



CHEESE BITS

W3CCX
CLUB MEMORIAL CALL

ARRL
Affiliated
Club



Volume LVI

March 2015

Number 3

PREZ
SEZ:

Wow, another month down in the New Year, 2015. I did manage to get away and enjoy some warm weather and experience Hamcation where I met several Packrats. I do plan to make that happen again next year. It's a great way to get away from the snow, ice and cold weather.

This has been a very cold and icy year. How are your antenna systems faring? The nice thing about March, when it rolls around, is that we know Spring is upon us and the cold conditions cannot stay much longer. At least it won't be the way it has been for the past several months.

I do have some antenna projects planned for the spring, how about you? While we have the cold down time we can contemplate, plan, and build that next antenna system. Maybe even start working on that new band. I'm working to get a couple of 47GHz stations operational so we can get more of those high scoring points in contests.

The first ham event this month is the ARRL DX SSB Contest on the first full weekend. I know the CW weekend is more fun, and useful in improving your code skills, but this one is also fun because the whole world is trying to work North America, unlike the CQ contests where everyone in the world is motivated to work each other. So get on and give that wire outside

some exercise and work some DX. The contest starts Friday evening and runs for 48 hours until Sunday evening. Aren't you glad our VHF contests only run for 33 hours?

Remember to compute the Daylight Savings time change coming on that first weekend, and **change the batteries in your smoke detectors.**

But the big Packrat event of the month is the **Home Brew night.** I know of some really exciting projects that are coming, so I hope you have prepared since my last writing to gather your thoughts about the latest project and bring it along to the meeting on the 19th of March. If you can, you should schedule some extra time to be at Giuseppe's at 6 o'clock before the meeting. Plenty of daylight by then; the days just keep getting longer and longer.

Since the months are moving so quickly, lets talk again about the busy April that we have ahead of us.

First we have the **Trailer Work Party and Picnic.** We're looking for a few volunteers to assist at the grill since the Board will be meeting for the first hour and that's when we'd like to have the meat cooking and ready for the arrival of all who will come and assist. We'll first empty the trailer and then pack only what we need for the mountain. It will be a great way to get outta the city and enjoy the country woods for a few hours. **Please start letting me know**

Pack Rats **CHEESE BITS** is a monthly publication of the
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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	K3EOD FM29II WA3QPX FM29di
8:00 PM	144.150 MHz	N3ITT FN20kl
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

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

if you are coming so I can get a count and driving directions to you. The Board meets at 10:30 and the crowd arrives for food first at 11:30. We sure plan to have the work nearing completion by early to mid afternoon.



Spring Sprints are a major event for that next month beginning with 144 on the 13th. But the best part of April will be the annual **ARRL and Awards Night** at the regular Packrat meeting on April 18. You do not want to miss this meeting.

Two outstanding conferences also happen in April; be sure to **register for the NEWS conference and the SVHFS conference**. Both organizations have their registration going and both conferences will prove to be a good opportunity to mix and learn. I can't fail to insist that you **make sure you have our Mid Atlantic Conference on your calendar for October 2 – 4**.

Its also time to talk loudly about the **ARRL JUNE VHF Contest**. I hope you have your time off request in, so you can enjoy the whole weekend. Where do you want to work this year? As part of the infrastructure, or on a particular band. Let us know so we can hook you up with the right captain and make this year one that is most enjoyable. **June 12 – 15**.

So stay warm, plan ahead and lets work on lots of bands,

Phil, K3TUF

Editors Note

Special thanks this month go to Ron W3RJW for going on a magical mystery tour of his hard drive archives, and digging out the original artwork for our back cover. Now when you look at our back cover you won't get the feeling that its time for a visit to the optometrist for a new prescription.

And extra special thanks to Ron's XYL Lynne for having done the artwork to begin with!

—Lenny W2BVH

FEBRUARY CRYING TOWEL MEETING



...Crying Towel cont'd



There were many worthy stories presented to our judges, and after serious (well half serious) deliberation they finally decided on a winner



Roger's story of the (non-Pack) rats in his shack won the judge's approval. Congratulations!



EI won the almost-as-coveted (if slightly less durable) Crying Tissue for 2015!

