



CHEESE BITS

W3CCX
CLUB MEMORIAL CALL

ARRL
Affiliated
Club



Pursuing weak signals and contesting since 1956

Volume XLIX

FEBRUARY 2008

Number 02

PREZ SEZ

This was a hugely successful January VHFSS, at least for me, as I believe this will be my highest score ever, AND, happy to report no major problems. Not everything was perfect, but nothing that deterred me from having fun. I'm a bit tired, but not as tired and

achy as I have been before on the day after a rove in January. I spent as much time as I could on the radio, and as little time outside and driving as possible. I raised the antennas a total of five times, coincident with the five grids covered. They are raised from the inside of the van—needs a bit of upper body muscle, but still doable. The dishes are less than a minute to pop onto the rear mount and place the keeper pin.

Leon, on the other hand will have a different story to tell. Now that he's had a taste of roving on his own, he's not quite as content to be a family rover. That story will wait 'til the "Crying Towel" meeting.

What I saw as a huge plus was the cooperative crowd at the N3NGE multi-op, the success of 24GHz QSOs with W3SZ, the quick runs with K3TUF (and others), and several Pack Rats operating bands they hadn't before, like K3VEQ and KB1JEY on 1296, and others on 903 and 2304 with new and borrowed gear. Thanks to NR6CA with supplying us with significant loaner gear for all bands. Many club members took advantage of computer control of the rigs, SDR advantages of "looking" for microwave signals and digital modes. K3IPM made a new trailer purchase with a crank-up mast and successfully operated from a new location in the area. WA3NUF was back on all bands with his new tower and mast after remodeling. WA3DRC even had his stuff operational through 10G. Despite the frigid weather and the football playoffs, there was enough activity to keep the bands going all weekend. You needed to have completed all your antenna work the weekend prior, as the contest weekend

would have been punishing temperature-wise to anyone who had to go outside and make any repairs or adjustments. Be sure to write down NOW what things you need to make improvements for future contesting. That will give you a goal and punch list for those nights in the shop and purchases at the hamfests.

Thanks in advance to Griff NE3I and Ava for having us over on Feb 2nd for the Contest Wrap-up. I want to remind folks that the projector is available for any pictures that need to accompany the Crying Towel stories—I have a few for mine (and Leon's).

A big welcome to two new members who were voted in at the last meeting, Al, KB2AYU and Jim, N2NRD. Both are active VHF'ers and contesters and have participated over several years at W2MMD and also at N3NGE's and on the mountain at W3CCX.

Let's concentrate on the upcoming June VHF QSO Party and how we're going to meet the challenge this year. We need more people and more gear. We have some new approaches, and new members that should be part of the action. I'm looking to Steve and Al for guidance here as chairpersons, and we could always use others to move into band captain spots, and other needed areas, such as helping with load, set-up, breakdown and repack, as well as keeping the gang fed.

An Ad-hoc committee has been set-up for planning this year's VHF Conference, with an eye toward incorporating sessions (and perhaps a building project) for VHF beginners. As always, you will get a lot more than you give to any club activity. The board will be selecting a nomination list for officers for elections in June. SAY YES!! 73, Rick, K1DS

WA1GHZ QEX article Archive

All my QEX articles are now available on my web page:

www.w1ghz.org/10g/QEX_articles.htm

73 Paul Wade WA1GHZ

Pack Rats **CHEESE BITS** is a monthly publication of the
Mt. AIRY VHF RADIO CLUB, INC. -Southampton, PA.
 SUBSCRIPTION RATE: \$16.00 PER YEAR (USA)
 \$20.00 PER YEAR (CANADA)
 \$10 PDF only
 \$24.00 PER YEAR (ELSEWHERE)

We operate on a .PDF exchange basis with other non-commercial publications. Anything that is printed in CHEESE BITS may be reprinted in a not for profit publication, unless stated otherwise, provided proper credit is given. Deadline for articles and swap-shop is the monthly meeting date. Non-commercial swap-shop items free of charge.

Pack Rat Web Site: <http://www.ij.net/packrats>

SUBSCRIPTION and ADVERTISING MANAGER:

Bob Fischer, W2SJ 7258 Walnut Avenue, Pennsauken, NJ
 08110 (856) 665-8488 bobw2sj@verizon.net

EDITOR:

Doc Whitticar W3GAD 28 Twining Bridge Rd, Newtown, PA 18940
 215-968-6397 w3gad@arrl.net

CLUB TREASURER:

Dave Mascaro, W3KM 1603 Mink Road Ottsville, PA 18942
 (215)-795-2648 dmascaro@motorola.com

