

**Mt. AIRY V.H.F. RADIO CLUB, INC.**



**CHEESE BITS**



**W3CCX**  
**CLUB MEMORIAL CALL**

**A Happy  
New  
Year!**

ARRL  
Affiliated  
Club



**Volume XLVI**

**January 2004**

**Number 1**

**Prez Sez**

As we get closer to contest time the air has a bit more bite than last year as we are out there working on our antennas. Hopefully, your stuff still kicks out the electrons as well as it did one year ago. If not, there is still time for repair. I spent this weekend at Jim's WA3EHD. Saturday we hooked up feedlines to antennas, checked SWRs, and put connectors on transmission lines. On Sunday, Jim and I went out on his roof and installed the guy brackets that Al N3ITT made for him. There is still some more antenna prep, but the tower is ready to go up. Another Packrat who came to our assistance was Randy NR6CA. Randy read last month's Cheesebits and offered to make 5 LMR-400 jumpers for Jim. This was an act of kindness for which we are grateful. This is the true Packrat spirit.

The rest of the contest packets will go out this week to those who did not attend this month's meeting.

Last years participation was great, but we have to do better. The band opening last year really helped but can not be depended on. What are you doing to help your teammates? Bill's letter summed it up well "Winning the contest requires dedication, preparation and the will to compete". If you don't have a home station, find a multi-op or rover who needs help. Make sure you get on and make a few contacts to keep up the log submissions. Finally, I can't stress checking into the Monday night nets enough. The obvious benefit is an equipment functionality check. It also brings us together and serves to unite us on the air. I'd like to hear everyone on. Please contact your team captains and let them know what you have and what you need. Have a great time competing. 73s Paul Sokoloff WA3GFZ



As another year draws to a close and a new one starts, it's always nice to take stock of where the club has been and where it is headed for the next year. Last January's contest brought 61 entries from club members—can we top that this coming year? Hopefully so, with many new members in the club. We came in second in the SMBS International Microwave Contest with some limited activity on Saturday morning. With more and more club members active on 2.3G and up, we're sure to do better this year. Our club meetings were held regularly during the year, and except for one cancelled by a hurricane, all were well attended, and we had some very interesting programs. An area that needs your help: vice-presidency and another board member. These appointments or elections need to be made asap. The June Contest had some new activity on 47GHz, and some of the roles of the members changed, new operators were in the activity seats and a whopper of a 2-meter station was assembled and delivered by KF6AJ. The weather cooperated this year, and it appeared that all involved had fun. The White Elephant Sale and Club picnic were great successes again, thanks to our hosts, Gary, WA2OMY and Al, N3ITT. The August UHF, September VHF, and 10G Cumulative contests are showing more participation by club members, despite the fact that these have not been specific Packrat activities in the past. Windstorms wrought a bit of havoc with many club members' arrays, and hopefully with the recent December warm spell, most everything is back up and operational. The VHF Conference and Hamarama continued to be very enjoyable events, and the basis for the financial viability of the club. Thanks again to John, KB3XG who has so ably facilitated the conference over the years, and to Ed, WA3DRC for the grange arrangements. There are officers who have served in their roles tirelessly for years, "Elmers" who have helped others keep their gear on the air. There are also those behind-the-scenes members, who see things that need to be done, and do them, for the benefit of the club and members, without being asked or appointed. In 2004 we have a great opportunity to participate in the EME conference, since it's being held in our back-yard in Trenton. As 2006 approaches, when the Packrats celebrate their Golden (50th) Anniversary, it's an opportunity to rally support around a number of on-the-air and group participation activities. Give, give, give, and you will get, get, get. 73, Rick, K1DS

## Editor's Column

Pack Rats **CHEESE BITS** is a monthly publication of the  
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### **PACKRAT 222 MHz REPEATER - W3CCX/R**

222.98/224.58 MHz, Churchville, PA

### **OFFICERS: 2001-02**

PRESIDENT: WA3GFZ Paul Sokoloff dogfaces@comcast.net

VICE PRES: TBD

CORRESP. SEC: WA3EHD Jim Antonacci, Antonacci@worldnet.att.net

REC. SEC: WA3AQA Walt Zumbach, wzumbach@bellatlantic.net

TREASURER: W3KM Dave Mascaro, dmascaro@motorola.com

ACTING REC SEC K3EGE Bill Shaw

### **DIRECTORS:**

K1DS (2 Yr) Rick Rosen  
W3GAD (2 yr) "Doc" Whitticar  
WA3DRC (1 Yr) Ed Finn  
TBD (1 Yr)

### **COMMITTEE CHAIRMEN**

January Contest AA2UK  
June Contest: "I'm not the contest chairman"  
HAMARAMA: WA3DRC  
VHF Conference: KB3XG 610-584-2489  
Awards Chairman WA3GFZ 215-884-3116  
QUARTERMASTER: K3IUV, Bert Soltoff, soltoff@uscom.com

