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

CHEESE BITS

W3CCX
CLUB MEMORIAL CALL

ARRL Affiliated Club

Volume XLIV **Special Extra Edition September 2002** **Number 9**

10th International EME Conference Success in Prague

Despite the greatest flooding in the city of Prague in the past 500 years, the organizational planning and strength of the Czech Radio Club, under the leadership of Zdenek, OK1KFC made this meeting an unqualified success. Starting on Friday evening, Aug 16, over 100 EME-ers and more than 80 registered family members enjoyed an opening party and dinner, then went on tour buses with guides to explore the Prague Castle at twilight. There were attendees from all over Europe, Russia, Japan, Australia, Africa and North America. The technical programs on Saturday included topics on Noise Figures, LINRAD, JT44 (by our club member, Joe Taylor, K1JT), TWT testing, RF safety, 24 GHz EME, antenna tracking and controllers, circular polarization, dish-building, and SETI activity. Each participant also received a conference logo T-shirt, cap, mug, pen and carrying case. There was also a bound booklet of the proceedings, and a great CD that contained all the presentations and programs. Discussions were conducted on frequency use and operating procedures, as well as commentary on the use of digital modes. Saturday evening activity included dinner and drinks and the awards for NF preamp testing and the Johannes Kepler Awards for those active on EME. A raffle (aka "Tumbler") followed with lots of VHF power tubes, relays and connectors as prizes.

The program concluded on Sunday with a visit to the Technical Museum for some great displays of telescopes, astrolabes and other heavenly devices, radios and communications accessories. We closed with more discussions on EME protocols, lunch, and a final debate on digital communication. Al Katz, K2UYH, volunteered to host the next conference in 2004 in Trenton.

EME attendees—I'm under the "U" of Centrum and Joe is under the "U" of Studii

Pack Rats **CHEESE BITS** is a monthly publication of the
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June Contest:	N3ITT	610-847-5490
HAMARAMA:	W3KJ	215-256-1464
VHF Conference:	KB3XG	610-584-2489
Awards Chairman	WA3GFZ	215-884-3116

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

TIME	FREQUENCY	NET CONTROL	
7:30 PM	50.150 MHz	WA3EHD/K3EOD	
8:00 PM	144.150 MHz	N3ITT	
8:30 PM	222.125 MHz	W2SJ/N3EXA	
8:30 PM	224.58R MHz	W3GXB	
9:00 PM	432.110 MHz	W3RJW	FN20le
9:30 PM	1296.100 MHz	WA3NUF	FN20le
10:00 PM	903.100 MHz	AA3GN	FN20ig

THURSDAY NIGHT NETS (1st & 4th of the month)
9:30 PM 2304.100 MHz W3KJ, & go to 3.4G & up after FN20hg

Joe K1JT, Zdenek OK1KFC and Me at the EME conference

Editor's Column

I couldn't resist the urge to get out a special edition this month, considering all the September and October VHF events, and our experiences at the EME conference in Prague. Although it seemed that I wouldn't be able to get enough material together, after getting my photos back (I'm not yet digital) and realizing there was good reason to add to the **HAMARAMA** publicity, and seeing all the 10G and meteor shower notes, it had me stimulated.

For all of you who watched the flooding of many European cities on the news, it was a frightening scene. As we flew into Vienna a week before the conference, we could see local farm fields flooded and the Danube River already at the edge of its banks. This was only the beginning. We had rain almost every day while in Vienna, and as the time approached for us to head to Prague, we were informed by our hotel that their sister hotel in Prague, where we had planned to stay and tour the city for a few days prior to the EME conference now had a lobby full of water and was being evacuated. We called the Krystal and were reassured that they were on high ground, and they referred my to Zdenek, OK1KFC, who was heading the conference for a detailed update. Zdenek was super, as were his team members. Not only did he confirm to me that we would be safe and the conference would proceed, but also that he would have a club member meet us at the train when we arrived at an alternate station, since the main train station in Prague, as well as the subway system there was flooded out also. It was also helpful to be met, as the Prague train station has a reputation for pickpockets and purse-snatchers, so we were very happy to see a conference logo with my call on it, and a smiling face to take us to a waiting car.

Our firsthand look at the Vltava River was during the ride to the Krystal, and the water had now receded by about 12 feet, but was still rough, turbulent, and overspread many of the riverside attractions through the middle of town. Everything else, removed from the river was going about business as usual. Public transportation on buses and trams was free since the subway was flooded. Shops that lacked electricity along the tourists routes in the river area were open by candlelight. Plenty of local military and civil forces were on hand to assist and protect. We never felt threatened, and were delighted to be able to be there, despite a delay in our plans. More pictures will follow in subsequent issues. For those of you who have been to Prague, we can now share the great experience. For those who have not yet been, we recommend it!

The international EME community was swell. The experience, technical capability, creativity, and energy is invigorating. The camaraderie of a diverse group of folks, united by a common cause was amazing. At each meal and tour I shared seats and tables and thoughts with folks from every corner of the globe. The family members who attended were also well served with an interesting tour program, complete with guides and transportation and meals. We couldn't have asked for a better experience. Thanks to the staff that supported this conference, including OK1's: DFC, AXH, CA, DAI, DAK, DCI, DIG, DST, FM, UWA, VAO, AQK and all of those who submitted papers and presentations. I can see that the proceedings and the accompanying CD-ROM of all the pictures and programs will be a keepsake and valuable tool for the future.

Well, did you get on for the UHF Contest? The 10G & up first weekend? How did you do? We're anxious to publish your stories and pictures. There was a great thread on 10G liaison frequencies and methods on some of the reflectors—perhaps we can discuss at a meeting soon. Did you make MS contacts during the Perseids? What are you doing for the second weekend of 10G and the Sept. VHF QSO party? Please share your plans and results, and if I'm around, hope to work you!