TRUSTEE OF CLUB CALL - W3CCX

Brian Taylor N3EXA
 (215) 257-6303 n3exa@verizon.net

PACKRAT 222 MHz REPEATER - W3CCX/R

222.98/224.58 MHz (PL 131.8) Hatfield, PA

OFFICERS 2004-05

PRESIDENT: K1DS, Rick Rosen rick1ds@hotmail.com
 VICE PRES: KB3HCL Dave Fleming kb3hcl@arrl.net
 CORR. SEC: WA3EHD Jim Antonacci jjantonacci@verizon.net
 REC. SEC: K3EGE Bill Shaw K3EGE@aol.com
 TREAS: W3KM Dave Mascaro dmascaro@motorola.com

DIRECTORS:

(2009) KA3FQS Tom Frederiksen ka3fqs@arrl.net
 (2009) KB1JEY Michael Davis kb1jey@arrl.net
 (2008) K3JJZ Elliott Weisman compusimpl@aol.com
 (2008) W2SJ Bob Fisher bobw2sj@verizon.net

COMMITTEE CHAIRMEN

January Contest K3EGE
 June Contest: N3ITT & KF6AJ
 HAMARAMA: WA3DRC
 VHF Conference: WA3EHD 215-659-4359
 Awards Chairman WA3GFZ 215-884-3116
 Quartermaster: K3IUV, Bert Soltoff, bsoltoff@comcast.net

PACKRAT BEACONS - W3CCX/B

FM29jw Philadelphia, PA
 50.079.8, 144.283.6, 222.064.1, 432.288.3, 903.072.6,
 1296.245, 2304.042.7, 3456.207.2, 5763.196.3,
 10,368.907.6 MHz (as of 11 January 2008) Tnx to W3SZ

MONDAY NIGHT NETS

<u>TIME</u>	<u>FREQUENCY</u>	<u>NET CONTROL</u>
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

Alas the JANUARY VHF SWEEPSTAKES are behind us. The wrap-up session has passed and we are now looking forward to the CRYING TOWEL, HOMEBREW NIGHT and preparations for the JUNE VHF QSO PARTY so stay tuned.

Our contest experience this year was event free for a change. We seem to have found all the gremlins and gotten them properly disciplined well before the contest. I also got one major improvement installed and working properly before the starting bell Saturday afternoon.

Post contest activities included a close inspection of the log before submission to the contest robot, double checking for bad calls and water grids and sending copies off to W3KM before the wrap-up meeting.

2 February found me in Waterbury Connecticut helping my daughter, N3YOK, get married and also starting a new lifestyle routine to help deal with personal health issues.

The best of intentions now are to complete the improvements to the transverters, and get some FM antennas up in the spring. Not having 222 for the contest probable cost a few PACKRATS contacts but with all the remodeling and reworking of the antennas feeds for all seven bands (I was off the air for three months without any antennas) I feel lucky to have gotten the horizontal arrays back in action for the contest. Maybe more at the Crying Towel on this subject.

As with everything in life we are all faced with opportunities for change. The PACKRATS are not immune to this simple fact. From a possible change of meeting place to changes in the June Contest, decisions need to be made and action taken to make it all come together for the PACKRATS as a group.

In particular we need you mental and physical support to make the June Event fun and fruitful as a contest station. Come to the meetings, make you opinions known and get on the air.

With the current group of officers terms expiring in June, the nominations committee is looking for a few good men to grab the reins and help guide the club. K1DS can fill you in on the duties and his last 4 years as president—he feels it is time for a change.

So when asked please give it a try. The officers positions are important to future of any club and the PACKRATS

need your support to move forward.

*Listen for the
 WEAK ONES*

73

W3GAD Doc



On the air with “SOMETHING OLD, SOMETHING NEW, SOMETHING BORROWED, SOMETHING BLUE or...

Why the PACKRATS survey the membership for spare or excess equipment.

Newer PACKRAT Michael Davis, KB1JEY was determined to be active for the January contest. With antennas borrowed from K3EGE, rotator from K1DS, coax from KB3HCL and others, additional rigs borrowed and blue rope purchased plus help from K1DS, KA3FQS, KA3WXV, and KB3VBS, (add in a bit of perseverance, sweat, ingenuity, some new soldering skill) and BINGO! An almost instant VHF/UHF/SHF station is on the air in FN20.



True to PACKRAT tradition, there is always last minute antenna work. Michael fits the mold well putting up the 222 'J' Pole antenna the morning of the contest.



For a first time VHF Sweepstakes contester, using unfamiliar equipment, Michael did quite well gathering 110 Q's and 16 Grids including 4 contacts on 1296. The low microwave contacts were a whole new experience.

Michael not only learned how to fix his station *on the fly* during the contest; he also had to learn how to determine where



Joel Knoblock W3RFC

www.therfc.com

The R.F.Connection

213 N. Frederick Ave. #11WWW

Gaithersburg, MD 20877 USA

World wide shipping via FED-EX or US Post OFFICE

Tech Line 301/840-5477

Order Line 800/783-2666 All major credit cards taken

Fax Line 301/869-3680

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

The January 2008 VHF SS at K1JT

In past VHF contests I've had a problem logging QSOs on the wrong band, and sometimes neglecting to log one at all, when I'm quickly running the bands. After the January 2007 contest I decided to do something about it, and also to increase my efficiency at running the bands, by means of a combined hardware and software solution. I wanted a setup that would require the logging program to issue all necessary commands for changing bands. Then the operator, the logging program, and the station hardware would all "know where we are." Early progress was reported at the club's Homebrew Night last March, and I've continued to work on the project on and off since then. A full station reconfiguration has now taken place.

