



# CHEESE BITS

**W3CCX**  
CLUB MEMORIAL CALL

ARRL  
Affiliated  
Club



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PREZ  
SEZ:

We have all probably had enough of “CQ, CQ, CQ, CONTEST” and the resulting adrenaline fix of working those more distant grids on the microwave

bands.

Just because the contest is over for another year is no reason to put amateur radio aside. There are improvements to be made, stuff to fix and new modes to be learned. Maybe even a new band or two to add to your arsenal for 2011.

Remember also that there are the Spring Sprints, assorted media showers, innumerable moon rises and moon sets for EME, Tropo, E-Skip and other natural phenomena to add adventure and challenge to you remaining operating hours in 2010. Not to mention June VHF, August UHF, and September VHF club scored contests.

In reading the post contest email I find it is recommended that, to improve my CW proficiency I should try some HF CW Contesting. Seems like a good idea and I know, while I can get by with my current skills it would certainly be more relaxing if my CW was a bit better. I also learned that meteor scatter using WSJT was very productive for the higher scoring stations adding many otherwise unattainable grids. Personally I know there were grids that I would not have in my log from 432 up if it were not for CW.

Another note on the Contest – I spent more hours this year on the air and, while it was not my best effort ever, it was a large improvement

over the last 2 years where we barely broke the 10K mark due to a large assortment of station problems. Most were repaired and the rest of the problems were worked around thanks to the generosity of the PACKRATS contest loaner program.

With the big January contest behind us it is time to “lick our wounds”. So polish up those props, hone that rhetoric and come share your best or worst moments of contest operating at the annual **CRYING TOWEL** on February 18th. For that same meeting bring along all those home brew projects, kits and widgets, working or not, to share for the second half of the evening’s program the annual **HOMEBREW NIGHT**. This promises to be a fun night for all.

The weekend of February 13th we will be gathering at the QTH of **NE3I** for the **Post Contest Wrap-up session**. Logs will be totaled for the aggregate club score. The **PACKRATS DO NOT MANIPULATE LOGS** or do **ERROR CORRECTIONS** at these wrap up sessions. Error corrections are the responsibility of the individual operators before logs are submitted. The wrap up session is strictly for being sure all logs have been submitted and to continue the planning for the June and next January’s contests.

I read an interesting definition of ethics – it is what you do when no one is watching. The **PACKRATS** pride themselves on their ethics **Remember that this year the contest effort has been dedicated to the MEMORY of ERNIE KENAS - W3KKN, one of the PACKRATS founding fathers.**

Well I’m almost out of space and it comes to

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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 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 FM29LW

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

mind that today's technologies are wonderful. We have digital photography, computers, word processors, spell checkers and all sorts of wonderful production aids and here I sit doing the PREZ SEZ with a little green book called 20,000 WORDS, from 1959 – all taped together but my bible for finding the correct spellings of those nickel and fifty cent words in these missives. Remember just because it is OLD TECHNOLOGY does not mean it is useless. **Get on the air** and keep the air spectrum active. I'm looking forward to seeing you all at the CRYING TOWEL. Listen for the Weak Ones  
73 de **W3GAD**



**Editors Column**

**Our next meeting** will be at our usual meeting site, the Ben Wilson Senior Center, 580 Delmont Avenue, Warminster PA., on February 18, 2010. The meeting starts at 7:30 pm with a pre-meeting dinner around 6:00 pm for anyone who cares to attend. Dinner is at Giuseppe's Pizza 1523 West Street Road, Warminster, PA 18974 (at the shopping center diagonally across from our meeting site). The Packrats usually are in the back dining room.

This month we feature a combination **Crying Towel** and **Homebrew Night**.

Last fall I spent quite a bit of time fixing and preparing 222 and 432 yagis that Bill K3EGE gave me the previous year. And in mid December (prime antenna raising weather) Warren, WB2ONA came over the shack on 3 Sundays with his safety equipment and **especially** his expertise. We raised both antennas, hooking them to 1/2 & 7/8 hardline. Working on a 45 degree pitch roof in December: not fun! But it was well worth the effort. I beat last years' score by a lot with the help of those new (used) antennas and high quality feedline. **Thanks Warren!**

And the extra points go in honor of **Ernie!!**

Judging by the number of check-ins on the Monday nets the week of the contest, lots of Packrats were super-motivated this year! Looks like there will be plenty of Ernie points from all the 'Rats.

Next year, the economy willing, I'll be running 4+ bands with my own equipment. What are your upgrade plans for 2010? 73, **Lenny W2BVH**

# January Contest Reports

*Here are reports on how things went during the January contest at some of our fellow 'Rat's QTH's:*

## **From Rick K1DS**

### **2010: Rove of the New Decade**

The rover van was ready to go with batteries charged and equipment in place a week prior to the weekend VHF SS. With the weather reports indicating a relatively warm spell, I planned to visit the usual grids that yielded the best QSO numbers and band multipliers, especially with K3TUF, W3SZ and N3NGE having capabilities through 24GHz. The van's State Inspection and oil change was done in December, and I gassed up the tank and got on the road. Heading west on the PA Turnpike to FN20bd, I met up with the N3NGE multi-op crew and we chewed the fat for a few minutes while the clock ticked toward 19:00UTC. Started off the contest nearby Len's for about 1 hour and had all bands working. I found WA2FGK on 2m, and knowing that Herb had all bands available there, started the run up through 1296. When we hit 2.3G, we didn't hear each other, so I go back to 2m, only to realize that I forgot to switch the IF rig to 144MHz for the 2.3G contacts, as I had a 145MHz IF setting for the new crystals in the LO for 903 and 1296. Sadly, that was the only time I ran into Herb, surely missing 4 grid multipliers and those 8 point contacts. I completed my runs with N3NGE, K3TUF and W3SZ, although Roger and I found that our 5G, 10G and 24G sigs were better bouncing off a ridge than direct.

