



CHEESE BITS

W3CCX
CLUB MEMORIAL CALL

ARRL
Affiliated
Club



Pursuing weak signals and contesting since 1956

Volume XLIX

January 2008

Number 01

PREZ SEZ

It's been a banner year for the Packrats. We have had a complete activities and meeting schedule and hosted an extraordinarily successful Hamarama and Microwave Update. Our

members have been published and recognized in QST, AMSAT Journal and CQ-VHF, and others. On-the-air activities have included our weekly nets, January VHF SS, the Spring and Fall Sprints, June VHF QSO Party, and even the ARRL EME contest. We made a transition from the Southampton Free Library to the Ben Wilson Senior Center for meetings during renovations. My deep appreciation to all the officers, board members and event chairpersons, along with their teams of support for the efforts they bring forth to continue to make this a premier VHF radio club.

We have an expanding core of members who have joined over the past several years that we can now call upon to actively participate in club leadership. Our first and most important task will be a slate of officers for the 2008-09 year. It's time for you to give consideration to an officer or board position. We continue to need to recruit fellow VHF'ers to our ranks, and facilitate their knowledge and operation on the bands above 50MHz. Although many senior club members are capable through the millimeter bands and on EME, others need help with the basics on the lower four. A Yagi building project is a start in this direction, and hopefully will get started before the January VHF SS.

We are fortunate to be able to have acquired a DLP projector for the club for meeting presentations. Although we scrambled in the past to have one available from various loaner sources, we will now soon have our own. Perhaps this might also be the stimulus for members to make Power Point presentations for the "Cryin' Towel" meeting night in February.

Our June efforts are in need of band captains. A band captain puts together a station for the particular band and tests it prior to the contest, delivers it to the mountain and sets it up into working condition, and makes him/herself available for any adjustments or repairs if needed. A band captain need not own all the needed band gear, but be able to acquire/loan it from club members and friends. So far, we have volunteers for the microwaves. We need to know now to be able to plan the intensity of the next June outing. Please make contact with Steve, KF6AJ and let him know you can! ssi-mons@manitousys.com

January—let's not forget. We have gear to loan, let your needs be known to Bill, K3EGE <k3ege@aol.com>; We need your entries, there are challengers on the horizon. Happy and Healthy Holiday Season and New Year to all.
73, Rick, K1DS

JANUARY VHF SWEEPSTAKES

1800 UTC 19 January 2008 (2PM)

To

0300 UTC 21 January 2008

(11PM 20 January 2008)

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222.98/224.58 MHz (PL 131.8) Hatfield, PA

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PACKRAT BEACONS - W3CCX/B

FM29jw Philadelphia, PA
 50.080, 144.284, 222.065, 432.295, 903.071, 1296.251,
 2304.037, 3456.220, 5763.190, 10,368.140 MHz (as of 3/1/01)

MONDAY NIGHT NETS

TIME	FREQUENCY	NET CONTROL
7:30 PM	50.145 MHz	K3EOD FM29II
8:00 PM	144.150 MHz	N3ITT FN20kl
8:30 PM	222.125 MHz	K3TUF FN10we
8:30 PM	224.58R MHz	W3GXB FN20jm
9:00 PM	432.110 MHz	WA3EHD FN20kd
9:30 PM	1296.100 MHz	K3TUF FN10we
10:00 PM	903.125 MHz	W2SJ FM29Iw

Visit the Mt. Airy VHF Radio Club at:
<http://www.packratsvhf.com>
www.w3ccx.com

Editor's Column

We'll look here - it's 2008 already. Happy New Year and I hope you had a wonderful holiday celebration.

We got caught up in the holiday activities along with an upsurge in business. Both kept us away from the task of getting this newsletter completed sooner.

With the contest a little over a week away and a very informative meeting just before the contest. I hope we have given you enough notice to rush and get things done.