My principal goals were to make station operation more flexible and more convenient, with point-and-click computer-controlled bandswitching for all bands from 160 meters through microwaves. My radio time has recently concentrated on 2 m EME, so capability in that operating mode was a major consideration in the design decisions, but overall flexibility for VHF contesting also produced many important guidelines and constraints. Several portions of the hardware are still in breadboard form, but they work: the full system was operational for 50 through 2304 MHz in the January 2008 VHF SS. I hope to rebuild the breadboard parts in more workmanlike PCB format in coming months. Who knows, they might even be ready for Homebrew Night? In the meantime, here's a brief report on how it all stacked up in the January contest.

Unfortunately, it did *not* all go as planned. I had a major setback on Saturday morning, only hours before the contest started. While making a few warm-up meteor-scatter QSOs I saw my 2-meter PA, an 8877 loafing at about 1100 W output, suddenly go flaky. Input SWR was way up, output power down to 100 W or so. I haven't yet determined exactly what the problem is — probably a nearly-moribund 8877, I suppose — but I found that tweaking the input tuning after keying up the amplifier, with RF drive applied, would bring things pretty much back to normal. It was necessary to first detune the input circuit and then go back to the correct setting. The only problem was that (a) the tuning control is an inconvenient screwdriver adjustment around the back of the amplifier, and (b) the tweaking procedure had to be done at the start of each transmission. There's no way that such an amplifier could be used for normal contesting, so I quickly recabled things to use a backup 3CX800 amplifier, instead.

Too quickly! I still don't know exactly how ... it's supposed to be impossible ... but in the process I did something that took out the tower-mounted preamp on the horizontal side of my dual-polarization 144 MHz system. This happened around noon on Saturday.

What to do? Vertical polarization was working OK, but I couldn't expect to make many contest QSOs with that. On 2 meters I use three separate feedlines: Rx/H, Rx/V, and Tx. I could disable the tower-mounted T/R relays and use the Tx feedline alone, foregoing the modest NF improvement of the tower-mounted preamp. Using horizontal polarization, that configuration should work pretty well for the contest, even with the smaller PA.

But wait ... the moon would be coming up just as the contest started. Owing to Faraday rotation in the ionosphere, EME signals can arrive at any arbitrary polarization angle. Some of them will be close to vertical. There should be plenty of worldwide EME activity on a nice winter weekend; wouldn't it be fun to work some of these stations near the start of the contest — say, until all the easily worked ones were in the log — and then switch over to the compromise 2-meter setup for the remainder of the contest?

It was probably not a wise decision, from a contest-scoring point of view, but what the heck ... I decided to go that way. In EME, 3 dB more power is a big deal; and with JT65's timed one-minute transmissions, I could manage the screwdriver tweaking once every two minutes, at the start each transmission. So, with a bit more hasty rewiring I switched back to the 8877 amplifier, and the contest began.

I nearly always start a VHF contest on 6 meters. No very good reason, it just feels right to me. This time, amazingly, six meters opened to Florida almost right away. The opening was spotty, but together with the usual crush of eager local activity it served to get the adrenaline going. After 98 minutes I had worked 100 stations in 19 grids, all on 6 meters.

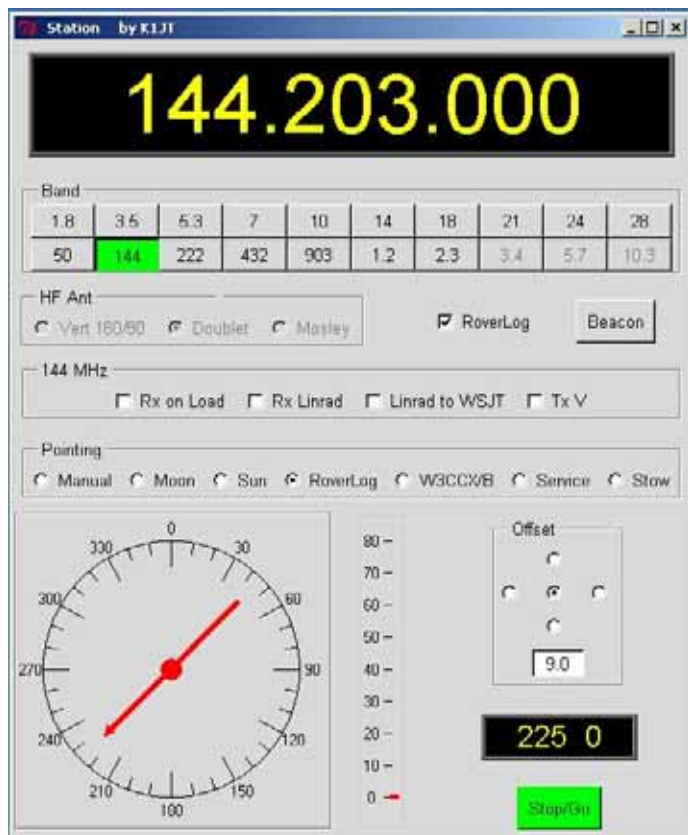
The E-skip opening seemed to end about then, and the moon had risen high enough to make some EME QSOs plausible. So I switched over to 2 meters at 2040 UTC, brought up Linrad and MAP65, and started monitoring the JT65 part of the band, 144.100 – 144.160, for EME CQs and possible tail-ending opportunities.