73, Rick, K1DS rick1ds@hotmail.com

HAMARAMA - 2 0 0 2

Sunday October 13, 2002

Rain or Shine

Gates Open: Buyers at 0700 Sellers at 0600

Middletown Grange Fair Grounds

Penns Park Road, WRIGHTSTOWN,PA

Food, Beverages & Facilities on Site

No Overnight Parking

Talk In on 146.52 MHz Simplex

General Admission $6.00 Outdoor Seller 's Add: $10.00/Car Space

Non-Ham XYL 's and Children under 13 Free Also,

Indoor Space: First Come, First Serve

Indoor Sellers Add: $10.00 per 10 ' Table

Bring Your Own Table

Grande Door Prize $300.00 Cash

Special Vendor Only $100.00 Cash Prize

Plus Buyer Prize Drawings

No Advanced Reservation

For More Information via E-Mail: **packrats_w3ccx@yahoo.com**

or www.ij.net/packrats

Grande Door Prize $300.00 Cash - Special Vendor Prize Only $100.00 Cash -Buyer Prize

From Points South :Take I-95 north to exit 49 Newtown/Yardley -Route 332 West. At top of Ramp turn left. Go west until 332 joins with 413 north. NOW follow 413 north until it becomes a two lane road. Go 3.2 miles and turn left on to Penns Park Road - Wrightstown Friends Meeting and cemetery on left just before turn. Sign for Middletown Grange is on Right. Follow Penns Park Road 0.2 miles to Hamfest on the left (approx.8.2 miles from I-95). NOTE: If coming from the Burlington Bristol Bridge follow 413 north to I-95 North then follow the directions above (saves a lot of time).

From PA Turnpike: Use Exit 28 keeping to left out of toll booths to US 1 North. Go to I-95 North and follow directions 'from points south '.

From Central New Jersey/Trenton: Take I-95 South from New Jersey. After crossing the Delaware River to Exit 49, take the **Route 332 West** (Newtown) Exit. **West on 332** and follow direction 'from points south '.

Entering PA on US 202 South :Follow US 202 to Buckingham Route 413 South. Turn Left. **South on 413** 7.0 miles to traffic light at Route 232 (2 gas stations). Stay on 413 and go exactly 1 mile past traffic light, passing CAROUSEL AT INDIAN WALK, and turn right on to Penns Park Road. Follow Penns Park Road 0.2 mile to Hamfest on the left. There is a Big "ICE " Box on Corner of Penns Park Road

From Montgomery County South and West: Follow Route 132 East to Route 232 (2nd Street Pike) in Southampton, PA. Hess Station on corner Go North on Rt. 232 (Right-hand turn). Stay on Rt.232 North for **7.1 Miles** to **Penns Park Rd** (Salvatore 's Tavern on corner). Make a right turn on Penns Park Road. Hamfest is **0.6 Miles** on right.

Prez Sez

We need to look at last January contest scores and see how each of us can improve our stations Rochester beat us on points with 20 less participants, shame on us. If you know a member that needs a little motivation don't hesitate to help, we all need a little motivation. September has prime antenna weather. Also if you know a ham that has shown an interest in VHF and above bring them to the September meeting at the library.

If you missed the Picnic at Al and Carol Shepard's you missed a good time, good food, good swimming, good weather. Thanks to Al and Carol for the hard work you both put in to making the picnic an enjoyable event for all of us.

Are you going to Microwave Update? We are planning to car-pool and caravan, as there not quite enough folks to cover the cost of a bus. So talk this up, volunteer your vehicle, and hook-up with other club members to make this a successful conference for all attendees.

It was good to work some RATS during the short time I was able to spend on the UHF contest. See you later **Brian N3EXA**

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New 10 GHz Beacon

A new 10 GHz beacon has been installed at the QTH of W3LPL in Glenwood Maryland (20 miles north of Washington DC) in FM19LG. This beacon features a CW store and forward processor to help folks verify that their 10 GHz systems are working Here are the details: Tx frequency: 10368.300 MHz nominal Tx power out: 20 mW Tx antenna gain: +12 dB to -3 dB (variations due to proximity to tower) Ground elevation: 600 feet above sea level Height above ground: 190 feet Receiver frequency: plus or minus 3 KHz from beacon tx frequency Receiver sensitivity: -106 dBm The beacon oscillator is a Frequency West brick. Typical drift has been about plus or minus 2 KHz. By contrast my outdoor mounted DB6NT transverter oscillator has moved about 8 KHz (all referenced to my HP counter).

Here is how to access the beacon receiver: Point your antenna at W3LPL, FM19LG, tune in the beacon in CW mode Set your transmitter to transmit CW 3 KHz below your receive frequency You can transmit to the beacon any time it is not IDing or repeating back another signal. Send a minimum of 5 or 6 characters, a maximum of less than 12 seconds of CW The beacon will repeat your CW (keep it under 40 WPM) followed by your signal strength in dBm (the minus before the number is left off). This means that smaller signal strength numbers are stronger signals. The acceptance bandwidth of the receiver is about one KHz. With a little practice, you can figure out what Tx offsets will work for you. For those with good receivers, you will need to have 40 dB of receiver S/N before the beacon will hear you - that is a strong signal! If you hear the beacon repeating garbage, one of five things is likely happening: It's raining at W3LPLs QTH (local rain scatter) The wind is high at W3LPLs QTH (vibration noise) Somebody is trying to send SSB or FM through the CW detector (IT WON'T WORK) The beacon is measuring the insect population of Glenwood, Md. The beacon receiver is a little noisy at times and will occasionally capture random noise. Most of those events lead to "104" or "105" signal levels (very weak).