Mother Nature seems to be providing her usual break from the cold to facilitate the last minute antenna projects. The rest of us are busy trying to get all that stuff fixed that broke last year or an improvement completed so it can be tested before the action starts on the 19th of January.

If you are looking for ways to help the club out we could use an editor with more free time to get this news letter to the membership in a more timely manner.

Remember we need everyone to participate in the January contest.

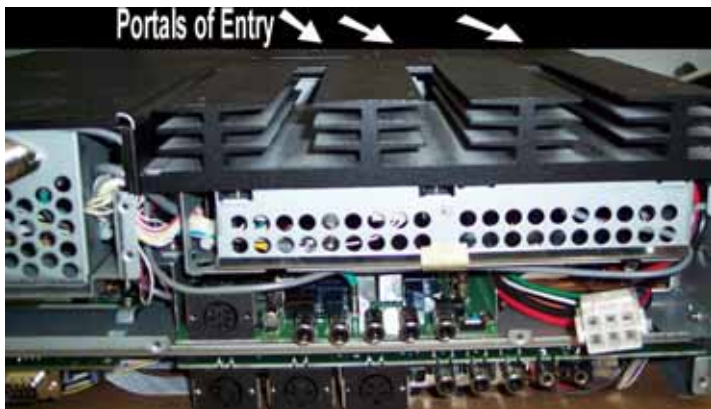
Speaking of contests—June is just around the corner. Get your permission slips in order and take care of the “Honeydo” list so you can lend a hand not only operating the W3CCX Contest station in some way helping with the logistics of fielding this mountaintop multi-op station. We need Rovers too.

‘Nuf said for now—see you at the next meeting and...

*Listen for the
 WEAK ONES
 73
 W3GAD Doc*



Mouse-Proof it is NOT! FT-1000MP Mark V A Poor Mechanical Design



I turned on my FT 1000MP Mark V IF rig early Saturday Morning to start the 10 GHz contest and was greeted with no received signals on any band 50 MHz through 24 GHz, and no transmit power on any band. I substituted an Elecraft K2 for the FT1000MP and I had good receive and transmit function.



The FT-1000 MP rattled suspiciously as I carried it from the operating desk over to the workbench. I opened it up, and lots of rat pellets spilled out!

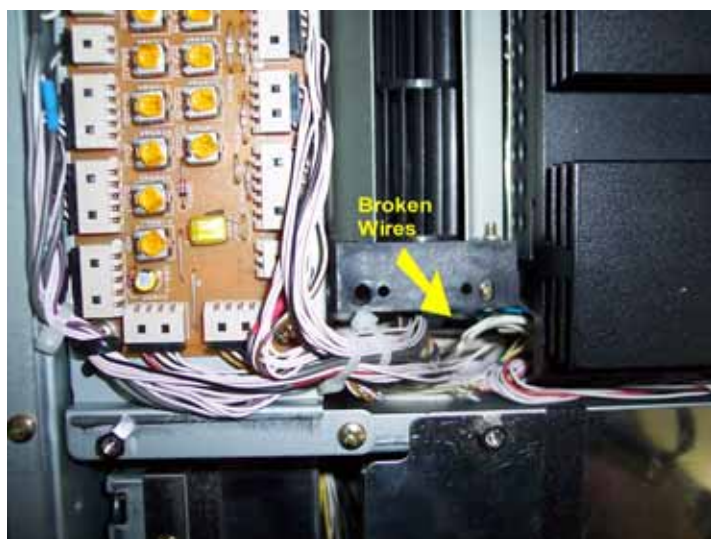
Do you have a story to tell? Why not write it up and share it with the readers of CheeseBits
Email it to:

Doc Whitticar at w3gad@arrl.net

There were more pellets inside!



This picture shows where 9 wires were gnawed or cut in half. The mice must have been hungry!



This is how the two cables [one with 6 wires, one with 3 wires] looked after I disconnected them from the circuit boards and removed them from the radio.



