of the contest was not the best tactical decision. I now realize I probably lost at least 10,000 points in doing so. But FN11sa was never activated and while I did not take advantage of the incredible open shot to the NE, past experience tells me this site has value, but do not look South for points.

Hogback may be better to do the second day, as you could operate long and not have a nighttime descent- it is pretty dark! So: do Blue Knob day one, and operate longer, as the night drive is not bad and the hotels are 30 minutes away,

I really wanted to operate from a third grid but that thinking and strategy does not work in this contest. Best strategy is stay high and loud!!

More input for the learning curve.

I did not have any ambition to work FT8 on 222 Mhz. What is the point of working stations with a low points value in a distance contest?

It looks like I have the Gemini 70-1k back online after putting in a new LDMOS device (BLF188XR) and replacing the shorted matching capacitor (let's hope I didn't just jinx myself). I'll be trying it on the net on Monday. I'll keep the power at 500W for now to see how it holds up. A special thank you to Dave, W2KV, for his advice on what hot plate to buy and the tips on soldering, and answering all my questions. I definitely learned some new skills with this project!

This is the Tower of Power as it stands now. The top amplifier is a 300W VHF Design for 1296 that still needs an enclosure. Next will probably a 222 amp.

73, Alex **KR1ST**



Move Preparation at WA3DRC

Antennas were supposed to come down today but it rained. So instead, I took the shack apart. This is why you all heard me in the past and why I will be silent for a while. It feels sickening to take all this working stuff apart! Oh yeah, there are 3 more microwave stations not shown.

73 for a while and see you all from fm28as,

Ed WA3DRC



222MHz Moon Mission 2020

Rick: "Did you work K5QE on 222?" Al: "Not these newcomers. I worked a bunch when we were on 220MHz." And so started our mission as Al, K2UYH had been asked by several 222MHz ops across the country to provide them with a 222 EME QSO to increase their Worked-All-States totals on that band. It appears that several hams, having acquired the 500W to 1.5KW amplifiers needed, have been able to work each other on meteor scatter and EME using 1, 2 or 4 long Yagis. Others have used their big dishes. In mid-August, Al put out a request for someone to supply a 222MHz station with at least 100W to operate at his QTH and use his 28' dish. I thought about it for a few minutes, realizing I had the IC375A, a 220-225MHz multimode rig, a remote, RF sensed preamplifier and a 100-watt amplifier, with a built-in preamp. I was able to purchase a cable to fit the accessory socket of the IC375A so that the Plug-and-Play Rigblaster would work with the rig and my computer. Just enough to be able to make some JT65 EME QSOs with Al's big dish.

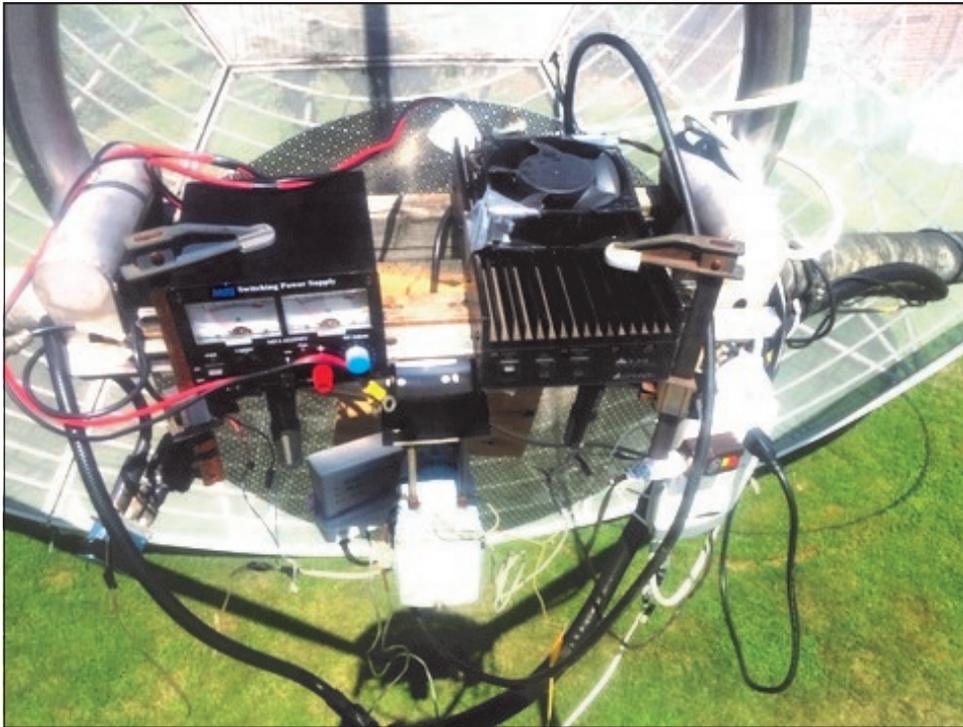
I spoke with Al and we made a plan to operate on Friday, August 21st as the moon would be visible from 9:30AM until 9:30PM. The only problems would be that there was tree blockage of Al's dish at moonrise and somewhat at moonset and there was no antenna feed for that band. I had a 3-element homebrew Yagi that could be used, but Al set about constructing a full-wave loop feed and reflector which he mounted in his dish polarization rotor. I had to acquire a 4-prong Jones jack for the power to the brick-amp as I'm sure that the one that it used had already been taken to our home in Florida. The rigs I had here were stored with my daughter.

