

# CHEESE BITS



**W3CCX**

CLUB MEMORIAL CALL



ARRL  
Affiliated  
Club

SCANNED TO PDF BY BERT, K3IUV, 2013

VOLUME XLII

July 2000

Number 6

## The PREZ SEZ

Wow, it's hard to believe that June is still around as I write this. It seems to me as if the month was stretched out longer. I seem to recall the mountain experience in there somewhere. I was one of the participants until a family matter pulled me off the mountain. I was really looking forward to the "total experience", and I was disappointed to miss the action on Sunday. I want to thank all of the individuals that participated in any way. I can only comment first hand on the loading and setup, but it seems to have become a finely oiled machine. I am sure tear down went equally well. The towers and operating positions went up in record time. I know 6 meters was really hopping, and conditions and grid counts were up on the other bands. Contacts were down, maybe the state of the hobby, or perhaps too many sporting events, like Stanley Cup playoffs to compete with. Thanks again to all who helped out.

It's time again for my favorite PR event of the year, the white elephant sale. Check the included calendar for details. Let's move some idle equipment around to get more activity on the bands. Also, scan the summer calendar for details on the club picnic.

My HSMS effort has been gratifying. Once I got the interface working, without ground loops, I was able to complete the first couple of attempts quickly. I completed with a couple grids in Georgia and Florida on 2 meters. Neither contact was a new grid, at this point, but it was fun, and a good way to get acquainted with the software. I am hoping to now do some missing grid hunting throughout the summer months. I am also still interested in trying out some PSK31 on 2 meters. I think it works, but haven't been able to find anyone to test with. Any takers ... ? CU at Gary's - Ed

73, WA3DRC

## MEETINGS

Third Thursday each month at 8:00 PM  
Southampton Free Library  
947 E. Street Road  
Southampton, PA 18966

Pack Rats **CHEESE BITS** is a monthly publication of the  
- Mt. AIRY VHF RADIO CLUB, INC. -

Southampton, PA

SUBSCRIPTION RATE: \$10.00 PER YEAR (USA)  
\$12.00 PER YEAR (CANADA)  
\$15.00 PER YEAR (ELSEWHERE)

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**PACKRAT 222 MHz REPEATER - W3CCX/R**

222.98/224.58 MHz, Churchville, PA FN20LE

**OFFICERS: 2000-2001**

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N3PLM (1 Yr) Chris Getman, [getmane@nad.com](mailto:getmane@nad.com)

**PACK RAT BEACONS - W3CCX/B**

FM29JW Philadelphia, PA  
50.080 144.284 222.065 432.295 903.072 MHz  
1296.251 2304.037 3456.220 5760.190 10,368.152 MHz

**MONDAY NIGHT NETS**

<u>TIME</u>	<u>FREQUENCY</u>	<u>NET CONTROL</u>
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/WA3DRC
9:30 PM	1296.100 MHz	WA3NUF
10:00 PM	903.100 MHz	N3AOG

**COMMITTEE CHAIRMEN**

LADIES' NIGHT:	N3AOG	215-443-9965
JUNE CONTEST:	N3ITT	610-847-5490
HAMARAMA:	W3KJ	215-256-1464
VHF CONFERENCE:	KB3XG	610-584-2489



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## CALENDAR OF COMING EVENTS - JULY 2000

- 2 Wilkes-Barre, Pa. Sponsored by the Murgas ARC at the Lurerne County Fairgrounds.
- 4 **Independence Day**
- 13 Packrat **Board of Directors meeting** will be held at the QTH of Al, N3ITT at 8:00 PM. All interested parties welcome. Call 610-847-5490 for directions.
- 8-9 **CQ Worldwide VHF Contest**. Six and Two Meters only!!! See page 102 of the June issue of CQ or the July issue of QST, page 100. Contest runs from 1800 UTC, 8 July to 2100 UTC on 9 July (27 hours).
- 16 **Valley Forge Hamfest 2000** will be held at the Kimberton Fire Co. Fairgrounds (near Phoenixville, Pa.), Rt.113, south of Rt.23. Talk-In on 146.66/.06 and .52. Check <http://www.marc-radio.org/hamfest.html>.
- 20 July meeting of the Packrats will be the **Annual White Elephants Sale** at Gary's Glen (WA2OMY's QTH) on Mt. Kirk Road in Eagleville, Pa. Starts promptly at 8:00 PM. Bring Chairs. For directions call 215-539-6409. See the enclosed map in this issue of Cheesebits.
- 20-22 The **33 rd Annual Central States VHF Conference** will be held in Winnipeg, Manitoba at the Canad Inn Ft. Garry, conveniently located in the south central part of Winnipeg at 1824 Pembina Hwy. For further information, contact CSVHF Society Vice-President, Jim Roik, VE4AQ at [VE4AQ@CSVHFS.ORG](mailto:VE4AQ@CSVHFS.ORG) or visit the web site at: <http://www.csvhfs.org>.
- 27 **LEAP INTO THE MICROWAVES** with the Packrats! 903 and above. Starting on the 4th Thursday of the month and continuing every 4th Thursday of the month operate from 8 to 10 PM local time on any band 903 MHz and above. For coordination on those difficult long haul contacts 144.260 MHz is the suggested liaison frequency. So here's your chance to fix what broke in the contest and work all those stations you missed.
- 30 **Maryland Hamfest**, Timonium, Md. at the Maryland State Fairgrounds, located on York Rd. adjacent to I-83 near I-695. Talk-in on 147.63/.03, 146.16/.76, and 146.52. VE sessions. Check <http://www.smart.net/~brats>.
- Aug
- 12 **Packrat Picnic** at the QTH of Al, N3ITT in Ottsville, Pa.
- Sept.
- 29-30 **Microwave Update 2000** at the Holiday Inn Select, Bucks County, 4700 Street Road, Trevoze, PA 19053. See more details in this issue of Cheesebits.