Over the next 5 hours I made only 29 QSOs... but every one was a new multiplier. Most would have been a new multiplier even if this were the DX contest! Certainly, most were in grids I don't ordinarily expect to see in my 144 MHz contest log: CN73, DM07, DN27, EM13, EM23, EM28, EM79, EM85, EN34, FK52, FN35, JN01, JN26, JN44, JN55, JN65, JN95, JN98, JN99, JO31, JO44, JO63, KN06, KN97, KO59, KP20, KP21, MO93, and MO99. Eighteen of these are in Europe or Asia. The RoverLog grid map centered on FN20 showed only EM79, EM85, and FN35 colored in, but I had 29 multipliers already. Too bad there are no distance multipliers in this contest! (I wonder what the ARRL's log-checking software will make of these log entries, many of which will probably be "uniques" in this contest?) I felt kinda weird about this mode of operating in the VHF SS, but ... it was fun.

While making the EME QSOs I had time to think about the rewiring necessary to use the 3CX800 on 2 meters without further mishaps. Wire-cutters and clip-leads in hand, I accomplished this quickly just before 0200 UTC, and went back to more-or-less “normal” contest operation in time for the 432 MHz activity hour.

Even with the unplanned changes to accommodate a backup amplifier on 2 m, the station control system worked as I had hoped. A simple computer program written in the Python language provides the user interface shown below. Single-button switching selects any amateur band from 1.8 to 2304 MHz. The program sets the Kenwood TS-2000X to the appropriate RF or IF frequency and energizes relays to select the desired antenna. Various special options are provided for 2-meter EME. The program has full control over antenna pointing in both azimuth and elevation, and it knows how to track the sun and moon.

I use RoverLog for logging in VHF contests. This program is well written and convenient, and best of all it is “open source.” I gave it a few trivial changes so that it sends its selected band and computed azimuth bearings to my station control program. In contest mode, switching between bands requires a single keystroke or button-click on the RoverLog screen. When a station’s grid locator has been entered, the corresponding azimuth is immediately available to the rotor-control software, and with one more mouse-click the antennas are moved appropriately.



With 61 grids on 2 meters and just 15 each on 222 and 432, my contest log looks strangely different from its usual form. Perhaps I would have scored better by doing things in the normal way; I missed quite a few normally easy-to-work, close-in grids, and made fewer QSOs than usual on each of the bottom four bands. Nevertheless, it was a fun weekend, and I was happy to make a reasonable contribution to the club score. There are *many* different ways to enjoy this contest!

WA3QPX

Back in the Contest Mode

Had a windy and noisy contest but everything stayed up and pointed in the same direction. Enclosed are some pictures u may want to use in CheeseBits 73, Paul WA3QPX



WA1ZMS—ONCE AGAIN PUSHES THE LIMITS

As most of you know, the January ARRL VHF contest took place this past weekend. I'd like to report that I only had one QSO but it was one of the best QSOs I have ever had.

I would like to claim what should be a new world DX record of 114.4km for the 241GHz band. The QSO was between myself, WA1ZMS/4 and W4WWQ/4 using CW. (The former DX record was 79km).

QSO Details are:

Date: Jan 21st, 2008 Time: 01:24z

WA1ZMS/4 37-31-00N 79-30-35W
FM07fm W4WWQ/4 36-43-03N 80-19-23W
EM96ur Distance: 114.4km

WA1ZMS/4 WX:

Temp: -15C Dew Point: -26C RH: 38%
Wind: 32km/h Wind chill: -26C Time spent out in the wind: 5 hours
Pressure: 876mb

Atmos Loss: 0.29dB/km

W4WWQ/4 WX:

Temp: -11C Dew Point: -22C RH: 40%
Baro: 890mb Atmos Loss: 0.41dB/km

I hope to have an audio file and a couple of Spectran screen captures posted in a few days on the web. This QSO was over 2 years in the making with several failed attempts at even shorter distances during that time period. The key to success was the very driest of winter air that may only take place one day per year in our part of the country.

One receiver mixer is better than the other by several dB thus CW copy was by ear on the WA1ZMS end, but took the aid of Spectran on the W4WWQ end.