Next stop is FN10 at the Blue Ball Elementary School, and I am quickly set-up and run these three stations again. Now I have time to call for additional Packrats, and add many to the log, in addition to the active stations in FN10. It's just about twilight when I decide to move on to Gap and FM19. There are several eateries in the center of Gap, and I hadn't had a McDonald's

meal since the last year I was there, so I indulged. When I exited the restaurant, a mom and her young sons were checking out the van and I scored some PR points with them, explaining ham radio and what we were doing, ending by giving them one of my tri-fold hand-outs on amateur radio and rover operations.

Just a short way up the hill on Rte 30, I pull into a favorite gravel parking spot and find my trio of multiband stations again and get them all in the log thru their top microwave bands. I hear NN3Q/R is also in the area—"on the ridge in the church graveyard"---I've got to check out that spot sometime to see if it offers advantage to where I hang out. Sadly, their 2G and 3G gear is on the fritz. I hear them fine, but they have receive problems on both bands. The evening is young, and it's about 8PM, so I head further up the hill to a nice peak in the road in FM29 and keep adding contacts to the log. Yes, the trio of multi-banders is easy to find and work, and by now the points are really starting to add up. I keep my antennas pointed between north and east, as that is where the population density appears from here. Lots of Packrats and NE stations get into the log, but I am way short on grid multipliers to the south and west. Maybe tomorrow....It's after 11PM and I need to head home to get my beauty sleep! Well, not so quickly. As I pass by the Rte 30/202 area, I head over toward Glen Mills to work WA3GFZ thru 24G and Laser, as his antennas are sufficiently lower in his new QTH. Great new grid mults for those high bands. Now heading home, gassing up again before turning in, as tomorrow will be a long drive to NNJ. Parked the rover and immediately headed down to the basement shack to make a home station log on 2m with one of my other rigs. This older ICOM was all I had left after lending out all the other home and club loaner gear to 14 'rats and 1 newcomer. Not too many folks still awake and scanning 2m, but I get the log started and will do some more when I awake.

Yikes, 7AM and I am still wanting to roll-over and get some more ZZZZ's, but contest calls. Start the coffee maker while I dress and clean-up, and head down to the home shack again for another sweep of 2m, for a total of 19 calls. By 7:30 I'm ready to roll again in the rover. By 8AM I am on the air at the 309/Stump Rd intersection in the

bank parking lot, a spot that has a reasonable horizon, no RFI, and is in the middle of the Packrat density. There are plenty of stations to work and I don't put down the mike or key for the next 4 hours. Had great runs with WA3NUF, WA3DRC and W3RJW through 10GHz and with K3IUV/R including Laser. Several others were worked through their top bands, although the path to W2SJ was blocked on 5G and 10G. W2KV found me and we easily completed on 10GHz. Log points now approaching 100K and time for a lunch break before heading to NNJ. I decided that a healthier lunch could be made at home rather than another fast-food meal, so I drop in for a sandwich and give the rover a rest. By 12:30 I'm back on the road for a 2 hour ride. I'm on the FN20xj site at Mt. Mitchill Scenic Overlook and operating by 3PM. The sky is overcast and the new park ranger is there to say hello and check out my communication vehicle. Hmm, the S-meter is showing S-9 noise on every band and in every direction. This is something similar to what I experienced 2 yrs ago at this location. Not good. I am easily able to work stations on the lower 4, but the bands above 432 are quite challenging. I do manage to work K1TEO through 5G, but he has trouble with his



rotor loop pointing this way on 10G, so we forgo that multiplier. N1DPM in FN32 finds me on the lower 4, but no luck with the high noise level on the upper bands. I do manage to find Dale, AF1T for a few band mults from FN43, but where was Mickie? It's 5PM and they are closing the gates to the park early, so I head over to my FN30aj spot. I park in front of a home with a good view to the

NE and get started calling, when the owner comes out to let me know that her TV set is getting blanked out as she is watching the football play-offs on channel 2 as she is the "last person in NJ not to have cable." I move a block away and continue contesting, explaining to other home owners what I'm up to for an hour or so. But the noise is too troublesome, and the rate is slowing, but I do get to fill in a few blanks with FN41, 42, 44 and 33. I'm sure there is a VE2 calling me also, but I just can't pull him through the noise. One of the things I enjoy most when in this neck of the woods is listening to that good old NY accent—where I grew up for my first 21 years.

I lower the antennas and drive a short way back over the new bridge by Twin Lights and I park in a nice open lot between two restaurants in the Sea Bright area. Antennas are all aimed at the Packrat beacons and I find the gang again and run them through the bands that we can, usually to 1296 from this sea-level QTH. By 9PM I am exhausted, and most everything I have been able to hear has been worked. It is a long ride home, I will have to disassemble the antennas and get the van back in the garage tonight as Monday its back-to-work, and significant rain and winds are predicted. Fortunately the rover is running fine, and I'm home in a clear weather moment and get everything squared away before the oncoming storm. Over 150K points in the log, and as I recall, my best rover score ever. Not an easy accomplishment for a single-handed rover. Thanks for all the fine support from the club members and their on-the-air activity. And apologies to anyone whom I missed!

