



CHEESE BITS

W3CCX
CLUB MEMORIAL CALL

ARRL
Affiliated
Club



Volume LXVI

February 2023

Number 2

PREZ

Follow-up on January 2023 Contest

SEZ: First, I am grateful that Ray N3RG has stepped up to become the Packrat Contest

Coordinator (or Contest Chair if he prefers). During our January Contest wrap-up Zoom meeting, there was a consensus that the club very much needed a Contest Coordinator to improve our planning for and participation in major VHF contests. During this week's Monday 6 meter net, Ray requested any suggestions and guidance that fellow members can offer. Thank you Ray !!

George KA3WXV lunches with some ham friends who are not Packrat members. A couple of his buddies, who are very capable hams, did not participate in the January contest but told George that they would gladly turn on their radios for an hour to give him and other Packrats some points. I imagine that some of those non-Packrat hams would be looking to work the contest on FM instead of SSB. Regardless, the additional points would be welcome.

George also suggests that one-to-one encouragement might be the best way to get those hams on the air. Several Packrats are active in other local clubs. With the appropriate

slides or handouts, we could attempt to convince those non-Packrats to join the fun. The handouts could be put on other club websites or attached to reflector posts. Done artfully, those hams might be drawn into Packrat weak signal activities and might become prospective members.

As I reported in a separate write-up for Cheese Bits and during the contest wrap-up Zoom call, I had increased my QSOs, points scored, and grids worked this year by 2-3 times as compared to January contests back to 2017. Most of the improvement was generated by getting on FT-8. I had 119 digital contacts compared to 75 SSB phone contacts. Some of those digital contacts would have been on SSB phone under other circumstances. However, with better personal contest planning, I might have increased my score by another 2-3 times. I worked too many Packrats only on 6 and 2 meters and neglected to follow-up with those hams on 222 and 432 MHz.

What could I have done better? I could have reached out with Slack. I could have monitored DMR, 222 MHz FM, and the ON4KST chat page. I did publish my availability on the W3SZ/ K1RZ database and called CQ on 6 and 2 meters at the beginning of the contest. I could have telephoned fellow Packrats missing in my contest log or sent them text messages. Last, I

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

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January Contest OPEN
June Contest 2020: OPEN
June Contest Technical Chair Phil K3TUF phil-at-k3tuf.com
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Awards Chairman OPEN
Quartermaster: Bert K3IUV bsoltoff-at-comcast.net
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PACKRAT BEACONS - W3CCX/B

144.300 (FN21be), 222.300 (FN20tk), 432.300(FN20tk), 903.300 (FN21be), 1296.300 (FN20dh), **2304.300** (FN20dh—under repair), **3456.300**, **5760.3** (FN21be under repair), 10,368.017 (FM29jw) **Note: red = temporarily off the air**; see <https://www.packratvhf.com/index.php/on-air> for details)

MONDAY / TUESDAY NIGHT NETS

VHF/UHF Monday:

<u>TIME</u>	<u>FREQUENCY</u>	<u>NET CONTROL</u>
7:00 PM	224.58R MHz	WR3P FN20kb Ralph
7:30 PM	50.150 MHz	N3RG FM29ki Ray
8:00 PM	144.150 MHz	K3GNC FN20ja Jerome
8:30 PM	222.125 MHz	KC3BVL FM29jw Jim
9:00 PM	432.110 MHz	WB2RVX FM29mt Mike

Microwave Tuesday:

7:30 Coordinate QSO's on 144.260 for all Microwave bands you'd like to work. Also setup Q's at w4dex.com/uhfqso or **Packrat Chat Page**

W3SZ.COM

Visit the Mt Airy VHF Radio Club at: www.packratvhf.com or www.w3ccx.com

could have posted a message on the Packrat email reflector announcing my availability for contacts.



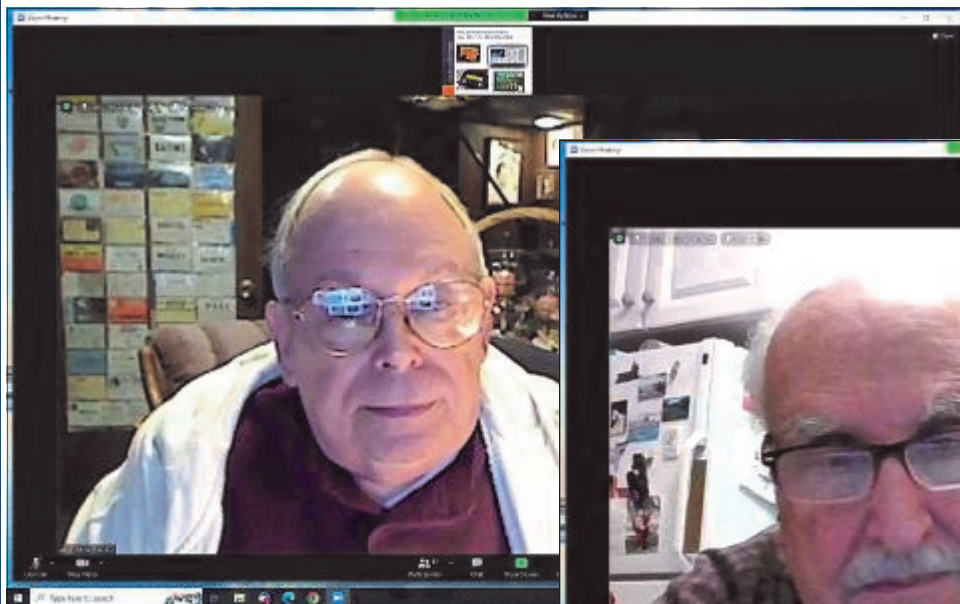
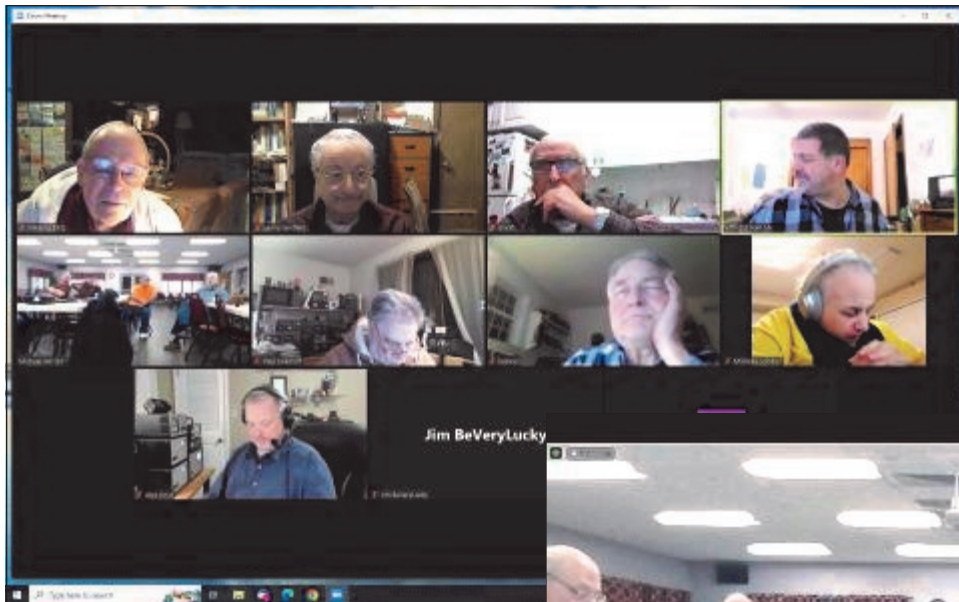
I'm not as good at multi-tasking during contests as I might wish, so I would have to do some additional planning to

