



# CHEESE BITS

W3CCX  
CLUB MEMORIAL CALL

ARRL  
Affiliated  
Club



Volume LVII

January 2016

Number 1

A new year is now upon us and with it, the January VHF Contest. It's our greatest event of the year. We have had plenty of time to prepare for the ARRL January VHF Contest, and I believe it will be maximum fun for all of us. Let's turn in a record number of logs! **We need a log from every member, no matter how large or small.**

Before I get further into the contest, let me wish you all a Happy New Year, and I hope you all had wonderful family time during the recent Holidays. We spent time with both of our families; it was an outstanding time of fun and fellowship, not to mention the spring-like weather during the holiday period.

Now that we crossed over into the New Year things are going to happen real fast. Before we know it the winter will be gone and all of the marvelous spring activities will be upon us. I will prepare you for them later in this section.

What can we discuss about the January contest that has not already been covered? **First and foremost, we should have fun.** Use the bands that you have working and make the most of them. **Assistance** is new for this contest since it was introduced immediately after the January VHF of 2015 and was first used in June of 2015. Being new, we have yet to fully utilize the benefit of having assistance available. It's a great thing to use no matter what category you are entering.

For us as a club, there is no longer going to be an excuse for not working all club members that are on the air. Use the "Packrats to look for" document to verify if you are missing any members in your log, and **contact them** to arrange a meeting on the air. You will receive a list that includes contact information on every member who has indicated they will be on the air soon after the January meeting.

K3JJZ has suggested a web page where we can go to see who has and who has not been worked yet. I think that is a great idea, and look for someone to take on that project; sort of a 'real time' log for the club members who are on the air.

Let me repeat that the best way to take advantage of assistance is to have your logger connected to the DX cluster where all spots can be sorted and presented to you while you operate. It shows who is on and who is working them, a valuable tool to instruct you where to point your antenna.

I am looking forward to having no schedules, but going open into the contest and see where the contacts lead me.

This year, beginning around midnight on Saturday, the moon will be in a great position to take advantage of added multipliers if you are so inclined. If you have elevation on your 144MHz array, you could be in for a fun filled night.

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222.98/224.58 MHz (PL 136.5) Hilltown, PA

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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:**

TIME	FREQUENCY	NET CONTROL
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](http://w4dex.com/uhfqso)

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

Be sure to make this month's meeting which will be devoted to contest preparation and directed by our faithful Contest Managers; K3EGE and W2SJ.

As always, you're invited to come to Giuseppe's beforehand for food and fellowship at 6PM on meeting night, January 21.

Now, when the contest is over, and the winter is not, what to do? Prepare for Spring activities, what else?

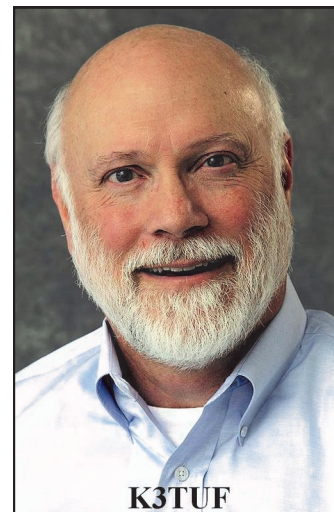
Make sure the VHF Super Conference is on your calendar for April 14-17 and go to <http://vhfsuperconference.com> and register. April 14<sup>th</sup> is for extra curricular activities like visiting the Udvar-Hazy Smithsonian Air and Space museum. There will be organized activities for the family as well. By that time in April the Spring Sprints will be upon us. The schedule will be in Cheese Bits, but make sure Monday April 11 and Tuesday April 19 are available from 7PM to 11PM for the 144MHz and 222MHz Sprints. Really fun times to exercise the bands.

May brings us the PEMA (PA Emergency Management Agency) conference just before Dayton. Make plans to go to Dayton this year. Oh, speaking of Dayton, if you can, join me at the "Dayton South" for Hamcation in Orlando from February 12 to 14.

We've also been blessed with some fine openings this season on six meters. Several of our folks worked ZL land, so keep the radio ready.

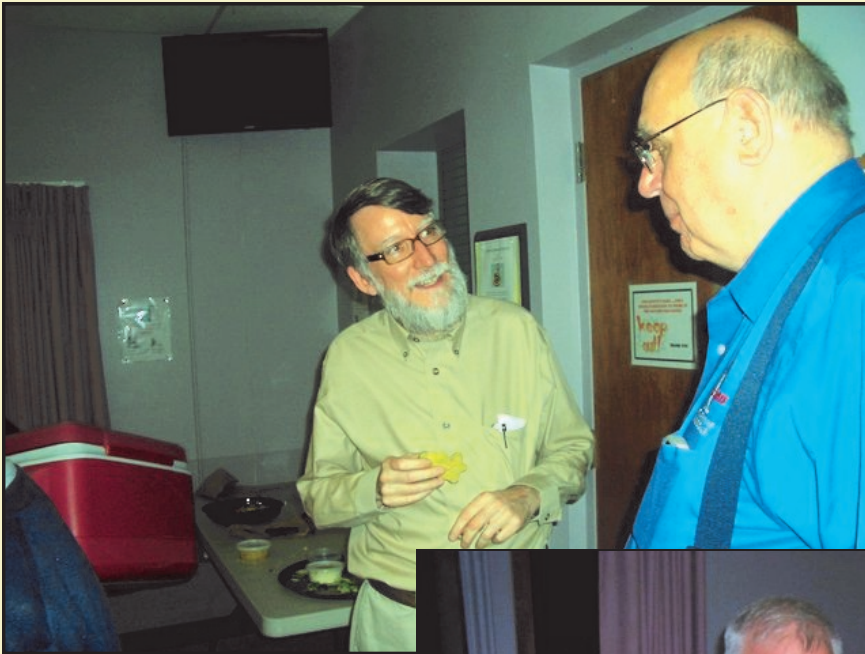
Until next time, lets work on lots of bands

**Phil, K3TUF**



**K3TUF**

# DECEMBER MEETING PICTURES



Roger did a great



Warren inspects a 13? Cm slot antenna.