The wires were repaired and put back into the FT 1000MP. Unfortunately, even with the repaired cables neither the main receiver nor the transmitter worked, although the sub-receiver did work. A review of the FT 1000 MP circuitry indicated that this meant that the problem was likely related to the IF board. When that board was supplied with an RF signal at 70.455 MHz [the 1st IF frequency], the FT 1000MP produced a loud signal in the speaker, indicating that the IF board itself was likely OK. Checking further, I found that the 2nd LO [62.24 MHz] was OK. The 3rd LO [8.67 MHz] was OK. But there was no signal output from the 1st LO [70.555-100.455 MHz]. If I supplied a first LO signal with my HP8640 at -20 to +10 dBm, the receiver worked. So the first LO was the problem.



I Fixed this broken wire and of course I again had +13 V at the appropriate pin on J4005, the 1st LO worked again, and the FT 1000 MP was restored to its previous excellent working condition.

I never liked the mechanical design of the FT 1000MP Mark V, as it is very difficult [for a human] to gain access to some of the circuit boards. But now I know that the design is also poor because it makes it very easy for small rodents to gain access to these same areas. At the top of the unit, at the junction of the rear heat sink with the front top panel, are 4 rectangular openings which measure approximately 1 cm x 1 cm , which is plenty of room for a little mouse to gain entry into the FT 1000 MP Mark V. The NIH website says that a nickel-sized opening is PLENTY of room for these creatures to gain access to anything. See the photo at the top of the page.

From now on, a metal ruler will sit in the slot on the top of the FT 1000 MP Mark V when I am not using it, to block the rodent access portals that permitted this to happen.

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Measuring the voltages at J4005 on the Local oscillator board, I found that the +9 volt and +5 volt pins had the proper voltages, but the +13 volt pin had only +0.24 volts. I applied +13 volts to this pin and the 1st LO signal appeared, and the receiver came to life and functioned normally. But why was there no +13 volts here? Had I made a wrong assumption in wiring the broken cables when I assumed that the designers had consistently connected pin 1 to pin 1, pin 2 to pin 2, etc?

No, I had not made an error. When I traced the wire going to the +13 V pin on J4005 deep into the FT 1000MP, I found yet another broken wire, along with some more pellets and discoloration of the metal frame of the FT1000MP, indicating that the mouse/mice apparently spent a good deal of time in this place.

WANTED:
 Your logs for the January VHF SWEEP-STAKES. This contest is one of the reasons for being a PACKRAT. Get on the air and:

SUBMIT YOUR LOG

ARRL EME Contest Activities

Three Packrats operated the ARRL EME contest at K2UYH and K1JT. Joe was joined by KC2TA, N4HY & AB2KT, while K1DS and K2LNS operated at K2UYH while Al went to Aruba on the third contest weekend to operate a bit of EME at P43L. The unofficial results of the multiband “neighborhood” effort is shown below. Joe’s station was running 1200W into 4 x 14 el dual-polarization yagis. Set up with his MAP65 software, they were able to “see” all the action on the band for JT65 contacts in addition to working several stations on CW. All the higher bands were worked from K2UYH’s QTH where he has his 28’ Kennedy dish. The first weekend of the contest was on 2304 and up, and Al and Joe worked 18 QSOs using 80 watts on 2304, adding the feed to the others that are mounted permanently on the dish. For the third weekend, Herb and I spent most of the time on 1296 CW, with a few additional QSOs made on 432 CW and some additional contacts made using JT65 also.

At one point on the third weekend, we lost power to the azimuth motor for the dish. As it was 2:30 AM local, and we were visitors at Al’s station, we decided to call it a night and wait until it was light out to see if it could be repaired. The motor was a small washing-machine variety, driving a pulley wheel which was attached to a right angle gear drive whose output is connected to a chain and cable that wraps around the base of the dish and helps it turn on its wheeled base on a platform. With the wiring appearing intact, the starting capacitor appeared as if it might be the culprit as it was green with corrosion at the clip-on terminals, and oozing a liquid when inverted. We switched the clips to the fresher appearing connecting lugs, and voila—it was back in action.