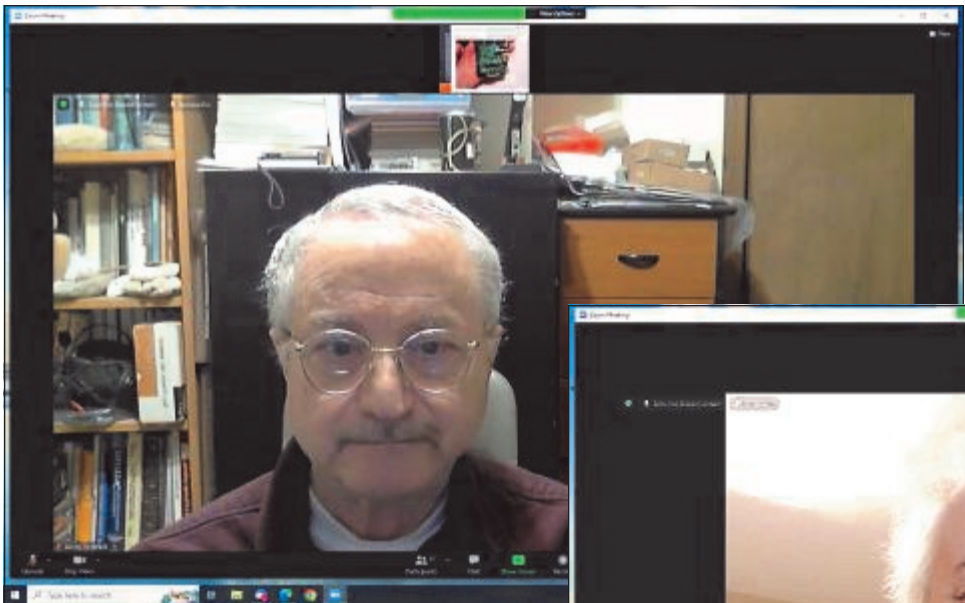
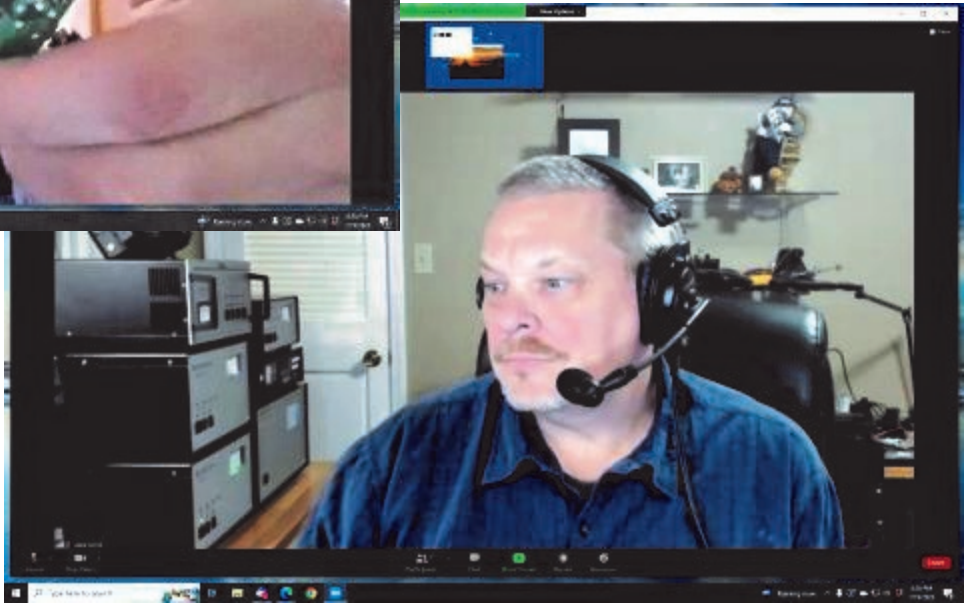
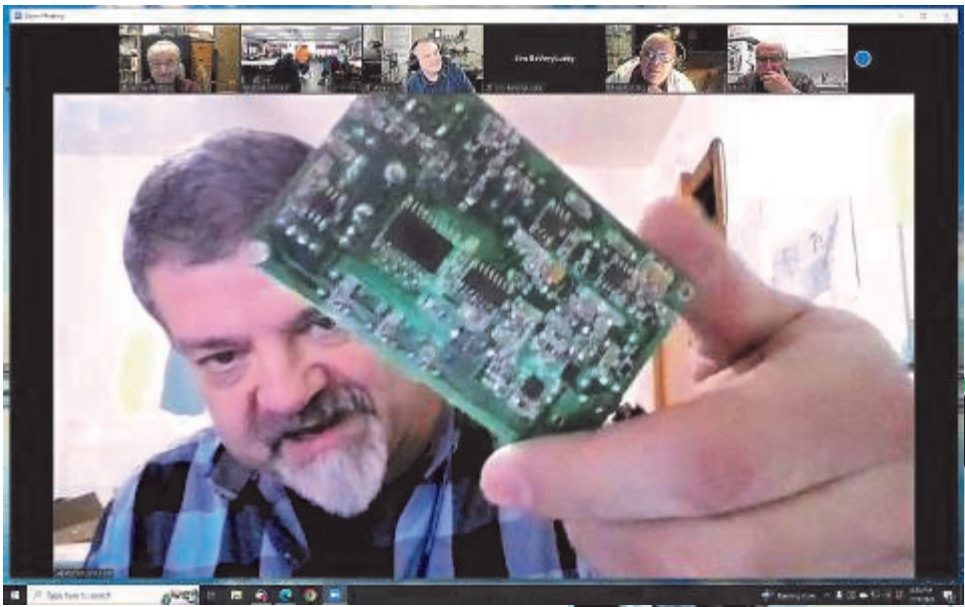
incorporate those techniques. I think Slack could be helpful but would have to arrange my screen layout better or put Slack on a separate computer. I find the squawk of multiple radios disconcerting. Perhaps turning up my 222 FM and DMR radios on periodically might solve that problem. Using ON4KST seems awkward but might be less so with more practice.