This little inexpensive Chinese HT fell out of a tower TWICE and still Works



# SUCCESS AT LAST

12 December 2015 - I have been having a **lot of trouble** with my antennas and have not been able to get the help needed to correct the problems. Those with the skill to do tower top antenna work have been severely overloaded with requests for help. I needed to replace the feed line to the 2.3 GHz looper. This feed line has multiple shorts in the rotor loop section. I do not have the gear to safely work at the top of the tower, nor do I have the needed strength.

Over the last year there has been a concerted effort to introduce a few PACKRATS to the skills for safely doing tower work. Michael, KB1JEY and George KA3WXZ are graduates of the K3TUF TOWER SAFETY ACADEMY.

Michael and George agreed to see what they could do to resolve my antenna issues. Yesterday the Tree surgeons arrived early to correct an issue with the big oak tree that was interfering with the rotation of the antennas and at 9:50 this morning, after what I am sure was a hearty breakfast, Michael and George arrived in the **Michael's Mighty Manly Minivan** to address the RF problems.



Reaching for the 2.3 connections

While I tried to keep everything moving smoothly with the needed tools and supplies for the job, George pulled the short straw and donned the climbing harness to do the work at the top.



Ground Crew hard at work

We tried to use HT's to communicate with George while he worked. I could hear and understand the questions, but after twice losing control of the HT and dropping it 40 feet, George said Michael should keep it safe on the ground. That Chinese HT survived the impacts - except for a clip on the battery holder, there was no case damage and it still sounds OK. After giving up on the HT idea Michael was my ears and all went well. The HT's still work well between myself in the shack and Michael at the tower base.



We need plenty of "stuff" for these jobs!

I thought we would have to unmount the 'H' Frame to reach the coax on the antenna. But George was able to reach to connector and inspect the driven element without doing more than repositioning the 6 meter beam. Once the offending piece of 1/2" ULTRAFLEX was removed, the hard line connector was dried out and a new length of 9913F7 was prepared, we broke for a bit of food. Arlene prepped up a nice plate of sandwich fixings, coffee and dessert. Then back for the installation and finishing touches. **Too bad the 2304 Beacon is not on the air** – it would have been nice to get some confirmation that everything was working.

We checked all the antennas with a TDR - after all the manipulation of the rotor loop all coax looked

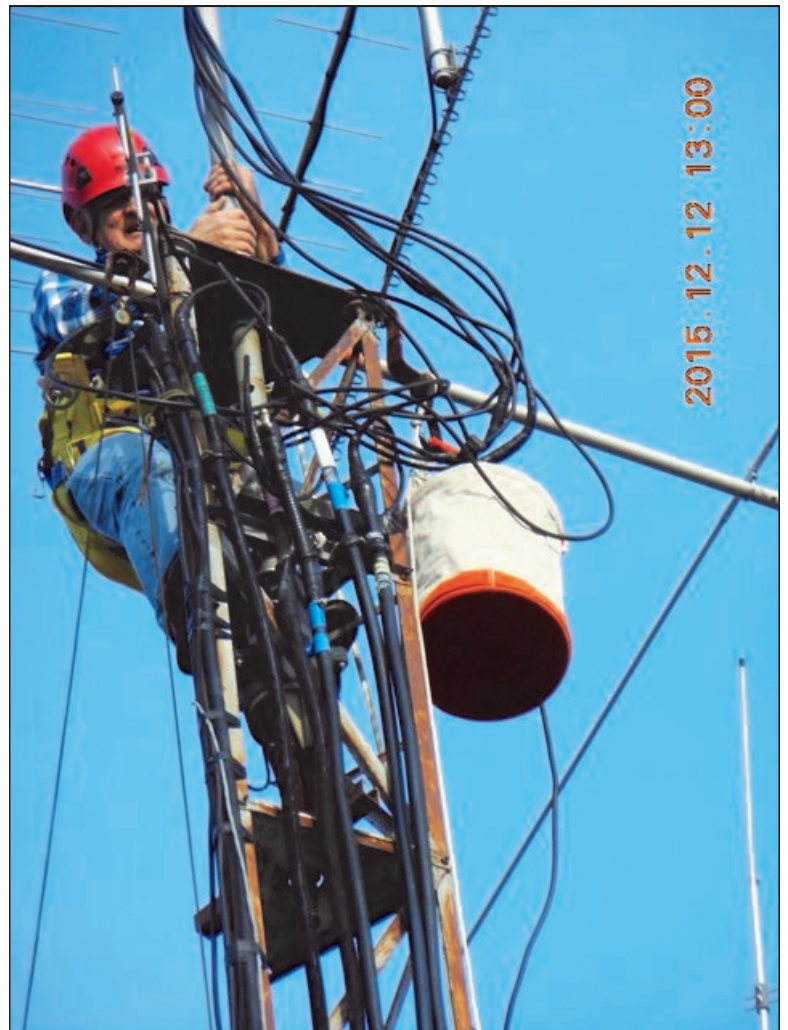
good and each scan terminated with the appropriate open or short depending on the driven element design.

George did a terrific job dressing the loop and resealing all the connections.

I got everything reinstalled in the shack and the transmit side looks really very good. I am sure the subsequent air check on the Monday and Tuesday nets will confirm the success of these efforts.

If Phil offers another class in climbing safety I would highly recommend a few of you younger and more agile members join in. This project does not sound like much but it took close to 5 hours from arrival to departure.

Again, I want to thank Michael and George for coming to my rescue, Mother Nature for providing a beautiful day to do the work, my lovely wife Arlene for adding the most patient moral support and sustenance for the day and to Phil K3TUF for providing the training for safe tower work. **73 de W3GAD**



Finally the new rotor loop gets connected.



# NEW TOWER INSTALLATION AT N3HBT

By Lenny W2BVH

George Brechman, N3HBT, our host at the Wilson Sr. Center lives directly across the parking lot of the Center. He had lots of problems with his old tower. It's a 30 year old aluminum tilt-and-telescope tower that was often hanging up while being lowered. It's possible that the problem is due to some misalignment caused by Hurricane Sandy. Warren WB2ONA and I went over to George's one Saturday last fall to get the old tower unstuck and lowered to the ground, a job that took a good 3-4 hours. Warren did the scary stuff up where the sections were hung up and I was the "here hold this" guy on the ground.

