



CHEESE BITS

W3CCX
CLUB MEMORIAL CALL

ARRL
Affiliated
Club



Volume LVI

August 2015

Number 8

PREZ
SEZ:

The weather folks tell us we've now endured our fourth heat wave in the Mid Atlantic region, yet I don't seem to have minded it.

The summer sure is in full swing now, and we are far enough into August to have enjoyed the ARRL August UHF Contest. It was fun. I am thankful for the 10 packrats worked, and wish that more would get on for this Contest. However, there was always someone to work by checking into the chat page. This contest lends itself well to the chat pages more so than other bigger contests. The rovers that were on would show up at a new grid and another run was imminent. The **ARRL Ad Hoc Committee** is looking for ideas to expand participation in this event. Will you please give your input to them at: <http://www.arrl.org/news/view/committee-asks-for-august-uhf-contest-suggestions?> Make sure and let us know your ideas. I sure would like to see this Contest come back strong.

July found us assisting with the "13 Colonies" operating event. I was able to work all of the colonies and catch both of the bonus stations too.

Then we had our annual July Auction. Many thanks to our brilliant auctioneer **Elliot, K3JJZ** who always keeps the crowd on their toes.

Next we had in excess of 30 in attendance at the Picnic which took place on August 8th, with thanks going to **Michael, KB1JEY** for hosting this years awesome event.

And, just like last year, the picnic coexisted with the first **VHF Sprint** of the fall, the 50MHz Sprint. There was some E skip, and lots of contacts to be had early in the evening. The rest of the Sprints start in September with the 144 MHz on the 22nd and the 222 MHz on the 29th. Sprints are a great way to explore the capabilities of single bands.

An August event that often gets overlooked is the first round of the **10GHz and Up Contest** on the weekend of August 15, 16. You can work folks on 10 GHz and above both days. Activity starts at 6 AM and runs through Sunday at midnight; you may only work for 24 of those hours (that shouldn't be a problem).

Since we were talking September, the main event of the month is the **ARRL September VHF Contest**. But first let me mention that September 5,6 is the first of three weekends for EME. This weekend is the 2.3 and up portion which usually takes place at the QTH of K2UYH. If you are interested in helping or even observing, I'm sure Al would love to hear from you.

Now on to the main event, the September VHF test. This is a **club event**, like all the others now. Lets see how many logs we can get entered this year. Is your equipment ready? This is the time (if you missed the UHF test) to get everything checked out for January.

I will get more out on operating assistance in the next Cheese Bits issue in preparation for the September VHF Contest. Feedback to me your

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PACKRAT BEACONS - W3CCX/B

FM29jw Philadelphia, PA
50.080 144.284 222.064 432.286 903.072 1296.245 MHz
2304.043 3456.207 5763.196 10,368.062 MHz (as of 1/08)

MONDAY / TUESDAY NIGHT NETS

VHF/UHF Monday:

<u>TIME</u>	<u>FREQUENCY</u>	<u>NET CONTROL</u>
7:30 PM	50.145 MHz	N3RG FM29ki, WA3QPX FM29di
8:00 PM	144.150 MHz	N3ITT FN20ki
8:30 PM	222.125 MHz	KB1JEY FN20je
8:30 PM	224.58R MHz	W3GXB FN20jm
9:00 PM	432.110 MHz	WB2RVX FM29mt

Microwave Tuesday:

7:30—8:30PM Coordinate QSO's on 144.260 with net controllers, for all Microwave bands you'd like to work. Also setup Q's at w4dex.com/uhfqso

Visit the Mt Airy VHF Radio Club at: www.packratvhf.com or
www.w3ccx.com

ideas on using operating assistance.

Do you use 3830? In years past many contesters would meet on 3.830 KHz after contests and share their experiences and scores. This ultimately became a website (the 3.830 frequency is still used) where reported scores were collected and published as well as a chance for soapbox comments. The website is: <http://3830scores.com/> and you will see a place to enter your 'submittal form' and also review recent (and past) contests. I normally put my score and comments there right after each contest.



The Mid Atlantic Conference is getting closer and closer, are you registered? Get your registrations in to: http://dataandwireless.com/packrat/2015_vhf_registration.php. We need to see club support for our only conference event. We have a great speaker lineup and we always have a great time learning and getting together with like minded friends from all over.

So until then, lets work on lots of bands,

Phil, K3TUF

Picnic Pix

Here are a couple of candid photos from this year's picnic courtesy of K1DS



Joe is proud of his Hints & Kinks contribution to the September QST as Phil looks on



Digital experts at work-- Guy checks his phone while Russ demonstrates his remote control of his station and Roger dials something up

STUFF JUST HAPPENS

de K3JJZ

It's been some time since I wrote for **Cheese Bits**. But I had to relate something stupid that I did.

As a matter of fact the last time I did something this stupid was when I told our HK1TL sponsors in Colombia that we needed them to supply a 20 meter wooden pole. I did this via snail mail and sent a copy to W3HMU, Tony, who was to be a part of the group that would travel to Colombia. Our purpose was to put the continent of South America on Moonbounce so that many could work the continent including W3CCX and K2UYH.

Anyhow back to the wooden pole. Tony called me on the phone and said "You screwed up" and indeed I had. The pole only had to be **20 ft** not **20 meters**. When we contacted Colombia the following night on 20 meters conditions weren't very good, but I said to our coordinator in Barranquilla. "Ate, I gave you the wrong dimensions for the wooden pole." He replied "Don't worry about the pole we have already got it". I said, "Ate, the pole is supposed to be 20 ft not 20 meters". He said "don't worry about the pole we can cut it".

So that was in 1976.

Fast forward to 2015. As many of you know I haven't attended very many Pack Rat picnic's since we purchased our condo in NJ. Lorraine spends July & August down there and in order to stay out of divorce court I spend those weekends in those months in Brigantine.

And so we come to the weekend of the Pack Rat picnic. Lorraine informs me that she has a bridal shower to attend on **Sunday** and that in addition to me bringing her up to Philadelphia from Brigantine I have to take one of her friends as well. So I drive down to NJ on Friday after lunch and I'm told the we will leave for Philadelphia after breakfast on Saturday. The shower is on Sunday and since she has a ride with someone to get there I only have to transport them to a pickup point.

Oh goody I say I can make the PR picnic **WRONG!!!!**. The picnic was on Saturday.

