

# CHEESE BITS



**W3CCX**

CLUB MEMORIAL CALL

SCANNED TO PDF BY BERT, K3RUV, 2013



ARRL  
Affiliated  
Club

VOLUME XLI

August 1999

Number 7

## The PREZ SEZ

Well, I don't know about the rest of you, but I have some new elephants (white) for my pile. It's amazing to see this endless pile of stuff appear year after year. Even though this year was only my third appearance at the sale, my reserves are building. Will this stuff ever be of use to anyone, (me even)? I am sure some percentage of this stuff gets put into service. With this crowd, I am sure the percentage is pretty high. Let's see what makes it to homebrew night next winter! One other item of note: In this year of drought, not one drop of rain fell at Gary's. Is this a first?

It's going to be time soon to start thinking January contest. I have been delaying antenna work to avoid roof dwelling in the heat. I got a small burst of enthusiasm when last month's QST finally posted the January results. There are Pack Rat calls plastered in almost every category of QSO and multiplier leaders, at least on the higher bands. It was a great effort by the club members to win the unlimited category again! I am working on the inside stuff in the comfort of "air", and should soon be trodding on asphalt shingles to improve the antennas. Don't wait 'till the month/week before!

The club picnic is on the near horizon. Try to make the effort to come to Al's newly upgraded QTH and have a blast. There is air-conditioned space there too, for an escape from the heat. Al's site should be a major upgrade to the atmosphere of this event, in the old tradition of Dave Hackford, N3CX. Let's try to get behind Al and Carol's extension of generosity and contribute with a good club turnout. We can have some good eyeball QSO's and not have to raise and lower towers! Don't forget your swimsuits, and "see you in Ottsville"!

Don't forget to turn on your radios. This is the time of year for good propagation on vhf+ bands, and the meteors should be peaking soon also. It's lots of fun making random SSB contacts, so give it a shot. Stay tuned for info on our conference and Hamarama.

73, Ed, WA3DRC

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## MEETINGS

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

## **SWAP SHOP:**

(send all ads to the editor)

**FOR SALE: CALLSIGN HISTORY.** Name and address of each holder since 1912. Cost \$15 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.

**W3HFY's Estate Sale.** The following items from Hal, W3HFY's shack are being offered for sale by Hal's daughter-in-law, Lynn Grace. The price on each item is negotiable. Lynn's phone number is 610-258-0231. Several Packrats are advising her on fair prices and she may ask you to contact one of them for technical questions that you may have.

AEA PK900 DSP TNC \$300

AEA DSP 2232 TNC \$250

RF Concepts Amp 4-432 440 MILz 3 in 20 out \$40

Mirage Amp 440 2 in 60 out \$60

MFJ 940 Tuner \$30

MFJ 1278B TNC \$125

MFJ 1278T TNC \$130

Icom 251 2 Meter All Mode Transceiver \$300

Icom 451 432 All Mode Transceiver \$300

Icom 281 2 Meter FM Transceiver \$150

Icom 3220H Dual Band VHF/UHF Transceiver \$300

Icom 229H Transceiver \$200

Icom R71 Receiver \$600

Icom R7000 Receiver \$600

Icom 4KL HF Amp \$4000

Icom 2KL HF Amp \$900

Icom AT180 Antenna Tuner \$250

Icom AT 500 HF Auto Tuner \$500

Icom 701 HF Transceiver w/PS20 and Icom base mic. \$500

Icom 706 HF+G+2M Transceiver 2 Meter Fm not working \$500.

Icom 736 HF +6 Transceiver \$1100

Icom 737 HF Transceiver w/PS15 \$800

Icom 756 100 watt HF + 6M Transceiver \$1600

Icom 765 100 watt HF Transceiver \$1250

Icom 775 DSP 200 watt HF Transceiver \$3000

Icom 781 HF Transceiver \$4000

Icom 821H \$97

Kenwood Twins R598 & \$300 R599 A Pair

Palomar Power Meter \$15.

Standard CS900 50/144/440 Mobile Transceiver \$700

Swan SS200 Solid State 100 watt HF Transceiver \$250

Ten Tec Titan HF Amp \$1700

Ten Tec 253 Auto HF Antenna Coupler \$750

**W3HFY's Estate Sale - RTTY/ATV Items.** Rats, I (Harry, W3IIT) have the following items of RTTY and ATV equipment from Hal, W3HFY's estate. I have no idea what they are worth and will not make a firm commitment on a price offer until I get an idea of their current going rate. If someone wants them, please offer an honest price for them. If you know some non-rats that are into RTTY and ATV, feel free to pass this list to them.

If you don't want them and have an idea of their value, also please let me know their value. Most but not all have manuals. There may be manuals buried away for all, I'll check if you are interested. I have all of these items temporarily in my possession so I can respond to any questions about them as to appearance but I don't have any means to test them functionally. They have not been stored away but I don't think many of them have been used for several years. Their physical appearance is very good (no scratches other than surface, no rust, tarnish or mildew, at most a little dust). The equipment: Wynan Research Tridon 2000 450 MHz ATV Transmitter, HAL Spectra-Tune model SPT-1, HAL Telcreader AMTOR R/T Converter, model AMTOR-10A, HAL Telcreader Keyboard model KB-6850, HAL Telereader CW/Baudot/ASCII Model CRW-6850, HAL Model DKB-2010 Dual Mode Keyboard with extended memory option, Robot Model 800 Keyboard. Contact Harry, W3IIT, 610-584-4846 or hbrown@voicenet.com.