George decided after 30 years and some aggravation it was time for a new tower. It is a custom job by Aluma-Tower in Vero Beach FL. Warren picked up the tower at the factory in **early** winter and drove it up to George's QTH on his work truck. It was a 2510 mile round trip, consuming 269 gallons of gas (at 9.2 MPG).

The new tower is another free standing crank up (motorized), tilt over aluminum tower. It has three 25 foot sections and has been set to go up to 66 feet with the limit switches on the winch. It is 27 feet tall in the retracted position.

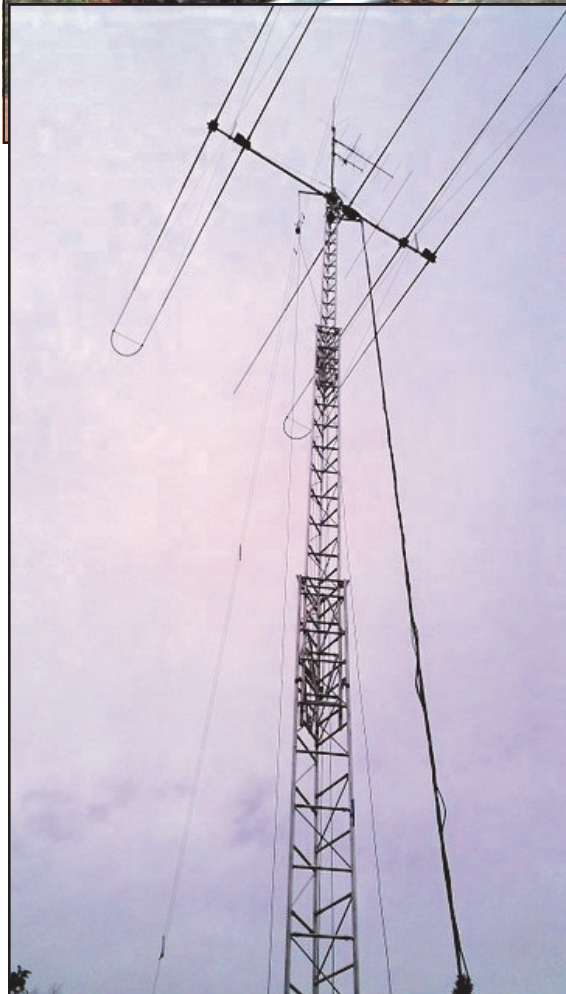
To quote George:



**"It is installed and working thanks to the following people: Warren WB2ONA, and his helper Peter, Tom KA3FQS, George KA3WXV, George KC3ESH, Jim WA4YWM, Michael KB1JEY, Dave Fox, and my wife Elaine N3TMP, who allowed this project to happen. My Seeing Eye dog, Duchess was a big help by greeting everybody with a loud bark. Thanks to all who helped install the monster."**



George has the following “antlers” up on the top of the tower: There is a 3 element SteppIr DB18 just above the thrust bearing, with a 4 element 222 beam for FM above that and a 8 element 2 meter/440 beam above that, and a 2 meter/ 220/ 440 meter vertical at the top of a 18 foot 2 inch 3/8 wall aluminum mast. This is all rotated with a Yaesu G2800 rotor.





# Some Club Stats From the 2015 January VHF Contest

Here are some data that might be of interest to the club. It gives an idea of the number of Unique calls and grids that were logged collectively, the most that were logged by a single station, and the typical value (median) that were logged by stations operating on a given band. Note that a rover operating in two or more separate grids is considered as two or more stations. --Ben WA3RLT

Unique Call Statistics found in 63 Mt Airy V.H.F. Radio Club Logs for 2015 on a band-by-band basis