For myself, I think the most effective tool would be make follow-up telephone calls or text messages to Packrats that I could work on 222 and 432 MHz, and on other bands if necessary. What ideas do you think would work? While the January contest is fresh in your mind, please share your suggestions to encourage greater Packrat contest participation with Ray and with other Packrats.

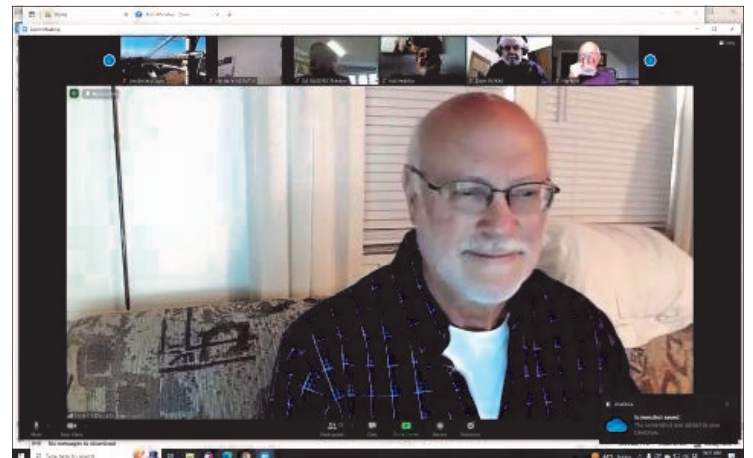
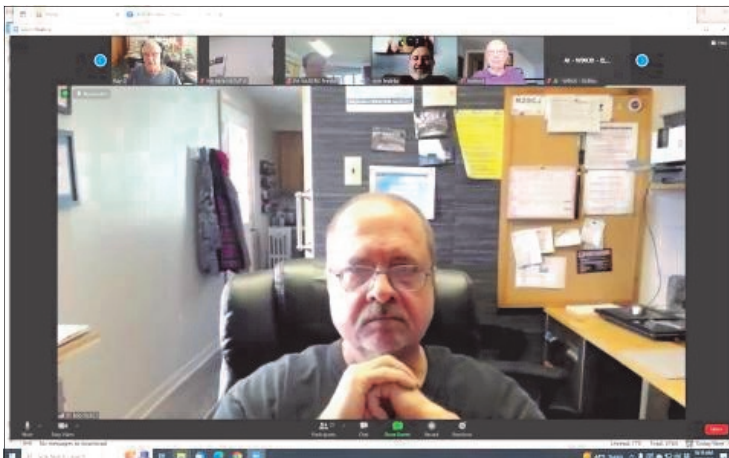
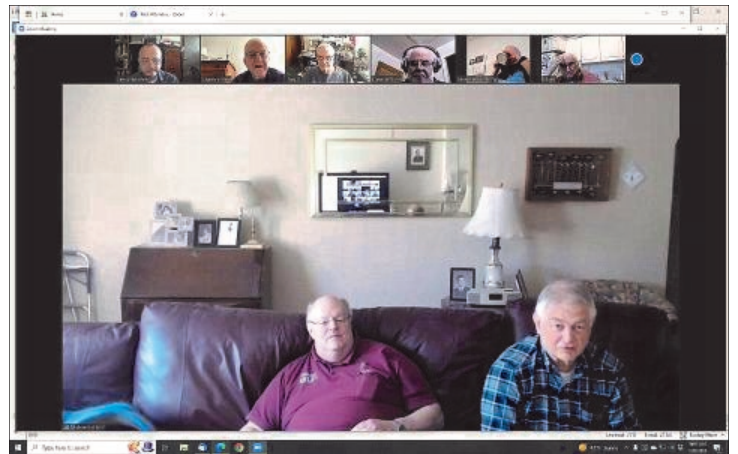
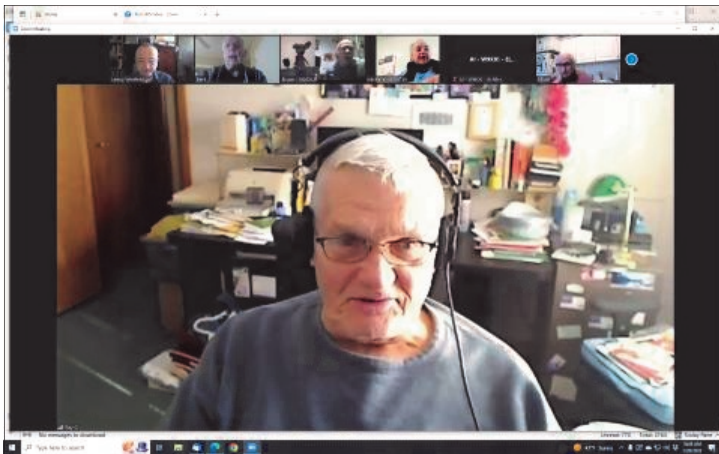
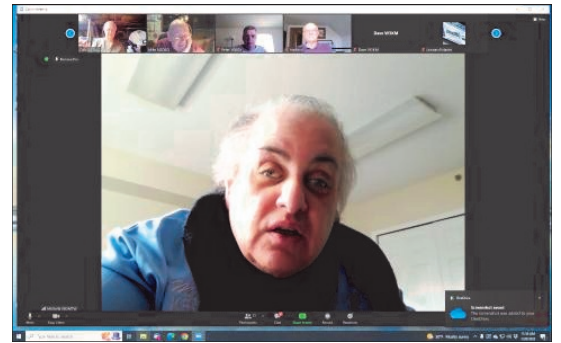
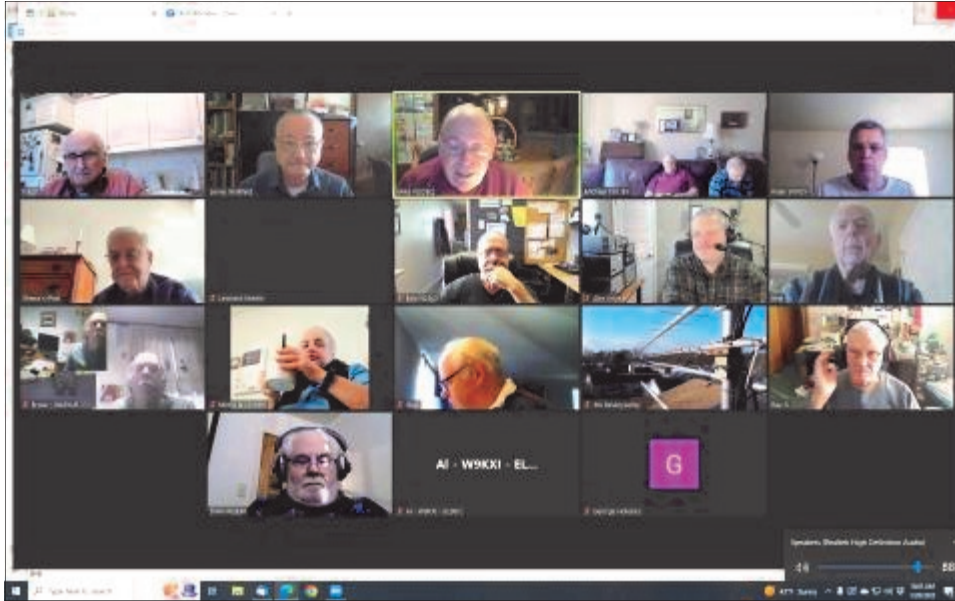
Michael KB1JEY