### **PACKRAT BEACONS - W3CCX/B**

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

### **MONDAY NIGHT NETS**

<b>TIME</b>	<b>FREQUENCY</b>	<b>NET CONTROL</b>
7:30 PM	50.150 MHz	WA3EHD/K3EOD
8:00 PM	144.150 MHz	N3ITT
8:30 PM	222.125 MHz	W2SJJ/N3EXA
8:30 PM	224.58R MHz	W3GXB
9:00 PM	432.110 MHz	WA3GFZ/WA3DRC
9:30 PM	1296.100 MHz	WA3NUF FN20le
10:00 PM	903.125 MHz	AA3GN FN20ig
10:30 PM	2304.085 MHz	W3KJ, & go to 3.4G & up after FN20hg

## More Items for Sale

10 GHz LNA, SMA in and out, .7 dB NF, 12 VDC. \$70.00 shipped. 3456 LNA, 1 dB NF, SMA in and out, 12 VDC. \$36.00 shipped. 10 GHz SMA isolators by TRW, <.25 dB insertion loss. \$10.00 shipped. 3456 SMA isolators, <.5dB insertion loss. \$8.00 shipped. WR-75 input, SMA out 10 GHZ LNA, 1 dB NF. \$44.00 shipped. New type N right angle connector, sealed package. \$3.00 shipped. Ku band SMA bandpass filters, may tune to 10 GHz using the two tuning adjustments but I am not sure. \$1.00 shipped. The small box is worth that for an LNA project. Thanks, Randy, NR6CA nr6ca@sbcglobal.net

It's the marker of a year—a calendar change-and we do so many things annually—sum up the past year, make plans for the new year, delineate the year's best and worst. What's going through your mind as 2003 closes and 2004 opens? What were your year's highlights and low times, and what's on your agenda?

In terms of taking stock, I am continuously amazed and appreciative of all the help we give each other. As an especially grateful recipient of a lot of technical and construction help from the more talented, I give thanks to those who stimulated, designed, built, lent, donated and installed things to improve the rover station. And there are countless other Packrats who are in the same position whom I'm sure feel the same way. The sharing of ideas, parts, test gear, rigs, antennas, time, energy, tools is a way of life for the club members. I am always thankful to those who have been contributors to the technical and communications news parts of Cheesebits...keeping me and the readers stimulated. It would be important too, to thank the XYL for allowing me all the computer publishing time to get things put together and "to press" on a timely basis each month; THANKS JANI!

To our subscription master, label printer and advertising boss, (Bob, W2SJJ) my sincerest appreciation for all the monthly labels and address updates. To Dave, W3KM, a tip-of-the-hat for updated files, timely printing and postage reimbursement. Our new Prez, WA3GFZ gets kudos for his timely PrezSez columns.

There are two open officerships that are essential to be filled in the new year—a 1 yr director (through Jul '04) and the VP spot. As many times as I have said this before, you gotta know: you will get back from the club what you give. Please step up and let us know your willingness to be active in one of those roles.

I managed to get a few hours of operating the CQ WW CW Contest last weekend, finding a few new DXCC countries, and showing that a G5RV in the attic with 100W can work all continents! I passed a note to K1PLX, the contests guru of W1OP (The Providence Radio Ass'n) on my activity, who promptly fired back on email, "It's not the score, but whether you enjoyed yourself." And so I will take that forward to the greater VHF contesting community, especially in light of the recent score-driven issues of roving. Your email or postal responses are welcome.

As always, the best laid plans of mice and men often go astray. Here we are, a month out from the contest. Plenty of time you say. I heard the upsetting news that Herb, WA2FGK lost his tower and antenna stack in the recent windstorm. He was a strong multiband operator in FN21, and we hope he can reassemble soon. Likewise, KU3A reported at the recent Packrat meeting that his tower took a dive in the windstorm also, and the antennas were spared when his 2m beam boom acted as a crutch, keeping the elements of all the other antennas from being bent. Hopefully, he'll be back on the air soon also.

So, what exactly are your contest plans?

Our son and daughter-in-law just had son #4 on Dec 22, our sixth grandson. We'll be making several visits to Baltimore over the next few months. **73, Rick, K1DS**

**SUBSCRIBERS: RENEW PROMPTLY FOR 2004 PLEASE— DON'T LAPSE!**  
**MEMBER PACKRATS: DUES ARE DUE IN JANUARY 2004**

**Important Dates and Events—Be Radio-Active!!**

Saturday Jan 3                      Microwave Activity Morning                      8AM-1PM  
Monday Jan 5                      Microwave Activity Evening                      7PM-11PM  
All bands 432 & Up, Coordinate on 144.260

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Mondays, Jan 5,12,19,26                      Packrat Net Nights                      Start @7:30PM, see p2

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**Thurs, Jan 8th PACKRATS BOD MEETING 8:00PM-Open to All Packrats**  
**QTH-Rick Rosen-K1DS-206 Kimberton Drive-Blue Bell, PA**

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**Thurs, Jan 15th— PACKRATS MEETING—8:00PM**

Southampton Free Library, 947 Street Road

2003 Contest Computerized Analysis — Ben WA3RLT

One of the sessions that will surely be educational for your station activity

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**Get Set for the**  
**January 2004 VHF SS**

**Starts Saturday (2PM EDT) Jan 24 @ 19:00 UTC**

**Ends Monday (Sun night 11PM EDT) Jan 26 @ 04:00 UTC**

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**Future Scheduled Meetings:**