I put a few notes in the log regarding potential improvements for next year: more sleep (haha), perhaps a voice keyer, a second CW keyer for the second rig, and perhaps a few hours of concentration for grids to the south and west to increase the multipliers. And for the past few years I have had amps for 2G and 3G and I will finally get them integrated into the rover. And what about installing the SDR-IQ as a band-scope? More possibilities. Hope you all had as much fun! **73, Rick, K1DS/R**

### **From Joe K1JT**

The better-than-usual weather was nice for a change, and most equipment at K1JT behaved well. I lost my 1296 preamp late Saturday, but made quite a few QSOs without it. A sticky relay sometimes made band-switching slower than it should be. Otherwise things worked well. I heard no E-skip on 6m, too bad. Worked 8 grids on 6 and 8 on 2 by meteor scatter, all by pre-arranged skeds. Worked 44 grids on 2 by EME, without skeds. Normal tropo QSOs brought my 2m grid total to 76 -- a personal best, and possibly a record for this contest? Overall totals were 596 QSOs and 153 multipliers on 50 through 1296, for 130,356 points. -- **73, Joe, K1JT**

### **From Russ K2TXB**

Well at first I thought I'd not be on for the contest this year. But I got to thinking about it and decided that maybe I could get something going on 2 meters because I had done a lot of work this past fall, running underground coax, control lines, power, etc to a shed in the back of my property. So I thought I'd put up a little 6 element Yagi that I have on a pole and work a few of the Rats. Then I got to thinking about the 25 foot aluminum tower with it's home made gin pole and base that I used for the moonbounce array at the old QTH. After a trip to Hammonton to my Son's house to get my antennas I was able to refurbish a KLM 16LBX Yagi from my collection. (That's 16 elements on a 28 foot boom.)

So, after putting in ground anchors and getting the tower ready, running rotator cable across the frozen ground, putting on lots of coax connectors, I finally got the station on the air one week before the contest. At first I thought I'd just run the TS-2000 barefoot but that 8877 sitting in the back room kept beckoning to me, so after a trip to Home Depot for some electrical stuff I got it up and running too. The coax run to the tower is about 180 feet of LMR400 so I figured I need a little extra 'soup'. I did mount the preamp on the tower with antenna relays, etc. I worked some HSMS (high speed meteor scatter) right away so I knew the station was working. But I found a consistent noise level of about 6-8 Db

from about 240 degrees to 300 degrees and that does kill the weak signals from the west. Anyway I was able to work 10 states and 15 grids prior to the contest. It is kind of fun to start over.

I was ready to roll at 1900z on Saturday and I operated pretty much the whole contest except for about 5 hours of sleep. Murphy did visit though. In my hurry to get the station set up, I had mis-wired the connections to the sequencer. Running WSJT and even SSB it was not a problem, but when I started using CW, the incorrect sequencing started destroying the main antenna relay. Throughout Saturday evening I was beginning to notice stations suddenly getting weaker or even disappearing when I was in QSO with them. Then someone made a comment to me that it was strange I did not hear a station calling. My meteor scatter skeds were all a bust. I would hear the guy one time and then nil for the rest of the sked. But being pretty tired by that time I just did not put it together until the next day. I cranked the tower down on Sunday afternoon and pulled the antenna relays.



Testing them in the shack it was immediately obvious that the main relay was providing a variable attenuation on the receive side of anywhere from a db or two up to 20 Db at times! A new relay was installed and while I was doing that I started wondering about that sequencer. Sure enough, there were 2 sets of numbers near the connections, one was the connection number and the other set was the ID numbers of the associated transistors. But

the numbers ran in opposite directions! So I had wired all the connections in reverse order. I rewired, and this time I put a couple of meters on the output to make sure the sequencing was right. I had no more trouble from that source.

At the end I had 282 contacts on 2 meters and 32 grids for a score just over 9000 points. I guess that is not too bad for a hastily thrown together station, but I would like to have done more. And I really need a taller tower!

**73, Russ**

### ***From Bob W2SJ***

I was happy to be able to submit a good score for the club this year. The last couple contests were challenging because of tower, feedline, and minor equipment problems. The problems were repaired before the contest and everything worked well this year. My improvements for next year include adding WSJT on 6 & 2 meters and improving my CW operating confidence on random CQ's. **73, Bob**

### ***From Bert K3IUV***

Many thanks to those that looked for and worked me in the Rover on Sunday. Equipment worked well (better than last year), and I had fun. If you called and I didn't copy you, please excuse it based on roving difficulties. This year I used a 2-meter halo, so I could have horizontal polarization. Found it in the basement. It was sold commercially about 35 years ago, built by K3BVZ (Ben Chalmers - remember him?). The weather cooperated, holding off on the heavy rains until Monday (hope nobody lost towers in the wind). **73, Bert**

### ***From Drex W3ICC***

I have never been associated with an organization with such a high level of Spirit de Corps as the Pack Rats. When my station went down and I appealed to the group for help, the response was rapid and spirited. This is the list of fellow hams who offered to lend me gear to get me back on for the sweepstakes or at least offered moral support.