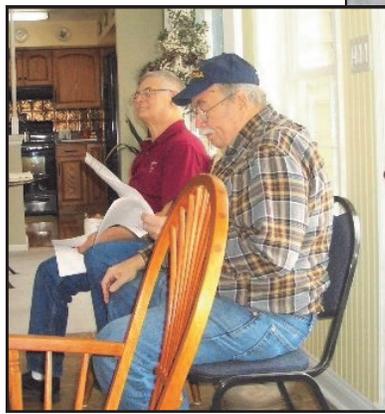
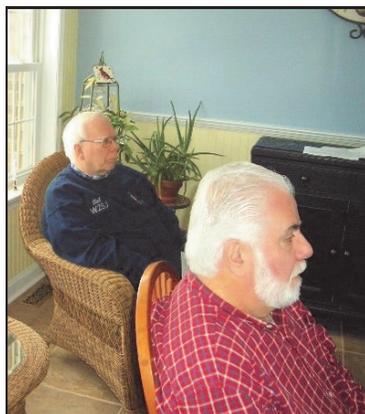


Congratulations to all participants in this years Crying Towel Competition, and to those who sailed through the January Contest with nary a problem.

PICTURES, PICTURES!

There were MANY pre and post contest pictures submitted to Cheese Bits in the last two months. Here is a representative sampling.

Contest Wrap-Up Meeting



K3JJZ Hard Line Installation



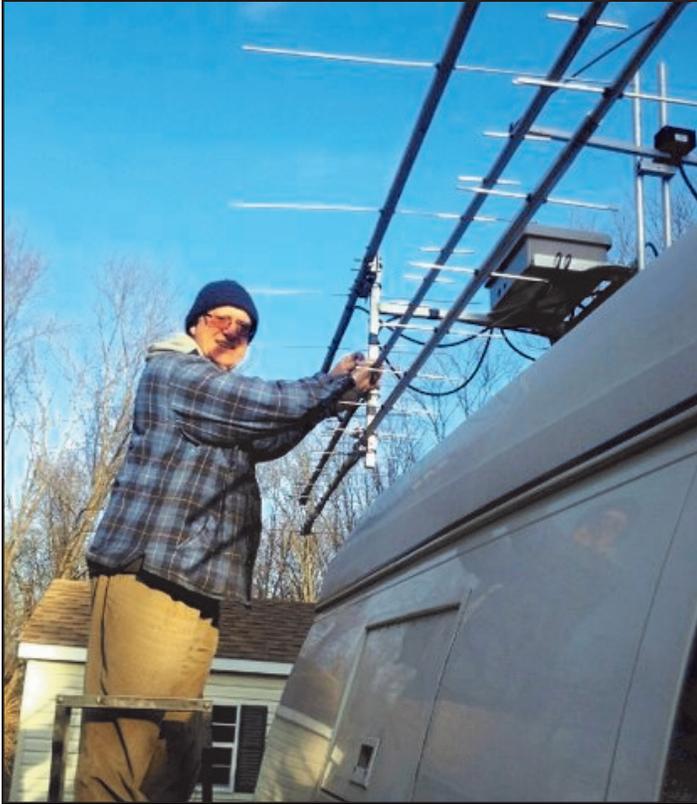
K3IP M Antenna Setup



KB3MTW Setup



W3ICC Rover Setup



... Underground cont'd

Roving on Sunday went pretty well, and I managed to give several Rats an 11 band contact. (And 12 at WA3NUFs). I'm looking for someone to take over the rover gear for next year. If interested, contact me.



K3IUU UNDERGROUND HAM RADIO

You may have heard of my underground antennas. Weather prevented me from putting up the stuff on the back deck. So I figured why not hang them from the **basement ceiling**? I mounted a HAM-M to the basement ceiling joists, facing down. Then a 5' mast pointing down. I **stacked 6, 2 and 432 beams in a 3' space**. Then I mounted a 220 beam at right angles to minimize coupling.

The hardest part of using it this way was to remember that the rotor directions would be going backward! **Did not work as well** as an outside antenna system, but was better than nothing! Did manage to work FN21 and the usual local grids on Saturday. **The antennas were below ground and facing concrete walls!** The picture shows the stack.



ON0EME MOON BEACON



The ON0EME moon-beacon is active since the 31st of March 2012. The beacon antenna tracks the moon when above 10° of elevation and transmits a high power signal direction to the moon.

The signal is bounced off the moon and can be received with modest receive antennas. The smallest station reported is from Carlos, CS5RAD using a 1,35m parabolic reflector. We hope to encourage other radio amateurs to attempt receiving the signals and improve their equipment.