It was a great learning experience for us newcomers to EME, and a great motivator for getting my own station on EME---just wait ‘til spring....
73, Rick, K1DS

Band	CW/SSB	Digital	TotalQSOs	Multipliers
144	26	149	175	67
432	28	1	29	22
1296	74	10	84	35
2304	18	0	18	15
Totals:	146	160	306	139
Claimed Score: 306 x 100 x 139 = 4,253,400				

LOOK FOR K3BPP

We have been very busy working and building an addition/ham shack. Hope to have a tower up for the contest. I will be contending with a station that will have very high power on all bands up through 10 GHz just 5 miles across the water. Call will be K3CB or W8GP. Any way that will get people to point their antennas down this way.

Have a great holiday and look for you during the contest on 2 meters.

Best Regards

Walt Bohlman K3BPP

Cambridge, MD 21613

410 901 9205 waltbohlman@hughes.net

How to find your 6 Digit Grid Square Fast

Laurent, F6FVY, has programmed a tool based on Google Earth so that you can click on any spot in the world and automatically the corresponding full grid locator is being displayed.

Just go to:

<http://f6fvy.free.fr/qthLocator/fullScreen.html>

and adjust the map to the desired resolution.

Then just click on the spot you want to know and a small window pops up with longitude, latitude and...ww-grid.

vy 73 Bernd DF2ZC (JO30RN)

NOTE:The GOOGLE MAPS give you a street map and Aerial Photo map and a “HYBRID” map that combines both. Here in the Philadelphia area the mapping is fairly recent (5 years) so at my QTH I can see the all the new housing and my own home quire clearly. Editor

ATTENTION—IMPORTANT STUFF

1. Checkout the 2008 contest rules
2. Go to W3KM’s web site and download the latest data files for the W3KM Contest logging program:

<http://mysite.verizon.net/dmascaro1/updates.zip>

Click ‘open’ at the download prompt. Extract the files to the logging program folder (not to the desktop or to a download folder -

JANUARY CONTEST

- WEEKEND OF JANUARY 19-20

The January contest will be here before we know it. This contest is the biggest club contest event of the year. We need everyone to participate - whether full time or part time - just whatever time you can allocate, please get on the air. We need to have at least 50 club members participate AND submit their logs in order to compete in the Unlimited Category.

The contest will be discussed at both the December and January meetings. Please try to attend one or both of these meetings as valuable information will be provided to those in attendance.

Several members have equipment and hardware to donate for contest use. If you have any equipment that you would be willing to let another club member borrow for the contest, please let me know as soon as possible.

Others have need for equipment, hardware, and help with getting their stations on the air on as many bands as possible. I will be letting everyone know who needs what very shortly. If you can assist in any way, please let that be known as well.

I sent an E mail out to all members I had E mail addresses for requesting information regarding whether you would be operating in the contest, whether you would be at home or at a multi-op and what bands you plan on operating. If you did not receive this E mail, you can either contact me by Email at k3ege@aol.com or call me on my cell (484) 614-1505.

Let's make this the biggest and best January contest the club has ever participated in. We can do it with all of us working together - and having fun at the same time.

Looking forward to working many of you in the contest.

73, Bill - K3EGE
January '08 Contest Chairman

UPDATED BEACON FREQUENCY CHECK LIST

Thanks to Roger, W3SZ we have accurate beacon frequencies to help us know where our transverters are operating.

Roger has used GPS Signal sources to verify these frequencies and is keeping the list up to date on his website in an EXCEL SPREADSHEET FORMATE. You can check the latest reading at:

[www.nitehawk.com/w3sz/
w3ccxbeaconsfreqs.xls](http://www.nitehawk.com/w3sz/w3ccxbeaconsfreqs.xls)

These beacon frequencies where checked on 29 December 2007 using a combination of direct readings with the GPS systems and using a GPS locked synthesizer as a reference on the non GPS locked systems	50.079.82 144.283.48 222.064.13 432.286.75 903.072.30 1296.244.86 2304.042.68
--	---

I am happy to be within 1 kHz accuracy—it really helps in finding the other station quickly as you are moving up the bands.	3456.207.20 5760.196.29 10386.061.??
---	--

Check your frequencies out on the Monday night Nets this week.