******Please send signal reports to w3ip@prodigy.net. **********

My thanks to Frank, W3LPL for the use of his tower, and to Craig, WA3TID for ground crew duties in the blazing heat.
73, Mike, W3IP

Important Radio Dates September & October 2002

Thu, Sept 12-Board of Director's Meeting-8PM watch email for QTH

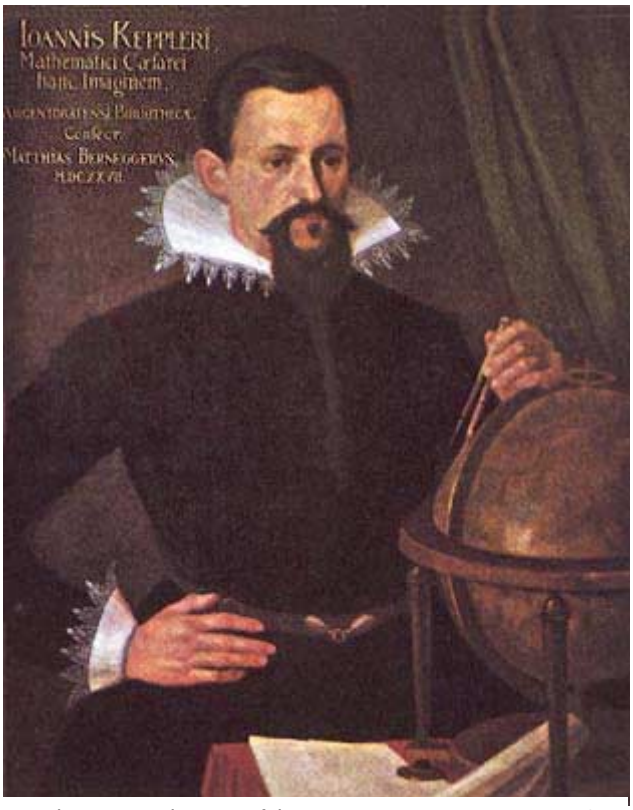
Sat & Sun, Sept 14 - 16 ARRL September VHF QSO Party Rules-Aug QST

Thu-Sept 19-General Club Meeting-Ken Tankel, of Dalet Media: Server-based Automated Broadcast Facilities at Southampton-Free Library, 8PM

Sat & Sun, Sept 21 - 22 ARRL 10 GHz and Up Contest

Sunday, Oct 13-HAMARAMA

Thu-Sun Oct 24-27 Microwave Update, Sponsored by NEWS group.



Johannes Kepler, one of the greatest astronomers spent 12 years of his fruitful life on the court of the emperor Rudolf II in Prague in 17th century
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2002 ARRL August UHF Contest

Operated for about 9 hrs from FN20 & FN21--conditions fair--participation good Tnx es 73 **Rick, K1DS / Rover**

Band	QSOs	QSO pts.	Mults.	
222	35	105	10	
432	41	123	11	
903	16	96	6	
1296	27	162	10	
2304	20	240	7	
3456	14	168	6	
5760	4	48	3	
10368	5	60	4	
Laser	1	12	1	
TOTALS	163	1014	58 + 2 = 60	Claimed score = 60,840

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With the help of good conditions and a great rover effort by W3IY/R I produced my best score ever in the UHF Contest. 213,087. I had a great time as well. See you all in September. Here is the band by band subtotals.

222	51Q	26 grids
432	78Q	31 grids
903	29Q	18 grids
1.2	44Q	23 grids
2.3	30Q	18 grids
3.4	14Q	10 grids
10	15Q	13 grids.

73, **Bill AA2UK**

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Had a fun time operating the contest this weekend. Thanks much to the efforts of all of the rovers. Bill W3IY covered 10 grids in a 24 hour period! I'm glad I wasn't near him on the highway. Thanks Bill for your diligence and patience. All of the rovers really boosted my score. I finished with 35,955 points. Nice participation from all. 73s, **Paul WA3GFZ**

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Here are my totals for the 2002 UHF Contest.

Band	QSOs	QSO Points	Grids
222	30	90	13
432	39	117	14
1.2G	23	138	7
2.3G	13	156	5
3.4G	11	132	5
Total	116	633	44

Had a lot of fun. Definitely need to add 903 to the station. I definitely missed 10 GHz, too. Great to work the rovers and Packrats who were on. Thanks K1DS/R and W3IY/R for being out there. Highlights for me included working K4QI on 1296, W3IY from FM15 and W2SZ up thru 3.4G. 73, **Joe W3KJ**

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My best UHF contest yet, good participation, everything stayed running! Well almost.

	Q's	Grids		
222	32	14		
432	45	17		
903	19	10		
1296	20	7		
2304	16	7		
3456	12	6	Total:	48861

It was fun working some long ones on 3.4 W2SZ, W3IY in FM17. Also in the last few minutes worked AF1T and friends in FN42/43 thru 1296. Also N2PA. The rovers did a super job. Thanks guys. 432 was working great, after fixing some IF cabling problems, intermittents (argh!) and adding a sequenced mast mount preamp. Also happy to hear WA3RLT on 2304 and hand him his 1st contact on that band. 3.4 next Ben? I have to agree with RJW - I like the 24 hr format. Much easier to take. Regrets: not spending more time on (about 50%), sleeping in on Sunday, not having 5/10GHz running yet, not trying bands above 1.2 with more stations (N2PA, for one, and W3IY in the southernmost grids). 1296 drive and receive gain wasn't quite set up right. I'll be working on these, and more, for the next one. 73 **de AA3GN**

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W3RJW FN20 SINGLE-OP ALL HIGH EPA Section

Band	QSOs	X pt =	QSO pts.	X Grids =	Points
222	20	3	60	11	660
432	35	3	105	14	1470
903	12	6	72	6	432
1296	16	6	96	7	672
2304	13	12	156	6	936
3456	11	12	132	6	792
10368	4	12	48	3	144
TOTALS	111		669	53	35457