### **More TID BITS**

The August issue of QST reports the **1999 January VHF Sweepstakes results.** The Rats remain on top with a score of 2,792,141 points with 52 entries. Three Rats were in the Top Ten Single Op category and 3 Rat stations were in the top Ten Multi-Op. How to do well in the Club Competition is clearly defined in a short write-up by Ron, W3RJW. The Rats were clearly in the lead of microwave operation as shown by the contact and grids worked tables in the write-up.

New records on **75 GHz.** See page 77 of QST for the grid listing for W2SZ/4 in FM07fm working 5 grids up to 114 Km (to tie the world record).

**Two new VHF rigs** were reported at Dayton. MFJ released their MFJ-9402 2 Meter SSB transceiver with 7 watts out. It is in the current MFJ catalog. Ten Tec released their model 526 All Mode 6 and 2 meter transceiver with 20 watts out and DSP filters.

**W7ZOI Paper on Noise Reduction** can be found at <http://www.teleport.com/~w7zoi/nonoise.html>

**Interesting web page** per Joe, AA3GN, SM0VPO, describes building cavity resonators from various household items ranging from trash cans to soup cans etc. and copper tubing. He has used them as NBFM receivers (a coffee can VHF "crystal set") to bandpass cavities for ten meters built in a loaded garbage can. <http://sm0vpo.8m.com/use/cavity.htm>. Also other fun stuff there - enjoy. And you must read his stupid questions page.

## CALENDAR OF COMING EVENTS - AUGUST 1999

- 7-8 **ARRL UHF Contest.** See July QST, page 99 for the rules. Second weekend is 18-19 September.
- 11 Packrat **Board of Directors Meeting** at the QTH of Ron, W3RJW. Call 215-355-5730 for directions.
- 12 **Perseids Meteor Shower** predicted peak.
- 14 The August meeting of the Packrats will be the **Packrats Family Picnic** with all Packrats, friends, wives, kids, etc. invited. The picnic will be held at the QTH of Al, N3ITT (see map in this issue of Cheesebits), near Ottsville, Pa. Bring a covered dish to share. The rats are providing hot dogs and hamburgers. Start time is noonish. Bring your swim suit, Al now has a pool.
- 15 **York Hamfest** at York Vo Tech School, 2179 S. Queen St., 1 block S of I-83, exit 6, TI on 146.865.
- 21-22 First weekend of the **11th ARRL Cumulative 10 GHz Contest.** See page 100 of the July QST for rules.
- 22 **Gloucester County ARC Hamfest** at the 4-H Fairgrounds Rt. 77, 2 miles south of Rt. 45/Rt. 536 in Mullica Hill, NJ, VE Sessions. Talk-in on 147.78/.18, 223.06/224.66 and 146.52.
- 26 **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.
- 27-29 The **25th Annual Eastern VHF/UHF/SHF Conference** will be held at the Hartley Hotel, Enfield, CT. For info contact Ron Klimas, WZ1V, 458 Alicentown Rd. Bristol, CT, 06010, 860-589-0528, email: [wz1v@ntplx.net](mailto:wz1v@ntplx.net).
- 12-14 **Sept. ARRL VHF QSO Party.** See the August issue of QST, page 103 for the rules.
- 2 Oct. **23rd Mid Atlantic States VHF Conference** sponsored by the Mt. Airy VHF Radio Club will be held at the Hampton Inn in Willow Grove, PA, 1-215-659-3535. Contact John, KB3XG at [johnKB3XG@aol.com](mailto:johnKB3XG@aol.com) for further details or check the Mt. Airy VHF Radio Club web page at <http://www.IJ.net/Packrats>.
- 3 Oct. **HAMARAMA '99** will be held at the Middletown Grange Fairgrounds in Wrightstown, Pa. TI on 146.52 MHz.

### TID BITS

**Dues are PAST DUE.** A few of our members have not yet sent in their dues for the year 1999. We don't want to loose any members. If you have forgotten, please ship off a check to Treasurer, Dave, W3KM. His address is on page 2 of every issue of Cheesebits.

Check the latest happenings of the Mt. Airy VHF Radio Club by checking our web page at <http://www.ij.net/packrats/>.

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

The current NA record for the longest **High Speed Meteor Scatter QSO** is held by K2TXB and K5IUA on 2m. It was a bit over 1400 miles.

**Perseid Meteor Shower de Sky and Telescope web page.** Conditions couldn't be better for this years Perseid meteors, expected to be most active just before dawn on the mornings of August 12th and 13th. The Moon is nowhere to be seen, thanks to August 11th total eclipse, and anyone at midnorthern latitudes who can escape city lights might see four or five dozen meteors each hour. Fewer Perseids are expected earlier on these nights and for a week before and after. The tracks of the Perseids, if extended backward, intersect at a radiant point between Perseus and Cassiopeia not far from the Double Cluster.