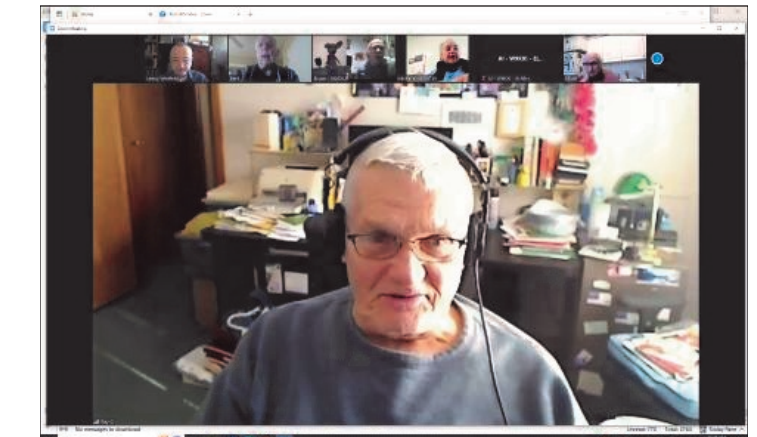
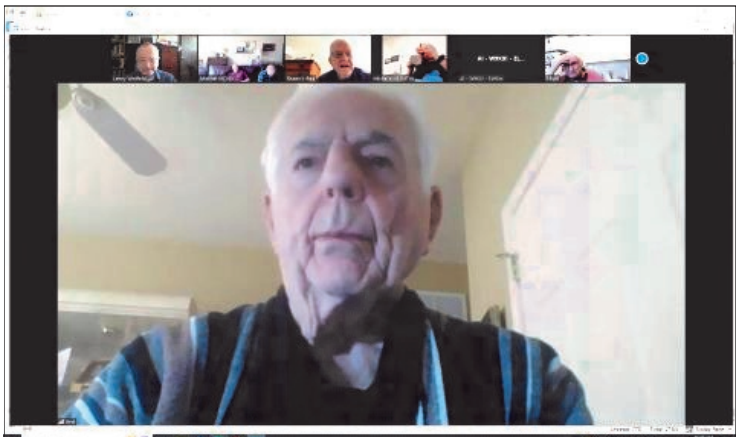
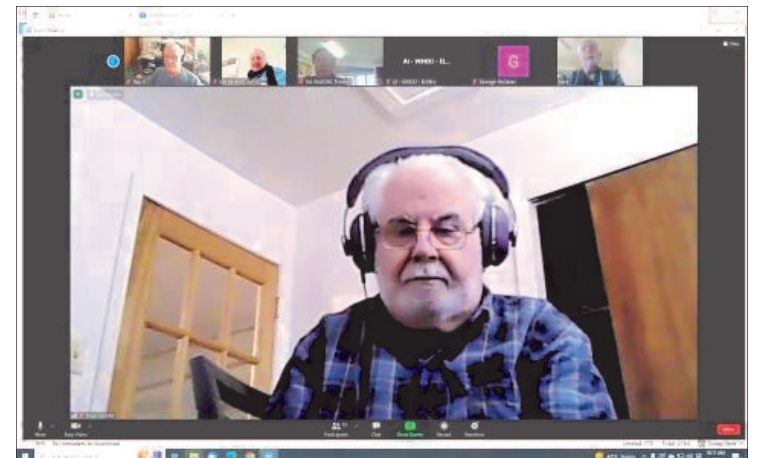
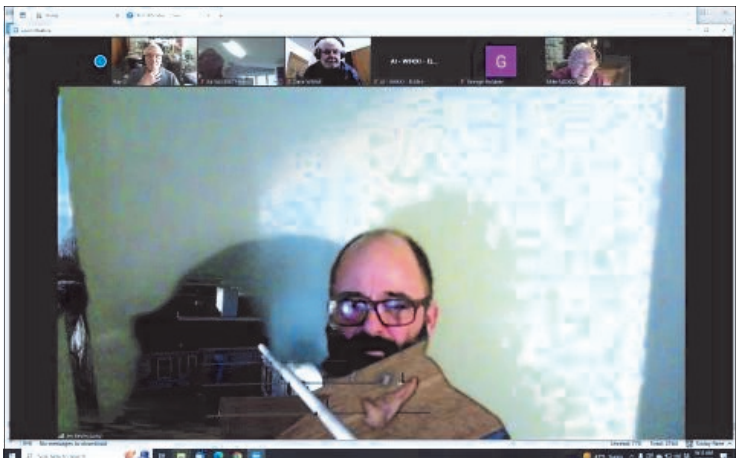