Here is why it is great to be a Packrat: within hours of posting a request for the Jones jack, there were six offers. I picked up the one from Gary WA2OMY and then headed to WA3YUE's QTH for Bruce to check out the amp. Not only did he validate the drive and the output of the rigs, but he also improved the Jones connector with 10-gauge wire for low voltage drop with a 22A load. He also lent me his 35A Astron power supply to be sure we had enough juice. He also threw in an extra AC power cord for the rig and a patch cord for connecting the rig and amp. I packed everything up and headed to Al's on Friday morning and we set things up. He had already mounted the loop feed. The preamp was RF sensed to 100W and that was placed at the feed. The rest of the gear sat on the desk at the main operating position, with the Astron on the floor. We were getting plenty of gain and even with the dish turned away from the beacon, we were hearing it at S7.

K7ULS was anxious to work us as he has a KW and a long Yagi with AZ-EL steering. His shack is in a trailer that is air-conditioned, but with the amplifier going full bore using JT65b for many cycles, the rig and the trailer get hot. We decoded him multiple times, however he was unable to see a trace from us. We were



able to exchange reports with N0AKC next, and then worked W4ZXT. Many of the decodes were as strong as -16, but with our limited power the other stations reported decodes as low as -30. We tried to contact W5ZN over an hour and we copied him almost every period, but he couldn't get a good decode of our signal. We contemplated how we could improve our output and thought that having the brick amp closer to the feed would be useful, but we would need a PS capable of supplying 22A close to it. One of Al's engineers at work volunteered his MFJ supply and we planned to use it the following day. On the other hand, I put out a request on the reflector for any other higher-powered amp, and that call was again answered by WA3YUE who offered an FAA 300W+ amp. Not only did he offer it, but he tested it, wired it for 220VAC and set up all the cabling for the transfer relays. I left Al's at dinnertime, and as the moon set he was also able to work KL6M and K5QE.



I picked up the FAA amp at Bruce's and drove to Al's. By the time I arrived, he had already mounted the switching power supply and the amp on the feed ring, just waiting for me to make the connection between the two. We tested the set-up and noted that with the PS set to 13.8V that the amp was drawing only 15A. We proceeded to set the dish to track the moon and easily decoded K7ULS who was again calling us. Despite several cycles of calling him, we were not seen or decoded. I was somewhat concerned regarding some of the connectors and cables we were using to complete the set-up and how small losses might have eaten into the power. Al went up to the feed again to do some measurement and testing.