The Perseids have declined in strength since 1992, when the shower's parent comet, 109P/Swift-Tuttle, passed through perihelion. In recent years the International Meteor Organization ([www.imo.net](http://www.imo.net)) has monitored several distinct peaks, especially one that seems related to a "new filament" that the Earth crosses eight hours before reaching the traditional Perseid stream. From a wealth of data acquired in 1997, the IMO predicts that Earth will pass through the new filament at 23h Universal Time on August 12, 1999, when predawn observers in Europe might see 100 or more meteors per hour. The Earth will enter the less-intense traditional stream at 5h UT on the 13th, favoring observers in eastern North America.

**Mystery Packrat Identification.** A mystery Rat can be seen on the aero photograph of the W3CCX contest site on Camelback that's on the Packrat web page. He's lower down the hill. The call of anyone identifying the mystery rat will be published in the September issue of Cheesebits.

### 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)

August 1999 Send to: SUBSCRIPTION/ADVERTISING MANAGER:

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

## PRELIMINARY JUNE 1999 VHF QSO PARTY TOTALS

(TNX to N.E.W.S. and KB1VC)

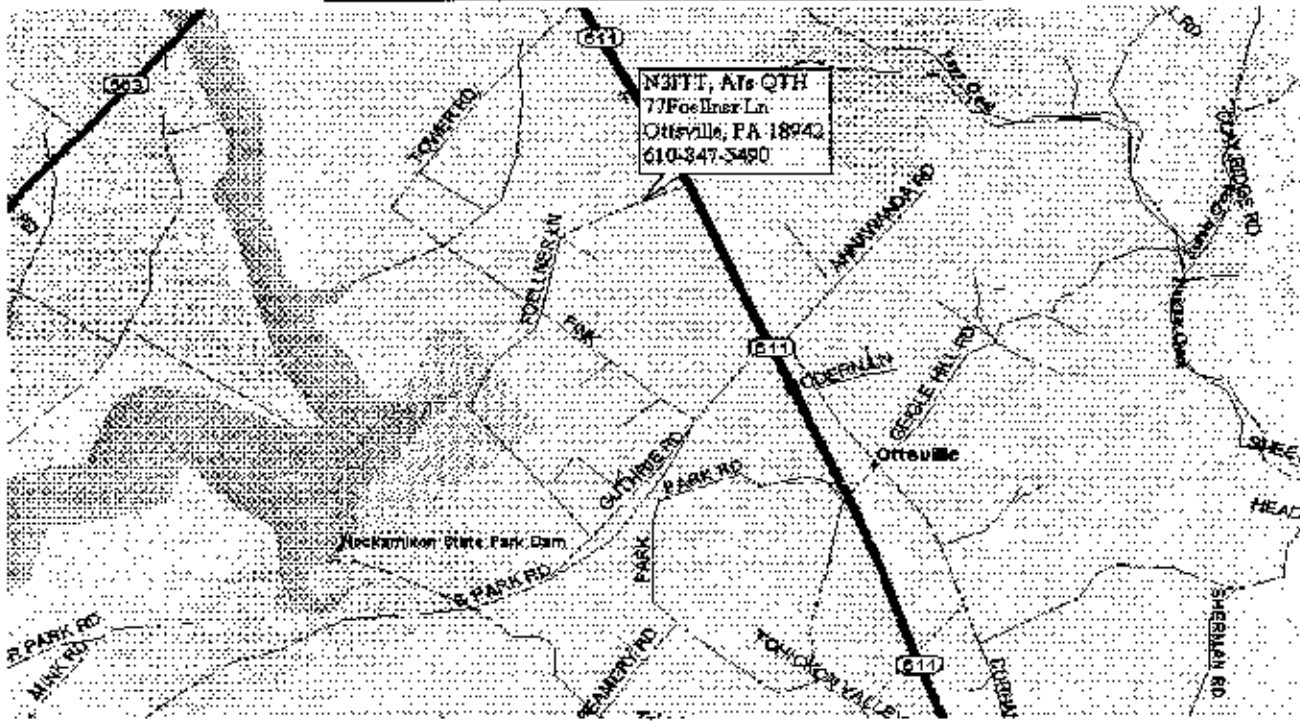
Call	Grid	Cl	Total Points	Band QSOs/Grids											
				6m	2m	222	432	903	1.2G	2.3G	3.4G	5.7G	10G	24G	LAS
W2SZ/1	FN32	U	174492	749/115	729/5	219/38	350/48	103/30	137/34	85/23	69/18	49/13	59/9	9/3	5*/4*
K8GP	FM08	U	116280	672/127	571/7	176/64	273/58	56/27	63/26	26/18	14/11	9/7	8/5	1/1	8/1
W3CCX	FN21	U	71853	610/91	0 608/5	161/38	249/41	44/12	55/16	23/9	12/6	4/4	9/5	3/2	-
K2TVI	FN21	U	34446	546/73	375/3	104/26	173/25	22/10	26/13	15/6	7/4	4/3	2/2	-	-
K1WHS	FN43	U	32214	427/88	327/4	81/23	130/32	18/9	43/12	15/7	1/1	2/1	10/3	-	-
WD3R	FN21	U	26385	405/50	443/5	101/29	115/31	17/12	16/9	8/5	-	-	-	-	-
W1XE	DN80	U	23429	448/175	134/4	26/14	56/15	6/4	21/10	-	-	-	11/4	-	-
W9ICE	EN60	U	19224	275/96	187/5	54/38	84/40	-	21/12	-	-	-	-	-	-
W3SE	DM04	U	15344	321/81	227/2	81/12	106/16	4/3	39/11	-	-	-	-	-	-