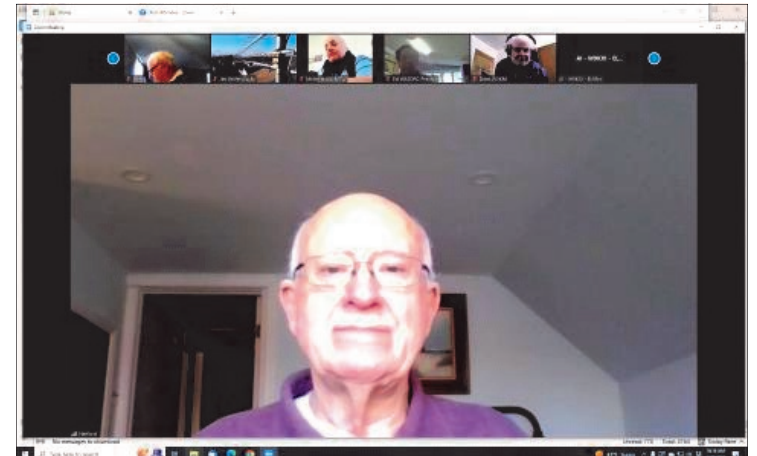
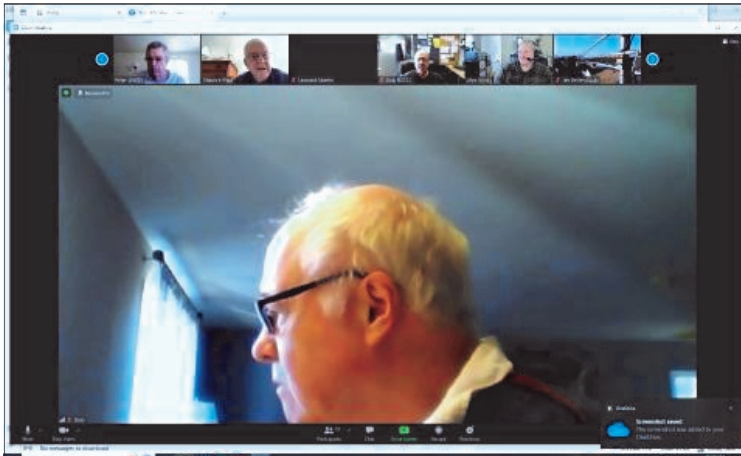
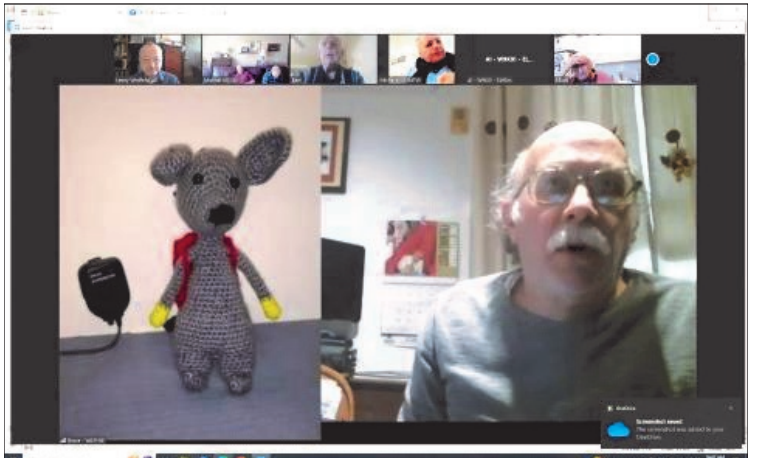
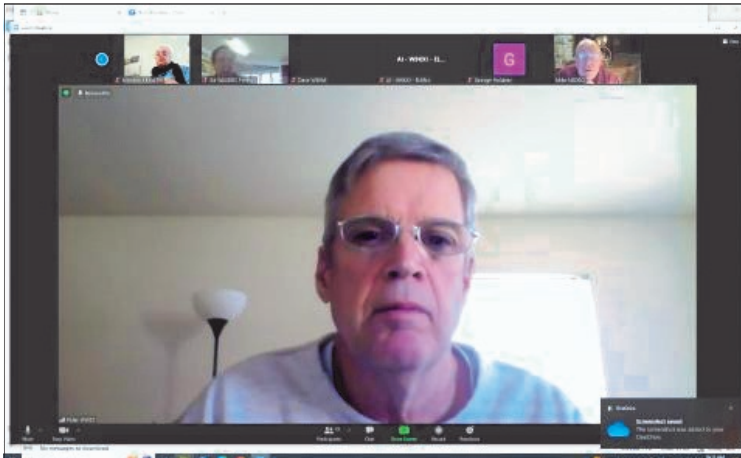
JANUARY MEETING PICTURES