Somehow that power measurement

did not appear to be as robust as expected, although the Bird slugs being used may not have given us reliable information. At that point, I noticed that the receive noise had dropped, and the S-meter was at zero. Further testing showed that the line supplying 12V for the preamp had somehow failed, and with the power test transmissions, the preamp was defunct and likely blew its device. At this point it was time to pack up and go. I have now had the experience of operating on 6 EME bands with my own radios, using Al's dish and feeds for 222MHz and 903MHz. I consider that mission accomplished! **Rick K1DS**

KA2LIM 10 GHZ CONTEST REPORT

10GHz Sunday afternoon outing from FN12of.



This is my recently completed portable 5&10g setup, 3W on both bands. It is pointed at K2UA – Rus, who was in FN12fv, we completed on CW and then worked each other on SSB at 97km.

Here is the horizon that I was looking at toward Rus. Also tried with VA3TO in FN03an. Heard a bit then faded away – no contact.



This is the horizon due West toward EN91ov where K8ZR was. Nothing heard.



This is the horizon toward W3EKT in FM19lg and K1RZ in FM19jh did not complete. Beautiful clear day, got hotter as the afternoon went on. I am pleased with this portable setup.

Ken KA2LIM



Minutes of the Very First Packrat Meeting

Lenny, You might find the attached interesting. It is a scan I made of minutes of the very 1st Packrat meeting, in 1956. 64 years ago. Don't ask me how i happened to have it!! 73, Bert, K3IUUV

MINUTES OF ORGANIZATION MEETING MAY 15, 1956.

On the evening of May 15, 1956 a group of Hams met at the QTH of Oscar Jacoby, W3FSC, for the purpose of organizing a V.H.F. Club.

After serious discussion and the views of each Ham present taken into consideration, the following principles were adopted.

- 1) Membership shall be by invitation only, and a limit to be set.
- 2) To qualify for membership a Ham must be active on the V.H.F. bands, 2 meters and up.
- 3) The purpose of the club shall be to promote interest in V.H.F. activity and improvement of existing equipment.
- 4) To help one another, join in any club sponsored event 100%.
- 5) The club shall meet once a month.
- 6) The club frequency shall be 144.2 MC. and members will be provided with crystals.
- 7) W3IBH was appointed President and W3SAO Secretary.

CHARTER MEMBERS AS OF MAY 15, 1956.

W3CL	W3FSC	W3IBH	W3SAO
W3CPT	W3HWV	W3NKD	W3ZEY
W3DHH	W3HYO	W3RZU	

Refreshments were provided by W3IBH and W3FSC.

Free will offering collected \$4.50.

Respectfully submitted by,
Francis D. Brick, Secretary.

New York Broadcast Station WOR: Some History

From the Podcast "Breaking Walls: History of American Radio Broadcasting"

The WOR Radio station, 1922.... According to FB member Tom Ray, "WOR doesn't stand for World Of Radio... It was the call sign from a ship that was turned in the day before Bamberger's went to the then Department of the Navy to get a license. It was turned in from the Orient Line - if anything, the OR stood for Orient Line.

I'm the former Director of Engineering of the station and know the history. When the station was sold, I found a whole boatload of documentation dating back to this time period. Among them, the licensing documents. That transmitter is most likely an early Western Electric (WOR signed on with a DeForest transmitter, then bought a Western Electric because, apparently, the DeForest sounded pretty bad). The other equipment is most likely Western Electric - and some could be homegrown.

There has been much speculation over the years as to what WOR stands for.....World Of Radio, Women On Radio....I even had someone from a foreign country write me asking why Americans are so eager to go to war that we have a station named WOR. Unfortunately, it's just a simple "this is what we were given". Incidentally, WOR is the only NYC radio station to retain its original 3 letter call sign."