K1TEO	FN31	S	37865	267/64	427/5	101/35	161/40	41/21	54/19	12/4	10/4	-	-	-	-
K9PW	EN52	S	30004	293/98	231/4	62/27	114/36	24/14	34/16	7/7	6/5	7/6	6/5	-	-
K1UHF	FN31	S	22016	240/37	330/4	90/28	126/29	25/11	41/13	13/6	-	-	7/4	-	-
K1RZ	FM19	S	15717	173/45	175/3	54/23	79/26	25/16	38/18	17/13	-	-	3/2	-	-
KE8FD	EM89	S	14431	112/53	149/6	55/36	70/37	16/13	30/20	1/1	-	-	-	-	-
K3DNE	FM19	S	14111	129/33	187/4	72/28	96/31	27/17	34/20	-	-	-	-	-	-
K8TQK	EM89	S	13310	114/49	128/5	54/34	52/27	17/13	26/19	11/10	4/4	-	-	-	-
KA1ZE	FN01	S	11844	166/65	130/4	46/24	59/30	11/8	25/17	2/2	2/2	-	-	-	-
K0GU	DN70	S	11783	406/155	60/26	16/11	37/14	-	-	-	-	-	4U-	-	-
K2UOP	FM09	S	10410	111/32	138/3	56/23	72/29	25/14	24/16	6/5	-	-	-	-	-
K5AM	DM54	S	9980	439/172	30/16	9/6	6/6	-	-	-	-	-	-	-	-
K1TR	FN42	S	9817	218/47	147/2	58/17	76/19	13/6	27/8	5/4	-	-	-	-	-
N8UM	EM85	S	9494	188/68	127/4	28/20	54/26	5/4	14/8	4/4	-	-	-	-	-
N5JHV	DM62	S	8338	471/165	11/8	-	-	-	-	-	-	-	-	-	-
WB2VVV	FN21	S	7516	72/16	170/2	61/17	66/16	22/12	30/13	7/5	4/4	-	-	-	-
W3EKT	FN10	R	14170	199/22	253/2	113/21	141/20	47/10	51/12	-	-	-	-	-	-
AB4CR	EM77	R	13721	83/21	86/18	52/14	56/15	29/7	32/9	25/7	29/7	24/7	25/7	21/7	2/2
N1MJD	FN34	R	11240	171/29	203/2	109/16	119/20	9/5	20/8	3/2	-	-	-	-	-
W4VHF	EM95	R	6070	232/39	179/2	18/6	77/22	-	-	-	-	-	-	-	-
N4STK	EM77	R	5925	21/7	22/7	21/7	21/7	21/7	21/7	21/7	22/7	21/7	22/7	21/7	2/2
N6DN	DM14	R	4977	135/26	167/2	47/9	84/13	-	22/5	-	-	-	-	-	-
N3LJK	ROVER	R	4227	82/14	133/2	55/17	33/13	12/5	16/7	-	-	-	-	-	-
KP9US	ROVER	R	2787	50/15	78/14	40/10	50/9	16/6	20/7	-	-	-	-	-	-
KB5VP	ROVER	R	1688	89/47	44/10	11/5	16/5	-	8/4	-	-	-	-	-	-
N1MU	FN13	R	1470	65/17	42/16	5/5	8/5	10/3	10/3	9/2	4/2	-	-	-	-
N2MH	ROVER	R	931	35/9	120/1	-	45/10	-	-	-	-	-	-	-	-
K1LPS	ROVER	R	308	31/14	57/16	-	-	-	-	-	-	-	-	-	-
W2ODH	DM04	L	37606	499/124	379/4	160/28	215/33	-	-	-	-	-	-	-	-
W4IY	FM08	L	25209	282/57	436/5	122/45	143/41	-	-	-	-	-	-	-	-
W7XU	EN13	L	24908	415/171	151/5	48/34	76/43	-	-	-	-	-	-	-	-
W5KFT	EM00	L	14862	378/140	140/3	36/16	64/19	-	-	-	-	-	-	-	-
AB2I	FN21	L	12961	362/61	333/3	-	112/21	-	26/11	-	-	-	-	-	-
W1QK	FN31	L	8526	341/34	235/3	60/17	87/17	-	-	-	-	-	-	-	-