Thanks to all of you:

**NR6CA K1DS K3EGE W3GAD NE3I  
K3IPM K3IUV KB1JEY K3JJZ W3KM  
N3NGE WA2ONK WA3QVU N3RG W2SJ  
W1SMS K2TXB K3WGR WA3YUE**

**73, Drex**

### ***From Michael KB1JEY***

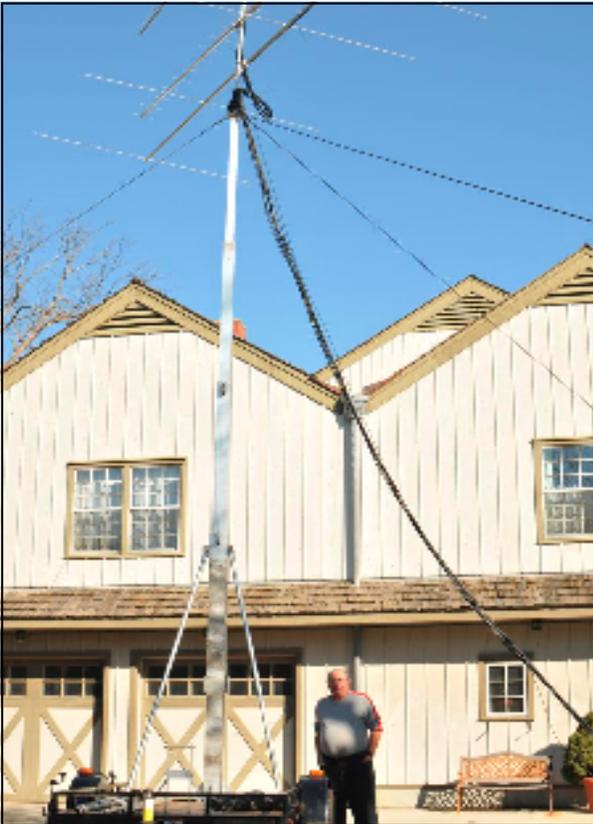
For the third year in a row, I was able to improve my January contest score. I made 185 contacts and 4,688 points, which is about a 9% increase over last year. Most notable was the improvement in microwave contacts. By switching from SSB phone to CW, I was able to make a total of 15 contacts on 903 and 1296 MHz, compared to only 7 contacts last year. Another reason for the microwave improvement was the addition of the club project 903 MHz power amplifier, which raised the output from my one watt transverter to about 40 watts.

While it is always satisfying to do better than the year before, a couple major shortcomings with my station need to be addressed to make the big jump in future January contest scores. The important step when Spring arrives is to dig that 6 foot deep hole and pour 2-3 cubic yards of concrete for my Hygain 54 foot crank-up/layover tower. Also, a lot of time was wasted moving between four different radios, requiring menu changes and other adjustments to "run the bands" with another station.

My goal for 2011 is to make my ICOM IC-746 the single radio needed to run the bands from 6 meters through 2304 MHz. To make logging and band switching easier, I'm going to see if I can work out electronic switching that interfaces the IC-746 to antennas and transverters with a remote band switch and a logging program. So if you have expertise on in these areas, please be prepared to be peppered with questions from me from during the balance of 2010. **73, Michael**

### From Stan K3IPM

Here are a couple of pictures from the contest. One of the tower trailer and one of the shack setup. I always come up from Florida to Phila and set up for the January SS. Quite a daunting task to set up and break back down after the contest and store all the equipment. **73, Stan**



### From Len N3NGE

N3NGE enjoyed a solid compliment of operators for the duration allowing all to get some sleep, fellowship with friends and take time to enjoy some real sit down meals, a requirement at this station.

Band conditions were average to good for mid-winter but not enhanced, apart from a very brief and weak 6M Es period. Activity was fairly good until Sunday afternoon and evening. When the football games came on in the afternoon and things really slowed; there was a short-lived up tick in activity after dinner and then the bands fell silent. To quote K1WHS "By Sunday night we had worked the bands out, and with no new propagation, there was no one left!"

In addition to the usual SSB (vast majority) and CW contacts (and several FM) we did operate Meteor scatter on 6 and 2 meters late Saturday night which produced some new grids out to 1200 miles.

All of the equipment worked as expected except for the main 24GHz system which was down and a flaky IPA on 222 which was repaired and returned to service. Even the network of seven computers did not cause heartburn.

The score for JAN 2010 VHF will exceed any of our prior scores by a substantial margin. We worked more than 1600 contacts in 236 grids. My hat is off to the experts who coordinate and operate this station.

**73, Len**

# The Birth of a Rover

by Mike Sabal, KB3GJT

It seems that those of us entering the amateur radio fraternity in the 21<sup>st</sup> century face incredibly more challenges than those who got their start in the years just prior to and just after World War II. Today, it is next to impossible to find a reasonably priced home that does not come attached with the strictest of association rules. With antenna placement limited to patios or attics, hams of this generation who are interested in the scientific exploration typical of higher-band radio must either settle for suboptimal stations or find another way to operate.

Many in this situation take refuge under the towering glory of the multiop and club stations. These are important parts of any organized effort to generate activity on the air. Often, the valley stations and those with indoor antennas can only hear the strongest and closest of stations. Having participated in the Packrats' June Camelback effort for several years, I can attest to what a pleasure it is to be the reference point on the band.