### 2000-2001 ELECTION RESULTS

Elections results from the June meeting.

President:	Ed Finn	WA3DRC
Vice President:	Jim Antonacci	WA3EHD
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Treasurer:	Dave Mascaro	W3KM
Cor. Secretary:	Joe Landis	AA3GN
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	Ron Whitsel	W3RJW
	Al Sheppard	N3ITT
	Chris Getman	N3PLM

### SWAP SHOP:

(send all ads to the editor)

**FOR SALE: CALLSIGN HISTORY.** Name and address of each holder since 1912. Cost \$20 plus SASE for printed CERTIFICATE. Wanted CallBooks before 1970 and QST's before 1940 will buy or trade. Also looking for 1x2 Ham Radio License Plates for my collection. Ron Allen W3OR, PO Box 73, Bethel, De. 19931-0073 or call 302-875-1100.

### CHEESEBITS SUBSCRIPTIONS

Cheesebits subscriptions are available to everyone interested in activities and information from the VHF thorough the microwave frequencies. Subscriptions are for 1 year of 12 issues. For a subscription, send the following information:

Name: \_\_\_\_\_ Call: \_\_\_\_\_

Street Address: \_\_\_\_\_

Town: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_

Subscription Rate: \$10.00 per year (USA), \$12.00 (Canada), \$15.00 (Worldwide)

July 2000

Send to: SUBSCRIPTION/ADVERTISING MANAGER:

Bob Fischer, W2SJ, 7258 Walnut Avenue, Pennsauken, NJ 08110

## FIELD DAY ON VHF

de, Rick, K1DS

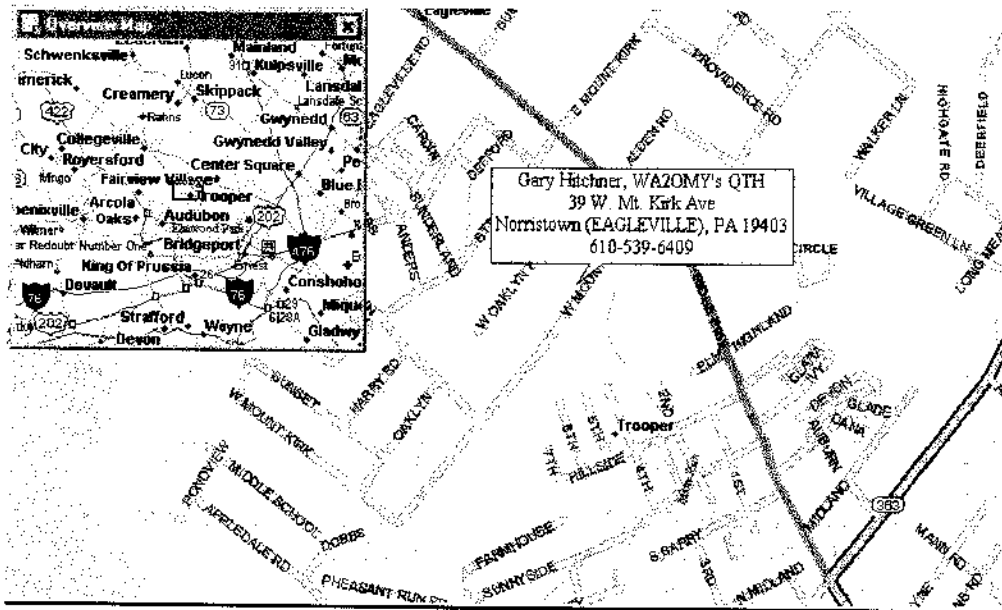
The rover van transmission was fixed by Friday afternoon, and I was able to pick it up and then pass by KB3XG's house to get the antennas which he carried back from the mountain with him in the microwave truck. I mounted the six-meter dipole and the ten element 2 meter beam on the mast and headed up to "the hill" at Potshop and Trooper Roads, and played radio for a few hours Saturday afternoon. Many of the regional clubs had active stations on 6 & 2, and there was enough activity to keep me engaged for a few hours. It was warm and breezy, and quite comfortable with all the windows and doors open for a cross-ventilating breeze, despite the 90 degree weather. Heard a few Packrats adding their QSO points to the action from the home stations, including N3FUJ, KU3T and W3IFT. KU3T inquired about 10G gear, but I didn't have it aboard. I did pack it on Sunday AM, along with a few more elements for the six-meter beam. Operated a few hours and had some 6 meter contacts into the south: Alabama, Louisiana, Oklahoma, Texas, Arkansas and Florida. When things quieted down, I found K2SMN leading the East Coast VHF Society net on 144.250, and found Joe, but not KU3T, as his new call was posted recently, and he is now W3KJ (Kilowatt Joe)! Got the 10G gear set-up fairly quickly, but forgot a coax adapter; luckily, I was able to use the 6 meter coax that had an N connector on one end and PL259 on the other for the i.f. interface, and we had a nice 30 minute SSB QSO on 10G with S9+20 sigs in both directions, with my dish on the tripod alongside the van. After we signed off, I replaced the coax to the 6 meter beam, as the band was hopping again, and made several QSOs to the West Coast, including Nevada, Utah and the California ARRL sections of Orange, LAX and SBar.