**February 19: Crying Towel Night—Your best story of contest quirks & Murphy**

**March 18: Homebrew Night—your projects displayed and discussed for the judges. Prizes awarded**

**April 15: ARRL and Awards Night, June Contest Preparation**

**May 29: Speaker—Likely on Software Defined Radio, June Contest Prep**

**June 17: Elections and “Festival Night”**

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**Also Upcoming: Spring Sprints:** For more information including Spring Sprint times and rules please visit the ETDXA website at [www.ETDXA.org](http://www.ETDXA.org)

144 MHz April 5 (Monday)

222 MHz April 13 (Tuesday)

432 MHz April 21 (Wednesday)

Microwave May 1 (Saturday)

50 MHz May 8 (Saturday)

**SBMS International Microwave Contest: Early May weekend; TBA**

**June ARRL VHF QSO PARTY: Sat-Sun June 12-13**

**Presentations from the Mid-Atlantic States VHF Conference, October 11, 2003  
Part II-Small Station EME Using JT-44 by Al Katz, K2UYH**

**AVERAGING**

- ◆ WHEN A SIGNAL IS STRONG CAN GET FULL COPY IN A SINGLE SEQUENCE - (QSO in < 2.5 m in!)
- ◆ OFTEN SIGNALS ARE WEAK AND THE MESSAGE GARBLED - (This is where JT44's averaging pays off.)
- ◆ IF THE SAME MESSAGE IS SENT EACH SEQUENCE, JT44 WILL AVERAGE THE RESULTS OF ALL PERIODS.
- ◆ THE MESSAGE WILL CORRECT ITSELF WITH EACH SUCCESSIVE PERIOD.

**VE7BBG'S SIGNAL**

COR RUNS A 7.5' DISH AND 120W AT THE FEED



**ECHO MODE - WANT TO TRY EVEN IF DON'T USE JT44 FOR EME!**



- ◆ LET'S YOU EVALUATE EME SYSTEM CAPABILITY.
- ◆ NOT GOOD FOR COMMUNICATIONS.
- ◆ ON 70 CM COPIED ECHOES WITH 200 W ON HORZ WITH TROPO STATION.

**STATION REQUIREMENTS**

IT DEPEND ON HOW BIG THE STATION IS ON THE OTHER SIDE?

- ◆ ON 70 CM - SINGLE LONG YAGI AND > 100 W.  
\*\*\* WANT TO ELEVATE (REALLY A MUST!)  
\*\*\* PREAMP AT THE ANTENNA (AND PA AT ANT).  
\*\*\* POLARIZATION ROTATION?
- ◆ ON 23 CM - SINGLE LONG LOOP YAGI OR 5' DISH WITH CIRCULAR FEED AND > 50 W.  
\*\*\* CIRCULAR POL GAIN + 3 dB!

**PORTABLE EME - DL30CH STYLE**



- ◆ BODO USES IC-706, HB TRANSVERTER WITH 100 W AND A 59 EL YAGI (5 m long & 18.7 dBd) FROM HIS CAR.
- ◆ BESIDES DL, HE HAS OPERATED FROM 3A AND HB0.

**YOU NEED A COMPUTER AND SOUND CARD**

- ◆ SHOULD RUN 32 BIT VERSIONS OF THE WINDOW S OPERATING SYSTEM AND BE FAST ENOUGH TO HANDLE JT44 AND SEVERAL OTHER TASKS.
- ◆ A 300 MHz PENTIUM OR BETTER WITH WINDOW S 98 OR PREFERABLY WINDOW S 2000 OR XP WILL BE MORE THAN SUFFICIENT.
- ◆ NEED TO INTERFACE THE COMPUTER TO YOUR RIG :  
1) PTT FROM SERIAL PORT (VOX will work),  
2) TX AUDD FROM AUDD OUT OF SOUND CARD , &  
3) RX AUDD TO INPUT OF SOUND CARD .  
(DL30CH uses Acer laptop - 650 MHz Celeron)



## OTHER SPECIAL REQUIREMENTS

### ◆ FREQUENCY ACCURACY AND STABILITY

- \*\*\* WANT TO BE WITH IN +/- 600 Hz.  
(No problem on 144 MHz, but on 1296 – Can tune?)
- \*\*\* FREQ DRIFT < FEW Hz IN 30 SECS.
- \*\*\* I USE GPS STANDARD.

### ◆ DOPPLAR SHIFT CORRECTION

- \*\*\* NOT IMPORTANT ON 144, BUT SIGNIFICANT ON 432 (can be > 1 kHz) AND 1296 (can be > 3 kHz)
- \*\*\* MUTUAL DOPPLAR CAN BE VERY DIFFERENT FROM LOCAL ECHO SHIFT!
- \*\*\* JT44 HAS BUILT IN CORRECTION.

(DL30CH – nothing special)

MOON	
Az:	313.03
El:	-26.98
MOON	
Az:	162.48
El:	58.96
RA:	11:15
Dec:	9.79
LHA:	-9.08
SD:	16.45
Freq:	1296
Txky:	3
Doppler:	+1822
Drift:	-8.48
Agnd:	-4.33

## OTHER REQUIREMENTS CONT'D

### ◆ MUST KNOW TIME TO ~ 1 SECOND.

- \*\*\* I USE RADIO SHACK WWW CLOCK AND SET MY COMPUTER BEFORE SKEDS
- \*\*\* SOFTWARE IS AVAILABLE TO AUTOMATICALLY TO UPDATE YOUR CLOCK VIA THE INTERNET  
<<http://www.thinkan.com/dimension4/>>.
- \*\*\* CAN ALSO USE GPS STANDARD.