### 25th EASTERN VHF-UHF CONFERENCE

With August upon us, I'd like to take this opportunity to invite you to our VHF Conference and ARRL Specialty Convention/Hamfest. If you haven't already signed up, please look over our program and consider joining us in celebration of our 25th year. \*REMINDER\* if you need overnight accommodations at the Harley Hotel, you need to make them by August 6 to get the \$69 rate. August 27, 28, & 29, 1999, Harley Hotel, 1 Bright Meadow Blvd. (off Rt. 5), Enfield, CT 06082. Each regular registrant receives a copy of the proceedings and is eligible for the drawings. Alternate dining is available nearby. Overnight rates \$69, mention Eastern VHF-UHF Conference or News by Aug. 6TH, Call 860-741-2211 for Harley Hotel reservations. Alternative nearby hotel/motels include: Sheraton Inn, Bradley Intl. Airport, 860-627-5311., Sheraton Inn, Springfield MA, 413-781-1010., Super 8 Motel, Enfield CT, 860-741-3636.

Regular mail registrations: \$20, at the door: \$25. Banquet tickets (by mail only): PRIME RIB \$25, Crabmeat Stuffed Sole: \$25, Chicken Parmesan \$25. Send check or m.o. payable to Eastern VHF/UHF Society & mail to : Ron Klimas, WZ1V, 458 Allentown Rd., Bristol, CT 06010, 860-589-0528, email: wz1v@ntplx.net.

## LAST CALL FOR THE PACK RATS PICNIC!



Just a last reminder, It's almost time for the annual PACK RATS PICNIC!! If somehow you don't know by now the new location will be the QTH of N3ITT on Aug. 1 with 15th as a rain date. The club will provide hot dogs and hamburgers plus beverages (BEER!) There will be set ups for horse shoes, vallyball and badminton plus an in ground pool, if you need to get cool!

So far I've had good response with about 18 packrats signed up so far, so I hope to here from more of you soon! I'm also asking everyone to bring a covered dish to round out the meal, and a lawn chair or two if possible. Following is a list of foods spoken for as of Aug. .

" Claimed " Foods (Aug. )	cold pasta salad	bean salad
Corn	three bean salad	cucumber salad
deviled eggs	rio grande dip	grande dip
baked beans	desserts (3)	
applecake	potato salad	

Looks like a great menu so far!

So come on up!! Enjoy the fresh air here "down on the farm", help us eat all this great food and drink all this beer and soda, and dive into the pool! SEE YA AT THE PICNIC!!!, 73, AL N3ITT

## FN31 TO EM95 ON 3 CM!! NEED MORE OPERATORS!

dc Del Shier, K1UHF, kd1du@Ridgefield-CT.com

Hello all, Saturday morning and I was glad the kids were watching TV, I flipped through channels 2-13 and found every one wiped out by co-channel interference.

Two meters was pretty quiet considering the conditions. The beacons were not up a lot but telling from the stations that were on the duct extended from NC to MA.

I caught Dex, KDEX, who was 20 over running 10 watts on 2 M. We moved up to 1296 and easily worked. I asked him for other bands and we went to 10 GHz. While Dex was warming up his TWT I sent dashes and he heard me right away sending my 3 cm signal back on 2 meters. He called me on SSB about 5X and he also gave me 5X. The signals were fairly steady with him Q5 all of the time we talked. He had more power, 20 watts, he was having a bit of trouble on the QSB fades with my 1 watt. We worked at 1352Z on a mostly over land path. His distance to me is 557 miles for my best on 10 GHz.

I posted this the other day on the microwave reflector and got some responses that next time I call people on the phone and get them on. I would like to get together a phone list for active home 10 GHz stations so that we could all call each other next time. The list would be distributed only to other 10 gig operators and would not be on the net. If you would like to send me your number and not have it on the list that is OK too. I was very surprised and that this QSO was even possible and I am sure I could have worked more stations if I knew they were set up and could contact them by phone.

## REPORTERS NEEDED

I would like a volunteer or maybe several to do more reporting on what is happening within the club. How about reporting more in Cheesebits of what you are doing? This means letting all know of the new antennas, rigs, all sorts of new equipment being installed that can be shared among the members. I sometimes find out some of this from seeing postings on the various reflectors and on the air but I miss most of it. I would guess that much of it does not get to all of our members.

So, how about it? Send your latest station upgrades (equipment built, or acquired or even license upgrades) to me or volunteer to collect it. Put it on the reflector or if you'd like, send it to me to put in Cheesebits. I'm sure that along the way of getting something working you've discovered one or more paths to stay away from. How about sharing this with your fellow rats?

Cheesebits is always looking for technical articles (just little bits or big projects). 73, Harry, W3HT

## REPORTERS NEEDED/MARK, NK8Q/3'S RESPONSE (1)

de Mark, NK8Q/3

I am currently involved in a few projects to expand the shack some more. I am mostly completed with a 903 transverter kit from DFM. Just have to finish the chassis wiring. I also purchased a 2304 transverter kit with some of the overtime dollars while on travel during the holiday weekend in California. Haven't even looked at it yet. I have loopers for 903 and 2304 I will be adding to the top of the antenna arrays, next to the 1296 looper. Plan to use a pair of SP4T Transco relays to switch the common 7/8" hardline to the different antennas/transverters. I also picked up a 222 SSB Electronics mast mount preamp to compliment the 144 and 432 versions I already am using. Planning to do antenna work the weekend after the Packrat Picnic. Hope to have both transverters done by then giving the following lineup for the September Contest with more improvements by January:

<u>Band</u>	<u>Rig</u>	<u>Power</u>	<u>Antenna</u>	<u>Preamp</u>	<u>Feedline</u>	<u>Antenna Height</u>
50	TenTec XVTR*	130 W	5 ele	N	LMR-400	50'
144	DEM XVTR**	160 W	17 ele	Y	1/2" Hardline	56'
222	DEM XVTR**	300 W	16 ele	Y	1/2" Hardline	59'
432	DEM XVTR**	10 W	25 ele	Y	7/8" Hardline	62'
903	DEM XVTR*	10 W	33 ele	N	7/8" Hardline***	65'
1296	KK7B XVTR*	3 W	55 ele	N	7/8" Hardline***	65'
2304	DEM XVTR*	1 W	45 ele	N	7/8" Hardline***	65'

\*IF rig is Yeasu FT-290R11 \*\*IF rig is Kenwood TS-940S \*\*\*Feedline is shared and switched between these antennas/stations  
Plans for improvements by January contest involve mostly adding more power as follows:

<u>Band</u>	<u>Power</u>
144	300 W
432	250 W
903	40 - 60 W ???
2304	40 - 60 W ???