Field Day is a nice opportunity to operate casually in a busy "pseudo-contest" mode, and give the radio experience to many newcomers, who are often assigned the VHF band operating for larger clubs. It took a lot more patience to exchange reports with operators not familiar with contesting and information transfer. Often, with the fickle conditions on 6 meters, there were many exchanges with limited info passed, and multiple repeats, and by the time you were at the 4th or 5th "over to you" the station had faded from propagation changes. A great learning experience for newcomers to changing radio conditions on VHF. Rick, K1DS

## WHITE ELEPHANT SALE

de Gary, WA2OMY

It is that time again for the annual Packrat "White Elephant Sale and Auction", Thursday July 20th, 8:00 PM. This is the first outdoor meeting of the year, and after all of the recent serious activity in the club, this is a chance to kick back, have refreshments and just plain fun with your fellow cub members. Look in the basement, under the operating table and bring any unused equipment and parts that you think other club members would like to have, (so to speak) to the auction! Looking at things from another perspective, bring a few dollars also! The meeting will be held at my QTH "Gary's Gulch" again this year. Although my spare time of recent has been spent on learning to coach baseball, cub scout den leader etc, I want to make sure all cub members know I look forward to the outdoor meetings and hosting the auction. All club members and interested parties are invited to attend. A large variety of refreshments will be served. There are already some items on the auction table which will make this meeting/auction worthwhile, examples include long 220 antennas, MMIC amplifiers, microwave goodies, outdoor enclosures, etc. As usual the driveway will be kept open to load and unload the items of value. If anybody needs directions, call Gary, WA2OMY at 610-539-6409, and leave a message. If I am not at home, I will get you the information. The address is, 39 W. Mt. Kirk Ave, Eagleville PA. See the map below. See you at the meeting! Gary, WA2OMY



## JUNE CONTEST-PACK RATS DO IT AGAIN!!

Take a dozen or so die-hard Pack Rats, throw in three truckloads of serious radio equipment, add an endless supply of great food and drink, mix in some (mostly) good weather, haul them up to a mountain top, and what do you get? The perfect recipe for a real fun time and some great VHF operating!! I'm happy to announce that the packrats have again returned from another successful contest effort from Camelback mountain.

The advanced group assembled at the qth of W3GXB under clear skies starting at 8:30 AM and loaded up the trucks obtained by W3KM and myself the night before. Load up went great, and we were on our way in record time! After a quick food stop at the base of the mountain we proceeded to the site. Set up went almost flawlessly, the combined experience of the group really shows, I think we really have this down to a science! The weather continued to cooperate, and about 90% of the station(s) were set up by Fri. night! Sat. again brings more fine weather, after a fine lunch was dished out by Doc and Don the contest begins! Things continued to go fine with some good openings on 6m supplying lots of excitement on that band!

I thought one of the highlights of this years contest was the 2m HSMS operation done by KIJT during the wee hours on Sun. morning. Joe operated from 2:00AM till abt. 5:30AM and completed 4 skeds, resulting in 4 new grids during what would have been "down time". It was fun doing something new at the mountain and good for the score too!

### Not A Perfect Contest

Things continued to go smooth Sun. with more good weather and all the equipment working well. The one casualty so far was the loss of the KIDS/N1XKT rover when the transmission died after all the magic "go" juice squirted out of it coming up the mountain during a halfway stop Sat. evening. Rick lost all forward gears, but managed to get the van up to the site, with help from N3OZO in REVERSE!

Otherwise it was smooth, too smooth, we knew that somehow, before it was all over, that Murphy would somehow still make an appearance. Sure enough, around 8:30PM Sun. night the thunderstorms were upon us, as conditions deteriorated, most of the stations shut down. By then several of us had taken refuge in the N3OZO bus drowning our sorrows at being thrown off the air by Mother Nature after such a flawless effort, when the power went out. After about an hour the storm subsided some. It was then that we found that the site still had power, someone reported that the 6m/432 truck still had power, and had been on the air right through the storm still cranking out the Q's! Only the breaker on the line to the bus tripped, so now feeling properly refreshed, we decided to fire up 2m and 222, since we still had some time left. We worked WA8WZG on 2m then went to hand him off to 222. Unfortunately at that moment the 6155 FAA amp for 222 leaked out all the magic smoke, as the truck filled with the wonderful aroma of smoked carbon resistor, we knew it was over. We then went over to the 6m/432 truck to witness the last few contacts and the end of the contest.

Tear down went smooth Mon. morning with the rain mostly holding off until we returned and unloaded.

All in all I thought it was a fun time and a success, and am looking forward to the next June contest. Thanks again to all those who made this possible, it takes a lot of effort from a number of us to make this come off, and this one came off GREAT!!!

Following is a breakdown of the score, and a list of all who participated in making this years June VHF QSO Party a success, I hope I got everyone, if I missed you please let me know.

73 Al, N3IIT

<b>2000 ARRL June OSO Party</b>			<b>W3CCX</b>	<b>FN21</b>
<u>Band</u>	<u>QSOs</u>	<u>QSO Pts.</u>	<u>X Grids =</u>	<u>Points</u>
50	749	749	123	92,127
144	451	451	61	27,511
222	131	262	40	10,480
432	197	394	43	16,942
903	37	111	15	1,665
1296	45	135	17	2,295
2304	25	100	11	1,100
3456	12	48	5	240
5760	6	24	4	96
10368	6	24	4	96
24000	2	8	2	16
<u>Laser</u>	<u>8</u>		<u>1</u>	<u>8</u>
<b>Totals</b>	<b>1,663</b>	<b>2,314</b>	<b>326</b>	<b>754,364</b>

**The Crew:** John, K3CX, Dave, W3DFM, Ed, WA3DRC, Rick, K1DS, Doc, W3GAD, Paul, WA3GFZ, Walt, N3EVV, Dave, N3FUJ, Joe, AA3GN, Griff, NE3I, Harry, W3IIT, Al, N3IIT, Joe, KIJT, Joe, W3KJ, Dave, W3KM, Phil, WA3NUF, Don, N3OZO, Paul, W2PED, Ben, WA3RLT, Ron, W3RJW, Bob, W2SJ, Pat, W2SK, Ted, W3SYN, John, KB3XG, Leon, N1XKT, and Bruce, WA3YUE.