There is a third part to the equation, though, that has seen an upswing of popularity of late. This article is my story of joining the ranks of the hearty road warrior, the roving VHF+ contester. A couple years ago, I was faced with a situation of having to replace my vehicle on short notice. Since I'd already had an idea of taking my station to the streets, I elected to purchase a Toyota Tacoma pickup truck. I made this decision on a number of factors, including a better than average fuel economy, especially important as gas prices were quickly rising to \$4/gallon. If I had done a little more research on the types of racking systems available for pickup trucks, I probably would have elected a different manufacturer. Many trucks have a through-hole to pass cabling from the bed to the cab, as illustrated in a recent QST article. Many also have rectangular stake holes in the bed, for which mounting hardware is readily available. The Tacoma has neither of these options, requiring me to devise a different method for mounting

the antenna systems.

Ideally, a rover will have a vehicle (s)he may dedicate to the effort if not permanently, then at least a week or two prior to the contesting event. In my case, my pickup is my daily use vehicle, which I currently use for carpooling during the week and grocery shopping on the weekend. That means that everything I do to the truck for ham radio must be built in such a way that it can be quickly removed when necessary. In the spring of 2009, I borrowed a circular saw and bought some 2x4 planks which I formed into a short antenna mount. The tie-down keeps it from sliding around while driving, and it's short enough that I don't have to worry about clearance limits when there are no antennas attached. In June, during the VHF contest, master rover Rick Rosen, K1DS loaned some equipment to myself and another new recruit and led us on our first roving adventure to the Allamuchy overlook on I-80 in New Jersey.

We started after lunch on Sunday of the contest, and only made contacts from Camelback (FN21) and Allamuchy (FN20); but even with that small effort, I was working on more bands and with more points than I usually did from my home in January. Though this trial run was somewhat disorganized, I learned a lot and resolved to continue the roving efforts. In the September contest, I borrowed much of the same equipment, and took all day Friday and Saturday morning to prepare. Naturally, having taken time off, the rain hardly stopped at all the whole time. My first project was disassembling the parts of my home station that I would need on the road. This included a short 2 meter Yagi, the FT-817 transceiver, and quite a few cables.

Since this was a new setup, I was going to need more switches, power connectors, and cables, and still had to figure out a way to get everything to fit on the two mast poles I had. I had three large gel cell batteries as part of the loaned gear. One was set up with the Molex power harness I use at home. A second was set up with cigarette adapters for a couple pieces of equipment that are powered in that way, and the third was set up for use with

Andersen Powerpoles. Since the pickup has a crew cab, there is plenty of space behind the front seats on the floor for two of the batteries. I placed the third on the floor of the front passenger seat. The transverters and brick amplifiers were in boxes and set on the seats. I had hoped that the weight of the equipment would keep it secure, which was true for the most part. But a couple sharp turns sent the 6 meter brick amp tumbling to the floor. Fortunately, there was no damage to that particular unit.

For September, the route was intended to be pretty simple. Start at the N3NGE multiop station in the western part of FN20, make a stop at a church parking lot just before the grid boundary since it's hard to hear stations to work when sitting underneath such strong power, then stop at an elementary school parking lot in FN10 to focus on K3TUF, then run south on Rt. 897 to Gap, PA to work from FM19 and FM29. What ended up happening wasn't quite so simple. Upon arriving at Len's two hours late in the rain (the only place in all of eastern Pennsylvania it was raining was exactly where I needed to drive), we worked 6,2,222,432, and 903 with little trouble other than cable changes. Then when I tried to operate 1296, the relay wouldn't switch to transmit. I unplugged everything and plugged it back in to try again, when this spectacular puff of smoke and flame came shooting out of what appeared to be the coaxial relay. I wasn't going to work 1296 that day. Moving to 2304 on USB, Len kept saying he couldn't make me out, that my signal was splattering the entire band. He tried adjusting frequency, so I set my radio to split operation so I could stay on the frequency I thought was correct, but still no luck. Len suggested trying FM, which I did and we made the contact clearly. The 2304 loop antenna had a loose SMA connector, so Len fired up his heat gun and made a clean connection. Then on the laser contacts, my speaker sounded like the battery was fading. After replacing the battery, it worked better, but intermittently, so before I try to use it again, I'll need to check the receiver for cold solder joints and loose wires.

I decided to skip the church parking lot because of the time, and only got turned around

twice before finding the elementary school. I worked what I expected from there, plus a couple others, and moved on to Gap after about 45 minutes. There was supposed to be a gravel lot on the left, just after you turn east onto Rt. 30; but all I could find there was a nail salon. I proceeded up the hill to the garage in FM29, expecting to see the gravel lot along the way. Failing that, I made a quick contact and headed back down the hill to grab a bite to eat. Nobody in town knew what I was talking about, so I decided to try scouting around the nail salon. I found the parking lot extended around the back into a driveway of sorts. The driveway came back out on Rt. 897, where the sporting fields across the street were lit up for a night game. I made a few contacts, but not with the multiop stations I was expecting. I didn't stay too long at that location, considering how late it was getting. Back at the garage, I was able to finish the expected contacts and a few extras on the lower bands, but by that time at that location, the microwaves were too noisy to be of any use.