I also plan to integrate operations with the computer to be used as a DVK and CW Memory Keyer using Dave's VHF Logging program. All of the "wave" files are already built and all I need to do is interface it with the rigs. Although putting up the tower and arranging the antennas with proper spacing was a great improvement over previous year's operations with an overloaded tripod on the rooftop, I was still a bit shy of my personal goal of 75k for the January contest this past year. I am sure I could have done a little better with what I had, there is always room for improvement, so adding not one but two new bands along with higher power on many of the bands is my effort for this year. I am hoping to shatter the 75k mark and approach 100k! One thing I do after a contest is done is write down a list of all things that could use improvement. It is more or less a "wish list" but also a list of goals and a reminder of what needed help. When trying to prepare for a contest a year later it is impossible to remember unless it is written down while still fresh from the contest fever! This helps set priorities as well. Some of the items on the list are as simple as adding a switch to an amplifier for "standby" mode while others are as complicated as adding a whole new band (or two!). 73s and hope to hear work many new stations with the new bands! Mark, NK8Q/3

(1) This is Mark's response to a request on the Packrat Reflector for more input in Cheesebits of what members are doing and planning. The primary purpose is to share the fruits of our labors with others and let others know who may be considering similar plans. Please feel free to submit your latest projects. Inputs via e-mail are nice but not necessary. 73, Harry, W3HT

## And more TTD BITS

**BD program for the Palm Pilot** per Paul Wade, W1GHZ, wade@tiac.net. The BD (Bearing and Distance) program is now available for the Palm Pilot. you may download it from: [www.w1ghz.cx](http://www.w1ghz.cx). Please let me know if you find any problems, as this is the first release. 73, paul

**RF design info webpage** per Phil, WA3NUF, INUF@aol.com. If you are looking for a website loaded with design info and free design software to help you with your latest project try [www.rfglobalnet.com/](http://www.rfglobalnet.com/) This site has a version of the popular APCAD software that is made for windows along with other shareware downloads for antenna design, smithcharts, etc. Check it out.

## VHF/UHF WORLD WIDE FALL SPRINTS

Following are the final rules, awards and log submissions for the including an earlier submitted revision that was inadvertently omitted in the first posting. The messenger has been severely dealt with already!

**RULES:** 1. **Objective:** To work as many amateur stations in as many two degree by one degree grid squares as possible, using authorized amateur frequencies on the 50, 144, 222, 432, 902, 1296, 2304, 3456 and 5760 MHz bands.

**2. Contest Period:**

2.1. The 144 MHz Sprint 7 PM until 11 PM local time on the fourth Monday of September (September 27, 1999).

2.2. The 222 MHz Sprint 7 PM until 11 PM local time on the first Tuesday of October (October 5, 1999).

2.3. The 432 MHz Sprint 7 PM until 11 PM local time on the second Wednesday of October (October 13, 1999).

2.4. The 902 MHz, 1296, 2304, 3456 and 5760 MHz Sprints 7 PM until 11 PM local time on the third Monday of October (October 18, 1999). These five Sprints run concurrently, but are scored separately.

2.5. The 50 MHz Sprint 2300Z Saturday until 0300Z Sunday the fourth full weekend of September.

3. **Exchange:** Grid-square locator - signal report is optional. Rovers will sign with call plus Rover suffix, on CW a /R after call.

**4. Scoring:**

4.1. QSO Points: Count one point for each complete QSO.

4.2. Multiplier: The total number of different grid squares worked. Each 2 degree by 1 degree grid square counts as one multiplier.

4.3. Final score: Multiply QSO points by multipliers. Each Sprint is scored separately.

**5. Rover Category Scoring:**

Score shall be the total number of QSO's for contest period, times the total number of unique grid squares worked from each grid square. Once moved to a new grid square, you may re-work all previously unique grid squares for new multipliers.

6. **Reporting:** Logs must be submitted no later than 30 days after the event.

7. **Certificates** for top three finishers (non-rover) in each Sprint.

8. **Certificates** for top three Rovers in each Sprint.

9. **Certificates** for top three finishers (non-rover), and top Rover finisher, in each CONUS Call Area \*and DXCC countries\*, where level of competition warrants.

10. A participation award of \$100.00 credit on DEMI products will be offered by Downcast Microwave, one to be drawn at random from those who submit logs showing activity in the 903 Sprint, and one to be drawn at random from those who submit logs showing activity in the 3456 Sprint. Both drawings will take place at the 2000 SVHFS Conference in Atlanta, GA.