Sent to the Packrats by Bert, **K3IUV**. The Podcast is at <https://www.facebook.com/groups/TheWallBreakers/>



Just wanted to remind you that Mark Hinkel - WA3QVU and Paul Ceglia - N3TMX have been conducting ham radio swap meets Sunday nights on the Penn Wireless frequency 146.790 (-), pl 131.8 at 7 pm. A lot of the equipment is fairly new as several club members buy stuff then either tire of it or find something better. It is followed at 8 by the PWA tech net. **Note this week I will be hosting it. Come say hello and maybe buy or sell something.** 73 **Michelle KB3MTW**

ARRL New CEO

The ARRL Board of Directors has elected David Minster, NA2AA, of Wayne, New Jersey, as ARRL's new Chief Executive Officer, starting on September 28. He is an active, enthusiastic radio amateur who is extremely knowledgeable about many aspects of the hobby. Details at <http://www.arrl.org/news/board-of-directors-elects-new-arrl-ceo-david-minster-na2aa>.

Member Spotlight!



Artwork by Lexie, W2SJ's granddaughter

Hi, I'm Phil, aka the **WF3W** Phil, and I welcome all to our new series for Cheese Bits, "Member Spotlight".

I will be writing this series about You, the members of our club! The following will give you an idea of what I envision doing. The driving force is my passion to explore things many of us do without knowing about each other and our individual approaches to our mutual radio interests.

I will start-off this feature, pointing-the-way as it were, into my thinking. I'm trusting I can convey my excitement and need-to-know the histories we are about to learn.

Because broadcasting has been part of my past, I'm going to quote my first hero-of-news ethics and purpose, Edward R. Murrow:

Just because your voice reaches halfway around the world doesn't mean you are wiser than when it reached only to the end of the bar.

This aphorism had nothing to do with Amateur Radio, of course, but it illustrates my main idea, viz., Amateurs occupy a unique position in the world of high-technology, because there are so many venues which we can project ourselves into, or onto, the entire globe. Since the essence of hamming is communication - above, below or over *the noise* - *when we are heard, we should attempt to say something of substance, be it education, facts, opinions or just explaining the incredible reach of our most fabulous hobby's history.*

My first, and continuing, Elmer, is a Pack Rat first-generation Ham, viz., Ralph, WR3P; and he is a good friend. Ralph's retroactive romps in Hamming, include his declaration that his technical prowess and knowledge, stream through his life, in the guise of the river of Ham Radio. How can a "simple" hobby be so rich & robust? Because it calls on all of us, to grasp skills.

—the how-to-do of our world's wonder-leader, and the power & fun of electronics. From that base gushes a spring so sweet and refreshing, it compels us to drink of its history, in preparation for the competence required to realize our future.

Recording "oral history" is a major thrust of the Library of Congress' vast warehouse of Americans being, building and "doing" this institution we call our culture, our society, our country. No less important is our history- as well as our conjoined future

— to facilitate a level of interest, fascination and wonder, a living, integral glue binding every Ham to the universe which is Hamdom.

The greatest question in today's Cosmology

—study of the universe — is its speed of expansion. The most compelling question in the universe of Amateur Radio, is how fast, and to where, we are expanding, beyond today's horizon. Is it a future in which Hams are born to explore new realms? Will Hamming be, still, a vanguard into the unknown, the possible? Any consideration, and hope, for our future relevance, must be rooted in the foundation laid by

our predecessors. A universal rotator, pointing our way *out there*.

Perhaps selfishly, I wish to embark upon a personal journey through this patchwork of genius. There should be a higher, practical, purpose, to walking paths of our past. Therefore, I encourage you to ask me to make the journey on your behalf. My efforts will make visible, the invisible web which glues together these singular legends, fables, myths, tales, woes, triumphs and romance, ensconced in stories of, and by, the Hams who thrived, having lived it, created it, made it happen.

And what better jumping-off platform than *The Pack Rats? Ourselves, bound together, more tightly, by a similar past, similar goals, similar hopes. We should enjoy more & more of each other by knowing "the other's story". But why our pasts? "To prepare for the future, there is nowhere else to look" [with apologies to James Burke, Northern Irish science writer and historian].*

There are over **113** Pack Rat stories in the RF realm- Yours, should be one of them

— Perhaps, next!

Who am I to be so Bold?

I have produced TV & Radio, in the roles of interviewer, writer, editor, producer - even did modeling when I had what could be laughingly referred to as a figure. I co-produced - with another Isard - Jerry Blavat's TV show, on Channel 29. I started a radio station at Temple U's Ambler campus, where I did everything. I also had to sweep-out the place.