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We had a real blast on the rover circuit, again...thanks to the efforts from the Packrats, & others. Condx seemed pretty sour at the beginning. Worked nobody for the first 12 min from FM15... then K4QI showed up to save the day, and get things moving. Found AA2UK, and completed thru 10G nicely, but sigs below normal. Wound up with only 21 QSOs in 80 min...pretty slow times. Highlight was working AA2UK here on 10G with decent sigs. FM25 was worse, with lots of dry CQs, and few stations heard. We squeaked out 17 QSOs in 39 min from there. Only 2 QSOs above 903 here with AA2UK. My FM25 site was on blacktop, and it was hot as hell, which helped us decide to leave early. If activity had been better, we would have "sweated" it out longer. The FM26 site has a great low take-off angle across the waters of Currituck sound. Still, things were a bit slow here, with just 30 QSOs in 1hr 34 min operating time. Only 1 QSO here above 2.3G with N3EMF on 3456. I was getting psyched to hit the bridge-tunnel, where I expected to do better with the 360deg view over water. FM16 produced 48 QSOs, with 2 on 10G. Things were looking up, but still condx flat, and activity slim. Short drive to FM17, still on the bridge, where we caught 38 more fish, which were all keepers...2 on 10G. AA3GN showed up with 3 nice Qs on 2.3, 3.4, &10G...cool! We also found W1PM from here for FN41, which was awesome. Tnx! FM27 was approaching late (somewhere past oh-dark-thirty), and we were breaking into the lunatic-fringe elements here. Found another 29 Qs here with a couple more on 10G. A huge super tanker drove past in the darkness which looked like the starship Enterprise...wow! I tried some tanker-scatter, but the direct path worked better. Long drive to FM28...had to catch 40-winks at the Pocomoke City rest area... this really helped us to keep going. FM28 was a beautiful flat site out in the marshland, just off the Chesapeake...nice but lots of hostile insects. The early morning ground fog looked promising for propagation, and yes, things started sounding better. We worked 58 Qs from here, including some nice ones with W4VHH (EM95) through 3.4G. Also wrkd K1TEO thru 10G from here. Things were definitely improving in the prop dept.58 QSOs in almost 3hrs... Yipes!! I stayed loo long...but condx & activity was picking up...so what the hell...go for the dx... FM18 produced some 41 Qs in 70 min. Highlights were getting called by VE3TFU on 222 & 432... nice. Also really cool was some rover-to rover action here provided by Rick, K1DS...thru 5.7G!! Tnx Rick!! Onward to FM29 in the cornfields. The tassels were high, but so was activity...being closer to Packrat country didn't hurt, either. We found 41 QSOs, including an awesome treat by W3RJW on 10GHz...Tnx, Ron! Running out of time, we made the short drive (300ft) to FM19xa, and worked 24 more guys, including AA2UK thru 10GHz. It was really awesome! Special thanks to AA2UK, K2SMN, & N3EMF who kept me from getting too lonely during most of this hot-wx madness, out in the boondocks. It's really nice to have guys you can count on being there, out in roverland....(and they ain't too shabby @ ops- with good gear too). Lessons-Learned... 1. In hot wx, with ur AC broke, you can't work much while driving...why, you say? Well the windows down at mach 6.5 makes careful lis-

tening really hard!! 2. Don't try to drive down Rt95 south of DC after 12 noon on Friday. 3. Check cables often...I lost 5-10 QSOs on 5.7 GHz, cause I didn't see that driving with the dish erected had loosened the SMA connectors. Finally fixed, and restored this band...late in the game. 4. 144.260 didn't work too well for liaison...432 really cooked! 5. Don't wait til Friday nite to try and find a place to stay in the Outer Banks. 6. Always remember lessons 1-5. **73, Bill, W3IY / Rover**

Band	QSOs	QSO pts.	Mults.	
222	75	225	10	
432	113	339	14	
903	46	276	5	
1296	52	312	7	
2304	31	372	6	
3456	14	168	6	
5760	2	24	2	
10368	13	156	4	
TOTALS	346	1872	54 + 10 = 64	Claimed score = 119,808

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Building The W3SO, FN00sn, Contest Station

By Roy Goshorn, W3TEF, and Ed Steeble, K3IXD

It began with the purchase of mountaintop property 100 miles east of Pittsburgh on top of Wopsononock Mountain in the Allegheny Mountains by W3YOZ. The location is not far from his hometown of Altoona, PA. Those three acres are the now the home of W3SO, a competitive Limited-Multi (LM) VHF contest station in grid square FN00.

Beginning with portable field-day type equipment and operating from tents and using the call W3YOZ, experienced VHFers KA3EJJ, KC3EK and N3CDY, and some top notch PVRC operators found the site to be a good one for VHF communications. Subsequently the Wopsononock Mountain Top Operators got their own call, W3SO, in May 2000.

Today, the QTH has a permanent two room wooden building with all the features of a home shack, namely electricity, a full bath, and a kitchen! Because of the round the clock noise from the various operations taking place during a contest, the group stays either at local member W3TEF's home or at a motel for a good nights rest.

When configured for VHF, there are now six operating positions, one each for 50, 144, 222, 432 MHz., the fifth is for 146 MHz FM and the sixth is a spare. Currently the 50, 144 and 432 MHz operators are in one room and the 222 and 146 FM operators are in a larger room that also houses the kitchen and a small storage-workshop area.

W3SO began by operating with low power VHF rigs and has evolved to now operating with an ICOM 756PRO on 50MHz, an ICOM 746PRO on 144MHZ, a classic ICOM IC-375A and a 130w Mirage brick on 222 MHz, and a Yaesu FT736R on 432 MHz. On 50, 144, and 432 MHz, Lunar-Link Systems amplifiers provide 1.5kw PEP output. To help the operators dig out the weak signals, SSB Electronics pre-amps are used.

Being on a mountaintop means that the receivers are susceptible to a lot of out of band signals, especially from "paging" systems. Also the transmitter at one position may interfere with a receiver at another position. To combat these problems, in addition to using good receivers, all signals are routed through DCI filters to eliminate or reduce the interference.

At the 50, 144, 222 and 432 MHz positions are 486 computers with DOS running the CT contest software. A planned station upgrade is to network the computers. Currently the operators use paper slips to inform each other of stations that are being moved from one band to another, and each band's pass frequency.