Anyhow on Friday, I email KB1JEY and tell him I am coming to the picnic and ask what I should bring. I suggested soft pretzels. He said that GFZ cancelled and he was going to bring Coleslaw and could I arrange to bring coleslaw and pickles. I emailed him back and said sure. And so it was that. On the way home from NJ on Saturday we stopped at BJ's and bought 4 lbs of coleslaw and 2 large jars of pickles.

So now it is Sunday the day after the picnic. I drove Lorraine to the pickup point at 10 AM and then went back home. I had put my cameras on charge the night before and they were all set. Now I went searching for my sunscreen and found it. So at 1 pm I had loaded the Cole slaw and pickles into the Murano. I applied the sunscreen and changed into my Pack Rat logo shirt and headed out to the qth of KB1JEY.

I arrived there at 13:45 and right away I knew something was wrong. **Only Michael's car was parked on his lawn.** So I walked around the back towards the pool. Of course no one is there. Take out the handy cell phone and dial Michael's number. When he answered with "Hello EI ", I said "Michael I'm here out back by your Generac ". He said "I'll be right there ". **He came out and said "the picnic was yesterday". "I was going to call you to make sure you were all right".**

And so:

- 1.- I never took my lawn chair out of the trunk.
- 2.- I drove back home and put the Cole Slaw and pickles back into the refrigerator.
- 3.- Tried to figure out how I would explain my stupidity to Lorraine.
- 4.- At 15:00 Lorraine called and said "We are on the way home". "Did you have a good time at the picnic?" I figured I better get the stupidity part explained over the phone so I don't have to look at her while I explain my mistake. And so I did. Her comment "That's a shame". She didn't even call me any names.
- 5.- At 15:30 Lorraine & Shirley (my passenger) arrive at my QTH and we leave for NJ. Trip was uneventful. Lorraine & I stay in Brigantine Sunday night and I leave for Philadelphia Monday after breakfast.
- 6.- Mon 10:00 I leave for Philadelphia with the reminder "Don't forget to return the Cole Slaw and Pickles.
- 7.- At 12:30 arrived in Philadelphia, get Cole Slaw and Pickles out of the fridge and head for BJ's. The lady gives me no problem in taking the stuff back but she asked for the credit card to credit my account. I take out all 4 of the Visa cards and the 1 MasterCard that I carry. Guess what folks. The lady tells me that this purchase wasn't made on any of these cards.. I said to the nice lady "What can you do for me?" She says "How about if I generate a BJ's gift card and you can use it on your next purchase?" "I said "thank you very much "

Follow up questions

- a.- What credit card did Lorraine use?
- b.- How in the world could I have possibly screwed up on the date of the picnic **since I ran the 2m net for 4 weeks in a row and made the announcement of the date, place & time of the picnic?**

De Elliott K3JJZ

(At least EI didn't need to return a 20 meter pole to BJ's -- ed.)

NN3Q/R UHF Contest Report

"Good Start; Unplanned Ending"

The August UHF contest was on the horizon, and I had plans to participate. But first I had to upgrade my software and firmware. To do the upgrade, (the K3 firmware, the contest software, and windows 7 software) all equipment had been removed from the rover.

Working too many hours on various home projects and needing a diversion from work, I decided to go Single Op during the August UHF contest since my usual roving partner, NN3Q would be on a long distance fishing trip. So prior to his departure we quickly re-populated the van with equipment and made some quick checks. All systems nominal, ready to go

Since the UHF Contest is a 24 hour event, the rove had to be well planned to provide known results at the selected grids. On Saturday, my plan was to start in FN20bi , Reading, Mount Penn, with a short excursion to FN10xi.

I was all set one hour before the contest with one glitch: the computer networking was not working. I tried the obvious fixes and trouble shooting ideas only to be foiled by Microsoft one more time. I never did resolve this issue until after the contest when I discovered the low band laptop had a DHCP disconnect, not sure exactly where or how that happened.

The contest started and I immediately found K3TUF, and about three or four other stations running the bands. I jumped in and worked a number of stations including a Reading local WA1ELA on 223.5 FM. All was going well, but activity was low. I worked my one hour stint and then moved to FN10xi, and started over. I found W3SZ, and K3TUF and finished off that grid with another hour of contesting in the log.

Sunday was a great WX day and my plan was to activate FM19/29 around Gap, Lancaster county. My routing takes the rover van down I-176 from Reading, to PA route 10 South to Route 30 West ending in Lancaster county.

The drive was going well and I arrived at the southern terminus of I-176 waiting to turn right unto Route 10 **when contest ended abruptly!!** While stopped waiting for traffic to clear, the **van was rear ended** by a young driver in a rush to be on time for church. Apparently she thought I had pulled out. Now that is an interesting statement! A vehicle as large as a full size Ford van, with many metal attachments to the backside is not all that inconspicuous. Well here was a clear demonstration of the absolute physical law about two bodies trying to fill the same space at the same time

What I felt was indescribable. I knew instantly that the contest was over, and I was in for a lot of repair work and much more time than I wanted to spend on rebuilding what had already been constructed.

The collision was directed right at the CD 45 rotor. It sheared the lower mast support right off the bottom of the rotor. The lower mast itself was crushed and sheared off the tow bar pintle. The bumper was damaged. It was pushed in and up.

The microwave antennas for 903 through 10 Ghz are located above this rotor with all the

coax, and control cables. At the point of collision the entire mast dislocated from the mast support and spun 90 degrees CCW. The 2304 looper antenna suffered the most damage (crushed loops) when it fell on the support cage atop the van.

If I thought I was getting ahead of my “to do “, I was dead wrong.

The van’s bumper will be replaced, but all the antennas, and the mast must be removed to allow the van to be placed inside the body shop. More fun and exercise!!

While my score is minimal, not what I was anticipating, it was submitted for the club total.

I know the rover will be operational for the January contest, but the September contest is doubtful.

73 and looking forward to working all the club members in January 2016 AI K3WGR

PROGRESS REPORT ON THE MWL GROUP'S 3 BAND BEACON

MWL is the "MicroWave Lunch" group. It's a group of microwave enthusiasts that gather every other Thursday for lunch to talk and discuss things of interest to VHF and above aficionados.

The group is largely managed by W3HMS and encompasses the South Central PA area. W3SZ, W3FEY, W3HMS and K3TUF are regular attendees. Phil K3TUF

The MWL Group now operates 4 beacons on 1296 MHz, 2401 MHz, 5760 MHz at Red Lion, PA and 10368 MHz at Harrisburg, PA. The Group is now working to add beacons on 144 MHz, 222 MHz, and 432 MHz. The Keystone VHF Club of York has agreed to host this beacon at the 100 ft level on their principal tower at their Club north of York, PA . This agreement will also support a 10 GHz and a 24 GHz beacon when desired by the MWL Group.