Operational parameters can be seen at <http://www.on0eme.org>

1296 MHz Small Station EME

Neil neil@ignika.com reports on his 23 cm activity during Nov and Dec -- I set up 4 x 55 el yagis in my garden, portable-style, for both EME weekends. The elevation was controlled with satellite jack, VK5DJ controller. I used my usual tropo PA with up to 400 W at the combiner. My Sun noise was ~7.5 dB with an SFI around 130.

He had 31 Q's including some replies to CQ's.



APRS Modules and Apps

—By Pete K0BAK

At a recent meeting Phil talked about APRS being especially useful for rovers to send call sign and location information, and possibly additional info like listening frequency etc. I mentioned that I used APRS in the July and Jan. contests to "broadcast" current rover location, and that there was a supplier that specializes in self-contained APRS transmitters and related GPS receivers.

The company I couldn't remember is Byonics, <http://www.byonics.com/>

I bought and used their all-in-one package "Micro-Trak RTG" that has everything needed, they even programmed the device with my call sign. They also have **quite a variety of other components for APRS** systems or to GPS-enable an existing radio.

I've also used an **iPhone app "Ham Tracker"** that injects basic APRS location information via Internet (cell phone data). You just need to configure the settings with your APRS verification key. Easier and neater in the rover than using an actual ham transmitter, but probably not considered sporting -- though there's nothing in the new contest rules about having to use APRS only via radio.

Navassa K1N 6 Meter Ops Report

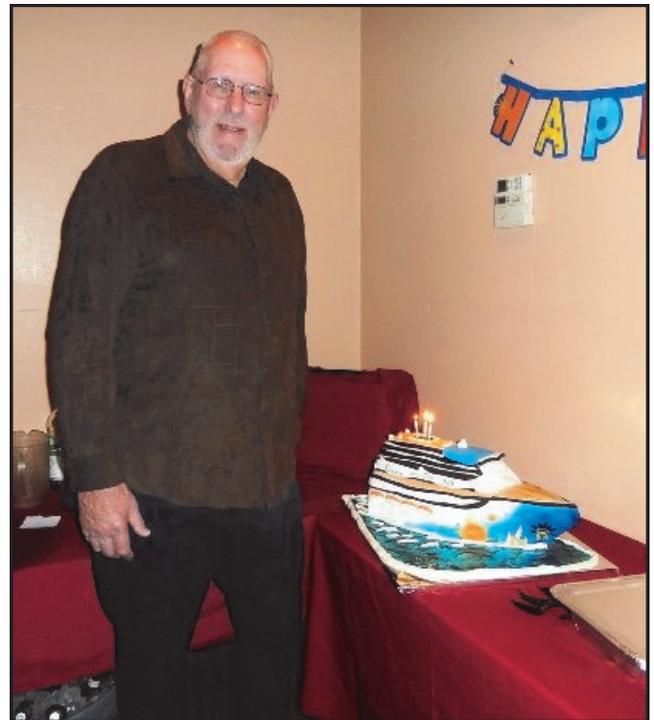
K1N, the Navassa DXpedition, which is on the air as I write this, has been on six meters on an irregular basis. The HF oriented operation did bring six meter equipment to the island, although by most standards the six meter station is **inadequate for serious weak signal work**. It consists of a 100 watt transceiver and 5 element yagi. There is no dedicated operator, and the equipment is located in the mess tent. There is a breakable beacon on 50.103MHz. If the beacon is broken by a signal, and someone in the mess tent hears it, there may be a reply. Despite the secondary status of the station, as of

Joe WA3SRU 70th Birthday

2/8/2015

Been busy unwinding from the cruise. The cruise was outstanding. Had a great time. Got home on 1/30. On Saturday the 31st, Marie & I went for dinner with her son & his wife. Turned out it was a surprise party for me. Our 7 kids, 15 grand kids & 2 great grand kids plus some friends. Great party. The chef made a replica of our ship. Just relaxing & recovering. I think I will be on the nets tomorrow. Also, the school club roundup starts tomorrow so I will try to work some of them. Talk to you tomorrow.

Joe WA3SRU



---Navassa cont'd

February 11th, 220 six meter contacts have been logged.

The vast majority of the K1N six meter contacts have been to South America via the evening TEPSeveral US stations have worked K1N on meteor or io-scatter. — Chris W3CMP

41st ANNUAL EASTERN VHF/UHF/MICROWAVE CONFERENCE

Fri./Sat./Sun. April 17-18-19, 2015
BAYMONT INN & SUITES,
20 Taylor St., Manchester, CT 06042
(just a few miles northeast of Hartford, CT
off I-84, at Exit 63)

Registration \$30 (includes Super Hospitality
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Registration \$25 before April 1 makes the
Saturday Lunch Free.
Banquet \$28. Must order banquet before April 10.