Initially the antennas were small beams on 40 and 50 feet high field day type masts. Today there are five towers. This year, in the time between the January and June ARRL VHF contests, coax runs to all antennas were replaced with half inch or 7/8 inch hardline, resulting in W3SO's highest contest score yet.

The VHF antennas today consist of a seven element C3I beam on 50 MHz at 75 feet, a 17 element Force 12 beam on 144 MHz at 70 feet, a 10 element M2 beam on 222 MHz at 85 feet, and a 25 element C3I beam on 432 MHz at 95 feet. For 2m FM QSOs W3SO has a Diamond vertical mounted on a telephone pole at 30 feet, also fed with hardline.

As with all evolving projects like this, everything is interim, antenna wise, and plans are already well in the works for higher gain beams on taller towers.

Current operators of the station consist of K4VV, WR3Z, AI3M, K3IXD, K3RUQ, W3PAW, W9NET, W3TEF and W3YOZ. Occasional operators are WX3B, N3SB, W3BZN, and WB3EFQ. W3YOZ and W3TEF handle the majority of the installation and erection of the towers and antennas. W3TEF is the QSL manager. K3IXD submits the logs electronically.

W3SO participates in the January, June and September ARRL VHF contests as a limited-multi (50 MHz, 144MHz, 222MHz, and 432MHz). For the CQ July VHF contest, W3SO enters in the single-operator category. For ARRL club competition contests, W3SO is one of the Potomac Valley Radio Club's (PVRC) entries. The W3SO operators wish to thank the Pack Rats and the other readers of CheeseBits for many QSOs and they look forward to giving out FN00 in future contests.

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Future Meeting Topics

October Meeting: K2TXB-Russ Pillsbury on EME Communication

November Meeting: W2PED-Paul Drexler on the K1WHS VHF Contest station

2002 ARRL June QSO Party W3CCX FN21

Band	QSOs	X pt	= QSO pts.	X Grids	= Points
50	675	1	675	122	82350
144	453	1	453	68	30804
222	140	2	280	45	12600
432	235	2	470	47	22090
903	46	3	138	16	2208
1296	63	3	189	23	4347
2304	36	4	144	10	1440
3456	28	4	112	10	1120
5760	21	4	84	8	672
10368	27	4	108	9	972
24000	2	4	8	1	8
Laser	19	4	76	1	76
TOTAL	1745		2737	360	985,320

For comparison:
2001 Q-1558 G-325 Score-740,350
2000 Q-1663 G-326 Score-754,364

Station and Activity Reports
UHF Contest—Perseids—10G & up

AA3GN 10GHz station, rev 3 8/18/02 - After hearing the beacon (weakly) for the past 2 weeks with my newly acquired and slightly reworked 10 GHz station, I have been working feverishly to get transmit capability running. Simple you say? This was AA2UK/W2UR's old mast mount 100mw transverter. Bill built this up like I did with Rev 1 and 2: he used a Micromega PLL LO with high side injection and a 432 IF. Since I am picky and don't like "upside down tuning" and doing the CW offset backwards, I wanted a high side 432 transverter as an IF. It also would be nice to put the signal somewhere in the 28MHz band where I can transmit. (With my regular 432 transverter, the beacon shows up in the higher 27MHz range, and I do not have general coverage transmit) So I built up a modified KK7B 432 transverter board set that I had laying around, with the LO hairpin filters trimmed down to run at 460MHz. Recrystalled/retuned the brick. Finally had this stuff running and "clip-leaded" in Sunday afternoon. The beacon was now at 29.195 on the IF. I ran the drive up to saturate the transverter on CW, and backup off a touch. By that time the locals were gone and I didn't want to distract the distant contesters with my initial debugging run. WA3NUF and worked on 10GHz after the 903 net on Monday night. But my signal was way down - the pwr output of the transverter seems intermittent. So I need to once again, pull the box down and debug. Hey - at least it's only on the test tower, up 20'. Interestingly, after verifying the current CCX beacon frequency and doing the math "correctly", the beacon showed up within a few KHz of predicted. So I guess my WWV counter calibration is pretty close. Hope to have all the bugs straightened out and box on the big tower by the September contests. Maybe I'll even figure a way to get a PA up there. **73 Joe AA3GN**

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For the most part I only attempted to work stations that I had never worked before and I found 12 of those for some fun contacts. More remarkable is what I did not work. I ran FSK441 skeds with W0AH, Doug in Colorado, over a 1617 mile path (2602 km), on the 12th and 13th at 1600z, the predicted best time for us. On the 12th, at 1646z we experienced a burn that lasted for around 90 seconds. I copied both calls in the first 30 seconds, Doug got full calls from me in the second 30 seconds, and in the first 30 seconds of the next minute at 1647z I copied calls again plus a 26 report! Doug's signal here peaked at 4 db above noise, and was very unstable in strength during the approximately 45 seconds I was hearing it - weak and fluttery. Subsequently Doug also copied my 26 report, but no rogers were exchanged so it is not a contact, but close! The next day we switched to 15 second sequences but nothing was heard. However if we had been running the 15 seconds sequences on the 12th I believe we would have made it. We are going to try this again in November and hope we get another fabulous burn like that one! On the 13th I also ran a sked with W5UWB en EL17ax, a distance of 1558 miles (2508 km). A few minutes into the sked, at 1240z, I copied both calls from John in about a 3 second burn. Nothing more was copied in the 1 hour sked, and I was not heard at the Texas end of the path. Hearing signals over these distances in the Perseids is very remarkable to me, and shows that the theoretical MS dx limit of around 1470 miles can be significantly extended. Perhaps with the higher speed Leonids shower even longer distances can be achieved. If anyone is interested, I have saved .wav files of what I received. **73, Russ K2TXB** FM29pt

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I have 6 Meter DXCC #497. It took me 37 years. Also Rick Connors, WC2K is ready or has sent in his 6M DXCC application. I don't know if anyone else in the club has 6M DXCC or is close. I only have 119 countries worked on 6M. **73 Ron Allen W3OR**