Sunday morning, I wasn't able to operate due to prior commitments. I thought I may operate from my home parking lot, but hearing very little activity, and being quite pleased with the score I had already made, and needing to get the truck back into normal use condition, I decided to call it quits for September. Despite the challenges, I had a good time. Being able to work the same large club stations multiple times in the same contest is a large boost to the club. I still have a pretty long list of improvements I'd like to make as time and money permit.

The first is to obtain a more permanent fixed and mobile battery charging scheme. The 55Ah batteries hold their charge well, especially with the Yaesu FT-817 pulling such little current. Being able to place them in a waterproof container in the bed of the truck would allow me to partially set up the roving station while still using the truck for daily use, making setup and teardown more manageable. The second is to improve the mounting of a couple of the antennas. For 2 meters, at least, this just means getting a better fitting U-bolt that matches the size of the mast (or a mast that fits the U-bolt, I'm not particular). Third, Len suggested that I need to get shorter feedlines.

Since I need a couple additional anyway, this is already on the list of purchases once Murphy (of Murphy's Law fame) stops pillaging my checkbook. And fourth, better raingear is a must for June and September. There are always countless ways to make the station, the operator, and the experience better. Having a dedicated rover vehicle, as many of the top-scoring rovers have, would by far be the best option. Sadly, at least for me, the same restrictions that keep me from being able to erect proper antennas at my dwelling also prevent me from keeping any vehicles that are not used on a daily basis parked in the lot.

As I've been learning through this effort, it doesn't matter how sophisticated or simple your setup is. **The important thing is getting on the air with whatever you have, even if it's nothing more than a single-band HT, and making improvements little by little, year by year, in whatever ways you can. Don't be afraid to try something new, even if it doesn't work the way you'd hoped.** Even if you have a good station at home, and want to try something new, putting a station on the road is a whole new ballgame.

### **FOLLOW-UP: January 2010 On the Road Again!**

For the January contest, I was able to take a little time each day for about a week before the contest to set up the truck for roving. With the extra time, and not having to fight raindrops this time, I was much happier with the way the truck was laid out. I still had some trouble with the U-bolts not being able to tighten quite enough on the relatively small-diameter mast, so they had a tendency to rotate while driving. Since I already had an abundant supply of bungee cords, I put them to good use stabilizing all the antennas, which worked well for the duration of the weekend.

I ran a similar route to what I ran in September, but I stayed local on Saturday and ran the four corners on Sunday. Saturday's route started at an elementary school at the top of the hill not far from Neshaminy Mall, running south to Penns Landing in front of the skating rink, and back home to the parking lot off Rt. 1 near Wal-Mart, which has a better view to the west.

All in all, my results were good - I made as many contacts on the road as my best year at home; and my roving score was somewhere between 2 and 3 times my best score from home. The upper three bands gave me a great deal of trouble. I couldn't get 2304 or 1296 to work at all, not even parked in Len's (N3NGE) driveway; and 903 worked great on Sunday but not at all on Saturday (the reverse of what usually happens, right?).

Part of my decision for the route I picked was based on a misunderstanding of how rover grids are calculated. I had thought that I could count a particular grid worked once for every grid roved, which would have given me 52 multipliers for the weekend. I learned after the contest, though, that it doesn't matter how many places I work a grid from, it only counts once, making my total only 26. The biggest drawback with roving in a vehicle you use for daily use is the difficulty testing the setup before the contest. I was still setting up the batteries and transverters Saturday morning, so I shouldn't be so surprised that I had trouble. For a serious effort, a dedicated roving vehicle is definitely a requirement.

My current goal is to make improvements to my home station first, and see how much better I can do there. Then I can combine that knowledge with what I've learned from roving, and make a better plan the next time I pound the asphalt. - **73, Mike KB3GJT**

## As others See Us

*I received a very nice email from Steve K4GUN/R who came all the way up from Virginia just to start the contest in Packrat territory. With just a couple of minor changes, here is his email. -- Bill K3EGE*

Well, I've just gone through the log, cleaning it up and it looks like I made an all-time best score of 28560. That's 296 QSOs, 62 unique grid/band mults and 8 grids opened for mults.

That's in spite of my 222 transverter dying on Sunday afternoon and my duplexer giving out on Sunday night (at least I had a switch to drop in line for that).

**The Packrats are amazing.** I realize that not everybody who lives in FN20 is a Packrat, but that's the closest way I have to figure it out.

Of my 296 QSOs, fully 94 of them were into FN20. Roughly 1/3 of all contacts were up there. The guys are professional, friendly and encouraging. It was a pleasure to work so many of them. Thanks for all your individual efforts as well, (Bill K3EGE). Your personal attention made a huge difference.

My XYL Kristine K4LIG was amazed at how helpful you were in all of this. We will definitely be coming back to PA in the future. We will likely start further North and make the Community Center (FM29hx) a later stop in the journey. I want to be in that population center for a lot longer next time.

Please express our thanks to the Packrat gang. They are really great.

**73 Steve K4GUN/R**



## Ham Radio URL of the Month

If you've never stumbled on <http://www.rfcafe.com> it's definitely worth a visit. As its name suggests, this web site has links to all things "RF". The quality of the hyperlinks is all over the place from self-serving to truly useful. It has many technical links, industry gossip, and even links to some ARRL resources.