Send presentation proposals to Paul
W1GHZ@arrl.net

Talks and papers, both long and short, are
needed. Please tell us about what you have
been working on. Operating, contesting,
construction, homebrewing, microwaves,
whatever. Please let me know if you are
considering something. A commitment by the
deadline of 18 March would be appreciated.

See <http://www.newsvhf.com/vhfconf.html>
for details

Mid Atlantic States VHF Conference

The Mid-Atlantic States VHF Conference will be
held on the weekend of October 2-3-4, 2015.

It's not too early to get your thoughts in order to
make a presentation for Saturday, October 3.

Papers are also welcomed for publication in the
conference proceedings disc.

Please contact rick1ds@hotmail.com with your
topic/presentation or paper title.

Rick, K1DS

Ham Humor

Jim decided to tie the knot with his long time
girlfriend. One evening, after the honeymoon, he
was cleaning his ham gear. His wife was standing
there watching him.

After a long period of silence she finally speaks:
"Honey, I've been thinking, now that we are
married I think it's time you quit ham radio.
Maybe you should sell your ham equipment."

Jim gets this horrified look on his face.

She says, "Darling, what's wrong?"

"There for a minute you were sounding like my ex-
wife."

"Ex wife!" she screams, "I didn't know you were
married before!"

"I wasn't!"

**From Ken, KA2LIM, forwarded (twice) to
Cheese Bits by WA2ONA and K1DS**

Rooting Out Malware On Your Computer

Here's a nice article on getting rid of Malware from
the IEEE "Spectrum" magazine web site:

[http://spectrum.ieee.org/riskfactor/computing/
hardware/rooting-out-malware-with-a-sidechannel-
chip-defense-system](http://spectrum.ieee.org/riskfactor/computing/hardware/rooting-out-malware-with-a-sidechannel-chip-defense-system)

Thanks to K3JJZ for the URL

Dave, W3KM reports that he has converted
most of his past work on ham projects to be web
addressable and it can be reached at [http://
www.qsl.net/w3km/other.htm](http://www.qsl.net/w3km/other.htm)

All of it is well worth checking out, but if you like to
make stuff you should check out the frequency
boxes in the middle of the page.

—W2BVH

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

(Nibbles from March 1965. Vol. VII # 12)
de Bert, K3IUU (*author's comments in italics*)

- “Our Prez Sez”. Prez K3GAS, Doc, reminded everyone to “snug up” your feedlines so they don’t flap in the winter weather (*still good advice!*). He also reminded all that Packrat certificates are still available (*good way we used to drum up contest contacts for the club members.*).
- Dues are Due (*as always, in March*).
- ARRL Bulletin Nr. 987. The Dept. of Transportation announced a rules change, permitting only CW in the first 100 Kc of the 6 and 2 meter bands. “... Intended to protect weak signal work such as moonbounce, auroral contacts and use of the Oscar satellite 2-meter repeater scheduled to launch late 1965.” (*Interesting. I did not remember that this change happened 50-years ago!*).
- Bulletin Nr. 990. US Supreme Court refused to review the Appeals court decision that FCC fees are legal. ARRL and others had petitioned for the review.
- Bulletin Nr. 991. Conditional class rules changed to require applicants to live more than 175-miles from an FCC office exam point. (*Is there still a “Conditional” license?*).
- From The Evening Bulletin (*things that aren’t there anymore.*). A bill was introduced to Congress, to authorize the

FCC to regulate devices “which cause harmful interference with radio reception”. Examples given were garage door openers, electronic toys, etc. (*Could anyone have anticipated today’s plethora of such devices?*).