Grids worked on Mhz

EN58	EN78	EN98	FN38	FN48	FN58
EN57	EN77	EN97	FN37	FN47	FN57
EN56	EN76	EN96	FN36	FN46	FN56
EN55	EN75	EN95	FN35	FN45	FN55
EN54	EN74	EN94	FN34	FN44	FN54
EN53	EN73	EN93	FN33	FN43	FN53
EN52	EN72	EN92	FN32	FN42	FN52
EN51	EN71	EN91	FN31	FN41	FN51
EN50	EN70	EN90	FN30	FN40	FN50
EM58	EM78	EM98	FM38	FM48	FM58
EM57	EM77	EM97	FM37	FM47	FM57
EM56	EM76	EM96	FM36	FM46	FM56
EM55	EM75	EM95	FM35	FM45	FM55
EM54	EM74	EM94	FM34	FM44	FM54
EM53	EM73	EM93	FM33	FM43	FM53
EM52	EM72	EM92	FM32	FM42	FM52
EM51	EM71	EM91	FM31	FM41	FM51
EM50	EM70	EM90	FM30	FM40	FM50
EL59	EL79	EL99	FL39	FL49	FL59
EL58	EL78	EL98	FL38	FL48	FL58
EL57	EL77	EL97	FL37	FL47	FL57
EL56	EL76	EL96	FL36	FL46	FL56
EL55	EL75	EL95	FL35	FL45	FL55
EL54	EL74	EL94	FL34	FL44	FL54
EL53	EL73	EL93	FL33	FL43	FL53
EL52	EL72	EL92	FL32	FL42	FL52
EL51	EL71	EL91	FL31	FL41	FL51
EL50	EL70	EL90	FL30	FL40	FL50

Grids worked = 61 Shown = 60

Hit a <key>

### Six Meter Grid Map

Grids worked on Mhz

EN58	EN78	EN98	FN38	FN48	FN58
EN57	EN77	EN97	FN37	FN47	FN57
EN56	EN76	EN96	FN36	FN46	FN56
EN55	EN75	EN95	FN35	FN45	FN55
EN54	EN74	EN94	FN34	FN44	FN54
EN53	EN73	EN93	FN33	FN43	FN53
EN52	EN72	EN92	FN32	FN42	FN52
EN51	EN71	EN91	FN31	FN41	FN51
EN50	EN70	EN90	FN30	FN40	FN50
EM58	EM78	EM98	FM38	FM48	FM58
EM57	EM77	EM97	FM37	FM47	FM57
EM56	EM76	EM96	FM36	FM46	FM56
EM55	EM75	EM95	FM35	FM45	FM55
EM54	EM74	EM94	FM34	FM44	FM54
EM53	EM73	EM93	FM33	FM43	FM53
EM52	EM72	EM92	FM32	FM42	FM52
EM51	EM71	EM91	FM31	FM41	FM51
EM50	EM70	EM90	FM30	FM40	FM50
EL59	EL79	EL99	FL39	FL49	FL59
EL58	EL78	EL98	FL38	FL48	FL58
EL57	EL77	EL97	FL37	FL47	FL57
EL56	EL76	EL96	FL36	FL46	FL56
EL55	EL75	EL95	FL35	FL45	FL55
EL54	EL74	EL94	FL34	FL44	FL54
EL53	EL73	EL93	FL33	FL43	FL53
EL52	EL72	EL92	FL32	FL42	FL52
EL51	EL71	EL91	FL31	FL41	FL51
EL50	EL70	EL90	FL30	FL40	FL50

Grids worked = 40 Shown = 40

Hit a <key>

### 222 MHZ GRID MAP

Grids worked on Mhz

EN58	EN78	EN98	FN38	FN48	FN58
EN57	EN77	EN97	FN37	FN47	FN57
EN56	EN76	EN96	FN36	FN46	FN56
EN55	EN75	EN95	FN35	FN45	FN55
EN54	EN74	EN94	FN34	FN44	FN54
EN53	EN73	EN93	FN33	FN43	FN53
EN52	EN72	EN92	FN32	FN42	FN52
EN51	EN71	EN91	FN31	FN41	FN51
EN50	EN70	EN90	FN30	FN40	FN50
EM58	EM78	EM98	FM38	FM48	FM58
EM57	EM77	EM97	FM37	FM47	FM57
EM56	EM76	EM96	FM36	FM46	FM56
EM55	EM75	EM95	FM35	FM45	FM55
EM54	EM74	EM94	FM34	FM44	FM54
EM53	EM73	EM93	FM33	FM43	FM53
EM52	EM72	EM92	FM32	FM42	FM52
EM51	EM71	EM91	FM31	FM41	FM51
EM50	EM70	EM90	FM30	FM40	FM50
EL59	EL79	EL99	FL39	FL49	FL59
EL58	EL78	EL98	FL38	FL48	FL58
EL57	EL77	EL97	FL37	FL47	FL57
EL56	EL76	EL96	FL36	FL46	FL56
EL55	EL75	EL95	FL35	FL45	FL55
EL54	EL74	EL94	FL34	FL44	FL54
EL53	EL73	EL93	FL33	FL43	FL53
EL52	EL72	EL92	FL32	FL42	FL52
EL51	EL71	EL91	FL31	FL41	FL51
EL50	EL70	EL90	FL30	FL40	FL50