JANUARY CONTEST WRAP-UP PICTURES





Mt. Airy VHF Radio Club, Inc.
`The Packrats`
January 2023 VHF Sweepstakes Contest

Total Logs: 52

Club Claimed Score: 1,337,804

Here's the results of the January Sweepstakes as compiled by **W3KM**. How did you do? Check it out below. Each frequency cell shows Q's and Grids for that frequency. What can you do to improve for next year? Start planning !

Nr	Call	QSO's	Total-Grids	Score	6M	2M	222	432	902/3	1.3 GHz	2.3 GHz	3.4 GHz	5.7 GHz	10 GHz	Laser
1	K1TEO	783	224	311808	279 58	231 47	67 29	104 31	26 17	43 19	21 11	6 6	5 5	1 1	
2	N3RG	340	109	70850	94 35	96 24	43 12	51 12	15 6	29 11	9 6		2 2		1 1
3	NN3Q/R	325	58	51852	43 6	91 10	46 7	50 6	25 4	23 5	14 4	11 4	13 4	8 3	1 1
4	WA3NUF	306	77	43967	98 17	89 22	38 9	42 10	10 4	12 6	10 5	4 2	2 1		1 1
5	WA2OMY	307	71	41464	80 18	122 30	27 2	30 4	12 4	17 4	11 4	3 2	5 3		
6	WA3DRC	284	85	41395	102 31	87 23	26 8	33 7	11 4	16 6	7 5	2 1			
7	WA3GFZ	274	67	35443	104 22	55 12	32 8	39 8	14 4	17 5	9 4	1 1	1 1	1 1	1 1
8	KR1ST	324	84	34440	145 34	117 32	21 5	29 8		12 5					
9	K3TUF	226	63	31878	61 11	55 12	24 7	37 8	13 5	18 7	10 6		5 4	3 3	
10	W3ICC/R	290	47	30080	61 7	69 8	50 7	57 7		32 7	20 5				1 1
11	W2SJ	248	64	28160	83 17	71 22	29 6	28 6	14 5	17 4	4 3				2 1
12	N2SCJ	319	68	25976	140 28	130 29	19 2	23 6		7 3					
13	W2BVH	217	58	21460	60 11	84 21	18 6	25 8	8 4	17 5	5 3				
14	W3SZ	157	61	19398	55 13	47 14	13 7	13 7	8 5	9 5		4 4	4 3	4 3	
15	W2KV	239	65	19045	58 16	127 32		54 17							
16	KA3FQS	209	44	16544	44 8	60 10	40 8	42 8	7 2	12 5	1 1	2 1			1 1
17	KC3BVL	163	44	14696	31 8	41 8	21 6	40 12	10 3	15 4	5 3				
18	W3KM	227	59	14514	118 27	90 24	9 4	10 4							
19	K3MD	192	59	13298	97 26	82 27		10 5		3 1					
20	KC2TN	175	48	11184	42 12	95 25	16 5	14 3	7 2						1 1
21	K2TXB	176	55	10835	36 11	133 40				7 4					
22	WA3YUE	132	49	8967	48 17	55 17	10 5	10 4	5 3	3 2	1 1				
23	NE2U	199	44	8932	88 15	107 27		4 2							
24	N3FTI	179	49	8771	179 49										
25	KB1JEY	193	39	8736	107 19	61 14	13 2	11 3							1 1
26	N2DEQ	162	36	8604	63 14	58 15	12 2	15 2	6 1	6 1	2 1				
27	N3ITT	187	44	8580	100 20	79 22	7 1	1 1							
28	WB3IGR	109	49	8550	41 12	42 21	7 4	13 6	3 3	3 3					
29	WA3QPX	116	58	8120	55 25	37 21		24 12							
30	WX3K	139	49	7987	39 13	78 24	9 5	12 6		1 1					
31	W3HMS	142	46	7866	76 20	45 13	8 5	9 5		4 3					
32	WB2RVX	106	28	6496	2 1	30 6	25 6	31 7	10 3	4 2	1 1		1 1		2 1
33	W3GAD	121	36	5508	44 12	51 15	11 4	14 4							1 1
34	K2WB	111	30	4410	48 11	35 10	11 3	13 4		4 2					
35	K0BAK/R	83	21	4305	16 4	25 4	14 2	14 3		1 1	1 1				12 3

Mt. Airy VHF Radio Club, Inc.

`The Packrats`

January 2023 VHF Sweepstakes Contest (cont'd)

Total Logs: 52

Club Claimed Score: 1,337,804

Nr	Call	QSO's	Total-Grids	Score	6M	2M	222	432	902/3	1.3 GHz	2.3 GHz	3.4 GHz	5.7 GHz	10 GHz	Laser
36	WA3EHD	121	23	3979	47 10	28 4	23 4	22 4							1 1
37	K3GNC	94	32	3360	31 8	52 18		11 6							
38	WA3SRU	118	19	2489	54 9	51 8	13 2								
39	N3PLM	65	21	1407	41 11	22 8		2 2							
40	KA3WXV	70	13	1170	30 5	20 4	9 2	11 2							
41	K3YTL *	49	22	1078	28 10	21 12									
42	KB3MTW	58	11	935	15 3	16 3	15 2	12 3							
43	NE3I	43	11	506	30 8	10 1	2 1	1 1							
44	WF1L	24	19	435	14 10	7 6	1 1	1 1		1 1					
45	K3IUV	42	8	408	12 3	21 3	4 1	5 1							
46	WB2ONA	32	9	342	17 4	9 3		6 2							
47	K3EGE	5	4	84		1 1	1 1	1 1							2 1
48	AF4NC	4	3	12	2 2	2 1									
49															
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NOTES: * K2LNS operated K3YTL

Mt. Airy VHF Radio Club, Inc.
`The Pack Rats`
January 2023 VHF Sweepstakes Contest (cont'd)

Total Logs:

Club Claimed Score: 1,

Multi-OPS

Nr	Call	QSO's	Total-Grids	Score	6M	2M	222	432	902/3	1.3 GHz	2.3 GHz	3.4 GHz	5.7 GHz	10 GHz	24G Hz	47 GHz	La-ser
1	N2NT	759	171	161595	291 66	282 53	77 23	109 29									
OPS	N2NT N2NC WW2Y																
2	N3NGE	467	132	118800	134 23	142 38	60 20	64 19	19 8	21 8	15 7		6 5	4 3			2 1
OPS	N3NGE K3EGE																
3	N3EXA	336	66	25674	128 23	155 27	29 9	24 7									
OPS	N3EXA KS3Z																
4	W0RSJ	238	61	21411	93 20	80 21	19 5	28 6	6 3	9 4	3 2						
	W0RSJ W1PV																
5																	

Mt. Airy VHF Radio Club
January VHF SS
Previous Aggregate Claimed Scores

Year	Logs Submitted	Score
2023	52	1,337,804
2022	59	1,370,915
2021	60	1,499,501
2020	70	1,260,661
2019	71	1,138,372
2018	60	1,911,495
2017	65	1,998,637
2016	70	2,238,450
2015	68	2,065,073
2014	68	2,277,747
2013	65	2,659,242