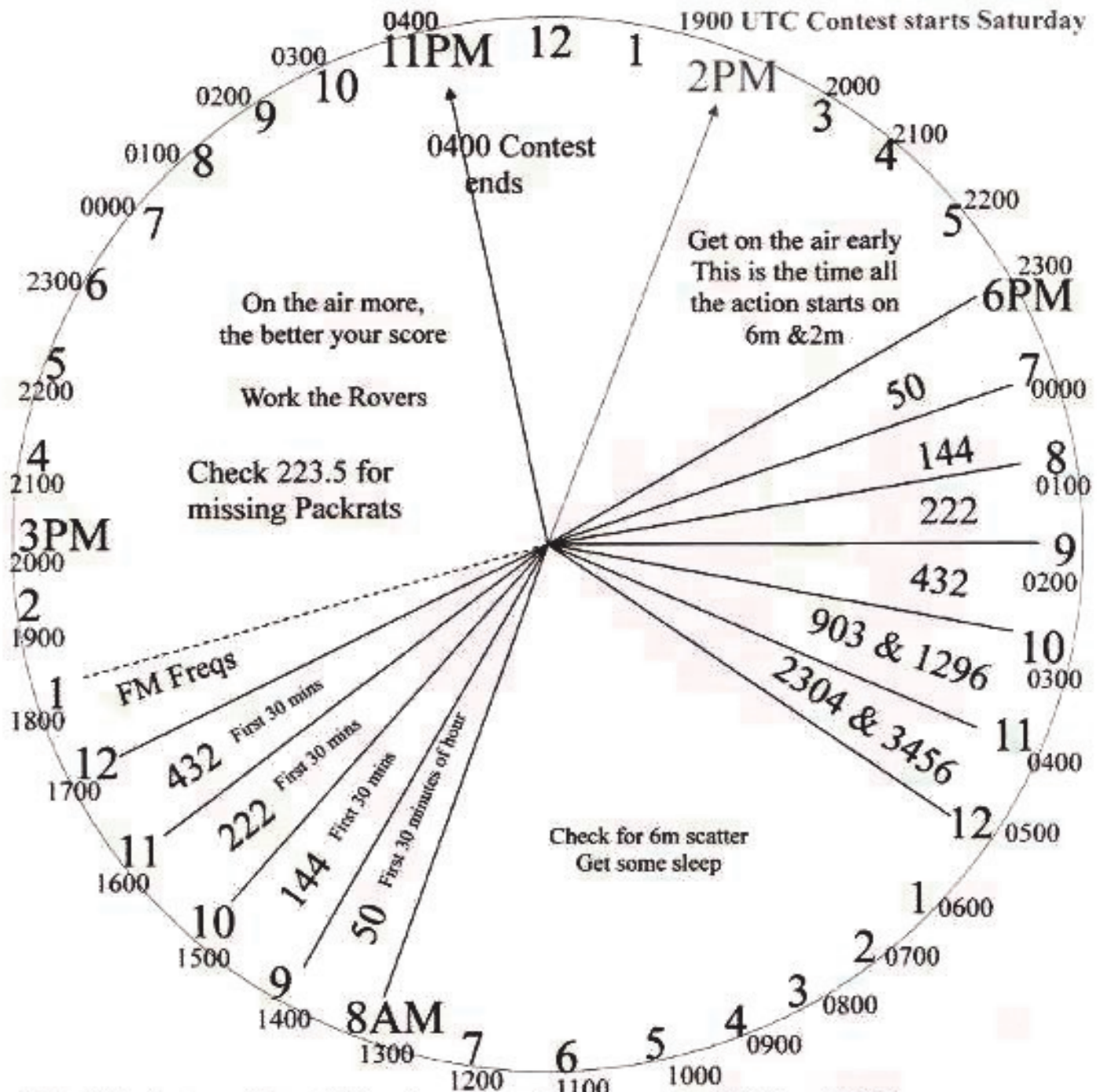
Band	Number of Logs showing Qso's on Band	Total Calls	Max calls in Single Log	Station with Max Calls	Median Number of Calls	Stations have the Median Number of Calls
50 MHz	58	465	341	N3NGE	45	WB3IGR
144 MHz	61	571	359	N3NGE	60	W3GAD, KB1JEY
222 MHz	54	193	148	N3NGE	26	WA3QPX, W2TAG
432 MHz	55	274	199	N3NGE	31	WB3IGR
902 MHz	30	63	49	N3NGE	17	W3SZ
1.2 GHz	29	77	52	N3NGE	19	W3GAD, N3YMS
2.3 GHz	20	43	33	N3NGE	14	K3IPM
3.4 GHz	19	36	21	WB2RVX	11	WA3EHD, N3RG
5.6 GHz	12	28	18	N3NGE	10	W3SZ
10 GHz	14	27	18	K1DS/R	8	WA3NUF, WA3DRC, N3RG
24 GHz	7	10	7	K1DS/R	2	WA3NUF, W3SZ
300+ GHz	16	28	12	K1DS/R	2	WB2RVX, WA3WUL, WA3NUF, WA3DRC, W3GAD, NN3Q/R

Unique Grid Statistics found in 63 Mt Airy V.H.F. Radio Club Logs for 2015 on a band-by-band basis

Band	Number of Logs showing Qso's on Band	Total Grids	Max Grids in Single Log	Station with Max Grids	Median Number of Grids	Stations have the Median Number of Grids
50 MHz	58	50	42	N3NGE	5	WB2VLA, WA3RLT, WA2OMY, W3GAD, NN3Q/R, NE3I, N2DEQ, KB3MTW, K3VEQ, K3JJZ, K1JT
144 MHz	61	120	79	K1JT	10	N2DEQ, K0BAK/R, AA3GN
222 MHz	54	32	32	N3NGE	5	W3HMS, W3GAD, W2TAG, W2BVH, KB1JEY, K1DS/R
432 MHz	55	42	32	N3NGE	6	W3ICC/R, W2BVH
902 MHz	30	13	12	N3NGE	5	WB3IGR, WA3QPX, WA3DRC, W3SZ, W2SJ, NN3Q/R, K1DS/R
1.2 GHz	29	14	11	N3NGE	5	WA3QPX, WA3DRC, W3SZ, W0RSJ, NN3Q/R, K3IPM, K3GNC, K1DS/R, W2SJ
2.3 GHz	20	10	10	N3NGE	4	WA3GFZ, W2SJ, W0RSJ, NN3Q/R, K3IPM
3.4 GHz	19	7	5	WB2RVX	3	WA2OMY, K3IPM
5.6 GHz	12	5	5	WB2RVX	4	W3SZ, NN3Q/R, N3RG, K1DS/R
10 GHz	14	5	5	WB2RVX	2	WA3NUF, WA3GFZ, WA3DRC, K3IUW/R, K3IPM
24 GHz	7	4	4	K3TUF	1	WA3NUF, WA3GFZ, K3IUW/R, K3DMA
300+ GHz	16	4	3	K1DS/R	1	WB3IGR, WB2RVX, WA3WUL, WA3NUF, WA3GFZ, WA3EHD, WA3DRC, W3GAD, N3NGE, K3JJZ, K3IPM, K3EGE, K3DMA



# January Contest Clock Activity Hours



**Work all Packrats on all possible bands.**

**Check 6 & 2 at sunrise, sunset and noon for DX**

**Eat and Drink right. Get some sleep**

**DO NOT USE 223.5FM for coordination**

**FM Frequencies: 146.55 and 146.58**  
**223.50**  
**446.000**

**Work the Activity Hours Have Fun!**

**Every contact adds to the club aggregate score**

Revised 10-28-2011

Note: this image does not render correctly in the printed version of Cheese Bits. It is due to a bug in Microsoft Publisher.

# Latest Beacon Frequencies

Unless noted, these were Packrat beacons measured 11/11/2015. The 903 and 2304 MHz - 24 GHz measurements are GPS locked, others not.

<u>Freq</u>	<u>Db above the noise</u>
50.079.300	50
144.284.432	40 (WA1ZMS beacon measured on 10/29/15)
222.062.400	50
432.290.200	50
903.072.520	30
1296.264.400	50
3456.200.800	25
10368.045.500	30 (W3HMS beacon measured on 10/29/15)

Measured by Roger W3SZ

**K2UYH**

**1296**

**DXCC**

**CONGRATS, AL !!**





# The Other End Of The Spectrum

by Wayde K3MF

It has been quite a while since I was active on 160m. At a former QTH in Schuylkill Haven, PA I built and had published a full size vertical using cheap tv tower and aluminum tubing from scrap CB, tv and ham antennas. At my QTH in Port Deposit, MD I loaded a 40 foot HDBX tower with three wires off the top as a loading hat.