Grids worked = 61 Shown = 60

Hit a <key>

### Two Meter Grid Map

Grids worked on Mhz

EN58	EN78	EN98	FN38	FN48	FN58
EN57	EN77	EN97	FN37	FN47	FN57
EN56	EN76	EN96	FN36	FN46	FN56
EN55	EN75	EN95	FN35	FN45	FN55
EN54	EN74	EN94	FN34	FN44	FN54
EN53	EN73	EN93	FN33	FN43	FN53
EN52	EN72	EN92	FN32	FN42	FN52
EN51	EN71	EN91	FN31	FN41	FN51
EN50	EN70	EN90	FN30	FN40	FN50
EM58	EM78	EM98	FM38	FM48	FM58
EM57	EM77	EM97	FM37	FM47	FM57
EM56	EM76	EM96	FM36	FM46	FM56
EM55	EM75	EM95	FM35	FM45	FM55
EM54	EM74	EM94	FM34	FM44	FM54
EM53	EM73	EM93	FM33	FM43	FM53
EM52	EM72	EM92	FM32	FM42	FM52
EM51	EM71	EM91	FM31	FM41	FM51
EM50	EM70	EM90	FM30	FM40	FM50
EL59	EL79	EL99	FL39	FL49	FL59
EL58	EL78	EL98	FL38	FL48	FL58
EL57	EL77	EL97	FL37	FL47	FL57
EL56	EL76	EL96	FL36	FL46	FL56
EL55	EL75	EL95	FL35	FL45	FL55
EL54	EL74	EL94	FL34	FL44	FL54
EL53	EL73	EL93	FL33	FL43	FL53
EL52	EL72	EL92	FL32	FL42	FL52
EL51	EL71	EL91	FL31	FL41	FL51
EL50	EL70	EL90	FL30	FL40	FL50

Grids worked = 43 Shown = 43

Hit a <key>

### 432 MHZ GRID MAP

## ANNOUNCING MICROWAVE UPDATE 2000

Microwave Update 2000 will be held on 29 through 30 September 2000 at the Holiday Inn Select, Bucks County just north of Philadelphia, PA.

This year, Microwave Update will be hosted by the Mt. Airy VHF Radio Club, Inc. ("The Pack Rats"). The Holiday Inn Select, Bucks County will be providing accommodations for the event. This is a 215 room full service hotel with a restaurant, lounge, indoor pool, fitness room, etc. It is centrally located between the Bucks County countryside and historic Philadelphia. We will have full use of the conference center Friday and Saturday. Two smaller meeting rooms will be available for the evening flea market(s).

Call for Papers: Anyone wishing to present and/or submit papers equipment design, construction, and propagation at frequencies above 900 MHz for inclusion in the printed copy of the proceedings should contact John Sortor, Conference Chairman at JohnKB3XG@aol.com. The deadline for papers is Monday, August 7, 2000.

For those of you that are unfamiliar, the Pack Rats are a group of VHF and Above enthusiast's with a 44 year history. The club was started by a small group from Philadelphia with the sole purpose of promoting VHF activity. The club has sponsored one of the area's best hamfest (Hamarama) for the past 28 years and has hosted the Mid Atlantic States VHF Conference since 1975. The Packrats provide beacons on 10 VHF/Microwave bands from 50 MHz through 10 GHz and are active in all VHF contests.

Room rates will be in the low to mid \$80's. There is no additional charge for double occupancy. We have blocked out 100 rooms under the key code "Microwave Update" which will be held for us until September 7th. This might sound like a lot of rooms but don't wait until the last minute to make your reservation. This is a busy area.

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In addition to ham activities we are tentatively planning some extra curricular activities for stranded ham family members. Most attractions can be reached in less than 1 hour. A list of activities will be included with the registration package to see who might be interested in what.

Atlantic City Casino bus trips  
Franklin Mills Outlet Mall  
Liberty Bell & Old Philadelphia  
NJ State Aquarium  
Philadelphia Park Race Track  
Sesame Place  
Valley Forge National Park

Of course it wouldn't be Microwave Update without the surplus tour. There are more new and surplus houses within a 50 mile radius around the Holiday Inn than you will be able to visit in one day. I said new equipment because Down East Microwave Factory Tours will be on the list. There will be evening flea markets at the hotel and don't forget Hamarama on Sunday. Please add flashlights to your packing list. The doors to the Pack Rat hamfest (Hamarama) open Sunday at 8 am but Hamarama has always been known for the "Flashlight Shoppers."

Noise Figure testing will be provided as well as an equipment tune-up clinic.

Advance Registration is \$40.00 with forms available at the web site below. Send registration to Microwave Update, PO Box 682, Hatboro, PA 19040. Hamarama and Dinner tickets will be available at the door.

For more information contact JohnKB3XG@aol.com and visit the Packrats web page for the latest news on Microwave Update 2000 at [http://www.ij.net/packrats/MUD\\_2000/mud.html](http://www.ij.net/packrats/MUD_2000/mud.html)

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### TID BITS

**VUCC Award Checking:** If you want QSL cards checked for your initial VUCC Award or an update, contact Harry, W3IIT at 610-584-4846 or [hbrown@voicenet.com](mailto:hbrown@voicenet.com).

**WN3A, Jeff**, will soon be moving to Mt. Misery (VF Mountain). His new QTH is on top of the mountain, a few hundred yards down from his old contest spot (U. of PA research site). He expects to be QRV again soon.