Previous Aggregate Claimed Scores
(Continued)

Year	Logs Submitted	Score
2012	77	2,491,702
2011	67	2,156,784
2010	70	2,699,809
2009	58	1,891,225
2008	63	2,232,731
2007	63	2,055,259
2006	57	2,724,560
2005	53	1,459,052
2004	56	2,856,837
2003	61	3,127,678
2002	49	2,113,624

Mt Airy VHF Radio Club Current + Previous 6 Years Scores by Station

CALL	2023	2022	2021	2020	2019	2018	2017
K1TEO	311808	322185	370744				
N3RG	70850	52640	78210	35471	75440	115062	90200
NN3Q/R	51852	26460	29800	15213		57525	66177
WA3NUF	43967	78090	44506	59428	49632	5712	90902
WA2OMY	41464	39390	29205	23892	16992		25929
WA3DRC	41395	37389	19240	46425	57868	55407	58880
WA3GFZ	35443	8022		29150	23453	50386	41608
KR1ST	34440	10794	13398	27612	5985		
K3TUF	31878	1564		3180	10461	117762	157505
W3ICC/R	30080	21566	25536	24432	10920	20727	30549
W2SJ	28160	11052	41920	33609	21156	50556	14945
N2SCJ	25976	31464	14440				
W2BVH	21460	16632	20648	19264	10647	23142	25592
W3SZ	19398	1368	83628	11250	79856	27048	52206
W2KV	19045	18467	20888	20280	21505	5848	28420
KA3FQS	16544	15618	15912	14911	17696	14630	19795
KC3BVL	14696	1656	8910	6650	4600		
W3KM	14514	19980	19275	4887	8388	15839	12012
K3MD	13298	12935	13104	8415	6204	16244	26979
KC2TN	11184	52689	43758	33330	17289	33428	13962
K2TXB	10835	9690	8946	11387	17020		
WA3YUE	8967	12593	8816	6665	6960	9144	14315
NE2U	8932	5508				5363	4185
N3FTI	8771	24414	1743		10962	22500	42316
KB1JEY	8736	2976	2136	3390	5112	4420	3584
N2DEQ	8604	13019	8126	8340	4840	4200	5050
N3ITT	8580	6422	2025	72	4810		
WB3IGR	8550		4454	4182	3432	4958	5056
WA3QPX	8120	15640	19762	15813	13650	37920	30415
WX3K	7987	6776	160	7304		5439	
W3HMS	7866	13734	7650	6480	3360	72	7740
WB2RVX	6496	16290	9744	40887	21935	49593	
W3GAD	5508	5825	25218	18964	10908	10461	19424
K2WB	4410	6195	1440	5432	1190	1498	
K0BAK/R	4305			11424	5565	33626	25921

Mt Airy VHF Radio Club Current + Previous 6 Years Scores by Station (cont'd)

Call	2023	2022	2021	2020	2019	2018	2017
WA3EHD	3979	23424	48970	25872	19635	18848	41160
K3GNC	3360	3844	7807	8496	14079	7380	47804
WA3SRU	2489				2968		11430
N3PLM	1407	4727	4154				
KA3WXV	1170	1540	3249	3380	3344	5300	6175
K3YTL	1078						
KB3MTW	935	3094	3262	3705	5232	4636	6912
NE3I	506	96	504	765	768	384	1188
WF1L	435						
K3IUV	408		525	33	2394	1778	
WB2ONA	342	330	228	430	100		
K3EGE	84	15		8	52	160	730
AF4NC	12						
N2NT	161595	145503	128979	121693	118956	142742	
N3NGE	118800	56529	34510	285196	220704	490154	441350
N3EXA	25674	10138	12887				
W0RSJ	21411	26944	26136	28426		27218	29341

Packrat QSOs and Pack Rats Worked
2023 January VHF Sweepstakes
 Data from 46 Logs

Call	Op Cat	Pwr Cat	PR Q's	Nmbr 'Rats	Call	Op Cat	Pwr Cat	PR Q's	Nmbr 'Rats
NN3Q/R	RO	HIGH	261	28	WA3SRU	SO	LOW	75	35
W3ICC/R	RO	HIGH	252	27	K0BAK/R	RO	LOW	73	18
N3NGE	MO	HIGH	230	49	W3GAD	SO	HIGH	69	29
N3RG	SO	LOW	190	40	K2WB	SO	LOW	68	28
WA2OMY	SO	HIGH	178	46	K2TXB	SO	HIGH	60	42
WA3NUF	SO	LOW	177	46	NE2U	SO	LOW	57	32
WA3GFZ	SO	LOW	174	44	N3ITT	SO	HIGH	57	33
N2NT	MO	HIGH	169	51	WX3K	SO	LOW	52	26
K3TUF	SO	LOW	165	36	KA3WXV	SO	LOW	51	25
W2SJ	SO	HIGH	154	43	K3GNC	SO	LOW	41	26
WA3DRC	SO	HIGH	147	41	W3HMS	SO	HIGH	38	21
KA3FQS	SO	LOW	143	36	K3IUU	SO	LOW	35	17
W0RSJ	MO	HIGH	121	39	WA3QPX	SO	LOW	28	24
N3EXA	MO	HIGH	119	52	NE3I	SO	LOW	27	22
KC3BVL	SO	HIGH	114	28	N3PLM	SO	LOW	27	19
W2BVH	SO	HIGH	112	35	N3FTI	SO	HIGH	26	26
KR1ST	SO	HIGH	108	39	WB2ONA	SO	LOW	25	12
N2SCJ	SO	LOW	105	42	K3EGE	SO	LOW	5	2
W3SZ	SO	HIGH	93	26	AF4NC	SO	LOW	4	3
KB1JEY	SO	LOW	93	48					
W2KV	SO	HIGH	92	40					
N2DEQ	SO	LOW	89	33					
WA3EHD	SO	HIGH	87	34					
WB2RVX	SO	HIGH	87	28					
W3KM	SO	LOW	86	44					
KC2TN	SO	HIGH	85	33					
WA3YUE	SO	HIGH	78	32					

JANUARY CONTEST REPORTS

From Phil K3TUF

While enjoying the weather in EL88, I operated my home station in FN10 remotely. Many scheduled activities kept me from operating more. But the stability of the network now has led me to plan more of an effort, maybe even SO2R remotely next year. Next year I might even consider turning on the amplifiers and operating HP, but still thinking about that. My score is courtesy of the rovers who go out to many grids and work again and again on multiple bands. I suppose also I need to add back in the 3.4 GHz band to get a few more points for those contacts. No digital this year, only good old SSB and CW.