Now flash forward to my present QTH near Fawn Grove, PA. I have not yet installed my towers...70 feet of Rohn 25, HDBX40 and 72 foot crank up. I wanted to get back on 160m so I used the trees behind the house. There are half a dozen or so 80 ft. plus oak trees. I got out the trusty fishing rod with a 2 oz. weight, tossed it as high as possible and next thing you know I had an Inverted L. It is about 70 feet vertical and 60 feet horizontal

I did not want to have radials on the ground so I installed three elevated radials about 6 feet off the ground going through the woods. I am feeding it with flooded RG6 cable. I coiled up about 20 feet at the

Inverted-L Feed with balun



feed to make a coil balun to keep unwanted rf getting back into the shack. In all my years as a ham (41 years to be exact) I never used an Inverted L antenna. **All I can say is WOW!** This simple antenna works. Running 20 watts and using JT65a, QSO's into Europe were possible. Running 100 watts and cw, they are tough but doable when conditions are favorable. Running 900 watts, well that makes a big difference, QSO's into Europe are a lot easier.

The limiting factor on receive is noise. Well fortunately I have the space for a Beverage. Next thing I did was go from the far corner of my



property to one of the oak trees near the house. Turns out it is 570 feet. My property has about 4 acres that is fenced in so I used one of the fence posts at the corner and hose clamped a four foot fiberglass tube to it giving me about six feet off the ground. About half way, I put up an empty twenty foot fiberglass station master shell, then another one near the driveway to give me clearance over the driveway. I wound a 9:1 balun at the feed and clamped the ground side to the fence wires. Ran flooded RG6 to the feed end which is about 400 feet long. It faces ne/sw and makes the noise go away. During the ARRL 160m contest I was switching between the inverted L and Beverage. If I heard them, I could work them. But reaching over to manually switch between transmit and receive was a pain. Sometimes I would forget, no big deal as the Beverage was switched before the amp at the rig so only 100 watts would go out to the beverage and several contacts occurred anyway. So to solve this problem out comes the foot switch and coaxial relay: hold down for the Beverage, let it up for transmit. I worked casually about 5 hours a night during the contest doing search and pounce. Worked a total of **277 stations, 32 states and 9 DX stations.**

The "vine" hanging out of the tree is the vertical segment of the antenna

# Antenna Gain

The January issue of QST has an article on antenna gain at pp. 45-48. It includes this stunning picture of a homebrew dish at Packrat Marc, N2UO's qth in North Carolina



## 70th Anniversary of EME

The Ocean – Monmouth Amateur Radio Club is Celebrating the 70th Anniversary of Project Diana: It was on **10 Jan 1946** that the first successful Radar Echo Location of the Moon (also referred to as EME or Earth – Moon - Earth) took place. And it is widely regarded as the first shot fired in what was to become known as the Space Race. They plan to have their Club Facility open for visitors and will be on the HF bands. **As it stands now, there is a very good chance that they will also be doing an EME transmission on Sunday the 10th.** They are now in the process of installing the needed equipment in the TLM -18 Space Sentry Antenna [**60' dish**], which is located at their facility. They will be posting more information on QRC.com and Eham.com as we get closer to the actual date.

Are any other Packrats planning to attend beside me?

73, AI - K2UYH

## 50th Anniversary -

CONGRATULATIONS to the Penn Wireless Association. Started in 1965; incorporated in 1966 !!!

## K2LNS -> ZL3CW on 6M!!

What a thrill to work ZL3CW for my first contact on six meters in several years! I would never have even listened on the band, but someone on our local group, said the band was open. I only have the Omni 7 which runs 100 watts. The New Zealand station was in and out, but for several minutes peaked at 579. Happy New Year, Herb K2LNS

Note: your editor tried for 1 1/2 hours to get a ZL QSO in that same opening, but no luck. I worked plenty of single hop to the southwest in that opening but no sign of the long-haul qso here in central NJ. Maybe next time. HNY & good dx in 2016



# Pete K0BAK/R CQ WW VHF Results

Packrat Pete, K0BAK/R placed fifth nationally in the CQ Worldwide VHF Contest this summer and got his rolling rigs picture in the magazine (see below). The pic was nominated for best scenery too. Way to go Pete!



A nominee for the best scenery award is this view of the K0BAK rover mobile from Bear Mountain, New York, in FN31.

## CLUB COMPETITION

(Minimum of 3 entries required for listing)

UNITED STATES			FLORIDA CONTEST GROUP		
Club Name	# Entries	Score			
POTOMAC VALLEY RADIO CLUB	(18)	139,247	NORTHERN LIGHTS RADIO SOCIETY	(5)	4,256
SOCIETY OF MIDWEST CONTESTERS	(15)	97,052	DFW CONTEST GROUP	(3)	2,342
CAROLINA DX ASSOCIATION	(13)	76,672	NORTHERN CALIFORNIA CONTEST CLUB	(3)	1,512
PACIFIC NORTHWEST VHF SOCIETY	(13)	63,010			
TEXAS DX SOCIETY	(3)	57,877	DX		
GRAND MESA CONTESTERS OF COLORADO	(6)	54,670	EA CONTEST CLUB	(3)	45,417
FRANKFORD RADIO CLUB	(5)	30,552	CONTEST CLUB ONTARIO	(7)	18,900
YANKEE CLIPPER CONTEST CLUB	(13)	29,299	HA-DX-CLUB	(3)	18,830
CTRI CONTEST GROUP	(5)	27,807	RADIO CLUB KVARNER RJEKA	(5)	15,845
BADGER CONTESTERS	(3)	20,625	CDR GROUP	(17)	5,902
NORTH EAST WEAK SIGNAL GROUP	(5)	18,537	UKRAINIAN CONTEST CLUB	(8)	4,340
MT AIRY VHF RADIO CLUB	(4)	13,851	BLACK SEA CONTEST CLUB	(3)	3,813
ARIZONA OUTLAWS CONTEST CLUB	(10)	7,434	UKRAINIAN VHF INTERNATIONAL CONTEST CLUB	(13)	3,536
PORTAGE COUNTY AMATEUR RADIO SERVICE	(3)	6,318	CABREUVA DX GROUP	(3)	929
ROCHESTER VHF GROUP	(3)	5,421	BAVARIAN CONTEST CLUB	(3)	804
MY AIRY VHF RADIO CLUB		5,143			

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A picture of K0BAK's minivan rover, in position at Bear Mountain NY, was published in the January 2016 issue of CQ Magazine.