If the club had a "Crying Towel" award for the 10G contest, I'd probably be a shoe-in. I only made one QSO the entire weekend including my trip to Camelback. That was with Ron W3RJW and he was barely hearing me. I discovered later why. I debated all week about whether to just stick the dish and rig up on the tower here at the home QTH, but since I had just gotten a new tripod and the weather being too hot to do any tower work, I decided to rove at least to a couple of spots. So, I fashioned up a platform for the tripod and was intending to use a thrust bearing with a small mast for the dish, but the bearing didn't arrive in time. Anyway, I secured the 2 ft. dish to the platform and installed the transverter, LNA, T/R switch, 250 mW driver amp and 1.5 W amp in ta fiberglass box. Since I would be battery powered (mostly) using a deep-cycle, I didn't want to have the 1.5 W amp powered all the time even though it only draws abt 600 mA, so I decided to use the indicator contacts on the T/R switch to switch the bias on and off. I tested everything I could here at home and it all seemed to work fine. I can't hear the beacon from ground level here so I decided to go up on Ridge Road to a little park I know and do a full "field test" before heading further afield. That way if there was a problem I was close enough to home to go back and resolve it. Planning, eh? So I drive to the park and as I get closer I see the place is packed and all sorts of tents, canopies, balloons, etc. Turns out they were having the Grandview Hospital PIG (not HAM) roast that day! OK, I'll just find another spot. Plenty of other hills around here, right? Well I thought abt Montgomeryville, but the prospect of trying to set up a new station in a brutally hot parking lot on a Saturday with thousands of onlookers and interrogators didn't sound all that cool to me, so I set off in a northerly direction to search for a suitable place. I had my GPS which was great, but I neglected to bring at least my local topo map (next time). Anyway, you probably know better than I do that there don't seem to be many (if any) small, high un-treed sites in our neck of the woods. I drove for abt 2 hours as far as Limeport when I decided to head back to where I grew up. Next stop was the ridge in FN20he near the old NIKE missile site where I thought they had built a small park recently. Well, I was wrong. It's pretty much all new home construction and fenced-in US Gov. operations. Didn't think it would be a good idea to set up a suspicious looking microwave station there. There was one bare lot on a cul-de-sac, but next door was a huge new house with all the ADT security signs so I knew they'd probably drop a dime on me as soon as I set the tripod on the ground. The search continued for a place to test the gear. A little further on where I thought a park had been built, was some sort of county agency with threatening no trespassing signs all over, but between that and the Techni-Tool company looked like a no-man's land where I could set up. So I did. Heard the beacon abt S7-9 I thought it should be louder and later I found my SMA-BNC adapter for the 2M IF was shot but at the time I just chalked it up to condx. I tried unsuccessfully with Jeff K1TEO on 10G, called on .260 for any locals and not raising anyone I decided to set my sites for Camelback Mt. on Sunday. Saturday night I rechecked all the gear and went to bed so I could get up to the mountain early. Everything went fine, got up there around 8:30 AM, drove to the crest and began setting up where our microwave truck does. It was a beautiful, reasonably cool morning and best of all, nobody else was up there yet. Got the station set up and took a bearing with my compass (which I actually remembered to bring this time!) to find W3CCX/B. Looked in that direction and started tuning around. I hunted for at least 1/2 hr, turning the dish, retuning, rechecking the true heading, no beacon heard. On the way up, I had heard the guys on .260 running with each other and Ron was one of them, so I gave him a call. It took a while due to pointing troubles on both ends, but eventually I heard Ron S9. Of course, my LO drifts like crazy even in the shack and it was tough to get him tuned in. Then I tried sending dashes. He eventually heard me at or under the noise and drifting like crazy. I don't know how he pulled me thru especially after what I found later. So we

completed and Bill AA2UK was on 2M, so Bill and I tried. I copied him great S7, but not a peep from W3KJ. At this point, I knew something had gone haywire. I should have been at least weakly copiable even running barefoot at 250 mW, but with the 1.5 W amp.... Check the amp. Sure enough, and I still haven't looked into the cause, but the T/R was not switching the 12V to the amp. That meant that Ron had copied what little of the driver amp's output had managed to leak thru the unpowered hi power amp. OK, no problem, I just won't switch it. I have several power pole ports on the RigRunner, I'll connect direct to it and call Bill back on .260 to try again. As I turned around to grab the 2m mike, I tripped over the IF cable, the tripod started to come over (I think one of the leg holding screws wasn't tight enough) and the box with all the gear fell of the platform. This shredded the semi-rigid running from the LNA and PA to the switch at the back of the dish and something shorted blowing a 10A fuse on the DC distribution box. I managed to hold the whole mess from completely hitting the ground and the dish didn't get damaged, but the rest of my 10G gear was a worthless pile at this point. I tried using my propane soldering iron to repair the SMA connectors and run a bead of solder to fill in the shredded shield, but it was just no go. Reluctantly, and with a lot of swearing and muttering under my breath, I threw the stuff back into the car and headed down the mountain towards home. I'm not sure what my plans will be for the September weekend. Maybe I'm just enough of a glutton for punishment to try roving again. Sorry for the long-winded tale of woe, but that's the story. You guys who go roving are something else and maybe someday I'll get it right too. Of course Murphy strikes everybody sometime even when you think you've planned it out and executed your plan to a tee. Where's my towel? . **73, Joe Keer W3KJ**

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I prepared for the UHF contest, but only had a limited opportunity Saturday, so stayed fairly local in FN20 at the parking lot of the Montgomeryville Home Depot and seemed to work out fairly well from there, except for the cell tower problems on 903, and the paths for 10G. When I moved a bit further south on Rte 309 toward the quarry, I had a much better shot on 10G, and ran the bands with WA3NUF with good signals.