The wind chill made for an interesting experience and as W4WWQ had said, it's amazing how a piece of RG-58 can become like a baton in such conditions. Two hours into the efforts I lost feeling in my right toe from just standing around and had to resort to putting a chemical hand warmer in my boot. My laptop also refused to boot and the battery now suffers from a shorted cell.

My contest log might only show one QSO and one grid, but it was the best January contest I've ever had! \

My personal thanks to Pete, W4WWQ for dropping everything he was doing and going on a 3 hour drive away from home to attempt this QSO.

73, Brian, WA1ZMS/4

SVHFS CONFERENCE

From April 25 to 28 The Southeastern Very High Frequency Society, (SVHFS) in conjunction with the Florida Weak Signal Society, [FLWSS], will hold their annual meeting at the Holiday Inn on the Campus of the University of Central Florida.

. The Society is composed of people interested in Contesting, weak-signal operating, EME, moon-bounce and home-brewing/kit construction. Visit

Steve Kostro, N2CEI, of DownEast Microwave is technical/program chair this year. We are still soliciting entries for our design contest and proceedings . See the Web pages for details at: The SVHFS.org. or FLWSS.net

We will have VHF and higher pre-amp noise figure and antenna testing. Other program highlights include a dinner speaker, Joe Lynch of CQ magazine, on-site vendors, an on-site hamfest, an auction of rare and vintage radio stuff and, of course, our technical presentations featuring new ideas in contesting, amplifiers, antennas etc.

Contact k2sto@hotmail.com with any questions you might have.

K3IUUV Mystery Solved

I think I may have solved the mystery of the 220 mobile antenna. In looking at the mag mount, I noticed that the "contact pad" in the center seemed to be an insulator, rather than having a metal contact to attach to the whip. So, I put the BIRD in the line and checked. 10W forward power, 9.5W reflected!!

Took the mount to the workbench, and found no continuity from center conductor to the interface "pad". Use a pin to probe down inside the very small hole in the center, and found connection about 3/16" down inside the pad. I suspect that there was supposed to be a piece of metal connected down through the tiny hole to the center conductor. I fabricated a brass pad with a short pin sticking out about 1/4", shoved the pin into the little hole, and now had continuity. Replaced the whip, reran the power check, and now got 10 w forward, almost nothing reflected.

The mag mount I was using was a new one, purchased on ebay a few months ago in anticipation of Roving. Never thought to check it out before. Oh well. I think the moral of the story is do not wait until contest day to check things out!! Bert

Announcing The 34 TH ANNUAL EASTERN VHF/UHF CONFERENCE 18-20APRIL 2008

At the CROWNE PALZA HOLIDAY INN in Enfield Ct Hotel reservations may be made at 860-741-2211 Ask for local reservations and mention the NEWS GROUP for the package rate.

The conference features technical presentations, hospitality suite, vendors, hamfest, and the banquet with the annual trivia quiz.

The website is being updated see more information at: www.newssvhf.com

DUES are DUE

If you have not paid dues, you can do so in one of 2 ways.

1. Via my w3km@verizon.net PayPal account

http://mysite.verizon.net/dmascaro1/MtAiryRC_Dues.htm

2. Or send a check to:

Mt. Airy VHF RC ,
c/o Dave Mascaro

1603 Mink Rd, Ottsville, PA 18942

Thanks, Dave, W3KM

FOR SALE

FREE - 10' dish antenna - 4 sections

FREE - 12' dish antenna - 4 sections

FREE - 8' dish antenna - solid

\$750.00 - Kenwood TS-940S-AT with 2 - 500Hz CW filters, interface chip in radio / RS232 interface and manuals.

Gus Nicolella K3GYS, 128 Raymond Avenue, Marlton, New Jersey 08053-7038

k3gys@comcast.net

856-767-3628 or 856-404-4571

Regards, Gus Nicolella

NE3I/R & NE3I

For the past two January contests, moving to a new deed restricted QTH limited my operating capabilities. (It still does.) However, consistent with comments on our nets, the number of stations on the air seemed to me to be down. Anyway, this year, my activity consisted of two separate operations. I operated from home in FN20GF on 6, 2, 222, 432, 903 and 1296 using, a small Create Log Periodic at about 26 feet. On 6 Meters, the antenna was a 41 foot ground mounted vertical tuned with the Icom AH4 Long Wire Tuner. Power ranged from up to 100 watts on 6 and 2 to up to 50 watts on 432, 10 watts on 222, 10 watts on 1296 and ONE watt on 903. A total of 109 QSOs and 31 Grids were worked for a score of 5456 points. I worked 2 grids in Florida on 6 Meter CW with the vertical Saturday afternoon.