### ◆ MUST BE ABLE TO TRACK THE MOON

- \*\*\* JT44 HAS BUILT IN TRACKING.

(DL30CH has GPS & digital radio clock)

MOON	
Az:	162.48
El:	58.96
RA:	11:15
Dec:	9.79
LHA:	-9.08
SD:	16.45

## CONCLUSION

- ◆ EME WITH JT44 IS NEW AND CHALLENGING.
- ◆ IT'S NOT JUST HAVING A YAGI, A100 W AND A COMPUTER!
- ◆ THE COMPUTER DOES NOT DO EVERYTHING FOR YOU!
- ◆ IT IS PRETTY EASY WITH A BIG STATION, BUT THERE IS STILL A LOT TO IT: ACCURATE FREQ AND TIME, MOON TRACKING, DOPPLAR, POLARIZATION (ON 432).
- ◆ WITH A WEAK STATION, ALL THE ABOVE PLUS MUST UNDERSTANDING HOW TO USE JT44 FULLY (EXCLUDE/INCLUDE, CLEAR, FOLD, FREEZE, CLIP, ETC.)
- ◆ FOR SKEDS CHECK INTO K1ROG'S 20 M NET (14.345 MHz 1600Z SAT & SUN) AND READ 70 CM & UP EME NEWSLETTER <<http://www.nitehawk.com/rasmit/em70cm.html>> .

## January Contest Team Plan

As proposed and facilitated by W3IIT

This was a general geographic team plan, considering some folks in parenthesis that could serve as captains and stimulate, facilitate, initiate, hopefully not irritate, their area teammates to maximize their contributions to the January Club Contest efforts.

Captains--call your teammates and do the facilitating. Teammates, call your captains and each other and see if anyone needs help or encouragement. If we unintentionally left anyone out, add them in!!

Codes:

\* = no contest entry 2003 as an individual

O = Other

M = Multi-Op/operator at (XYZ)

N = New Member

R = Retired

(ROV) = Rover

**Norristown (W3IIT)** WA2OMY WA3YUE KB3XG W0RSJ WN3A\* W3KJ KA3MGB

**Ottsville (W3KM)** KU3A W3GXB W3HMU N3ITT

**Blue Bell (K1DS)** (Rov) WA3AQA NE3I (Rov) K3LOM \* K3VEQ R N1XKT (Rov) W3RZU \*R AA3RE K3JJZ

**West (N3NGE)** W3AX M(NGE) W3DFM\*,D,M(RSJ) N3FTI W3SZ K3TUF M(NGE)

**South Jersey (W2SJ)** N2DEQ K3EOD R AA2UK W2UR M (NGE) WB2RVX\* WB2RXM\*,R K3ZPN \*, D W2SB \*

**Newtown (WA3DRC)** W3GAD W3ICC N K3MFI K3CX\*

**Hilltown (N3EXA)** WU3C\*,O?,D AA3GN K3ESJ\* WA3NFV\* K3IB N3PLM N3GSA\*,

**Warminster (WA3NUF)** N3AOG W3FQD\*,R W2SK\* N3OZO K3EBZ KB3GJT

**Southampton (K3IUUV)** KB3IB W3RJW K3IUUV W3PST\*,R

**Upper Jersey (K2TXB)** W2AXU \*,R N2CG R WC2K WB2ONA M(RSJ) K1JT W2PED M(NGE) WB2VLA

**South (WA3RLT)** K3BPPR W3OR WA3U KB3BBR K3EGE N

**Glenside (WA3GFZ)** W3CIL\*R K3DMA WA3EHD N3EVV Rov/M(NGE) N3EMY\*, W3KKN KB3HCL W3SYN\*

**Philadelphia** W3HK\* K3GNC WR3P \*,M(EOD)

**Other** NR6CA \*O,R K2EVW\*,R,O K1DY \*,O,D K3IPM O WA1KIR\*,O W3NSI \*,O,R? WB9PUJ\*,O,R W1SD \*,O WA1YHO \*,O KF6AJ

A successful event, as we are always familiar with, depends on the active participation of ALL of our members. Helpful strategies: Use the contest clock; check 146.55 and 223.5FM, call CQ, use CW, move contacts "up through the bands", track and follow the rovers, (rover plans will be posted on the reflector), get plenty of rest in the week before the contest, calibrate your frequencies and beam azimuth to the beacons. Let's be there and on-the-air!

## Contests Should Be Fun!

Thanks to technology, we no longer need to do paper logging. But, we can't just hit `Exit` at the end of the contest and submit the file that the logger spits out. The log submission must conform to the contest rules to be accepted by the contest sponsor. This message is just to let you know that my loggers come with applications that are useful post contest, as well as during the contest.

I hated paper logging and the post contest drudgery that followed - some of which is still necessary with computer logging. Everything that I hated to do post contest (or wasn't fun during the contest), I wrote an application to help do it. Please use these tools - and have MORE fun.