I did get up early on Sunday morning, and was the first to arrive atop Camelback on a fairly bright but cloudy day. After aligning the van and antennas with the GPS, I started to work actively on all bands from 222 on up. I can't boast any real long haul QSOs, but I did find success on all bands, although dish aiming on 10G is still a bit touchy. I did complete my VUCC on 10G from Camelback, now having worked grids FN31, 32, 21, 20 and FM29 from there. I'm looking forward to adding to those totals in the second weekend of the 10G contest. I also roved with a spare set of LASER communicators, and ran into a visiting ham on Camelback. He was nice enough to accommodate a LASER QSO up there. Thanks to all the Packrats and NEWS and other Mid-Atlantic stations that created a lot of activity for August.

For those of you who commented about the quality of my 432 signal, I found out that the transceiver battery power had run down, and running the engine to recharge at that point fixed things up—but then I also realized that the 432 brick switch was turned off, so we were limited with 432 power Sunday! I think K1UHF reported doing the same in June! The next quality improvement to the rover van is installation of the voltmeters for monitoring the batteries. **73, Rick, K1DS/R**

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Well got on for a few hours and worked a few folks - lots of trouble on 222 with the box but worked W3IY on 432 in FM17 and 222, 432 and 903 in FM27. (YES! -Finally have 903 on the air) Also worked AA2UK, AA3GN, WA3RLT, WA3DRC, W3RJW, K3EMF. Have no idea about a score as I didn't even have a computer up and running. Really just wanted to see how the 903 set up was working - I'd say pretty good for 6 watts out. Next is 1296 and get 222 fixed. Hope to spend some more serious time in September. **73 Doc W3GAD**

The following reports were abstracted from the UHF Soapbox

What a contest I don't know where to start! I more than doubled my highest score in 1998. After a long rest from contesting the new station is really working well. Here is a short list of great contacts and operators I had the pleasure of working. W3IY/R my hat's off to Bill he is a top notch operator and a tireless rover, I worked him all the way through 10GHz while he was in FM15 and in every one of the ten grids he activated! W2FU, Jeff provided contacts all the way through 3456 from FN13 Western NY, W4FSO in FM14 provided contacts through 1296, W3HMS/R John provided an new grid for me when he was in FN00 in Western PA on 10GHz, as well as working W4VHH in EM95 through 2304, great job Tom always a pleasure. Conditions were pretty flat Saturday until Sunday morning when we had a nice coastal to the south stations up to 500 miles were very strong, K4QI pinning my meter on 432 but Russ always has big signals. I hope everyone had as much fun as I did. I look forward to doing it all again in the September contest. 73 and tnx to all from **Bill AA2UK**


AA2UK shack

Bill, AA2UK, gave me great company from almost all my grids (FM15,25,26,16,17,27,28,18,29,19) on all bands thru 10GHz. It's great to have guys like him, K2SMN, K1TEO, and N3EMF to keep things going into all hours of the night. Thanks guys...we really appreciate the activity! Keep up the good work. The Packrats were also all over the bands, which was a nice treat...we always miss lots of stations in June, with the multiop efforts of the clubs. The UHF contest is always a little less active than the big 3 contests, but the dedication of this UHF amateur radio group makes me proud to be a high-band enthusiast. The QSOs are more challenging, and less frequent than in the VHF contests, but the satisfaction of working guys on 10 GHz is hard to describe. It's amazing how well things can work on this band with a little effort and perseverance. My hat's off to all these FB operators! CU on the bands in September. Tnx es **73, Bill W3IY/R**
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The North East Weak Signal Group's
August UHF Rumored Self-reported Contest Totals
Tnx to WZ1V and KB1VC as listed on their website

Red highlight=Packrat

Call	Grid	NEWS/Class Total Club Memb?	Points	Band QSOs/Grids 222	432	903	1.2G	2.3G	3.4G	5.7G	10G	24/47/75/120/145/240	LAS
AA2UK	FM29	N H	213087	51/26	78/31	29/18	44/23	30/18	14/10	-	15/13	-	-
AA3GN	FN20	N H	48861	32/14	45/17	19/10	20/7	16/7	12/6	-	-	-	-
AI3Z	FM19	N S	5913	22/10	25/11	-	13/6	-	-	-	-	-	-
K0VXM	EL98	N S	3264	8/3	22/8	2/1	3/2	4/1	-	-	3/1	-	-
K1DS	ROVER	N R	60840	35/10	41/11	16/6	27/10	20/7	14/6	4/3	5/4	-	1/1
K1TEO	FN31	Y H	160758	61/26	85/28	32/17	44/19	20/12	11/7	-	9/8	-	-
K2SMN	FN20	N H	87210	48/23	81/28	29/14	38/17	15/8	-	-	-	-	-
K3DNE	FM19	N H	32010	30/14	46/16	16/8	21/9	11/8	-	-	-	-	-
K3MJW	FN00	N S	243	-	9/9	-	-	-	-	-	-	-	-
K4TO	EM77	N H	24375	33/21	32/21	9/8	21/15	-	-	-	-	-	-
K8MD	EN82	N H	41055	34/24q	39/23	16/16	18/17	5/5	-	-	-	-	-
K9YR	EN52	N S	2214	22/7	13/8	2/2	1/1	-	-	-	-	-	-
KC6ZWT	CM98	N S	3780	18/9	42/12	-	-	-	-	-	-	-	-
KJ1K	ROVER	Y R	9660	11/3	15/5	9/3	10/3	9/2	5/1	5/1	-	-	-
KN4SM	FM16	N H	2736	-	48/19	-	-	-	-	-	-	-	-
N0IO	ROVER	N R	12540	23/5	35/5	6/1	12/2	-	11/2	-	13/2	-	-
N1JEZ	ROVER	N R	47436	32/15	38/18	17/9	22/11	6/4	3/2	-	13/6	-	-
NOBAF	ROVER	N R	252	-	12/3	-	-	-	-	-	-	-	-
VE2ZP	FN25	N S	1080	9/8	11/10	-	-	-	-	-	-	-	-
W1ZC	FN42	Y H	1092	-	26/14	-	-	-	-	-	-	-	-
W3IY	ROVER	N R	119808	75/10	113/14	46/5	52/7	31/6	14/6	2/2	13/4	-	-
W3KJ	FN20	N S	27852	30/13	39/14	-	23/7	13/5	11/5	-	-	-	-
W6OAL	DM79	N S	10890	14/7	23/7	6/4	8/4	3/2	5/3	1/1	5/2	-	-
W8PAT	EN81	N S	60	2/2	3/2	-	-	-	-	-	-	-	-
W9SZ	EN50	N S	2835	10/10	9/9	4/4	4/4	-	-	-	-	-	-
WA2IID	ROVER	N R	28812	31/12	31/12	16/8	13/6	4/1	4/1	4/1	7/4	-	-
WB2SIH	FN31	N S	8178	25/10	27/10	9/4	12/5	-	-	-	-	-	-
WZ1V	FN31	Y H	18216	18/9	16/9	11/7	15/8	8/7	5/4	-	-	-	-