The "Calculators" link near the top of the home page takes you to a cornucopia of RF calculators that can help in solving all sorts of rf design and usage problems: an Antenna Design calculator, several unit conversion tools and my current favorite <http://www.rfcafe.com/business/software/rf-cafe-calculator-workbook/rf-cafe-calculator-workbook.htm>. This is a multi-worksheet excel spreadsheet containing many utilities like an attenuator calculator, a coil designer, mixer calculator, 1 and 2 way path loss calc etc. etc. All in one spreadsheet. Many of the calculators on the page are for sale, but an equal number are free and quite useful  
ENJOY! — **Lenny W2BVH**

**ANOTHER GOOD REASON TO DO THE  
VHF / UHF CONTESTS**

# Trenton Computer Festival TCNJ Hosts 35th Annual Trenton Computer Festival, April 23 – 25

EWING, NJ ... The world's original computer show, the Trenton Computer Festival (TCF), will celebrate its 35<sup>th</sup> anniversary in 2010! Come celebrate with your fellow computer, electronics, and ham radio enthusiasts Saturday, April 24 and Sunday, April 25 at The College of New Jersey in Ewing. A full schedule of informative panel sessions, tutorials, demos, and other computer-related educational events is planned from 10 am – 5 pm on Saturday and 10 am – 4 pm on Sunday. The popular **computer and electronics sales center and flea market** (rain or shine!) will also be offered that weekend as well as the **New Jersey State Convention for the ARRL**, the national association for Amateur Radio, on Sunday. The Information Technology Professional Conference is scheduled from 9 am to 5 pm on Friday, April 23. The primary venues for TCF include TCNJ's Brower Student Center and the Social Sciences Building. Exhibits and events include Amateur Radio license exams on Sunday, April 25<sup>th</sup>. This year's festival themes are "Open Software" and "Attracting Students to STEM (Science, Technology, Engineering and Mathematics) Studies." Featured speakers are Apple's Dave Marra, leading Apple / Mac Day on Sunday; and our keynote speaker, Richard Stallman, Open Software Freedom Activist on "Open Source Software" on Saturday. Mr. Stallman was a major contributor to the GNU operating system, and is President of the Free Software Foundation. **Two-day admission tickets are available for \$12 in advance and \$15 at the gate. Sunday-only admission is \$10.00, also at the gate. Advance tickets may be purchased from [www.tcf-nj.org](http://www.tcf-nj.org) by Sunday, April 18.** Check the site for information on bringing your robot for free admission! Parking is free. Also visit [www.tcf-nj.org](http://www.tcf-nj.org) for more TCF '10 details, including **festival only deals from marketplace vendors and registration as a speaker at TCF and associated events.**

**Also, remember** that the Packrats will be supervising the vendors at the TCF Flea Market on both days of the Festival. **Please consider** volunteering to help with this effort. We'll need 4-6 people to properly supervise the vendors on each of the days. Contact Lenny, W2BVH at the next meeting(s) or at [lennyw@comcast.net](mailto:lennyw@comcast.net) if you'd like more information or would like to help out.

## Late Contest Soapbox Submission

From George WB3IGR & Bill WF1L

We did not go roving this year as we were in a last minute rush to get the 2304 amp going, and forgot about getting the rover ready. Me and Bill WF1L did a fair job as a multi-op this year! WOW!!! What a great contest. This year was the best ever from this station. With new antennas for 2 and 432 and 2304 the bands just seemed "OPEN" all the time. I guess improvements do work! We also changed the 2304 antenna from a 15 element loop to a 45 element loop. Also added a 10 watt Kuhne 2304 AMP. The combination doubled our contacts and grids from the September contest. 6 QSO's and 4 grids! N3NGE in FN-20 our best 2304 contact!! 200 contacts and 70 multipliers for a claimed score of 27,720 pts., about 4 times what we normally do in January from here. **73 George & Bill**

## Events

For inclusion, please direct event notices to the editor.

**BVARA Techfest & Auction** - (Beaver Valley ARA) February 14 2010. See <http://www.w3sgj.org> for details

**JCDXA Hamfest** - (Jersey Coast Chapter of the NADXA) April 10 and Sept. 11, 2010. Details to follow. See <http://nadxa.org> when available.

**Eastern VHF/UHF Conference** - Sponsored by the Eastern VHF/UHF Society and the North East Weak Signal Group. Tentative date April 16-18 2010. Details to follow.

**Trenton Computer Festival / NJ State ARRL Convention**— April 24-25, 2010. A combined event. Computer and ham radio presentations, hamfest and computerfest. Details to follow. Don't miss this one!

**Dayton Hamvention Convention / Hamfest** - May 14-16, 2010 One of the largest ham events in the US. See <http://www.hamvention.org/> for details.