### VHF EVAL

1. Evaluate your Cabrillo log file - check the score and identify dupes. Dupes are allowed in the Cabrillo log without penalty, so don't remove them. 2. Check your Cabrillo file against the `good calls` file [ logsort.dat ], to see if you are prone to making typos - so you can try to do better in the next contest. Note: The flagged calls can also be an activity indicator. This option will flag callsigns entered as call/grid - which is incorrect in submissions to the League. Also, rover calls without /R can be flagged by using the [ rovers.ini ] datafile. VHFLOG and KM ROVER both allow call/R and call/M to be entered without duping problems.

### UTCTIME

Allows changing all the QSO times +/- X hours. If you used the wrong UTC offset, you can fix your log file post contest. Your log could be rejected by the contest sponsor if it starts at 1800 UTC, when the contest actually started at 1900. To set your PC clock/date and to set the correct UTC offset, go to <http://tycho.usno.navy.mil/cgi-bin/timer.pl>. Click `Refresh` to update.

If you are logging at the beginning of the contest, it only takes a few seconds to insure that the logger's UTC time agrees with the UTC start time - per the contest rules. If you used the wrong UTC offset and didn't start at the beginning of the contest, you may not realize that all the times in your log are incorrect.

Important note:

Don't change the UTC offset mid-contest unless you first use UTCTIME to convert your current log to the correct hours. Then re-run the logger and change the offset.

### LOGSORT

Compiles the `good calls` data file [ logsort.dat ] from previous contest logs. I generate and update a file every year - from high scoring Pack Rat January SS logs. Get the zipped file at <ftp://ftp.qsl.net/pub/w3km/updates.zip> and extract it to a temporary folder. Copy the files you want to your logging folder.

### SQUARES

A grid square calculator. Creates the [ sixdigit.dat ] file used by my loggers to lookup frequently worked stations. If you want to use my updated file, download it as above: <ftp://ftp.qsl.net/pub/w3km/updates.zip>.

### LO

Creates [ xtalx.dat ] used by VHFLOG to display IF frequencies, due to transverter LO offsets. 1. The calling frequency and IF frequency are displayed for each band. 2. At the time of a microwave QSO, read the PLL reference frequency on an accurate VHF counter. Enter it into VHFLOG

to display the exact IF frequency to be used.

3. When told to go to 1296.145, Enter `F145` to display the IF frequency for 1296.145. Only a few of my transverters are ON frequency, so this feature is most useful. 4. Your `Favorite Beacon` frequencies and indicated dial readings [ beacon.dat ] can be displayed in VHFLOG when you Enter `B`.

### MEMSWRKD

Used to display the total club member QSOs you worked during a contest. This application uses the club member data file [ cklist.dat ]. Download the updated file as above at: <ftp://ftp.qsl.net/pub/w3km/updates.zip>.

### SKEDULER

A multiple alarm that can be used to remind you of schedules during the contest period. Up to 20 alarms (with comments) may be set.

### TGRIDS

A QSL-ing and file evaluation tool. Outputs total grids worked in multiple contests.

### DXGRIDS

Evaluate your log files from multiple contests, to produce station bands/grid activity data. 73, Dave, W3KM

## New DX Record Claim for 241GHz

*(from the Microwave Reflector)*

I'd like to claim a new DX record for the 241GHz band. We had some rather dry WX here in Virginia and I just couldn't pass up trying to better our own DX record for the band. After shorting out a set of gel cell battery terminals while setting the gear up, I thought we'd never make the QSO! No fire, just a melted 1/4" plug on the cable end of the CW straight key. The new claimed record is 61.8km and here are some specifics:

Date: Dec 3rd, 2003

Time: 01:48z W2SZ/4 (WA1ZMS op) FM07fm 37-31-04N 79-30-40W W4WWQ/4 EM97xe 37-10-49N 80-03-59W  
Distance: 61.8km

The weather at the time of the QSO at the W2SZ/4 QTH was: Temp: -6.1C Dew Point: -17C Relative Humidity: 40% Station pressure: 876mb These WX conditions result in a total atmospheric loss of 0.541dB per km. The weather at the W4WWQ/4 QTH was not logged. But since his elevation was around 600 meters lower than mine, his dew point should have been slightly higher.

I elected to use the W2SZ/4 club callsign for this QSO since several people within the club have helped me with this 241GHz project. I hope to have an audio file and a photo posted at [www.mgef.org](http://www.mgef.org). 73, Brian, WA1ZMS/4 op for W2SZ/4

**Joel Knoblock W3RFC**

**[www.therfc.com](http://www.therfc.com)**

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

## Call for Speakers Trenton Computer Festival

The 29th Annual Trenton Computer Festival (TCF-2004) will be May 1st and 2nd, 2004 at the New Jersey Convention Center in Edison, New Jersey. The Speaker Program is a very important part of TCF. I am again asking for your support as a speaker and your help in locating speakers. We are making a number of changes to improve the speaker program. We are promising all speakers a hard walled room. We are also adding a poster session to provide an opportunity for presenters to engage in discussions with attendees in a lively more personal way not available from the front of a lecture hall.