11. **Log submissions:** Paper or electronic in usual ARRL VHF contest formats

6 Meter logs to: Harry Brown, W3IIT  
3012 Potshop Road  
Norristown, PA 19402  
hbrown@voicenet.com

2 Meter logs to: Johnny Wolfe, K4TW  
3918 Captain Drive  
Chamblee, GA 30341  
jwolfe@bellsouth.net

222 MHz logs to: Peter Shilton, VE3AX  
215 Windecker Rd., R. R. #1  
Cayuga, Ontario, CANADA N0A 1E0  
VE3AX@icom.ca

432 MHz logs to: Southeastern VHF Society  
P.O. Box 1255  
Cornelia, GA 30531  
w4kxy@bellsouth.net

902, 1296, 2304, 3456 and 5760 MHz logs  
(be sure to note band on log) to:  
Southeastern VHF Society  
P.O. Box 1255  
Cornelia, GA 30531  
k4rf@contesting.com

Thanks and see you on the bands for th FALL SPRINTS. K4SZ for SVHFS

## COMMENTS OF RUSSELL C. PILLSBURY K2TXB

Dear Ladies and Gentlemen,

This is a comment in favor of the CSVHFS petition, RM-9673. First, my experience and qualifications to comment. I have been actively operating Amateur Radio VHF and above since the late sixties. Most of my operation has been using CW and SSB on the 50 MHz through 10 GHz bands. But I started working two meter AM back in the sixties. And I went through an FM phase too, building repeaters and remote links, when repeaters were first being introduced to Amateur Radio. So I have some experience with the FM activity too. I have qualified for numerous operating awards, including "Worked All States" and "Worked All Continents" on 144 MHz. I currently hold one end of the two meter High Speed CW Meteor Scatter distance record for North America, and one end of the rain scatter propagation record for North America on 10 GHz. I think that my experience gives me a pretty broad view of the current VHF situation as applied to narrow band, weak signal work.

The petition submitted by the CSVHFS has some errors in the appendix, and I suggest that the appendix be ignored in any rulemaking. The text of the body of the petition is accurate and I am fully in agreement with the changes it asks for. I would like to comment on the section about modulation index, "No angle-modulation emission may have a modulation index greater than 1 at the highest modulation frequency". This is the main item of importance. I believe that any mode of emission which does not exceed this provision should be allowed everywhere in the bands. I am especially referring to the various phase shift modulation schemes (PSK31, etc.) Since many of the lower frequency Amateur bands already allow this type of emission in all band segments, it seems to be in keeping with existing rules to make the same ruling in respect to narrowband segments of VHF and UHF bands.

The following paragraphs describe my present and past experiences which lead me to request that you make a rule change in this matter. When I first started operating 2 meters, the whole band was available for weak signal work - there was not anyone else on. Then came FM and repeaters. At first they stayed above 146.0 MHz, and did not cause any problems to weak signal work. But in time FM operations started expanding below 146 MHz. Repeaters, FM simplex, and FM packet radio channels now occupy all available space between 144.3 and 148.0 with the sole exception of the satellite segment. This means that weak signal operators have been squeezed down to just 7.5% of the spectrum that they started with. Similar portions of the other VHF bands have been occupied by FM and other wideband modes, but on the 144 MHz. band is where the greatest problems lie. The 300 kHz. segment of 2 meters that is still available for narrowband work is also divided into several segments. 144.0-144.1 is used for CW only - mostly EME (Earth-Moon-Earth) operations. 144.1-144.150 is used for CW, SSB, HSCW, 144.150-144.275 mostly SSB., and 144.275-144.300 is where the propagation beacons are. This relatively small amount of spectrum is fairly adequate to the pursuit of narrowband, weak signal work, we can continue to enjoy our propagation exploration, dx'ing, contesting, and experimentation within the small space we have. But we cannot be squeezed any more, and survive! The bottom 300 kHz. of 2 meters is designated for narrowband work only, by the ARRL band plan, a voluntary, gentleman's agreement, and for a time that agreement was sufficient to keep a suitable separation of the narrow and wide band modes. But for the past 5 years, I have experienced an increasing amount of interference to my narrowband operations on 144 MHz., mostly by simplex FM operations within 100 miles of my location. FM operations have proved to be extremely popular, and continues to grow. Many FM operators do not know about or do not care about the ARRL band plans. They are looking for a quiet place to operate and the segment from 144.1 to 144.3 is attractive to them.

When an FM operator decides to move below 144.3, there are several problems. One is that his receiver and antenna are very unlikely to be of sufficient quality for him to determine whether or not the frequency is in use by weak signal operations. (The very nature of an FM receiver will tend to make weak cw and ssb transmissions unnoticeable.) Also the 2 meter beacon band is just below 144.3, and the FM operators quite often end up interfering with the beacons which we try to monitor as propagation indicators. Due to the width of an FM signal, one station can block reception of 3 or 4 beacons at once. There are problems lower in the band too. I have had my EME operations at 144.020 interfered with by FM. I have recently experienced quite a bit of interference to my HSCW Meteor Scatter operations between 144.1 to 144.130. FM stations often turn up on the two meter calling frequency of 144.2. I hear the same reports from many other weak signal operators.

Another problem is that FM operators tend to think in terms of channels. They pick a channel which they always operate with their friends, and just 'go there'. They either do not, or can not, listen to see if the frequency is already in use. I have tried many times to ask FM operators to keep the FM operations above 144.3. I try to do this in a friendly, non-threatening way. I am almost always met with the response that they have the right to be there and have no intention of moving.