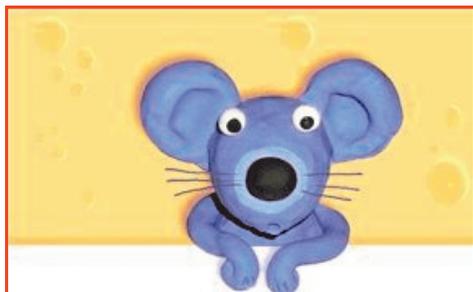
- The Pack’s Rats. This periodic column detailed a biography of members, and this month featured Paul, K3EOU and Howard, K3EPB. (***Nice way to build fraternity into the club. Should this be revived?***).
- Technical. The Prez, K3GAS, Doc described his modifications to the Lafayette HE-45. The changes improved stability and facilitated output amplifier tuning when installed in a car. Doc says “Now look for me mobile”.
- KUI, by W3HKZ, Ed. FCC gave Pan American Airways (*things that aren’t there anymore*) a 90 day permit to have two of their jets communicate with ground stations via a satellite relay. (*So much the norm today, that we forget when it was not feasible.*)
- Interesting article by W8HHS, Doug Demaw, the editor of The VHFer (*anyone interested in the copies I have in the bunker?*). He expounded on the proper use of call signs on the air, and bemoans the “cutesy” phonetics frequently heard on the air. He pointed out the unprofessional appearance and image reflection of such actions (*you know who he means – still seen today.*).
- 2-meter report by W3LHF, Dave. As usual, activity dropped dramatically right after the contest. He reports stations in VA and MD looking this way for Packrat contacts to earn the certificate. Also heard nightly is

W2AZL, on CW. He was the designer of the widely used “W2AZL converter” which used a 417A in the front end. A club project put one of these in almost every Packrat’s shack. (*I still have one in my collection.*)

- Technical. A schematic, description and construction details for a stable oscillator for VHF – UHF use was authored by K6HCP, Ken. With a 2N3251 transistor in a Hartley circuit, he used an un-powered crystal oven as a thermal shield to eliminate short-term changes to the crystal temperature. (*High-stability ovens were not commonly available.*)
- Swap Shoppe item. For sale, 432 Rig (not modified). The seller, K3IUV, Bert . (*Can’t remember now, but it might have been an old Link Taxicab rig!*).
- February meeting announcement. Topic “Home Brew”. (*Some things never change.*).
- Five pages, double-sided, heavy stock, legal size. Postage still 4-cents.

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 K3IUV



Rick’s got something to crow about this month

A Nice YouTube Ham Radio Video

<https://www.youtube.com/watch?v=hxU1ZhINaHk>

Tnx K1DS for the link

Council Rock South Students Call the International Space Station

Video and article at the The Intelligencer web site at http://www.theintell.com/videos/local/video-council-rock-south-students-call-the-international-space-station/html_ab5d5ac0-c729-53c0-a7e0-4dc867dbbb62.html

Andy (KD3RF), Irwin (KD3TB), and Karl (K3KH) from the Warminster Club are in the video. Packrat Joe Horanzy (AA3JH) the antenna guru helped with the outdoor setup that uses circular beams on 2m and 440 -- the rotor is computer controlled.

Tnx, Mark WA3QVU for the info

TCF™@40

The College of New Jersey Hosts
The 40th Anniversary of
THE ORIGINAL PERSONAL COMPUTER SHOW

TCF™@40

Trenton Computer Festival™



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www.tcf-nj.org

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Saturday, March 21, 2015

9:00 am — 5:00 pm

Registration/Flea Market open at 9 am, Talks start at 10:15 am.

- Internet-of-Things
- Android Wear talk by author Barry Burd
- Project Tango • Android/iPhone Apps
- Raspberry Pi Tutorial and Projects



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one day at TCF! Cram begins at 9 am**

**Arduino Developer/User Tutorial/
Workshop**

IEEE/ACM IT PROFESSIONAL CONFERENCE

Friday March 20, 2015, 8:30 am — 5:00pm**

Continuing as part of TCF's Saturday Talks.

For Conference Info and Fees See

<http://princetonacm.acm.org/tcfpro/>

**For additional TCF'15 info,
directions and advance tickets:**

www.tcf-nj.org

DOOR PRIZES

IEEE Integrated STEM Education Conference (ISEC)**

Saturday, March 7 – 8:00 am — 5:00 pm

at Friend Center, Princeton University, NJ

Creating a Culture of Achievement

Info: <http://ewh.ieee.org/conf/stem/>

**The IT Pro (Friday) and ISEC Conferences require separate registrations.

The 2015 Trenton Computer Festival™ is sponsored by The College of New Jersey and its School of Engineering.

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Events

For inclusion, please direct event notices to the editor.

Trenton Computer Festival - Conference & Swap March 21, 2015. 40th annual conference. Multiple tracks of presentations all day and an indoor flea market. See www.tcf-nj.org for more details.

Spring Sprints 2M—Contest Monday, April 13, 2015 from 7 - 11 PM local. See <https://sites.google.com/site/springvhfupsprints/home/2015-information> for details

Eastern VHF/UHF/MICROWAVE Conference April 17 - 19, 2015. Manchester CT. Sponsor N.E.W.S. Chairmen W1GHZ, WZ1V, K1MAP. See p.15 and <http://www.newsvhf.com/vhfconf.html> for details.