New tower storage racks installed

Photos from K3JJZ



Joel Knoblock W3RFC

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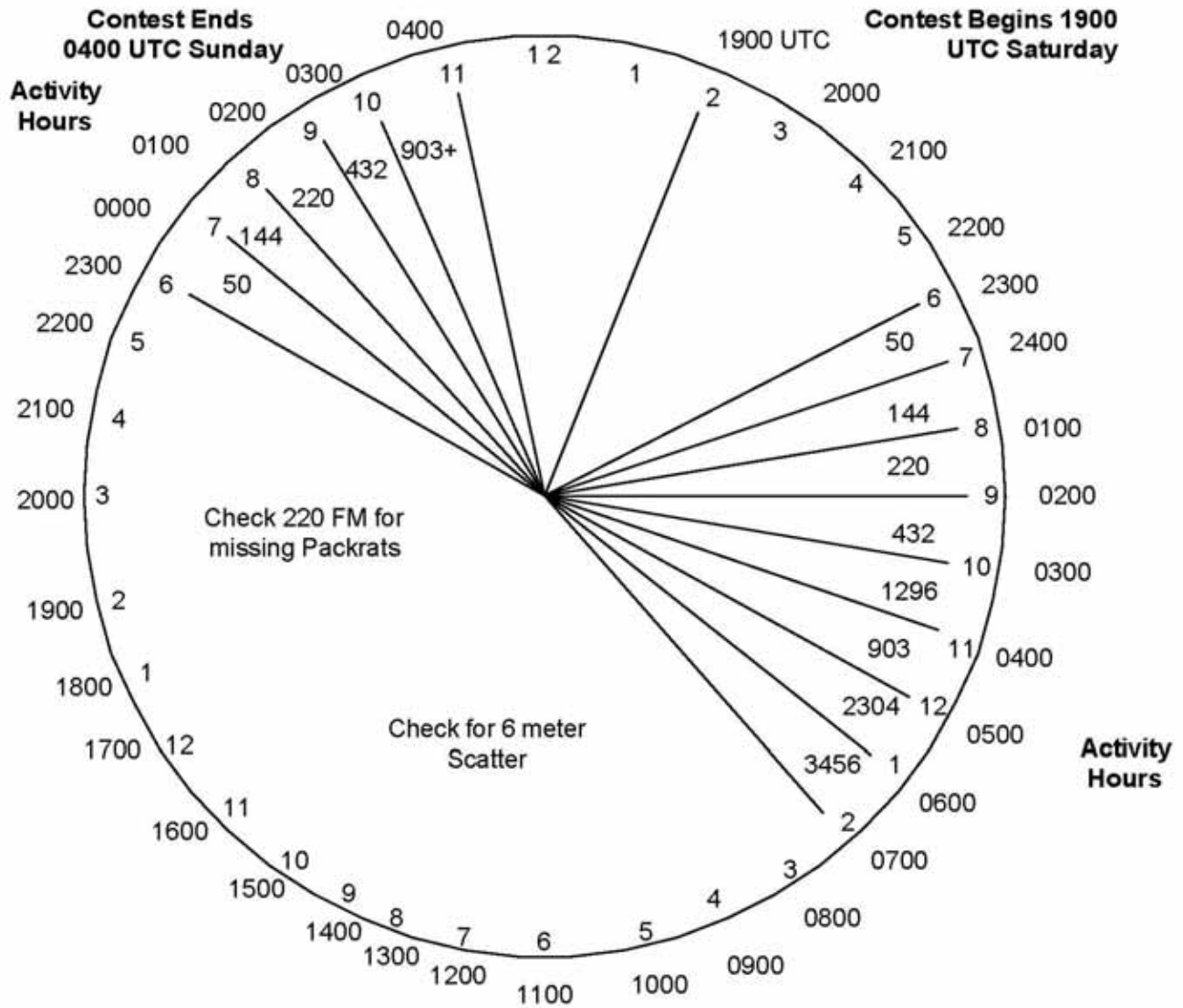
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Hours: Monday-Friday 9:30am-5:30pm Eastern