The function of a beacon is to provide a weak signal in all directions to permit VHF,UHF, and microwave hams to test receiving equipment and antennas on bands that are often unoccupied for

most hours in a day. The CW mode is consistent with this purpose.

The transceiver used for the beacon is a CW based frequency agile unit called the “Radio Shield RS-UV3” by HobbyPCB.com in the US. It will be programmed to spend approximately 20 seconds on each band sending carrier then call letters of W3HZU and the grid square, FN10pa.

An integral part of the beacon will be an Arduino or Raspberry Pi computer which will be programmed to send beacon messages and possibly receive control commands.

The power output will be 200 mw.

The antennas will be horizontally polarized omni-directional loops using a triplexor by Comet (Model CFX-324b) to feed each antenna. The beacon will be built into a hinged waterproof box and mounted on the tower. It will be fed from the station by 120 ft of CAT 5 Waterproof cable. 117 VAC is available at the beacon location on the tower.

Downstream features may include selected or time phased power reduction from, say, 200 milliwatts to 5 milliwatts, using the receive

...cont'd on p.23

BUILDING A HIGH CURRENT POWER SUPPLY

Thanks to Jim, W6PQL for setting up a great website and designing high powered solid-state VHF and microwave amplifiers. See <http://www.w6pql.com/>.

I bought his 500W 432MHz SSPA, and purchased a 50V 22A switching supply that work well with it.

Last year I also acquired a 180W Spectrian 2304MHz amplifier, hoping to do some 13cm EME operation with it, using my 10' dish. The driving transverter and amplifier were both bench tested and adjusted at Phil's QTH, since he has a power supply capable of powering the amplifier He also has the proper directional couplers and power meter to check the output.

What I still needed was to find a power supply capable of providing 28VDC at almost 50A, and something that could run off 115VAC. Since I do not have a 230VAC connection in my garage, and I have a generator that only supplies 115VAC, my EME operations in the driveway are best done using 115VAC lines that are available.

I sent around a note on the reflectors, hoping that I could find a suitable power supply, but aside from a loaner, and a suggestion to put my two Astron supplies in series, there were none available.

Both Phil K3TUF and Mike WB2RVX have these amplifiers, and they both own supplies that can manage up to 100A at 28VDC. Searching the web and eBay, there were supplies that could fill the bill with a cost of over \$1000 plus shipping, and other supplies that were 230VAC based. Others available were "for parts only" and "tested, not working."

My surfing brought me back to the W6PQL website, where Jim features a power supply that can power any of his amplifiers.



...High current cont'd

Using series-parallel 12V switching power supplies, he creates big amperage at 13.8, 28 or 50 VDC.

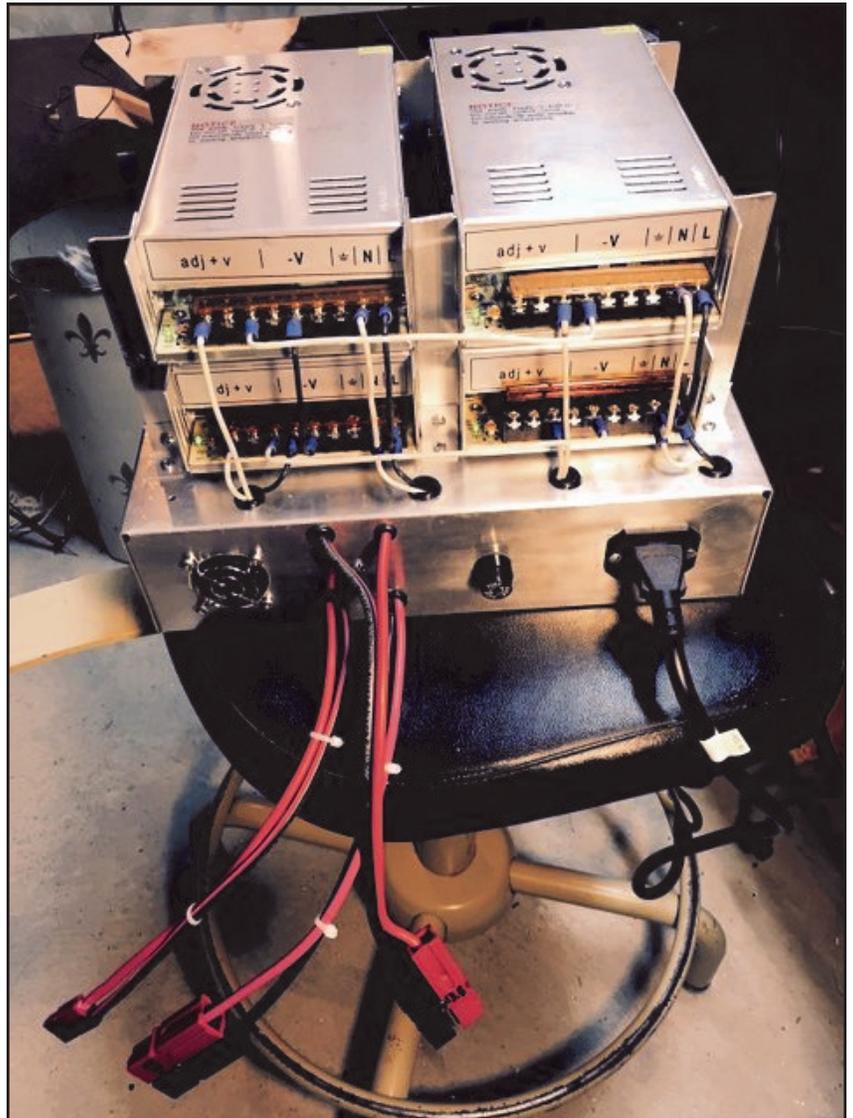
Following his schematic, I built the 13.8V and 28V version, using four switching supplies and a lot of surplus parts I had in the workshop. With an aluminum chassis from EI K3JJZ, connectors from Randy NR6CA, switches from another project, bypass relay from Bob W2SJ, and a fan from the White Elephant sale, I went to work.

Planning the chassis layout was first on the agenda, so that holes and mounting spaces could be drilled and cut. The 50A meter was not going to fit in the package, so I made provisions for current monitoring on a pair of binding posts.