Spring Sprints 222 MHz—Contest Tuesday, April 21, 2015 from 7 - 11 PM local

Spring Sprints 432 MHz—Contest Wednesday April 29, 2015 from 7 - 11 PM local

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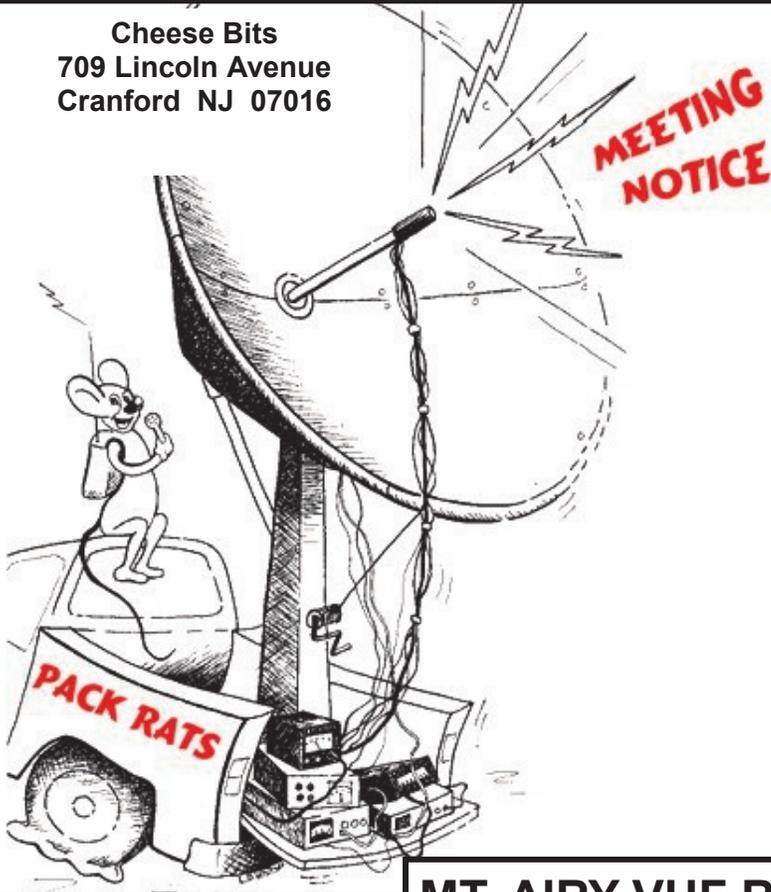
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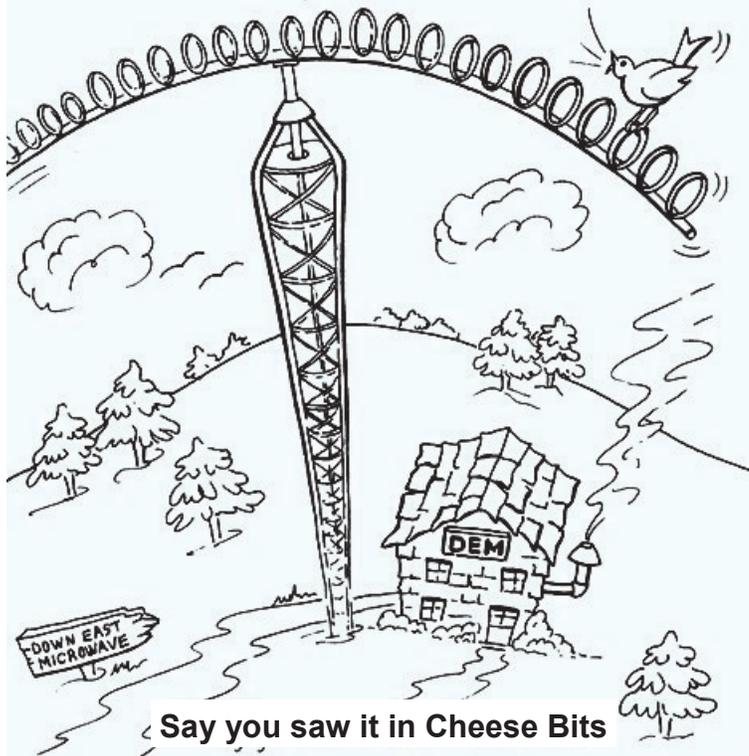
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