Note: the photo above does not render correctly in the printed version of Cheese Bits. A Microsoft Publisher Bug!

## Moon Visibility Software

On the "Moon-Net" email reflector recently, Jim N1NK asked: "Is there software available to help me visualize the portion of the earth currently or at some future time, currently able to view the moon? ". And the answer is yes. Jose, EA3HMJ replied: Try this software. <http://ea3hmj.net/download/Moon.rar> Just enter Home locator and if you want Dx locator. By clicking on a day it gives you a graph of the most important parameters. Click on the graph to close. Double click on the month and it calculates the best day to EME QSO, this is marked with an "\*" next to the number of the day. The software requires Microsoft .NET framework 4.0+, download from <https://www.microsoft.com/en-US/download/details.aspx?id=30653>

# **JANUARY VHF CONTEST HINTS AND TIPS**

- ° NIL - not in the log. Every year members say they lost points due to NIL. Get into the habit of <Entering> the QSO into your log when you QSL the message. If you forget to log it, you lose the points and the other station is penalized for NIL.
- ° Contesters are advised to read their log before submission. Check call signs and exchange data that contain O(oh) and 0(zero). Check for invalid grid formats. Changing O/0 typos and log editing to insure correct format, and the required Cabrillo header, is allowed post contest.
- ° Check the PC Date and UTC time before logging. Using the wrong date or wrong UTC offset can cause cross-checking errors that can result in NIL. Setup your PC's system clock to automatically update the time from an on-line time server.
- ° **Work dupe stations again**, otherwise this could cause NIL in cross-checking. You can leave dupes in your log without penalty.
- ° **Do not just log the exchange that the logging software suggests** from look-up files - always log and QSL what the other station transmits.
- ° **Rover stations must be logged as call/R**. If you work that station again in a different grid, enter the grid transmitted, otherwise the QSO could be scored as a dupe. The rover operator may also operate from `home` and submit a non-rover log, so logging call signs and grids correctly is important.
- ° **Call CQ!** If you only `search-and-pounce`, your score can suffer. It doesn't matter if you are a little station or a big station - call CQ. Using the logger's digital voice keyer will allow you to call CQ without fatigue.
- ° Use CW. If you are a low power station, or live outside the `Pack Rat activity area` or you want to work new grids, use CW - and call CQ. If you have HF capability, get on the air and improve your CW skills.
- ° Use WSJT. As pointed out many times at club meetings, digital modes can be used to work stations outside your normal distance circle. QSOs don't need to be via meteors or EME. Using JT65 will allow you to work stations that you can't normally work.
- ° **All categories are allowed to use spotting assistance**. See 7.1 in the rules. For schedules, some folks are using the SKEDULER software: [www.qsl.net/w3km/skeduler.htm](http://www.qsl.net/w3km/skeduler.htm)

Your Cabrillo log must be e-mailed, as an attachment, to [JanuaryVHF@arrl.org](mailto:JanuaryVHF@arrl.org) no later than **\*0359 UTC Wednesday, March 2, 2016\***. If you have a paper log, send it to me and I will create a Cabrillo log and submit it. After receiving a favorable response from the robot, send me a copy of your Cabrillo, so I can tally the Club's aggregate score and provide W2BVH with the results for Cheese Bits.

The Cabrillo filename must be URCALL.log (URCALL-R.log or URCALL\_R.log for rovers). The Subject: in your e-mail submission must be URCALL (or URCALL/R). When operating as a rover, after writing the Cabrillo, change the CALLSIGN: field to URCALL/R if necessary. Then make sure your call sign is URCALL/R in the sent call field for all QSOs.

**Have fun, Dave W3KM**



## First Geosynchronous Amateur Radio Satellite is In the Works

Launch of the first ever geosynchronous amateur radio satellite is planned for late 2016 or early 2017. If successful, it means you won't have to wait for a satellite pass, it will be visible at the same spot in the sky 24 hours a day.

The satellite is called "Phase 4B".

Uplink will be on the 5 GHz band and downlink at 10 GHz. Anticipated power for a usable uplink signal is approximately 1 Watt to a salvaged 18" tv satellite dish.

Commercial providers are working on making kits available for radios capable of using the satellite.

You may want to consider sending a contribution to AMSAT to further the work on this project. As they say "No Bucks, No Rogers".

More information is available on the internet. For instance: <http://forums.qrz.com/index.php?threads/first-amateur-radio-in-geosynchronous-orbit.505312/>

Or

<http://www.vtnews.vt.edu/articles/2015/12/122215-ictas-humegeoradio.html>



Former Packrat Bob McGwier (R) N4HY is working on ground station equipment at Virginia Tech

## First Ever Satellite Bounce QSO on 23cm

We are very happy to inform you all that after almost two years of trying we (DJ5AR and PI9CAM) completed a satellite bounce QSO on 23 cm on Dec 8.

It was a long journey but we finally made it! Details, screenshots and sound files on: [www.dj5ar.de](http://www.dj5ar.de)

73! DJ5AR & PA3FXB (team PI9CAM)

## QRP HF Mobile CW DX

Joe Everhart, a local (Brooklawn NJ) QRP'er, crackerjack rf engineer and friend of the editor recently had the following to report:

My son and I enjoy weekend trips to "local" sites of historical and other interest. This weekend (12/5-6/2015) we visited Harper's Ferry, WV and Antietam, MD. The latter has a moving Memorial Illumination each December in honor of those who fell during the Battle of Antietam. It is quite moving to see 23,000 luminaries spread across the battlefield.

You can find more info at <http://www.nps.gov/anti/planyourvisit/luminary.htm> .

As during my recent travels in Death Valley, CA, I fired up my KX3 for some mobile operation. Naturally my son was driving....

30 meters in good shape so on Saturday afternoon I listened there while en route from WV to Antietam. Managed to snag AI, N4NBM in Winter Springs, FL and had a hurry-up 599 exchange with VP5/W5CW down in Turks and Caicos. Then while sitting in line for an hour to get into the Antietam Battlefield I managed to snag DJ2QV for my first transatlantic 30M mobile QSO.