**6M Dxpeditions Update per Mike, N1JEZ.**

July 6 - 10 CY9 - St. Paul's Island off the North Coast of Nova Scotia. (I will not be operating at this one)

July 14 - 19 FP - Ile aux Marins NW of St. Pierre Isl. 25 miles off the south coast of Newfoundland in the French owned archipelago of Saint Pierre & Miquelon. (I will be operating 6M and satellite from here). Individual callsigns (four) with the suffix /CY9 will be used on St. Paul's, TOODX on Ile aux Marins. Both islands count as separate countries for DXCC (CY9 and FP, respectively). Operation will be SSB, CW and SSTV on the higher HF bands (10-40M, incl. WARC), and on VHF 6M and Satellite (Sat on TOODX only). The expected 6M operating freq will 50.110 +/- qrm.

Crystal Oscillators-Good to Read from the DSP-10 Reflector. Per Kohjin, JR1EDE. <[kohjin@marina.prug.or.jp](mailto:kohjin@marina.prug.or.jp)>. Great reading titled "Introduction to Quartz Frequency Standards" <http://www.qct.nl/theory/toc.htm>.

50 MHz DX Bulletin (#025) is available at: <http://www.qsl.net/oz6om/>

K3CX is John, N3DQZ's new call. Joe, KU3T is now W3KJ. John, K3DMA took his extra exam on 17 March and received the new license on 1 June. John's new e-mail at work is [taylorjd2@navair.navy.mil](mailto:taylorjd2@navair.navy.mil).

### More TID BITS

**Time To Get Your Dish Ready For Summer!** Per Paul Wade, W1GHZ. The 10 GHz contest and the UHF contest are fast approaching. even sooner is the next NEWS meeting where you may have a chance check things out. Steve says there are a bunch of 10 GHz DEM transverters out there, and they will all need antennas. In spite of my frequent suggestions that horns make really good rover antennas, all of us \*\*\*MORE POWER\*\*\* guys have to use a dish. so I've worked over "How to set up a parabolic dish" and added it to the W1GHZ Microwave Antenna Book online as Appendix 6B. <http://www.w1ghz.cx> There are also some other recent additions, and I've added bookmarks and thumbnails to most sections.



Per Kenneth E. Harker" <kharker@cs.utexas.edu> I've written a **Review of the Downeast Microwave DEM 222-28CK** transverter on the eham.net Product Review site. <http://www.eham.net/reviews/detail/946>

Friend of the Packrats, **Al Katz, K2UYH**, has been elected an **IEEE Fellow** per the latest issue of IEEE Microwave magazine.

**Pack Rat June Contest Pics.** Pack Rat June contest pics are on the Pack Rat WEB page: <http://www.ij.net/packrat>

From The ARRL Letter, Vol. 19, No. 24, June 23, 2000. **Rainscatter record?** On June 17, ARRL First Vice President Joel Harrison, W5ZN, and noted VHF-UHFer Al Ward, W5LUA, completed a 515 km (321 mile) rainscatter QSO on 10 GHz. The contact could be a record for that mode of propagation. Details are at <http://www.ntms.org>. Harrison says the trick was to keep a sharp eye on the weather radar, looking for very strong, appropriately positioned storm cells. "We have tried this a few times before," Harrison reports, adding that the pair once managed a 5.7 GHz rainscatter contact. "This time, everything fell into place!" Harrison says the longest distance he's aware of for a 10 GHz rainscatter QSO is 240 miles.

### JUNE CONTEST COMMENTS

**222 On the Mountain.** Per Joe, AA3GN. Well I had a great time on the mountain. WA3DRC and I co-captained the 222 station, and it performed really well. The setup went smooth, except for forgetting the FM antenna. After having my arm twisted, we picked it up after returning home Friday night, and it was installed on Saturday. Activity and QSO's seemed down, but conditions were good and grids were up.

Station setup: 2 \* 16 elements (I think) at about 40 feet, switched omni at 30 feet.

DEM transverter

AM6155 amp, about 400W out

FT990 IF.

FM Single 6 element yagi at 50 ft, Icom IC37 mobile.

132 QSO's \* 40 Grids, preliminary

8 of those QSO's on FM

The little omni worked nice. I was able to throw the switch and work many weak stations off the side and back without having to turn the array and waste time. Well it would be great if there was enough activity to worry about wasting time, but it was convenient!

Weather held until Sunday evening, then all hell broke loose. We took some close hits - no delay between flash and bang. Sparks were observed near the disconnected 2M feed. Some spectacular 5 second horizontal bolts flashed across the valley BELOW us. Wind whipped the 2M mast about 10 to 15 feet at the top. After restarting up the 222 station at about 10:30, the amp quit and we shut down. The wind was high during most of the weekend, especially at night.

Everyone had a great time. Setup and teardown went well in spite of initial concerns and frustrations about having critical mass. Sorry those were unable to attend or operate - missed out on a lot of fun. This is a great hobby, and as has been said many times, probably the best radio club in the country, maybe the world. Please - let's keep it fun so we can all continue to enjoy it. 73, Joe - AA3GN. P.S. Now I'm going to start digging a hole for my first tower. Having picked the hottest day of the year so far, anyone want to come over and help or at least stand around and watch like PENNDOT?

**K2TXB Contest summary & Comments by Russ.** Just thought I would post some comments about the June contest effort here. I thought that the contest was a good one with reasonable, though not excellent conditions on the upper bands. I operated 4 bands, 144, 432, 1296, and 10 GHz, from home in SNJ. Things started off pretty good and by 9PM Saturday I had what I thought were pretty good totals on all of the bands - then Murphy struck! A loud POP that alerted the whole house and I had no power out on 2 meters. The 8877 arced over, taking several diodes and the plate meter with it (Yes there is a HV fuse, but for some reason it did not blow). After spending two hours of prime contest time (9-11 pm) trying to get it going again I abandoned the effort and proceeded to run the rest of the contest with just 150 watts on two meters.