During what seemed to me to be one of the most active periods of the contest, (Sunday 1500z to 2000z), I was operating as NE3I Rover in FM29 and FN20. For this quick Rover diversion, I used the IC706 in the SUV at power levels of only 10 watts on 6, 2 and 432. Antennas consisted of a HQ 2 Meter "Squalo"? which worked well on 2 and 432. The 6 Meter antenna was a High Sierra vertical side mounted on the SUV. Results were 64 QSOs in 9 Grids plus two for activating FM29 and FN20. Total points amounted to 903.

As many of you have long known, experienced VHF Contest operators typically demonstrate a higher degree of civility, patience and commitment in working less well equipped stations. I attribute this to our "old timer's" recognition of the fact that, without encouragement, significantly fewer "weak signals" would be available to work. I had a lot of fun testing the capabilities of my modest antenna farm and in handing out QSOs . Experience with Pack Rat contest operating practices particularly, activity hours, makes operating more efficient and less frustrating. My goal was simply to give out as many Qs as I could. Naturally, in our locale, you work a lot of Pack Rats. Of my 173 total combined contest QSOs, 110 were with Pack Rats. Thanks to all for working me.

As a postscript, 49 of the 64 Rover Qs were with Pack Rats using only 3 bands, low power and omni-directional antennas from two local grids. In addition to augmenting the log total, there could probably be a real benefit to Club scores by encouraging new members or modest station operators to rove locally on a few easy bands.Griff

Reflections on the January Contest

De K3IUV, Bert

Well another January contest has come and gone, and it's time to reflect on the changes that have occurred over the years (I think this may be the 40th year I've been in the contest). First off, my own station capabilities have diminished considerably since I moved into a covenant-restricted community 1-1/2 years ago. Gone are the big tower, the big antennas, and the capability to operate 1296 or higher bands. But even tho I do not have the option of putting up a permanent outside antenna system, I've managed to set up and operate on 6 through 432. This year I employed the same system I set up last year. I put a homebrew picnic table umbrella stand in the corner of my back deck. The stand is made from an old cast iron brake drum filled with cement, so it is pretty heavy and provides stability. A short 2" pipe extends from the cement filled drum. To this pipe I mounted my Ham-M rotor (use what you have!). I put a flat wooden plate over the deck railings in the corner. The plate has a 1-1/2" hole to serve as a "thrust bearing" for my mast. Through this hole I placed an 8' mast extending down into the rotor. On the roughly 4-1/2' of mast above the deck rails I installed (bottom to top) a 2-mtr beam, a 220 Vertical beam, a 432 beam, and a 6-mtr Halo. They're so close to each other that they shouldn't have worked, but THEY DID. Well enough to work 20 grids on the 4 bands. The only real problem is that I cannot keep them there all the time. So, the whole works went up the week before the contest, and came down the day after. Not the best system, but at least I was able to operate and ENJOY the contest.



CheeseBits

Feeling guilty about my poor showing for the club competition, I also set up to run a Rover station on Sunday afternoon, as I did last year. I operated for several hours from FN20 and FM29, and results were better than last year, since I added 432 ssb to the operation. The only disappointment was poor performance on 220-FM. But after the contest I found the cause. I had purchased a 220 whip and a Mag mount (separately) on ebay. The mag mount was new, but I didn't notice that it was missing a contact pad on the center contact. So, when I attached the 220 whip it was only capacity coupling to the center (read 10-w forward, 9.5-w return on Monday!).

Lesson: Test everything before the contest, not during or after!

Concerning activity and conditions, my opinion is that the number of stations operating was notably fewer this year. For example, one used to be able to operate on 2-meters, tuning slowly up from 144.12, and find a continuous stream of new stations to work looking toward New England. This year it was a famine. I certainly hope this is not a sign of long term drop in ham radio interest. There are many other things now competing for everyone's time, but let's not forget the wonderful opportunities offered by Ham Radio operation.

While conditions were certainly not outstanding, there was the opportunity to work a large number of grids if you tuned carefully. The short opening to Florida on 6 added a little excitement. And 2 meters offered the usual New England grids if you spent a little time tuning.

A few stalwart stations were worked on CW (including FN41), and it was good to hear stations continuing to use that mode.

As usual, the contest provided an opportunity to have a (brief) conversation with many friends from the past. It was great to make these contacts. But it is depressing to realize that so many of past year's contacts are no longer around!

For next year, I hope to have installed (and tested) some antennas in my attic, in the hope of getting better performance. But if I don't, or if they do not work as well as this year's setup, I'll put it back. Remember; listen for the weak ones.