When I ordered the switching power supplies, two of them came with digital voltmeters. I use one to monitor the 13.8VDC and the other for 28VDC. I did need to order the high current Schottky isolation diodes and a large wattage 25ohm resistor used to limit inrush current.

Some aluminum angle was used to mount the four switcher supplies, leaving room between each for cooling. Most of the DC wiring was done with #10, #12 and #14 copper, using appropriate sized ring terminals and PowerPole connectors. The unit is complete and tested and seems to deliver what I sought for power.

It was a satisfying project. I used my TS2000x in the shack to check for RF noise, and the unit was quiet. Next steps will be rolling out the trailer, mounting the dish and 13cm feedhorn and doing some testing with the preamplifier, transverter and amplifier. **73, Rick, K1DS**



Some Cheese Bits from Smel A. Rhatt

-
- Overheard on the air for the June contest, "I know why you weren't able to hear us on 903. I forgot to hook the amplifier output to the antenna."
- Overheard when loading some aluminum tubing, "I think I'll need it for a rotatable dipole for 80m" (or was that really 160m?)
- And at an antenna zoning hearing from a non-ham who was boasting with lingo, "You don't need a 180' tower to communicate on the microwaves. I can work on 10GHz with just a longwire."

TOWER REMOVAL DAY SUCCESS

We were able to assemble a crew of 8 Packrats to remove several towers and antennas at the QTH of KB3HJA. Gary was an active ham for many years at his wooded estate, but a few years ago he took down and sold much of his equipment. Back then I purchased a few of his uW loopers and Phil grabbed a few of his Lunar Link amplifiers. Sadly, one of the hurricanes took off the tops of a few of his 4 aluminum towers, and now he wanted to dispose of them also. Two had already been removed from their bases, while the other 2 were still standing. It took us about 4 hours on a steamy Saturday morning to remove most of the metal.

Al KB2AYU had his eye on the 75' aluminum crank-up towers, while Paul WA3GFZ was in the hunt for the smaller aluminum towers for a rover trailer. There were plenty of masts, brackets and some turnbuckle hardware, useful for any tower installation. Phil K3TUF was getting the big HF Yagi parts, while I sought some of the 2G & 3G loopers for the club. Unfortunately, they were truly basket cases after we got them out of the 1700's barn. As we entered the barn, we heard something stir, and then two turkey vultures flapped out and flew from behind some plywood pieces. They made for a scene out of a Hitchcock movie, but aside from startling Michael and myself, they took off and minded their own business.

Having a big crew made the work easier and lifting more doable. Al towed a 12' trailer with him, shorter than the 18' one he had his eye on. His rear-wheel drive F150 pickup proved to be insufficient to get the trailer up the rise to the tower area. Fortunately Phil's truck with more power and 4-wheel drive easily did the trick. We struggled to lower the extended tower due to the locking mechanism being a bit jammed. We were however able to cut it free from all the cables and load it onto the trailer.



While working in the brush, Phil managed to annoy some **wasps that had nested in the tubing** and a few made it up his pants leg and he had several stings. He played the hero and shook off the incident.

The bolt-cutter lent to us by Doc W3GAD got plenty of use as many of the guy wires and cables needed to be cut in order to clear the towers.

Time for a lunch break. Hoagies from the local deli and plenty of hydrating fluids were the order of the day. The second tower was already nested, and it too was tilted over and removed from its base and readied for loading. The second 75' tower was cleared out of the brush and loaded onto the trailer next to the first, with the third 50' tower wedged in between those two. The last tower was lifted onto the small trailer and a unique mount that Paul made, and by 1:30 PM we were all loaded and on our way home. Gary was thankful for the work that we did.

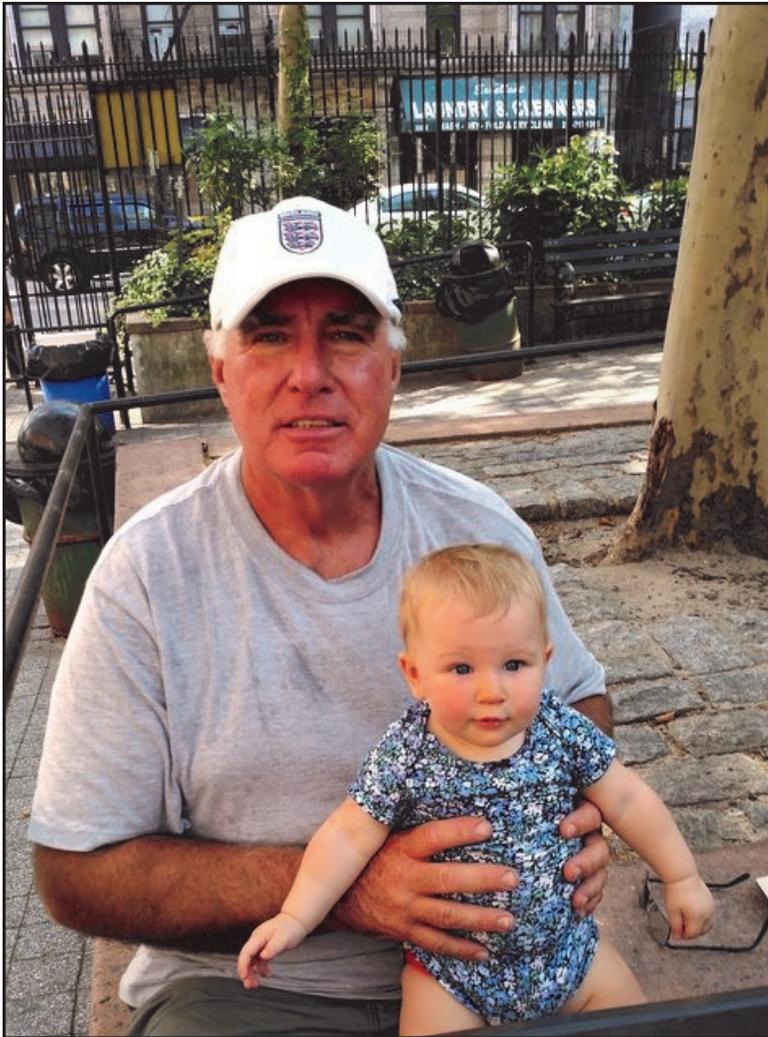


There is still more to retrieve, especially large runs of 7/8" hardline and connectors, but that will wait for another day.

Special thanks to Paul WA3GFZ, George KB3WXV, Tom WA3FQS, Michael KB1JEY, Griff NE3I, Rick K1DS, Phil K3TUF and Al KB2AYU for all the effort in getting this done.