I helped John Gerren, at WCAU-FM's oldies station, build rock & roll into the top of the ratings' sweeps, in Philly. And they asked me to help sweep-out the studio and offices also!

73, **Phil WF3W**

Loss of the 3GHz Ham Band in the works

Rumors of the demise of the 3456 band are apparently true. However, FCC spectrum auctions, legal review and challenges, and other bureaucratic processes typically take 3-5 years before the spectrum actually changes hands. The clock starts ticking in December 2021 so start working on your VUCC award plans while there is still time! Also: The hype over 5G wireless is spawning an endless stream of proposals by every potential and wannabe communications company across the globe - all lobbying for additional bandwidth from 2.5 GHz to 60 GHz.

DOD Agrees to Share Midband Spectrum for Commercial 5G

The Trump Administration is making 100 MHz of midband spectrum available for FCC auction by December 2021, according to the White House, and use by commercial 5G providers at full power ASAP.

White House and DOD officials said Monday (Aug. 10) that they had identified spectrum between 3450 and 3550 GHz currently used by DOD for key radar applications, that could be freed up quickly for sharing with commercial 5G without sacrificing national security or military uses, specifically critical radar for air defense, missile and gun control, battlefield weapon locations, air traffic control, and more.

The Administration will work with industry on the sharing regime, which will require ongoing coordination. Full Article at: <https://www.nexttv.com/news/white-house-dod-id-midband-spectrum-for-commercial-5g-auction>

—Phil **WA3NUF**

The Wayback Machine In CHEESE BITS, 50 Years Ago

Nibbles from September 1970. Vol. XIII Nr. 9
de K3IUV Bert
(*author's comments in italics*)

“Our Prez Sez”. Prez EI, **K3JJZ** thanked the chairman, all the committee members and the rest of the group that pitched in and made this year's picnic a great success. The weather cooperated. Ernie, **W3KKN** provided a sack of peanuts for the scramble. Arnold, son of Lee, **K3MXM**, and Mark Zimmerman, son of Dave **W3ZD** did a great job as game helpers and Judges. (*Did you know that Mark Zimmerman is still a missionary Dr. in Nepal. Dave would have been very proud of him.*) EI also thanked the companies and individuals that contributed prizes, and asked the members to show their thanks by patronizing the suppliers. (*They were listed later.*)

ARRL Bulletin NR 281, 7/16/1970.

Amateurs using 6 meters were asked to look for OX5AP, operating from Thule, Greenland. He will be making 5-minute transmissions on 50.15, from 2200 to 0200 GMT, and will listen for 6-meter signals in the five minutes after each test. Reception reports or two-way contacts should be reported to the ARRL. (*I don't recall if any contacts were made.*)

ARRL Bulletin NR 283, 7/30/1970. The new FCC fee schedule for application and licenses was adopted, effective on

8/1/1970. New, upgraded, or modified amateur license fee was raised to \$9. on 8/1/1970.

ARRL Bulletin NR 285, 8/13/1970.

ARRL is seeking additional volunteers to become members of the Intruder Watch. The existing team has been very successful in monitoring intruders in the Ham bands and having them removed. More help is needed.

Calendar. September 6, York County Hamfest. September 9. BOD at the QTH of Doc, **K3GAS** (No Covid back then). September 13, SJRA Hamfest at Molia Farms, in Malaga, NJ. (*This was a well-attended annual event, with lots of goodies to be found.*) September 14 – 18, Amateur radio week in PA. A large display was planned at the McDade mall in Glenolden, PA. The three Armed Forces Mars groups will have exhibits and operating stations. A Teletype link was being set up to Washington, to handle traffic. And last, on September 16 the Packrats would hold their annual auction at the QTH of Dave, **W3ZD** in Warminster. Always a fun time as are our current auctions (*BC, before Covid.*) Also announced was a resumption of code practice classes, sometime in September. To be conducted by Ralph, **WA3FOF**.