Since they DO have a legal right to be there, then I believe that the only solution that will assure the continued success of weak signal operations is to create a band segment where FM and other wideband modes are not allowed. Regarding other wideband modes, data transmission can cause as much problem with weak signal work as wideband FM can. Spread-spectrum will raise the noise floor of our receivers, and destroy our ability to hear weak eme and terrestrial signals - and we may not even be able to tell what is causing the problem. These wideband modes just do not coexist well with weak signal CW and SSB work.

Thank you for reading my comments. I urge you to act favorably on this petition to preserve the future of narrowband VHF Amateur Radio.



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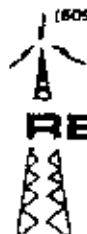
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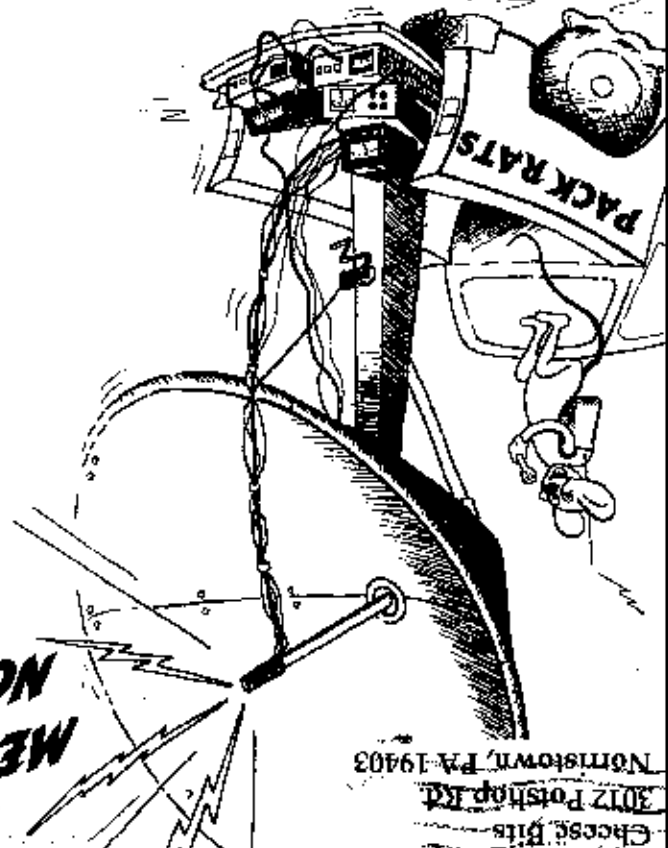
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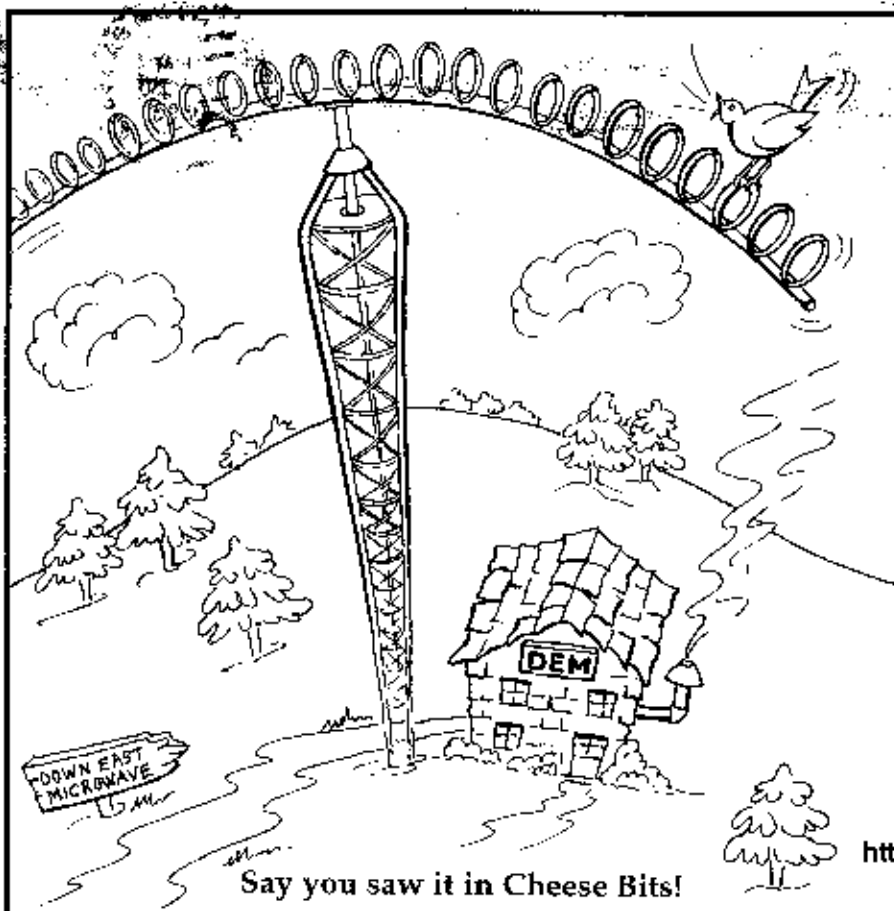
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8:30 PM	222.125 MHz	W2SJ/N3EXA
8:30 PM	224.58R MHz	W3GXB
9:00 PM	432.110 MHz	W3RJW/WA3DRC
9:30 PM	1296.100 MHz	WA3NUF
10:00 PM	903.100 MHz	N3AOG

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