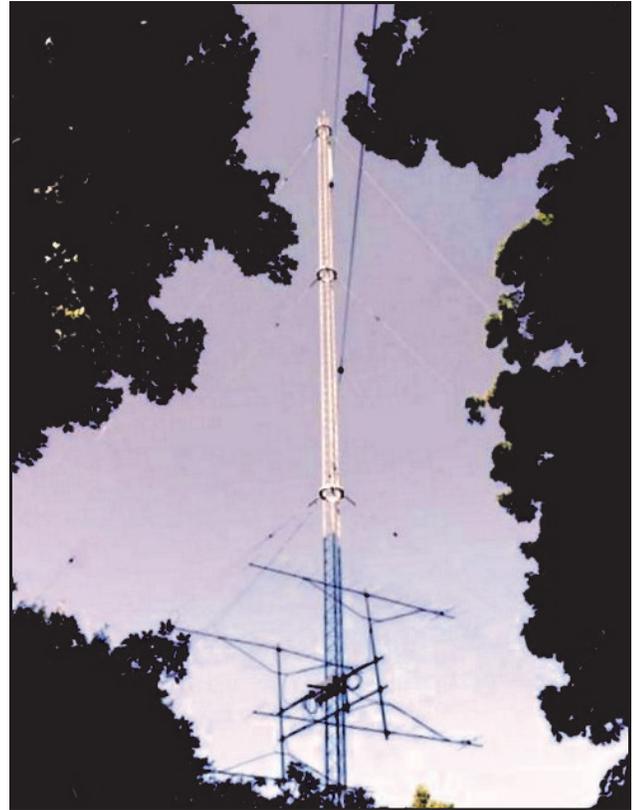
73, K1DS

WB2ONA & Second Harmonic



Warren sent along this picture of himself with his Granddaughter. His comments: "Spent some time overseas today, with Steven and Willa, at the park. (overseas = anywhere across the Hudson) "

W1SMS Tower Progress



K1DS sent us this picture of W1SMS's tower. Steve's comment "125 feet are up, 10 more to go"

2.3 GHz, 3.4 GHz World Records

Please check out the report on new world distance records for the above bands at <http://www.arrl.org/news/new-world-distance-records-set-on-2-3-and-3-4-ghz-ham-bands>

“Who Will Start the Bidding Off at a Dollar?”

Those are the words that start the bidding from our illustrious auctioneer, Elliott, K3JJZ.

“Don’t scratch your head, because if you raise your hand it’s a bid!” were his starting instructions at the White Elephant Sale (tongue in cheek, of course).

“Don’t look over there, watch over here” and “Don’t bid against yourself...” are constant prompts to the bidders.

The 2015 version of the Packrat White Elephant Sale was another remarkable success. 95% of the items brought for auction were sold. The majority of the funds went to the club from all the donated items. One ham brought a nice Yaesu multiband multimode rig and a vintage Heathkit SB200 for sale, and those were also sold in a flash at bargain prices.



We had a room full of guests for this event also, who added to the bidding frenzies and they found a few items of use for their shacks. The hard core Packrats scored plenty of nice VHF and microwave gear. There were loopers for 2.3GHz, a dish and feed for 3G and 5G. There was a pair of 8930’s in a beautifully made amplifier for 432MHz that almost went unsold, until after the auction was over. There were just 3 cars in the parking lot at 10:30PM and a deal was hatched! I had to lug home a box of U-100 rotors and controllers that I brought in to be sold, only to find I have takers now that the auction is over.

I considered but did not make a bid for that beautiful Ailtech noise meter---not because I needed it, but because it had some great knobs and switches and meter. My construction plans are always looking for some parts like that. I think it walked away after the auction for a buck!

There were Yagis, coaxial cables, hardline (with connector!), estate items with tools, parts boxes, functioning test gear, and a special digital voltmeter with Nixie tubes for KB1JEY.

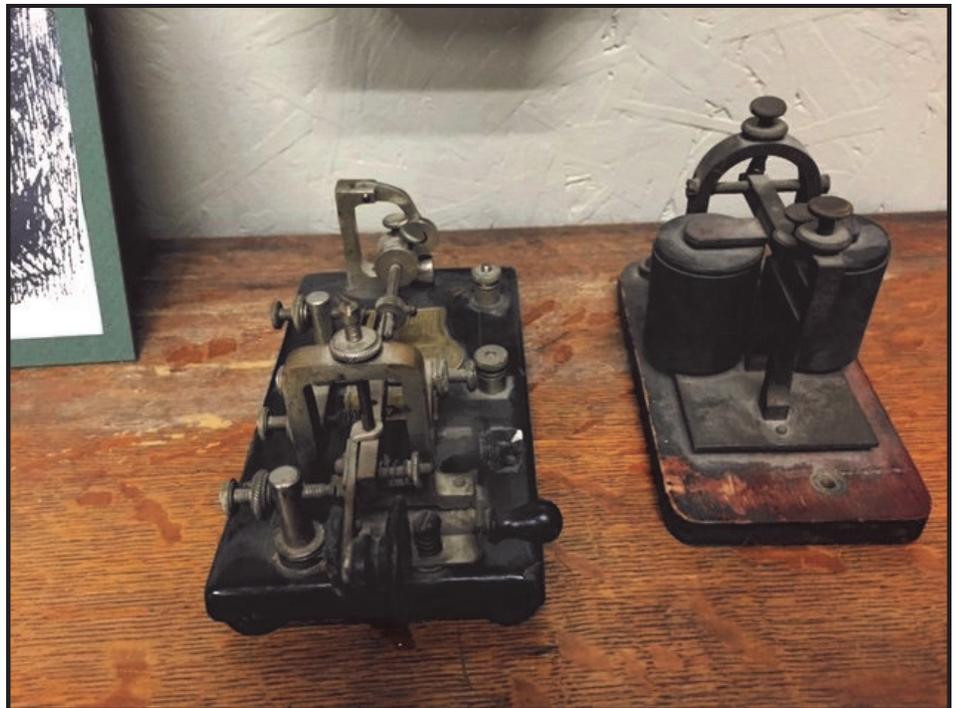
It's truly amazing that year-after-year we continue to have so much to exchange and buy, and hopefully put to use. This year was no exception. Thanks to our Auctioneer, EI, runner Bruce WA2YUE, and treasurer Dave W3KM, who kept track of buyers and sellers. Let's keep the tradition and make sure this event remains on our annual calendar.