The 2004 theme is "Public Policy In Computing" with Keynote Dr. Rebecca Mercuri talking about the problems of electronic voting. We are seeking speakers in support of the theme and on topics such as the Internet, multimedia, networking, wireless, security, graphics/art, photography, video/net conferencing, music, database management, robotics, operating systems, programming, business and home applications. We are interested in talks on any computer-related topic. We are also seeking people to lead hardware and software forums and special interest group meetings. If you can present a talk, or lead a forum or special interest group, please fill out the TCF Speaker Application form at: <[http://www.tcf-nj.org/spkr\\_reg.shtml](http://www.tcf-nj.org/spkr_reg.shtml)>. Although the deadline for submitting applications is Feb. 1, 2004, it would be very helpful if your submissions were received as soon as possible. Next year will be the 30th TCF, and is also the 150th anniversary of The College of New Jersey, the original home of TCF. We are already making plans for this special even and hope to return TCF to The College of New Jersey in 2005. If you have suggestions on how to improve TCF2004 or for the TCF2005 celebration, please contact me at <[a.katz@ieee.org](mailto:a.katz@ieee.org)> or by telephone: 609-771-2666 or 609-584-8424. Thanks for your continuing support. My very best regards, AI , K2UYH

### Movin' Your Cheese (Buy-Sell)

FS: FT-790R11, 432/440 MHz all mode for sale, asking \$300.00. I was my primary rig for contesting on the band. Doesn't have the CTCSS for repeaters. I only used it on FM simplex, SSB and CW. [chuckwa3iac@yahoo.com](mailto:chuckwa3iac@yahoo.com)

WTB: 222 XVTR (or loan for Jan) contact [K3EGE@aol.com](mailto:K3EGE@aol.com)

### Useful Ham Website

For prospective tower erectors, N1LO has created a valuable site with a lot of information on tower construction and maintenance practices. It's very much worth a read: <http://www.qsl.net/n1lo/tower.htm> Thanks, Gene AD3F

There are two main items on this page. The Guyed Tower Summary goes into has a multitude of subjects that tower owners should at least know exist. All worth reading. The second item is also worth reviewing. It's much more technical as it should be. It does have annoying pop up's but it's a small price to pay for the information that it provides.

## 11th International EME Conference New Jersey, August 6 - 8, 2004

At The College of New Jersey we have a microwave lab with network analyzers, spectrum analyzers, a noise figure meter (only one) and various signal generators, etc. This was one of the reasons for having the conference at the college. Packrat volunteers are being sought to assist with the preamp gain and noise figure measurements. *(Please contact K1DS directly at [rick1ds@hotmail.com](mailto:rick1ds@hotmail.com) if you can assist with this activity on the Friday and Saturday of the Conference. )* We are planning to have the usual technical presentations plus workshops where you can use test equipment to tune your LNA, transverter, etc.

We will have a Spouse's Activities Program available for those who wish to join us. If you have any suggestions on places to visit, or things to do, please let us know.

We encourage all radio amateurs to submit papers for the Conference Proceedings. Even if you can't assist but you still want a paper to be published, we would like to hear from you.

At this point we are accepting proposals for papers. It's probably a good idea to submit your topic before starting to write in order to avoid having multiple papers on the same topic.

Later on we will publish guidelines and suggested formats, so we can have professional look proceedings with a minimum of editing.

Your contribution to the Conference Proceedings will be noticeable, and greatly appreciated by the Organizing Committee, attendees and the ham radio community in general.

The following papers have been proposed:  
Noise Figure Calculation - Paul Chominsky WA6PY  
2003 JW/SM2BYA 432 MHz EME operation - Gudmund Wannberg SM2BYA  
Circular polarization feed with septum - Zdenek Samek OK1DFC  
2 x G17B 23 cm 500 W amplifier - Marc Franco N2UO  
EME in Alaska - Ed Cole AL7EB  
Also papers from K2UYH and K1JT with topics to be determined will be presented.

We have reserved a block of rooms at the Amerisuites hotel in Princeton, New Jersey. The special group rate is \$95 for all types of rooms. The price includes breakfast, week-day newspaper, indoor heated pool, fitness center, 25" TV, free local transportation, rooms with mini-kitchen and refrigerator, coffee maker and coffee, etc. At walking distance from the hotel there are several restaurants and a shopping center. Click on the following link for details:

<http://www.mymarketfair.com/>

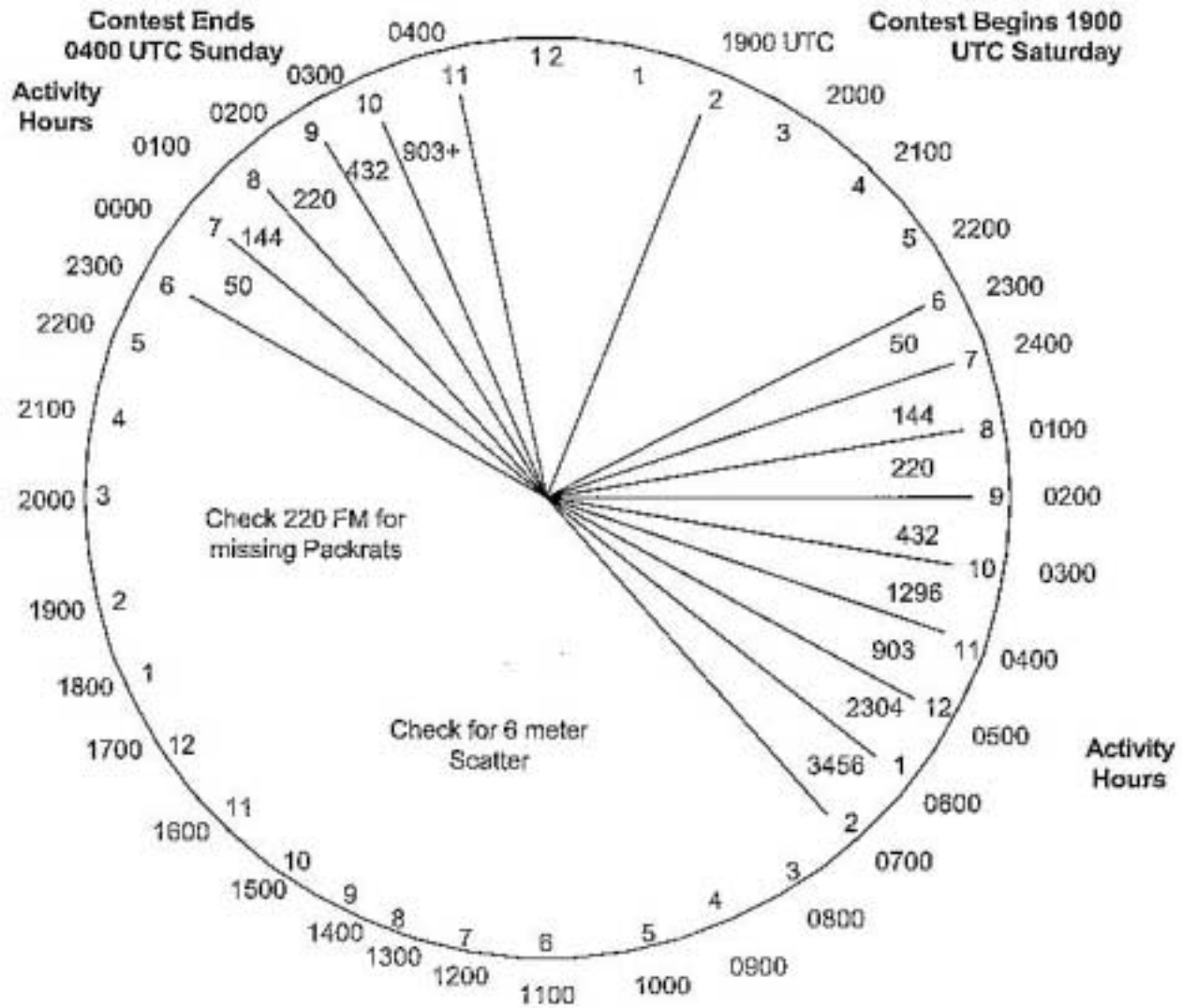
Please contact the hotel directly for more information or to make reservations. Make sure to mention "EME2004" to get the group rate

<http://amerisuites.com/hotels/ajpr.shtml>

Search for Extra Terrestrial Intelligence Technical Symposium 2004 will also take place at the College of New Jersey during the same days. If you'd like also to register for their event, or know more about SETI, please visit their web page:

<http://www.setileague.org>

# January V.H.F. Contest



## CONTEST CLOCK

Get some SLEEP  
Eat and Drink Right

Work All PackRats on  
all Possible Bands

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	

Check 6 and 2 at Sunrise  
Noon and Sunset for DX

Every Score Helps the  
Club and Your Team

Use 147.48 or 147.51 for Coordination Freq.

Have FUN !



## Metal Stock Sources

If you are looking for small quantities of metal stock, Metal Supermarkets may have a franchise in your area. The stores are set up for browsing and there is reported to be no minimum purchase. Check to see if there's one in your area at <http://www.metalsupermarkets.com/>. (Thanks, Lynn N7CFO) There is a store in Philadelphia on Cottman Ave and another in Temple Pa. For those of you near Reading there is a great place for surplus metal. It is L&B Metals. They have 2 warehouses in Reading and an outdoor place a couple of miles from the intersection of 73 and Pricetown Road. You can get exercise at the same time wandering around in their multi acre yard finding what you need. They have everything from small diameter aluminum wire, square and round tubing, angle stock, rod and plates to at least an inch thick. Bring a caliper and measuring tape. Nothing is labeled. They sell by the pound.

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all kinds of flat & tubular stuff, steel, aluminum and stainless too plus a huge hardware store also by the pound and they cut to length --- for a fee.

Easy to get to from Route 55 and Route 322 - South New Jersey area 73, Harry, W3IIT

### PA PRB-1 Assistance Needed

To All Radio Amateurs in Pennsylvania, We are seeking case histories of anyone having tower/antenna problems

due to municipal action and/or municipal inaction. Anyone having problems of this type are encouraged to contact E. Pa. Section Manager, WB3FPL, in writing or via the internet. Eric D. Olena, WB3FPL. 284 Blimline Rd. Mohnotn, PA. 19540-7810. [wb3fpl@arrl.org](mailto:wb3fpl@arrl.org) as soon as possible.