73, and look for me next year. K3IUV & K3IUV/R

DUES are DUE

K1DS/R REPORTS

Despite the poor conditions, cold and football games, I kept busy in 5 grids with the rover. At least there was no precipitation this year. With all 12 bands AB-CD9EFGHIJP) working, and a route well established, I submitted my best VHF rover score of about 140K. Only one brief police inquiry as I stopped for gas, and the hand-out always helps. Visitors are a lot friendlier now that I have the ARRL

magnetic signs RADIO COMMUNICATIONS on each side of the van. Noise levels were extremely high Sunday afternoon. Murphy made a minor showing, pulling the cable out of the N



connector that brought the 432 RF down from the dish-mounted 24GHz transverter, but luckily this was after completing a few QSO's on that band. I had a spare cable, but no need, as there were no more stations with bands through 24G besides W3SZ within my range. Next time I won't forget an additional jiffy connector to secure that cable. Nice runs thru 10GHz with N3NGE, K3TUF and K1TEO from several grids and with WA3DRC and WA3NUF in FN20. Pack Rats were out in force as usual, although some of the usual suspects were MIA. Glad to work most of the NE grids with stops on Mt. Mitchell in FN20 and FN30. I've got to find a better spot and time to work more of the stations in grids south of me, as I know there's plenty to QSO in that direction. 73, Rick -- K1DS

N3NGE MULTI-OP Reports

The 2008 VHF sweepstakes as experienced at the N3NGE multi-op station was enjoyable, challenging and even unique in several respects.

In the months leading up to the event many changes were made to the station which included repairs, modifications and design improvements to various items of the existing infrastructure along with the implementation of several new pieces of hardware. The pace quickened dramatically during the final six to eight weeks reaching a furious, nearly desperate level of urgency in the final week as several unexpected failures compounded the level of effort required to complete preparations on time. Fortunately it all came together and the station was ready to rock 'n roll by Saturday morning.



The contest started off on the right foot Saturday afternoon with a good level of activity as evidenced by the steadily mounting number of QSO's posted to log.

We noticed almost immediately that propagation was not very good generally, and just plain awful on the SHF bands.

During late-night Saturday the 6 and 2 M stations were running meteor scatter. The 6 m station did fine making most of the skeds

and snagging a few randoms along the way. 2 M however drew a blank, the first time ever that no MS contacts were made on that band.

By Sunday morning the temperature had dropped substantially and the winds had picked up. This change in weather caused the power lines to go crazy from North through West all the way to South; the entire "left hemisphere" of azimuth was fraught with noise sources extending from 6 M through 222 MHz.



So, we fought an uphill battle against uncomplimentary propagation including mediocre MS conditions and suffered vicious EMI. And, just to add insult to injury when the football games came on Sunday afternoon activity took a nose dive making the last few hours of the contest a real non-event.

On the positive side there were no equipment issues and we had a generous roster of operators to share the load. The team persevered and the effort put forth by this excellent group of participants resulted in our generating a very nice multi-op score in spite of the various detractors. Of course a very important part, at least in my view, is that we took some time to enjoy the company of friends.

To the guys I say thank you and best 73, Len

K3IPM/P or what some PACKRATS will do to get on the air

Here are a few pictures of Stan's prototype tower trailer, the antennas he installed for the January contest and his "makeshift" operating position.

Stan has a few challenges but he found a really nice new location and was able to enjoy portable operation at a comfortable desk with all the amenities of home.

Despite making a few tactical mistakes, limiting power on some of his bands and working with a new untried system he felt like the effort was a success.

After the contest he cranks the tower down, packs everything away and he is ready to do it all over again for the next contest.

Meanwhile the PACKRATS have a 'living breathing specimen from which to spawn additional units to make the June effort easier and to replace some of the aging powers currently in use.

Great effort Stan and thanks from all the PACKRATS, de W3GAD, editor & K3JJZ, Photos



WHATS HAPPENING

A LISTING OF INTERESTING EVENTS

SPECIAL ACTIVITIES:

18 TO 20 APRIL 2008 34TH ANNUAL EASTERN STATES VHF CONFERENCE, ENFIELD, CT

25, 26 APRIL 2008 SOUTHERN STATES VHF SOCIETY ANNUAL CONFERENCE, ON THE CAMPUS OF THE UNIV OF CENTRAL FLORIDA

OPERATING ACTIVITIES:

2 FEBRUARY 2008

MICROWAVE ACTIVITY DAY 8 AM TO 1 PM did you get your gear repaired or improved after the contest? Here is an opportunity to check it out today.

1 MARCH 2008

The Holmesburg Amateur Radio Club of Philadelphia is pleased to announce the **Delaware Valley FM Sprint**. For the rules go to: <http://www.harcnet.org/contest.htm> This also coincides with the next MAD

COMING SOON: SPRING SPRINTS

14 TO 16 JUNE 2008

THE ARRL JUNE VHF QSO PARTY—PLANNING IS ALREADY UNDERWAY.

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

14 FEBRUARY 2008

BOARD MEETING—at the QTH of W3KKN, Ernie Kenas.

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.