73, **K1DS**

Cruising the Ohio River in a Steamboat, we stopped in Paducah, KY. At the railroad museum there, I spotted this old time telegraphers key, and Sounder. Both In nice condition, as part of a display.

--73, **K3IUUV Bert**



HAM RADIO FRIENDS
UR INVITED



CRABS



SATURDAY, SEPTEMBER 26

12:00 - 5:00 p.m.

Rain or Shine

(in barn/picnic tables also outside)

Crabs, hamburgers, and sodas provided

**Paul & Judy Domanski's Home
987 Dexter Corner Road, Townsend, DE**

Bring: A covered dish
Your favorite beverage to share
A chair

Wear: Your callsign - badge, hat, etc.

RSVP Not Necessary

Directions: South on Rt. 1. As you come over the Rt. 1 bridge, near the bottom, take the right exit (to take old Rt. 13) (before toll). Follow south on Rt. 13. Approx. 5 mi. south of Odessa, turn right on Rt. 71, (at Valero gas station). Go to next road, Ratledge Road, and turn left. Go to the end of Ratledge Road and turn left on Dexter Corner Rd. We are approx. 1/4 mile on left—split rail fence, pond in front. Look for the aerials. Paul's cell 302-388-2679

73

W43QPX

Paul



Mid Atlantic States VHF Conference

The Mid-Atlantic States VHF Conference will be held on the weekend of October 2-4, 2015 at the Holiday Inn Bensalem / Philadelphia 3327 Street Road, Bensalem, PA

Registration now open on-line and by mail. Go to the Packrat Website PACKRATVHF.COM and click on the VHF Conference link for all information. **Make hotel reservations** at 215-639-9100 for Special VHF Conference rate \$79+tax/nite til Sept 4, OR USE: http://dataandwireless.com/packrat/2015_vhf_registration.php

EARLY BIRD CONFERENCE REGISTRATION \$40 (TIL SEPT 20)
EARLY BIRD BANQUET \$40 (TIL SEPT 20)

Fri eve: Hospitality and table-top indoor selling

Saturday: Conference 8a-5p registration includes pizza lunch and snacks and proceedings disc

Saturday: 10a-4p Technical test bench with Greg Bonaguide of Rohde & Schwarz

Saturday eve: Banquet, speaker, door-prizes*

Sunday AM: limited outdoor flea-market free to all.

*You must be registered and paid for conference and banquet to be eligible for door prizes

ADDITIONAL PAPERS STILL SOLICITED FOR PROCEEDINGS

Contact Rick, K1DS at 215-284-5517 or rick1ds@hotmail.com

Tentative Speakers and topics:

Joe Taylor	K1JT	New VHF & Up Features of WSJT-X
Roger Rehr	W3SZ	Open HPSDR for VHF/UHF/uW Operating
Phil Theis	K3TUF	Radio Server for VHF/UHF/uW Contesting
Chris Wilson	N0CSW	Yaesu Fusion System Innovations
Rob Renaud	K3RWR	SDR and Noise Reduction
John Jaminet	W3HMS	Roving in the Pennsylvania Boondocks
Mario Filippi	N2HUN	uWave Satellites
Al Katz	K2UYH	Devilish Doppler
Joe Horanzy	AA3JH	Talking to the Astronauts
Michael Davis	KB1JEY	Painful Tower Lessons
Al Waller	K3TKJ	Six Meter Magnificence
George Heron	N2APB	Scalar Network Analyzer
Gary Hitchner	WA2OMY	New Packrat Beacons (Can You Hear Me Now?)
Steve Simons	W1SMS	RF Safety for Radio Amateurs

KØBAK/R CQ VHF Results

Pete Kobak, KØBAK, roved in the July CQ WW VHF contest. This was his first repeat contest, having entered the 2014 CQ VHF as his first-ever ham contest (see his **2014 effort in a sidebar in the January/February issue of CQ magazine**). For 2015, he started in Bear Mountain State Park for the first time, about 50 miles due north of New York City. A paved road provides access to several operating positions with 180°+ horizon views at 1000-1200' AMSL in FN31 and FN21. Because of low bridges on the Palisades Parkway whose height was unknown (despite having called Parkway maintenance), he had to take down his antennas and his 12'-1" mast to travel to the next location in FN30, State Line Lookout just over the border in New Jersey. While this location is only about 400', it is one of the highest points in that small-land-area grid. Heading home through FN20, Pete continuously called CQ on the Jersey Turnpike, and discovered his amp's heat sink got too hot to touch due to almost-continuous use. Unfortunately, conventional contacts dry up rapidly after dark, though he was a little disappointed he didn't pick up more contacts while pointed toward Philly on the Turnpike.

Sunday was limited in time due to a family commitment. Pete started in his favorite "local" location, the stone fire tower in Reading in FN20bi at 1200'. He found several strong stations, though no long distance contacts in either band. 6m seemed to be even weaker than

Saturday, or at least have less activity. After a couple hours, he traveled toward Gap on route 222, calling and stopping several times in FN10 on marginal road crests, making several contacts with super stations despite the mediocre road stop locations. Pete parked in a hilly Gap neighborhood in



KØBAK/R set up on Bear Mountain in FN31, looking southeast over the Hudson River.

FM19, only finding one contact in about 40 minutes. This was also a disappointing location in the sprints, but Pete hasn't found a better FM19 location that's accessible quickly.

Heading back toward home, Pete stopped at a crest along route 30 at a cell tower access road in FM29. As in the sprints, this location was surprisingly effective in getting 12 contacts in 40 minutes, though several were band switches. Having run out of time, Pete headed home on route 30 listening for calls while in FM29 and FN20, but finding no new stations.

Pete was able to make several CW contacts for the first time, despite not knowing Morse code yet, by using CWGet to decode and N1MM to send. Of course, the decoder would only work on fairly strong and well-formed signals, but the excellent graphical filtering of the Flex 1500 gave the decoder the best possible signal to work with. Pete also set up N1MM for the first time to send voice CQ, concatenating 3 parts of the CQ call, with the middle part being a recording of the current grid whose name was the Rover QTH setting in N1MM. This allowed Pete to make automated CQ calls while underway without having to record a new CQ voice call in each grid as he had before when using the IC-7100 radio.

Summary:

Band	QSOs	Grids
6m	35	12
2m	43	14

QSO points 121 -- Multipliers 50 -- Score 6050

73, Pete KØBAK

K1DS CQ VHF Results

Since we were busy removing towers at the QTH of KB3HJA on Saturday, I opted to shower and rest the remainder of the day and spend some time with the XYL.