Membership. New member: Ron Whitsel, **WA3AXV**, Churchville, PA. Ron is now an official member of the 50-year club. (*Clock?*) Visitors at the last meeting included Bill, **W3VIR** (recently SK), Lorraine Weisman, xyl of

the prez and Harriet Soltoff, my xyl. Application for membership was made by Tony Sousa, **K1SFF/3** in Ottsville. There were 11 visitors total at the last meeting.

2 Meter Activity. **W2EIF**, Joe, reported lowered summer activity. His schedule with **W8DGF** in Cleveland was suspended until mid-September. The Perseid meteor shower (August 12 – 13) were a little disappointing, but contacts were reported into Iowa, Wisconsin and surrounding states.

Technical Topics. “Using a high Z mike with the ‘Carfone’” was contributed by Randy (then **WB2SZK**). *(The Carfone was an FM rig used in taxicab service. Produced by both RCA and Motorola, a number of them were surplused from the NYC taxicab fleet. Using a 5894 driver and 5894 final, they were easily adapted for Ham use, and many were put into service by the Packrats. I used one for many years to run the 432 net. I’ve still got at least one in the shack, if anyone wants it!)* Randy’s article gave details and a schematic on the mike circuitry modification. Also contributed by Walt, **K3BPP**, under Hints and Kinks was the suggestion to wrap a strip-heater (*normally used for downspouts*) around your rotor, to keep it from freezing in the winter months.

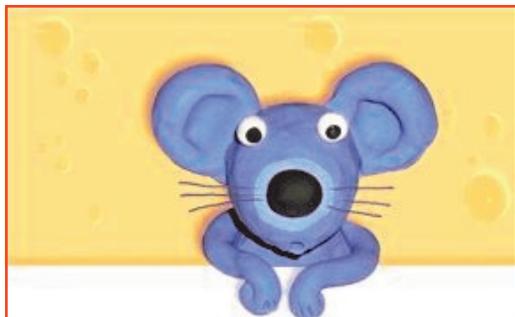
The Avalon Report. Here was a detailed description of the clubs ground-breaking effort in preparation for the Rodanthe expedition. A lengthy article,

I recommend you read it in its entirety, on the **W3CCX** website under the Documents tab. But here’s a synopsis. **K2UYH**, Al, and **K3IUUV**, Bert (that’s me) suggested a 1296 expedition, to be tested initially between NJ and NY. The East Coast VHF society (coordinated by **K2UYH**) would handle the NY end, the Packrats would handle the NJ end. Joe, **W2EIF**, had a summer cottage in Avalon so that became our chosen operating spot. **K3UJD**, Mario supplied the transmitter. **K3BPP**, Walt, supplied the antenna expertise, Bert, **K3IUUV**, supplied the receiver, converter and cw key, Dan, **WA3NFV** handled metering and tower-climbing. **WA2WEB** was using a 4-ft dish on the beach. Packrats were using a 6’ dish at about 25 ft. We quickly made contact on 1296.1, with signals that were “pinning the S-meters.” The test was a great success and set the stage for our subsequent expedition to Cape Hatteras. Results there were not as good, but that’s another story! I encourage you to read the full details, including how Dan got his nickname “The Red Garter Kid!”

Swap Shoppe. By **W3ZRR**. *(Always nostalgia. Now we use the club reflector).* From **K3GAS**, Doc, a pair of the Clegg 6-meter units, (an Apollo and a Venus). Also included was the Clegg SSB booster, a Turner Mike and a Heath power supply. Package deal for \$425. Another Clegg rig, a Zeus, from Jerry, **K3KVS**. No price noted. From **WA3CND**, Candy, a Viking Ranger II, 6 through 80 meters, \$125. And a lot of other “goodies.”