**ARRL June VHF QSO Party Contest** - Jun 13-14, 2020 Details to follow at <http://www.arrl.org/contests/rules/2010/june-vhf.html>, when available

**Valley Forge Hamfest and Computer Fair Hamfest** - July 18 2010. See <http://www.marc-radio.org> for details

**CQ WW VHF Contest**— 3rd full weekend in July. Details to follow.

**ARRL UHF Contest** - Aug 1-2, 2010.

Details to follow

**ARRL 10 GHz and Up Contest**—Aug 15-16, 2010. Details to follow

**ARRL September VHF QSO Party Contest** - Sept 12-13, 2010. Details to follow

**ARRL 10 GHz and Up Contest**— Sept 19-20, 2010. Details to follow

**ARRL International EME Competition Contest**— Oct 10-11, 2010. Details to follow.

**ARRL International EME Competition Contest**— Nov 7-8, 2010. Details to follow.

**VHF Spring & Fall Sprints Contest** - Dates and rules to be announced

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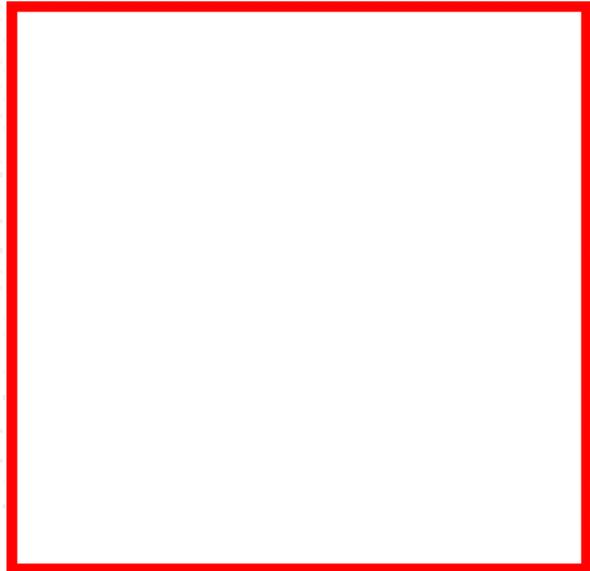
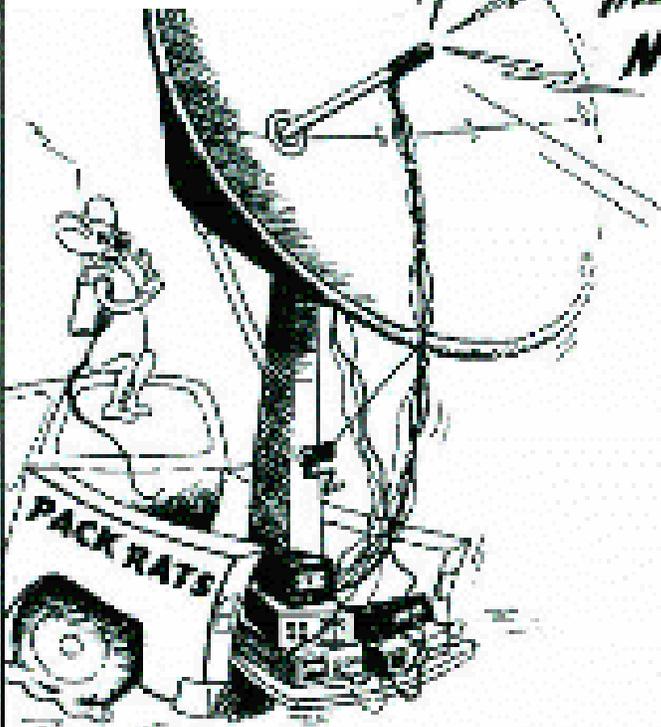
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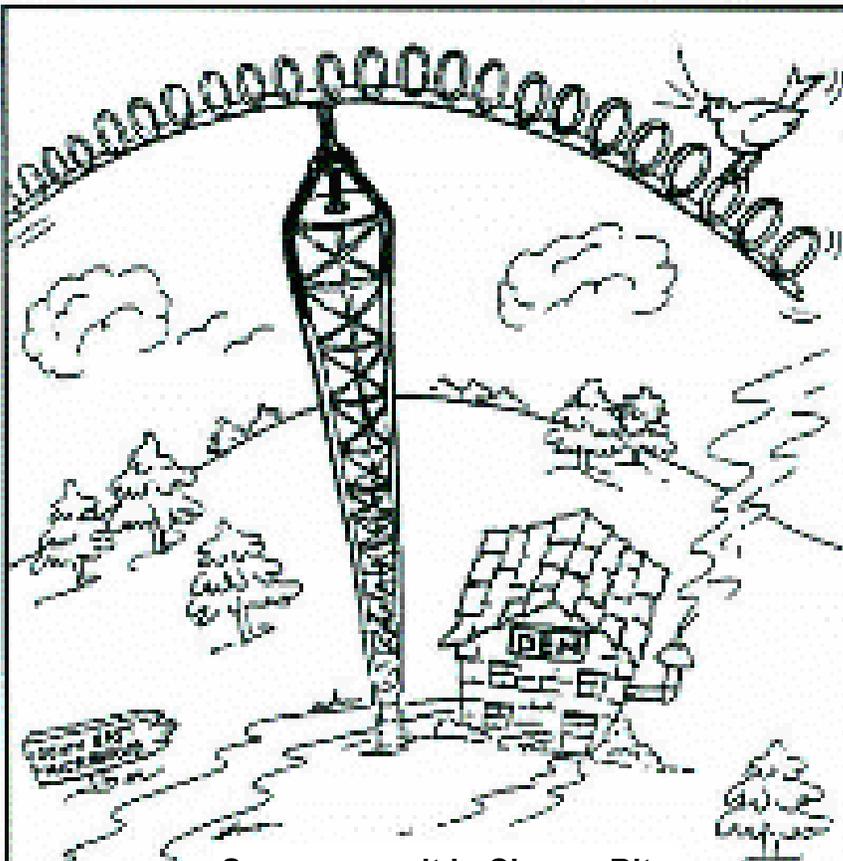
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