Not a bad way to spend a Saturday afternoon!

72/73, Joe E., N2CX

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

(Nibbles from January 1966. Vol. VIII  
# 10)

de Bert, K3IUU (*author's comments in italics*)

- **“Our Prez Sez”**. Prez K3GAS, Doc reported: 1. Get your stories ready for the crying towel session in January (*tradition*); 2. W3CL, Harry continues his code practice sessions on 50.2 (*should we do this again? I know several members that could use it.*); 3. Cheese Bits mailing has been changed to First Class, to expedite delivery (*This issue postage went up to 10c*); and 4. The club voted to establish a “Pack Rat of the Year” Award (*now a long-standing tradition*).
- **ARRL Bulletin Nr. 37**. 12/9/1965. United Kingdom added to the reciprocal operating agreement list.
- **Oscar IV**. Successfully launched, not in desired orbit, but being used for contacts. Input 144.1, output 431.972, beacon (*telemetry*) 431.962.
- **Two Meter report**. W3ZD, Dave returns, and reports an upswing in activity. Nightly contacts to VA and CT. “Nice to hear a bit of CW traffic at the low end. Remember to observe the gentleman’s agreement to keep the first 100 kc (*sic*) free for CW”.
- **Free Dues Entry**. This issue contained a full page entry of the conclusion by our perpetual humor author, K3JJZ, El. Remember the topic was “You Lose Again, Mom”. (*I won’t give away the punch line. Read it yourself at W3CCX.com. [I wonder if El remembers it?]*).
- **RFI**. W2AXU, Jack, summarized some interesting stories on recent FCC action on RFI from Industrial sources. (*Where are they now, when we still have power line noise and many birdies from other services?*).
- **New Product Announcement**. Lafayette Radio announced availability of a 100-watt linear amp for 6, 10, 11 (Boo) or 15 meters. Useful for FM, SSB, or CW. Automatic RF switching. Price \$79.95.
- **Silent Keys**. Helen included a memory page for our silent keys. Starting with Matt Gelardi, W3CCX (*now our club’s call*). With her usual cartoon of a key.
- **Swap & Shoppe**. The monthly column by W3ZRR. Ray listed a 6-meter converter, with a Nuvistor preamp, crystal included. Price \$25 (*Michael, take note*).
- **New Members**. A number of new members to report. The usual rush to join before the January contest. Included were: WA3BIV, Carl Barish, WA3EPS, Mort Mazer, W3IA, Tom



Coin, W3WIJ, Tom Matthews, and WB2DIF, Jim Harvey.

- **Ladies Night.** Make plans to attend now. April 16, Buck Hotel. (*Another tradition, sadly allowed to end*).

*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](http://www.W3CCX.COM) and read the full issue posted there by our Webmaster, Ron, W3RJW).*



*thirty, de K3IUUV*

## FOR SALE

For Sale at scrap prices, various lengths of new and used elliptical wave guide. EW127A, E105J, EW63 and what we called 75 (one size smaller than small X).

Used connectors available for the 6 GHz and 14 GHz wave guide.

Contact via email only: [we95@comcast.net](mailto:we95@comcast.net)

Warren wb2ona

## VHF Super Conference Call for Papers

First Call for Papers and Presentations for the Super VHF Conference, April 15-17, 2016, near Washington, DC. Jointly sponsored by Packrats, NEWS Group, and SVHFS.

details at <http://vhfsuperconference.com/>

Looking for presentations or papers on VHF, UHF, microwaves, and higher. All aspects welcome - operating, contesting, homebrewing, software, EME, surplus, antennas, test equipment, amplifiers, SDR, 47 GHz superregen, whatever.

This is the first call, so you have time to think about it, heat up your soldering iron if needed, take pictures, win the January contest...

N2CEI and W1GHZ will be coordinating the Proceedings. Details for submission will be on the website soon.

## January VHF Contest Assistance Rules

The complete contest rules can be found at <http://www.arrl.org/january-vhf>. It's well worth checking out section 7.1. Setting up QSO's is now permitted via chat rooms, reverse beacon nets, dx cluster reports, APRS, self spotting, etc. **But its only for setting up a QSO.** The q must be completed without any outside assistance (internet, cell phone etc.).

## Tower For Sale

Heights 60 foot crank up tilt over free standing aluminum tower with thrust bearing and ac hoist motor and base template. \$400.00. Must pick up in Warminster PA.

Tower is 35 years old and will need some repair. For more information, contact George Brechman N3HBT at 215-443-5656 or [n3hbt@arrl.net](mailto:n3hbt@arrl.net).

## Events

For inclusion, please direct event notices to the editor.

**Phil-Mont Radio Club - Auction** - January 14, 2016 (tentative date), at Roxborough Hospital. See <http://www.qsl.net/w2vtm/hamfest.html> for details

**WASH 2 Meter Contest - Contest** - January 16, 2016. See <http://www.n3sh.org/WASHRAG/WASH1215.pdf> for contest details

**Harrisburg RAC Winter Hamfest - Hamfest** - January 23, 2016. See <http://w3uu.org> for details

**January VHF SS - Contest** - January 30-February 1, 2016. Extensive info and advice on the January contest will be given at the December Packrat meeting. **Please plan to attend!**

**WARC Auction - Auction** - February 4, 2016. See <http://www.qsl.net/w2vtm/hamfest.html> for details.

**Cabin Fever Hamfest - Hamfest** - March 12, 2016. Tech Night Amateur Radio Club. Pocono Manor, PA. See <http://www.arrl.org/hamfests/cabin-fever-hamfest-6> for details.

**41st Trenton Computer Fair - Convention** - March 19, 2016. Dozens of presentations on all sorts of technology plus a technology flea market. Hosted by The College of New Jersey and organized by AI, K2UYH. See info elsewhere in this issue.

**Penn Wireless Assoc - Auction** - March 21, 2016. See <http://www.qsl.net/w2vtm/hamfest.html> for details.

**2M Spring Sprint - Contest** - April 11, 2016, 7 - 11 pm local time. See <https://sites.google.com/site/springvhfupsprints/home/2016-information> for details.