Miscellany. *Postage for this copy was*

*still a single 6-cent Roosevelt 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 **K3IUU** (me), and posted on the website by **WS3O**, our webmaster. Remember, 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 **K3IUU**
(K3IUU@ARRL.net)*

K1DY 6M Sprint Comment

Woo hoo! My total for the sprint was 16 Q's in 9 grids.. Guess that's a score of 144! 3 on SSB, 13 on FT8. Best DX WD9EXD in EM57, right at the start. Operated for 2 hours. I had a surprising amount of fun chatting with a few of the "old gang" (not much else to do!). Also worked my own grid for a change. "Heard" a few 'Rats but no luck calling. Suspect that due to a tx power difference.

Events

For inclusion, please direct event notices to the editor.

September VHF Contest - Contest - September 12-14, 2020. See <http://www.arrl.org/september-vhf> for details.

2.3 GHz and up and Up EME Contest - Contest - September 12 -13, 2020 Details at <http://www.arrl.org/eme-contest>

Gloucester County ARC Hamfest - Hamfest - September 13, 2020 Mullica Hill NJ. Details at <http://www.w2mmd.org/>. Click small box at upper left corner of web page. Consider the risks before deciding to attend.

10 GHz and Up Contest Round 2 - Contest - September 19-20, 2020. See <http://www.arrl.org/10-ghz-up> .

2M Fall Sprint - Contest - September 21, 2020, 7-11pm local time. See <http://svhfs.org/2020FallSprintRules.pdf> for details.

222 MHz Fall Sprint - Contest - September 29, 2020, 7-11pm local time. See <http://svhfs.org/2020FallSprintRules.pdf> for details

422 MHz Fall Sprint - Contest - October 7, 2020, 7-11pm local time. See <http://svhfs.org/2020FallSprintRules.pdf> for details

Microwave 902 and Up Fall Sprint - Contest - October 10, 2020, 8am-2pm local time. See <http://svhfs.org/2020FallSprintRules.pdf> for details

50 - 1296 MHz EME Contest - Contest - October 10-11, 2020. Details at <http://www.arrl.org/eme-contest>

CANCELED RF Hill ARC Hamfest - Hamfest - October 18, 2020. Sellersville PA.

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AA2UK 6M Sprint Report

I operated for 1.5 hours using FT8.
Conditions were good for extended Tropo with a
low noise level.

I made 25 contacts and 15 grids.

Bill AA2UK

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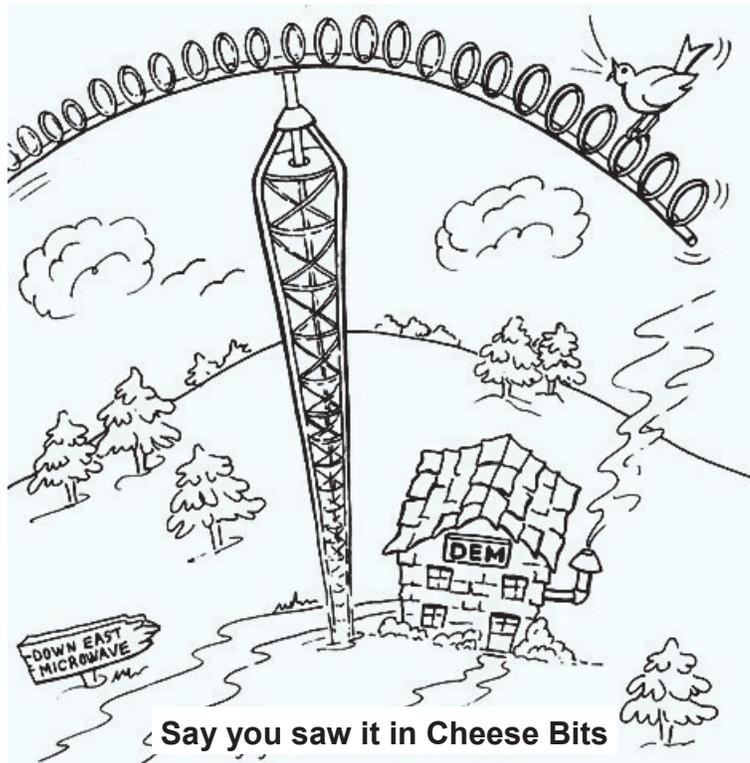
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