On Sunday morning I had some time and put almost an hour's worth of operating from the home QTH with 9 QSOs on 2m and 6 QSOs on 6m, with 12 grid multipliers.

Several Ops were doing CW and it was nice to work them. I worked everything I heard, and turned off the rig, knowing that I was not in contention for an award, but that submitting my log was evidence of activity. The best QSOs were with W1AN on 2 & 6, who operated from FN41.

K3TUF CQ VHF Results

Spent some time on the contest. There were enough stations for the two hours that I was able to spend on the air. Never saw six meters open but found lots of activity on two meters, as you can see two thirds of my contacts were on two.

Missed my own grid on both bands, along with other nearby grids (FN01, FN11, FN10) but did work north to FN34 and south to FM27.

It was good to hear Pete, K0BAK out there banging out the contacts from his rover.

This is always an active contest when six meters cooperates and opens up, but when it stays closed, the activity makes for a good two meter activity day.

Looking forward to seeing results from around the country.

Band	Mode	QSOs	Pts	Grd
50	CW	4	4	3
50	USB	15	15	10
144	CW	1	2	0
144	USB	36	72	16
Total	Both	56	93	29

Score : 2,697

73,
Phil K3TUF

K2LNS CQ VHF Results

I spent about two hours on Saturday afternoon trying to give out points on 2 meters. I'm sure activity would have gotten better during the evening, but of what I saw on some results sent in, I would question that. I do have a spot on my low band tower, and will put up a six element, six meter beam this summer at 100 feet. That will allow me to operate 50, 144 and 432 in the future. Here are my two meter totals: **28** contacts and **18** grids. **I did not work my own grid!**

73's
Herb K2LNS
Used the call WA2FGK

CQ Magazine Article

K3MD article, "New Uses for Old Tubes: Building a Junkbox QRP Transmitter," will be in Sept. CQ.

K0BAK/R 6M Sprint Report

I got only 2 contacts in the first hour from down here at the Maryland grid intersection, and didn't even see weak CW signals on the panadapter so I know there just wasn't activity out there. I did get WB2JAY in FN10 and K1TEO in FN31 from FM28 in the two contacts I made from my humble low Moxon, so my equipment was working. I think this **sprint date wasn't publicized early enough** by the sponsor, or maybe the activity picked up later since it wasn't a work night like the other sprint bands.

Anyway, I packed it in (literally and figuratively) after about an hour or so. Quite disappointed because there's a significant effort getting the van configured for both the HF contest and 6m.

-- Pete K0BAK

DOOR PRIZE SOLICITATION

It's never too early to ask your boss and suppliers for contributions for the raffles and door prizes at our VHF Conference. I have started the collection here. We have some donations of manuals from ARRL, a few items left over from last year, and some items from the W3VIR estate. We also have a few items from NR6CA that can be used for door prizes. Whatever you can provide will be useful. If you don't ask, we don't receive. Old test equipment, logowear, coffee cups, travel mugs, cables, connectors, parts over-runs, obsolete stock, tools, radios, antennas, electronic parts, etc. Let me know what you can get your hands on.

This is one of the highlights of the conference.

TNX, Rick, K1DS

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

(Nibbles from August 1965. Vol. VIII # 5)
de Bert, K3IUU (*author's comments in italics*)

- **Front page**, a memorial tribute to member W3UMI, Willy, who passed away on 7/9/65. He suffered from "sleeping sickness" and died at 38. Helen included a memorial poem, which is included here to remind us of others that are no longer with us, and to perhaps provide some solace:

He is not dead,
Just gone on before.
Where he waits to greet us,
Inside the heavenly door.
His voice is silent,
Our hearts are sore,
But in our memory,
He lives forevermore

- **"Our Prez Sez"**. Prez K3GAS, Doc (*reelected in June*), said "K3HWZ, Grandpop Bill wins a cash prize for his design which was selected for the Packrat Lapel Pin. I saw the mockup, and believe everyone will want one and be proud to wear it. The nominal price is \$3". (*I'll bring mine to the next meeting to show anyone that is interested. Does anyone else still have one? Is it time for a new production?*). He also reported that Frankie and Mother Rat were busy planning the picnic and requested donations for prizes (we still do that, but for the conference.). Among his suggestions:

A clean meter, or ***Trading Stamps*** (*emphasis mine. Anyone need some S&H green stamps*).

- **ARRL Bulletin Nrs. 13 and 14.** 7/1/65. Reciprocal operating agreements now in effect with the United States, and Belgium and Australia, Amateur may now obtain permission to operate their own stations in these countries, which have been added to the previous list.
- **Editor's Corner.** Helen apologized for the "skimpy" paper this month, saying "I decided to follow the admonitions of the Board, and print only those items which were received by my published input date". (*Helen was tough, but did a great job of putting out the Cheese Bits in a timely fashion*).
- **August Birthday Announcements.** Another aperiodic listing, this month included our own K3JJZ, EI.
- **Packrats Family Day and Picnic.** Reminder that it is scheduled for August 8, 1965, at Ft Washington State Park. Entrance fee, \$1 per family. Gifts, Prizes, Fun, Free soda and eyeball QSOs. (*Ernie used to provide the peanuts, and EI did a good job organizing the games for kids [and sometimes adults!]*).
- **Band reports.** None included. (*Helen published on time, as a reminder for members to "get their articles in early"*).
- **Swap & Shoppe.** This monthly column by W3ZRR, Ray (SK) listed a Heath DX-60, 1-year old, for \$60. The DX-60 was an 80 through 10 meter transmitter, with AM and CW capabilities. Using a 6146 final, it ran about 90-watts(DC input).

- **Technical article.** None this month. New articles solicited from the members (*sound familiar, Lenny?*).

As in previous editions, many "folksy" comments about members, their families, and activities were included in this edition of Cheese Bits. If interested, or for more detail on the above items, visit www.W3CCX.COM and read the full issue posted there by our Webmaster, Ron, W3RJW).



thirty, de K3IUUV

KB3MTW 6M Sprint Report

I made 6 whole contacts. The last guy must have been new to contesting. Even though he lives in NE Philly he didn't know what a grid square was. I told him to Google it. After 5 mins. he came back and gave me FN20. I knew it would be, but didn't want to chance it.