January V.H.F. Contest



CONTEST CLOCK

Get some SLEEP
Eat and Drink Right

Work All PackRats on
all Possible Bands

Check 6 and 2 at Sunrise
Noon and Sunset for DX

Every Score Helps the
Club and Your Team

Work the Activity Hours

FM Frequencies

146.49	223.50
146.55	223.52
146.58	223.60
147.45	
147.48	446.0
147.51	446.1
147.54	

Use 147.48 or 147.51 for Coordination Freq.

Have FUN !

WHATS HAPPENING

A LISTING OF INTERESTING EVENTS

SPECIAL ACTIVITIES:

1 JANUARY 2008 HAPPY NEW YEAR

OPERATING ACTIVITIES:

5 January 2008	Microwave activities day	08:00 to 13:00 144.200/144.260 for coordination "Get on the air and make some noise"
7, 14, 21, 28 January	Packrats Regular Nets	19:30 LST Starting at 50.145 with K3EOD NCS and moving up the bands every half hour (See listing on page 2)
5,12,19 January 2008	Microwave activities day	These are the January Contest "tune-up" weekends.
19-21 January	ARRL JANUARY VHF SWEEPSTAKES	This is a club score event—we need everyone to get on the air and submit a log. K3EGE is Chairperson—Let Bill know your needs.
14-16 June 2007	ARRL JUNE VHF QSO PARTY	The annual W3CCX Journey to the mountain—all Hands are needed to make this a successful and fun filled weekend

MEETINGS: [ATTENTION-IMPORTANT](#)

DUE TO CONSTRUCTION AT THE SOUTHAMPTON PUBLIC LIBRARY THE MEETINGS WILL BE HELD AT THE BENJAMINE WILSON SENIOR CENTER, 580 Delmont, Warminster. Just off Street Road across from the 5 PONDS GOLF CLUB. The meeting will start at 19:30 rather than 20:00 hrs

10 JANUARY 2008 MEETING OF THE BOARD OF DIRECTOR at the QTH of Jim Antonocci WA3EHD—Conference calling will be available

17 JANUARY 2008 REGULAR MEETING OF THE MOUNT AIRY VHF RADIO CLUB - Ben Kelsel WA3RLT will present his evaluation of the 2007 January contest

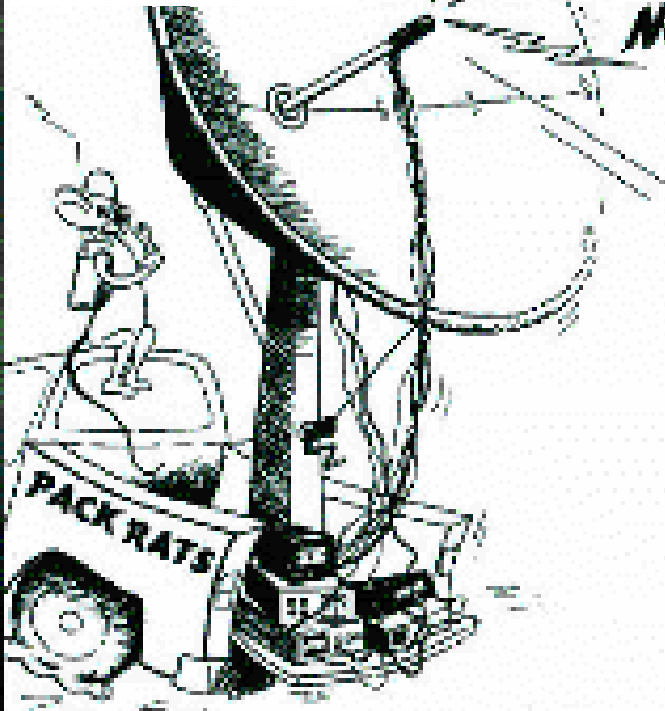
14 FEBRUARY 2008 MEETING OF THE BOAARD OF DIRECTORS