**VHF Super Conference - Conference** - April 15 - 17 2016. See additional details on this page and <http://vhfsuperconference.com/> for details.

## 2016 East Coast Super VHF Conference Plans / Status

Will be on April 15<sup>th</sup> to 17<sup>th</sup> 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

August 19-21, 2016. Venice Italy. Additional info will be added here as it becomes available.

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

--Info from Rick, K1DS

## 2016 Dues are Due

Go to <http://qsl.net/w3km/members-dues-R-due.txt> to see if you owe dues and how much.

Submit cash or check at a club meeting.

Or via PayPal:

[http://www.qsl.net/w3km/MtAiryRC\\_Dues.htm](http://www.qsl.net/w3km/MtAiryRC_Dues.htm)

Or send check to Mt. Airy VHF RC. Mail to:  
Dave Mascaró, 1603 Mink Rd., Ottsville, PA 18942



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## Trenton Computer Fair 2016

The TCF team is now working on the 41st TCF, to be held Saturday March 19th. We hope to make this year's TCF as enjoyable as the last. One difference is that we will be holding a Start Your Own Business/Entrepreneurship Forum. Entrepreneurship will be the theme of TCF with both presentations and exhibits that could impact and change your future. As in the past, we are looking for presenters with talks (50 minutes) and tutorials/workshops (100 minutes) on our theme and all forms of **computer/digital electronics, communications technology, amateur radio related topics, robotics, home/environmental control, gaming, digital home entertainment, digital video/photography/music and art, wireless technology, networking, education, etc.** If you have an idea for a presentation, please email me at [<alkatz@tcnj.edu>](mailto:alkatz@tcnj.edu) with Title, Abstract, Bio and length (50 or 100 min). For TCF info see [<http://tcf-nj.org>](http://tcf-nj.org). This year TCF has joined forces and is a member of the NJ Maker Day Partnership. See the upcoming January Cheese Bits for a full color flyer on this event.

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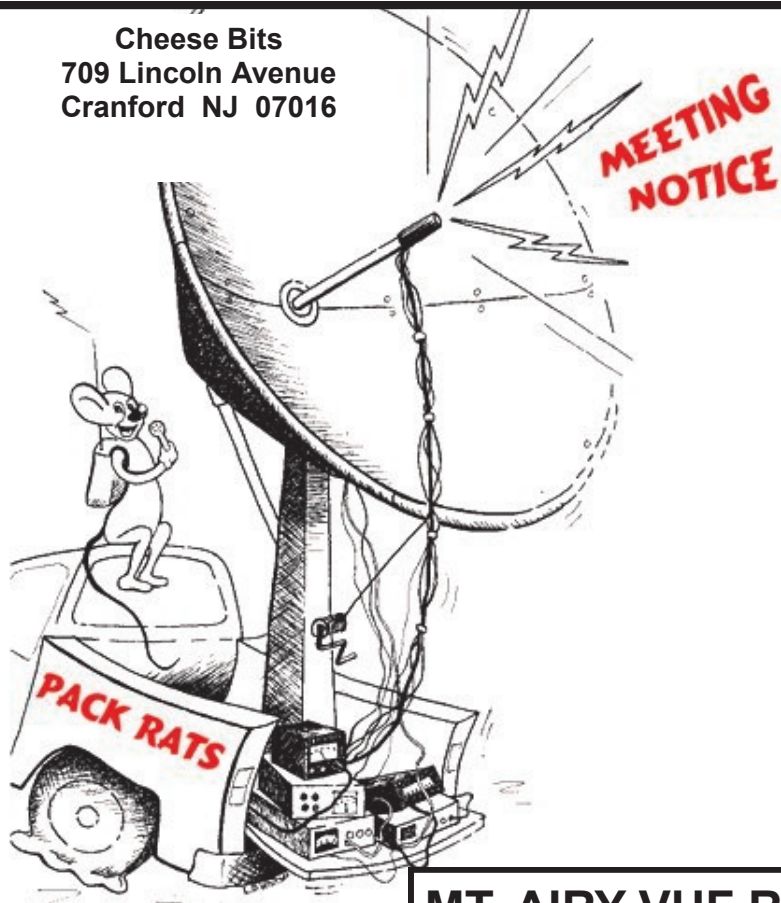
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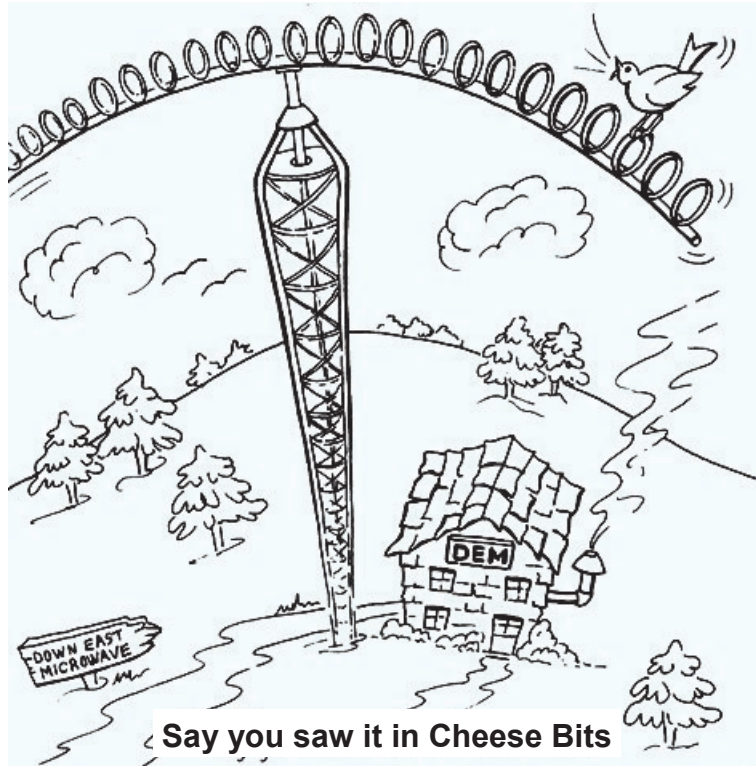
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