Here is where things got interesting. I had set up 10 meteor scatter skeds via HSCW, with stations in the western and southern extended grids. I had only completed one of those skeds when the amp blew. So, Running just 150 watts pep output, I proceeded to work EN13 (twice-one Minn one SD), EN34 (also twice), EM84 and EM85. Two of my skeds were no-show's and one showed late (I think), so I actually made every sked where both ends were there and trying. But the neat thing is that the contacts were EASY! Most of the contacts were completed in 15 to 20 minutes, at least one in 10 minutes.

From the above experience, I would say that HSMS in a contest is a great tool for extending the grid count in a contest, and it is especially effective for low power stations who may have trouble working the DX contacts via non meteor scatter means. Of course it is useful for us QRO types too, but the percentage of score increase will be much greater for the low power stations.

Additionally I want to comment on 10 GHz. That band has really come a long way since I first got on it 20 years ago. From my home station I was able to work 11 qso's in 8 grids - a best ever effort for me. One reason is better equipment here and for most of the other stations on the band. But a bigger reason is that there are a lot more stations on 10 GHz, and more are getting on all the time. I worked 3 new grids - FM08, FM09, and FN00. The last two were via a rover (W3HMS). I'd like to encourage everyone to think about 10 GHz for your contest station, whether it be at home or in the rover. It can do a lot for your score and is lots of fun and excitement too!

Without the big hook out there trolling for microwave contacts (the 8877), my totals on 432 and 1296 were down, and of course 2 meters was way down, but I did end up with a total of 311 QSO's and 83 grids = 41002 points. Thanks to everyone who participated - it was a fun contest! 73, Russ K2TXB

**HSMS from W3CCX in June Contest per Joe, K1JT.** For the record, let me add a few words to the reflector about HSMS results from W3CCX during the ARRL June VHF QSO Party. W3CCX is the club station of the Mount Airy VHF Radio Club, better known as the "Pack Rats". Operation was from Camelback Mountain, Big Pocono State Park in Tannersville, PA (FN21hb). On 2m HSMS we had two 13 element yagis and 300 W out at the start. (The PA tube was old and rather "soft," and by the end of our 4-hour HSMS run its power out was down to about 150 W). Alas, the frequency chosen for the HSMS skeds fell almost exactly on an unexpected intermod product from an FM station, and with no internet access from the mountaintop it was not possible to change the plans.

Consequently we had a noise level some 4-6 dB higher than it should have been, and the audio modulation made it hard to listen for weak pings. We had made 8 half-hour skeds, as follows:

UTC	Call	Grid	Az (deg)	Dist (mi)	UTC	Call	Grid	Az (deg)	Dist (mi)
0600	K4SSO	EM47pn	259	855	0800	W5SNX	EM73wu	227	691
0630	WC4N	EM17jp	266	1189	0830	WB5APD	EM84ak	264	900
0700	W7XU	EN13lm	286	1120	0900	N0UK	EN34jv	292	940
0730	NJ0M	EN43dv	292	964	0930	W8WN	EM77bq	251	608

We had an advance agreement that W9FX would tail-end on the W8WN schedule if that QSO was completed well before 1000z.

As K4SSO explained in an earlier message to this reflector, he had mountaintop antenna problems and was unable to make his sked.

John, NJ0M, told me later that his alarm clock failed to wake him for the sked. Of the six other full skeds, we completed with W5SNX, WB5APD, N0UK, and W8WN. We heard one weak ping from Mike, WC4N, and several decent ones from both W7XU and W9FX, but were unable to complete the exchanges with these three in the time we had allocated. I think at least W7XU and W9FX would have been easily possible if our tube had not gone soft and the FM intermod product had not degraded our receive sensitivity.

As it happened, the rocks were not very cooperative on Saturday night. In a single test run with W8WN at 1130z on Saturday morning, the only chance we had to test the HSMS setup before the contest, we completed in just a few minutes -- much more easily than during the contest at 0530 EDT.

All in all, it was great fun. The extra grids will help the W3CCX score, and we'll do the HSMS contest thing again! I certainly made some additional believers (and potential converts) to the HSMS model -- 73 de Joe, K1JT

**June Contest per Griff, NE3I.** Thanks to all who did all the planning and hard work that made this year's trip up to Camel Back enjoyable for me. (I have just caught up with three weeks of emails so please forgive the late gratuity.) Thanks again to Al, Doc, Don, Joe, Phil, Ron, John, Bob and all those who gave above and beyond the call of duty. I was out of town on business until Friday afternoon and was not able to come up until Sunday. Things of course were rolling by that time, although we had already suffered a number of casualties, due to health, family matters, mechanical and automotive breakdowns and other unforeseen circumstances. But the stations, phones, power, and food were all functioning well. Some operators appeared a little (a lot) worn down, but after a few of those great pancakes and sausage were re invigorated and rolled on. There were some interesting conditions. QSOs seemed down, except on 6, but grids were up, especially on 6. Thought I had an EA8 or EH8 on 6 just before the lightning hit, but couldn't snag him for sure. We did work some interesting grids in Central America (Nicaragua which is tough to work on the low bands) and the Caribbean while I was there and I am sure Joe and others pulled in some other neat stuff. I think that we also saw some pretty good relatively long range stuff on 2, 220 and 432. The old timers may not have been too impressed, but I certainly was. The lightning storm was unfortunately timed as there was stuff popping in and out on 6 when that came through. (I tried to photograph some lightning bolts behind the antennas, but that stuff sure moves fast.) We were sitting in Don's Bus when the lights went out and thought the whole mountain lost power until Pat checked the breaker, (after the lightning stopped) and found that it was just the breaker for the Bus. Everybody was up early for breakdown and just went to work. Break down went smoothly and we were done by 9 am photo and all.