21 FEBRUARY 2008 REGULAR MEETING OF THE MOUNT AIRY VHF RADIO CLUB - For the laugh of your life come out for the annual CRYING TOWEL. Learn what went right and wrong during the January contest.

All meetings are announced on the regular Monday Evening Nets. (See Page 2) - Board meetings of the Mount Airy VHF Radio Club are open to all members. Teleconferencing for members is usually available. Regularly scheduled meetings of the PACKATS are held at 8 PM in the basement meeting room at the Southampton Public Library on Street Road in Southampton, PA. Meetings are open, not only to the membership, but to any party interested in VHF/UHF/Microwave contesting, equipment design and construction for use on the VHF/UHF and Microwave Frequencies or amateur radio in general.

CheeseBits
c/o Doc Whitticar W3GAD
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Newtown, PA 18940-9704

MEETING NOTICE

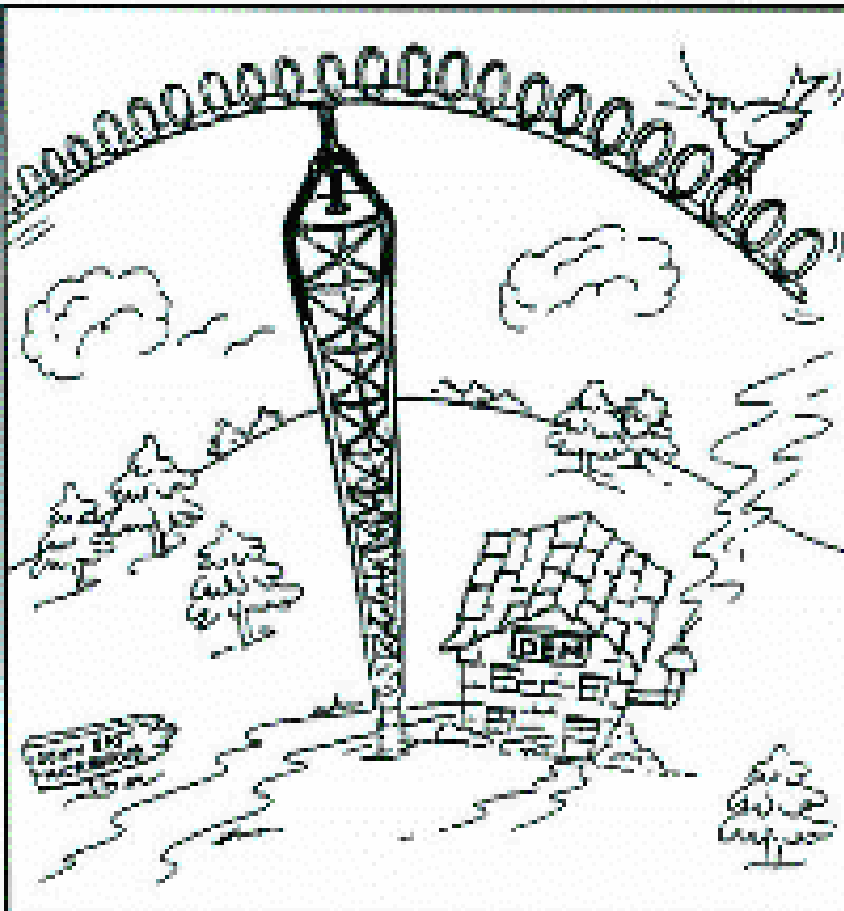


LOOKING AHEAD:

INSIDE:

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