13 MARCH 2007—BOARD MEETING—

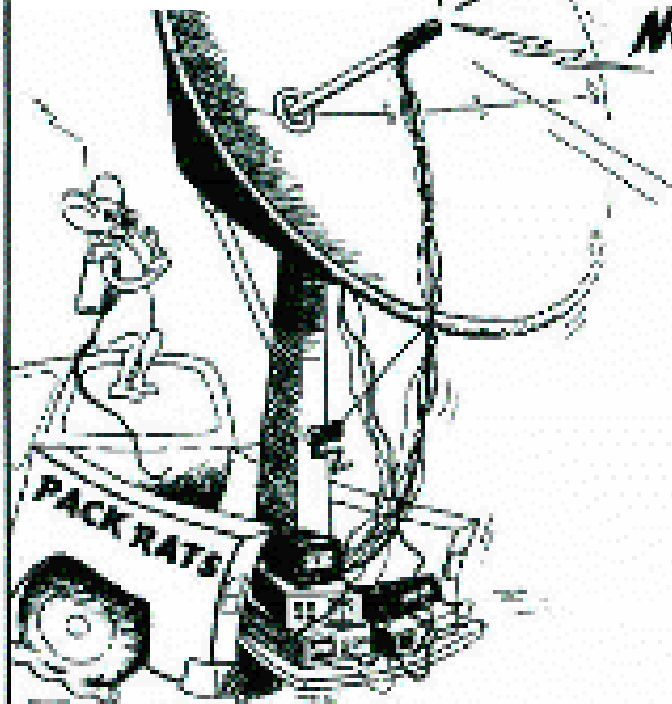
20 MARCH 2007

Regular meeting of the Mount Airy VHF Radio Club—**HOME BREW NIGHT** - finish up your project and bring it to share with fellow packrats.

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
28 Twining Bridge Rd
Newtown, PA 18940-9704

MEETING NOTICE



LOOKING AHEAD:

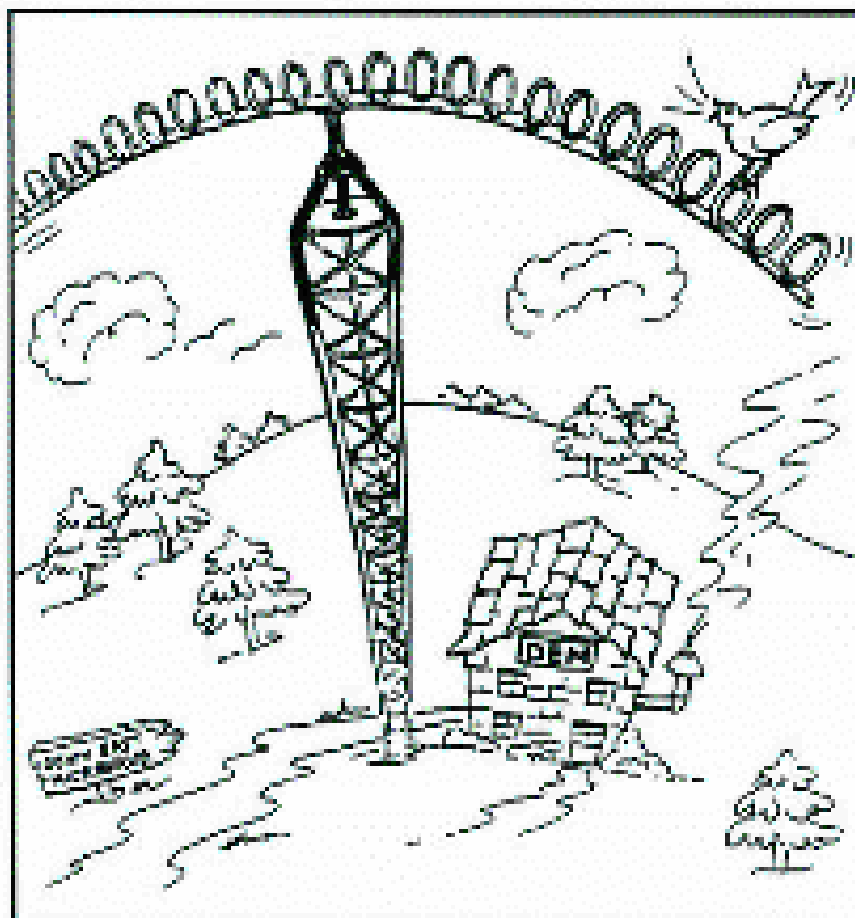
21 February—Crying Towel
20 March—Home Brew Night

INSIDE:

View and comments on the January
contest
Club Calendar
Spring conference schedule

FIRST CLASS

MT. AIRY VHF RADIO CLUB, INC.



DOWN EAST MICROWAVE

Manufacturers and Distributors
Of VHF/UHF/SHF Equipment and Parts
50 to 10,368 MHz

- No-Tune Linear Transverters
- Linear Power Amplifiers
- Low Noise Preamps
- Coax Relays, Coax Cable, Connectors
- Crystals, Chip Capacitors, MMICs, Transistors, RF Modules

For All Equipment :
Steve Kostro, N2CEI
19519 78th Ter
Live Oak, FL 32060
386-364-5529

<http://www.downeastmicrowave.com>

Say you saw it in CheeseBits