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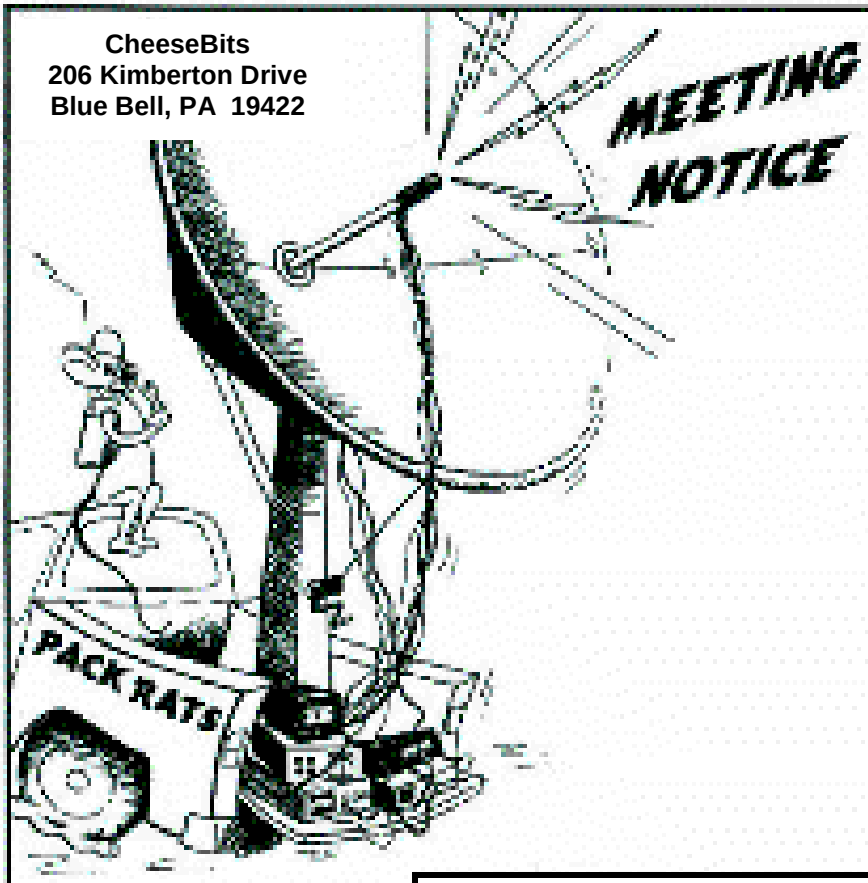

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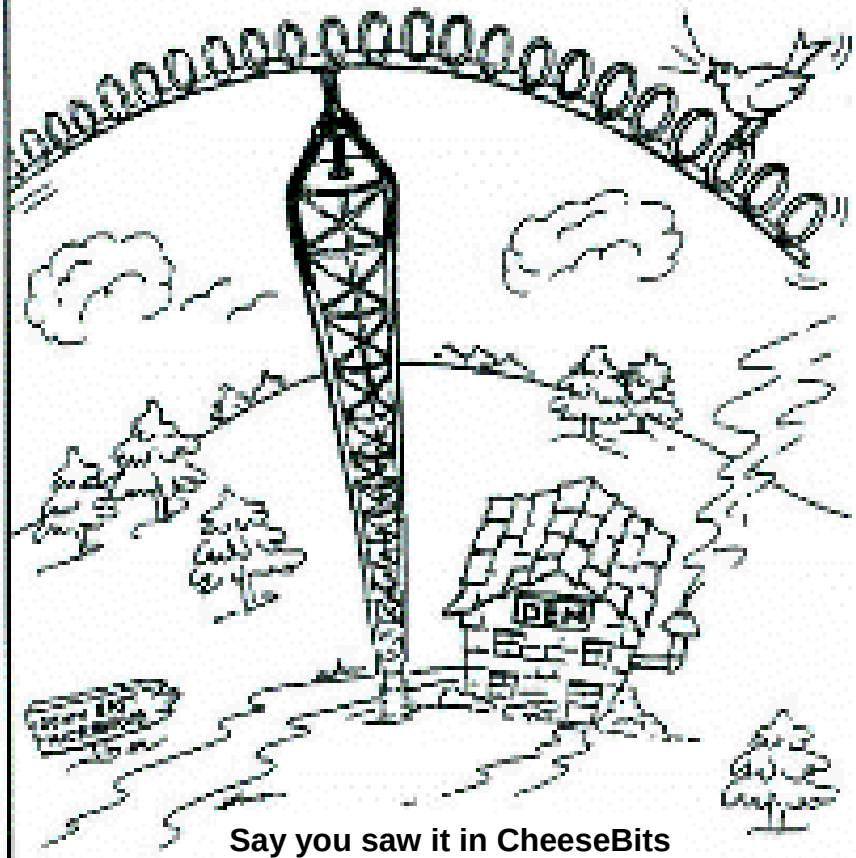

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