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Packrat **Ben Kelsall, WA3RLT**, was co-author of an article titled "Cavity Techniques for Substrate Properties at Microwave/Millimeter-Wave Bands" in the December 2003 issue of professional magazine "Microwave Journal".

**Robert A. Griffiths**  
Attorney at Law

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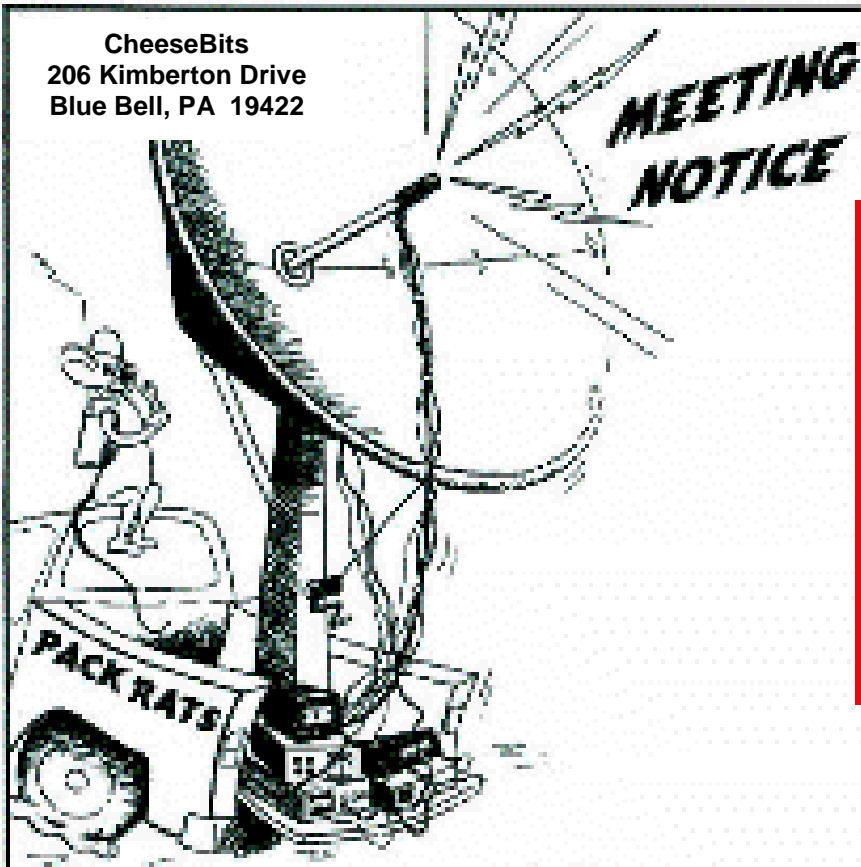
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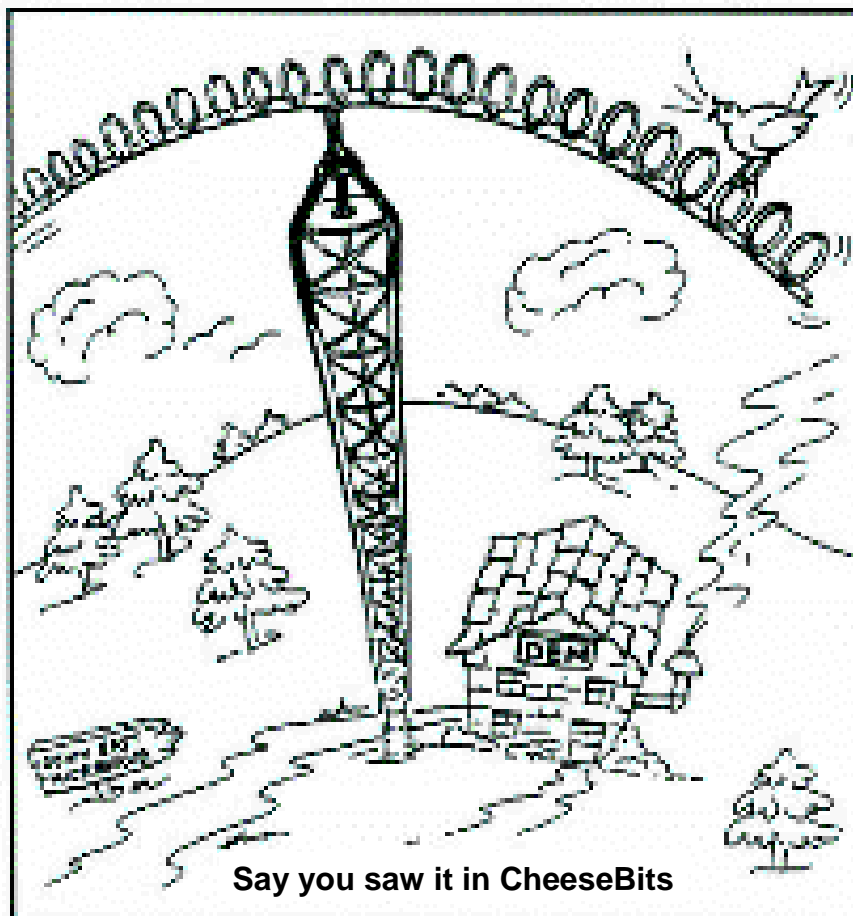
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Events Calendar p3  
Small Station EME II p4-5  
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