How frustrating not to be able to turn or even get the antenna above the roof. I could hear Jeff K1TEO calling out for the contest, but no matter how hard I tried he could not hear me. Oh well :-)

I submitted my measly score on the 3830 score form. It requested furthest distance - In KM! After Doc and I tried to use Dave's logging program to get the KM I resorted to the call sign database on my phone. Then used Google maps - after changing distance to KM from miles - for a range of 441 KM.

Whew. What a workout for a total claimed score of 12. At least it went to the Pack Rats. Oops I mean Mt Airy VHF Radio Club :-)

73, Michelle KB3MTW

WA3SRU QST Article

Hi Guys,

I guess it is official as the digital edition is now out with the magazine coming next week. I have submitted an article for Hints & Kinks. The Hints & Kinks article is on pages 62 & 63 of the September edition.

73's Joe WA3SRU



Events

For inclusion, please direct event notices to the editor.

ARRL August UHF Contest Round 1 - August 15-16, 2015. Details at <http://www.arrl.org/10-ghz-up>

VHF Fall Sprints - TBA

EME 2.3 GHz and Up Contest - September 5-6, 2015. Details at <http://www.arrl.org/eme-contest>

ARRL September VHF Contest - September 12-14, 2015. Details at <http://www.arrl.org/september-vhf>

10 GHz & Up Contest Round 2 - September 19-20, 2015. Details at <http://www.arrl.org/10-ghz-up>

2M VHF Fall Sprint Contest - September 21, 2015 7-11pm local. See <http://svhfs.org/wp/>
For details

222 MHz VHF Fall Sprint Contest - September 29, 2015 7-11pm local.

Microwave 902+ VHF Fall Sprint Contest - October 10, 2015 7-11pm local.

RF Hill ARC Hamfest - October 18, 2015. Sellersville PA. Details at <http://www.arrl.org/hamfests/39th-annual-rf-hill-arc-hamfest>

Mid-Atlantic States VHF Conference - October 2-4, 2015. Currently soliciting papers. Details to follow.

432 MHz VHF Fall Sprint Contest - October 7, 2015 7-11pm local.

ARRL EME 50MHz - 1296 MHz Contest - Round 1 October 31 - November 1, 2015. Round 2 November 28 - 29, 2015. Details at <http://www.arrl.org/eme-contest>

January VHF SS - Contest - January 30-February 1, 2016. Details to follow.

K3TUF 2015 UHF TEST

As of 8/13/ 2105, the 3830 web site (<http://www.3830scores.com/currecscores.php?arg=KxsgJzdfymcw>) shows Packrat president K3TUF in second place in the SOHP category, with 38130 points, behind K1TEO (97092 pts) and ahead of K8TQK (21168 pts).

2016 East Coast Super VHF Conference Plans / Status

Will be on April 15th and 16th 2016. It looks to be a large one! More and more people are talking about attending.

There will be an Indoor vendor area.

Rooms will be \$79 plus tax for King and \$89 plus tax for Double.

The conference needs 230 room-nights – looks good.

So far the Conference fee looks to be just under \$100 per person. Many meals are included in this.

The cost of the Saturday night Banquet dinner is still to be decided.

The Packrats will not hold a Conference during 2016. Any profits made from the East Coast Super VHF Conference will be split amongst the 3 clubs involved. The Packrats have a hand in planning and manning the Super Conference.

2016 EME Conf Web Page

No real info yet, but there is a page where you can enter your name and call to get info when it is available.

<http://www.eme2016.org/>

--Rick, K1DS

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Packrat Microwave Nets

The microwave nets on Tuesday nights are working out well for the people that take advantage. Use the web chat page or 432.260 to help find where people are and contacts.

(From the July BOD Meeting Minutes)

... MWL Beacon Progress cont'd from p.8

capability to send a signal report on same or different bands, programming the beacon remotely by the Internet, so removal is not needed, and others features to be determined.

The project is being financed, as were all other beacons, by personal donations from 10 MWL Group members and others. Some equipments may be loaned by members or others and the specific terms of the loans will be defined in writing for the benefit of MWL Group members, their estates, and KVHF Club. The target completion date is unknown but key factors are a successful check-out, availability of climbers and weather. Late Fall 2015 may be possible.

73, John W3HMS

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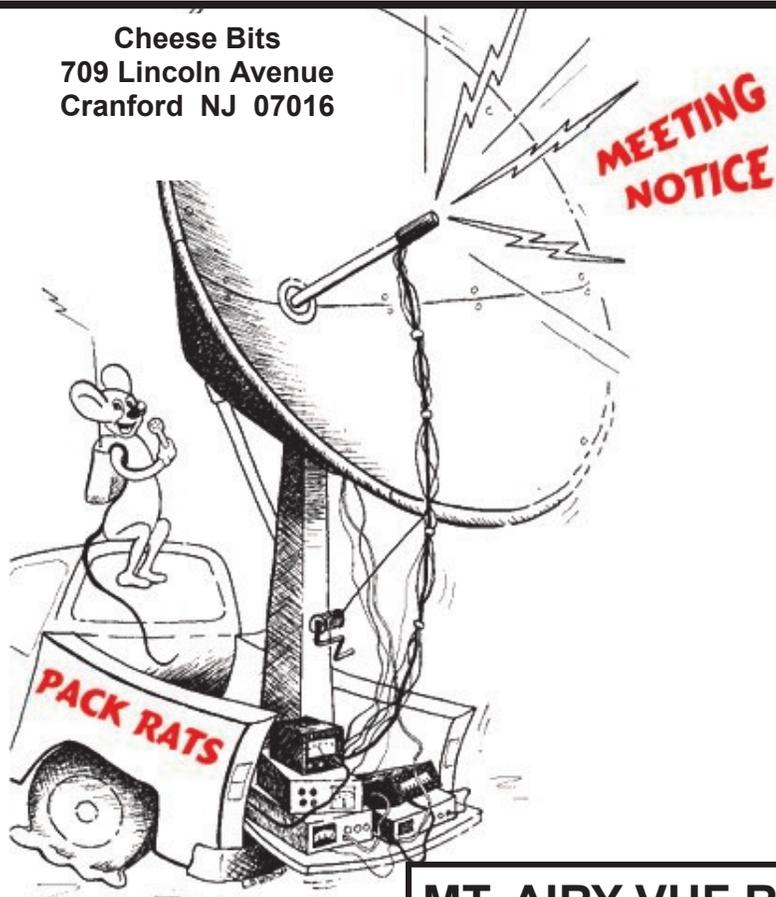
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