It's certainly a lot of work and maybe there are things we can do to make it easier, I don't know. I do know that I have neither the knowledge or the equipment without the Club's help to be able to enjoy such an event. I think that we should also not lose site of what the effort means not only to us as a club in terms of experience, camaraderie and challenge, but also what it means to others who benefit from W3CCX being there to work from distant points, the usefulness of our beacons and the technical knowledge and mentoring of our members without which, activity on these bands would be decidedly decreased. We do a lot, we try a lot, we lead the way. The fact that at times we evidence some fatigue, grumbling or dissatisfaction, simply means that our members come from a breed who typically will not accept that "it simply can not be done." What we are about in this hobby is exactly the opposite. "The credit belongs to the man who is actually in the arena, who's face is marred by dust and sweat and blood. Who knows the great enthusiasm, the great devotion and spends himself in a worthy cause. Who in the end, at best knows the triumph of high achievement and at worst, fails while doing greatly. So that his face shall never be among those cold and timid souls who know neither victory nor defeat." ...Theodore Roosevelt. This club has been and continues to be something special. My thanks to all.

.....Griff NE3I

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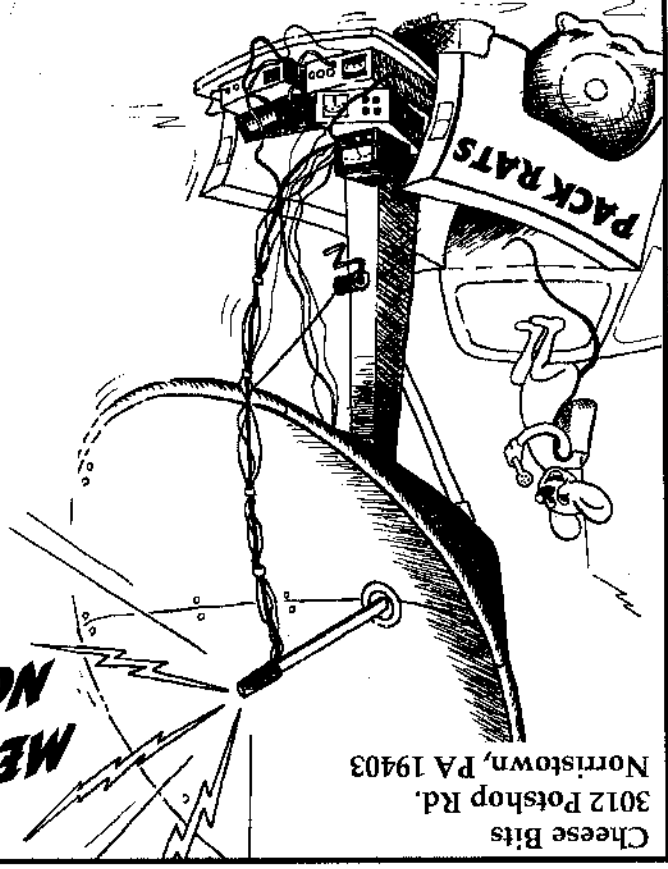
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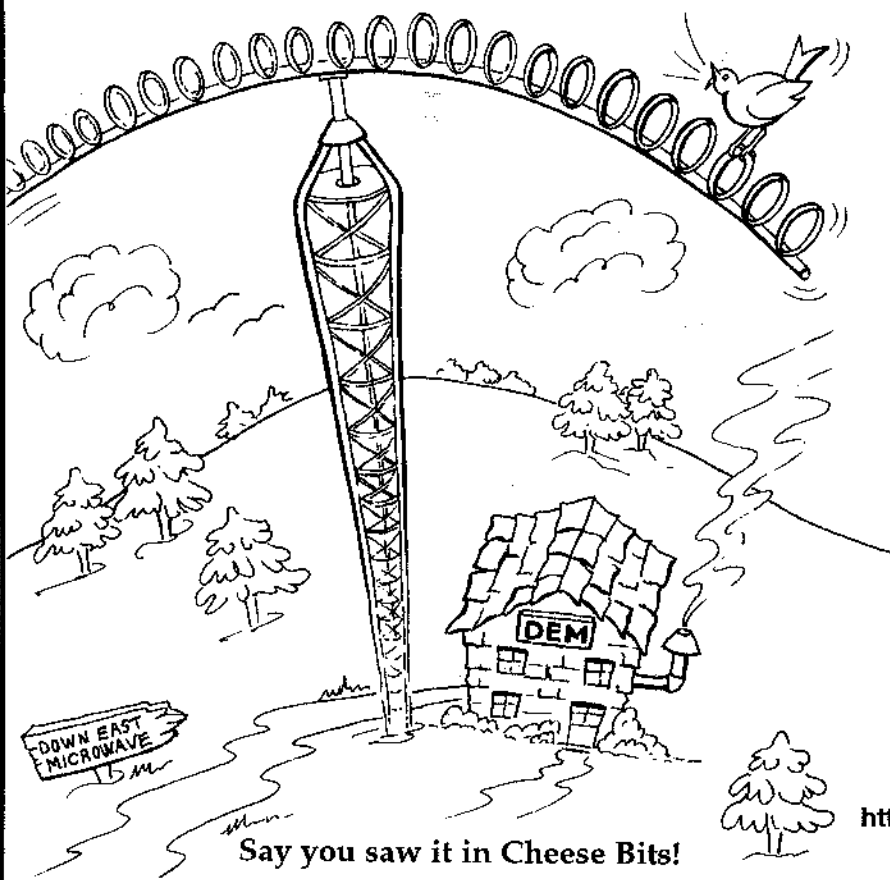
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