From John K3MD

14 hours of operation. QRT due to ice and snow, causing very slow antenna rotation, although SWR seemed OK. Not as good as personal best, 2017. Did get the MSK program working! 2 computers / 4 rigs/ have to switch cables to go from FT8 to CW/SSB! My battery-eater keyer only ate 1 battery. Rigs:FT-726R, two AM-6154/5's, Henry 2002A, FTDX10, KPA 1500, 5L CC 6M, 13L CC 2M, 18L K2RIW 432, 55L looper 1296. MM preamps for 2 and 432. 50 ft. tower on top of 850 ft. ridge, valley at 400 ft ASL. Worked a lot of Packrats!

From Bob N2SCJ

No big openings. I was hoping to work some DX on 6m as sunspots were high. 6 was open to the SW into EL territory and to the west. A short opening 2-3 contacts.

From Griff NE3I

I wanted to do what I could to make Qs with fellow Packrats and submit a log for the Club score. Deed restricted as I am, I used my indoor 40 Meter bent Dipole for 6 Meters and my Ed Fong Tri-Band J-Pole Vertical in the attic for 2 Meters, 223.5 MHz FM and 70 CM. I had ten phone contacts on 6, three phone contacts on 2, two phone contacts on 223.5 MHz and 1 phone Q on 432. I had a single CW contact on 6 and 2 Meters. (Thanks for the memories.) The remaining 25 Qs were via FT8. Many thanks to Len and Bill at N3NGE who worked me on all four bands. They were always there for me when it was worth the effort to be a casual Rover.

From George WB3IGR

After a year off the radio because of taking care of my wife Kathy after her heart attack, I had a great contest. And I was surprised that all the radios and antennas worked so well! I think my best effort from FN10vi since I moved back to PA. from MD. FM18xs. Total time spent 12 to 15 hours. 8550 Pts

From Herb K2LNS (K3YTL)

I never realized how quickly 3 hours goes by. I set my little portable setup on a hill in Hobbie Pa Right at 1,200 asl. Had about 50 watts and short yagi's on 6 and 2 at 12 and 15 feet. Many years ago Bob Michael (N3FA) who ran the 2 meter system on Red Rock, told me when they first started operating from Red Rock 2,400 asl, they had a heck of a time getting thru the coastal QRM and having guys turning their yagi's NW. That was until they started using stacks of antennas and KW's. I ran into the same problem. I will say this, if I operated on Sunday, I think stations would have been looking for weaker signals. I had to stop at 5 pm due to darkness which was a shame. Activity seemed really good. I worked a total of 49 stations on 6 and 2. Total score 1,078. Was surprised to work EN82 which was nice on 2 meters. And heard as far north as FN25. My QTH must be sold this summer and at that time, I'll buy a van to set up a low power system from 6 to 1296 including 902. All the equipment is ready to go. I love going portable since it keeps the mind active. My score even though small was accepted by the ARRL. Never will I have scores like I did in **the past, but still enjoying this great hobby**'.

From John W3HMS

Propagation seemed flatter than in past; grids were closer to QTH. 222 had little activity. 432 was even better than 222. Gear seemed to work, though 23 cm signal was down from prior years. N3FJP log showed me scoring more than ARRL tally by about 800 points but I only learned the next morning ugh!!! A happy point: I seemed to work more 'Rats than in past. QSOs mostly happened on FT8 except for 2M with CW. Score about 7.8 K. My bands used as before: 6, 2, 222, 432, 1296. The 10GHz mast station was working but no customers, HI!! Where are the sky hooks when we need them.

From Michael KB1JEY

As background (pre-contest) information to readers, several months ago, my home-brew ham shack tower computer began to show intermittent problems. I decided that the best long-term solution was to go to Microcenter and buy a replacement Dell tower-style computer. George KA3WXV was kind enough to install the hard drive from the home-brew computer into the Dell as a secondary drive. As time permitted, I installed various pieces of software used on the other computer. I did not install WSJT and the Elecraft K3 utility until recently.

When I installed WSJT-X on the Dell, I had some trouble getting it to talk to my Elecraft K3S via USB. It turned out that while the K3S is talking to the computer via USB, the computer is connecting to the USB port as COM4. After tweaking this and other settings on the Dell, I was able to get the computer to converse with the K3S. However, WSJT was not successfully decoding received signals. Bruce WA3YUE was kind enough to stop on by and adjust various level settings required by WSJT for successful FT-8 operation.

For a few weeks, the Bird 43 meter that I use to monitor power output from my TE 2 meter power amp intermittently but frequently showed no RF output on the Monday night nets. Working six days per week, I was not able to schedule a visit with Tom KA3FQS until the morning of contest. Tom theorized that a loose electrical connection was the most likely fault. I reverted to "Plan B", using a spare ICOM IC-746PRO, connected to the 2 meter

Yagi antenna via a mechanical coax switch.

I started the contest at 2 PM Saturday by pouncing on stations I found using the P3 panadapter and calling CQ. During the afternoon, I made an accidental contact with Brian N3EXA on 2 meters with the K3S - DEMI - TE PA combination. Hmm, I wondered how many FT-8 contacts I could make with that combination on 2 meters? The answer was 47 QSOs. I could determine when the K3S - DEMI - TE PA combination was working in a couple of ways. I could see half-scale deflection on the Bird 43 meter and hear the bleed-through hum on my Heil speaker - parametric equalizer.

Overall, I made 194 QSOs and accumulated 8,775 points on 39 grids. That was 2-3 times my previous best results going back to 2017. 119 of those 194 QSOs were via FT-8. I made no FT-8 QSOs on 222 MHz and only a single FT-8 QSO on 432 MHz. The discussion of whether to use FT-8 is often emotional. Only observation that I care to share in this write-up is that you can watch football while tending to FT-8.

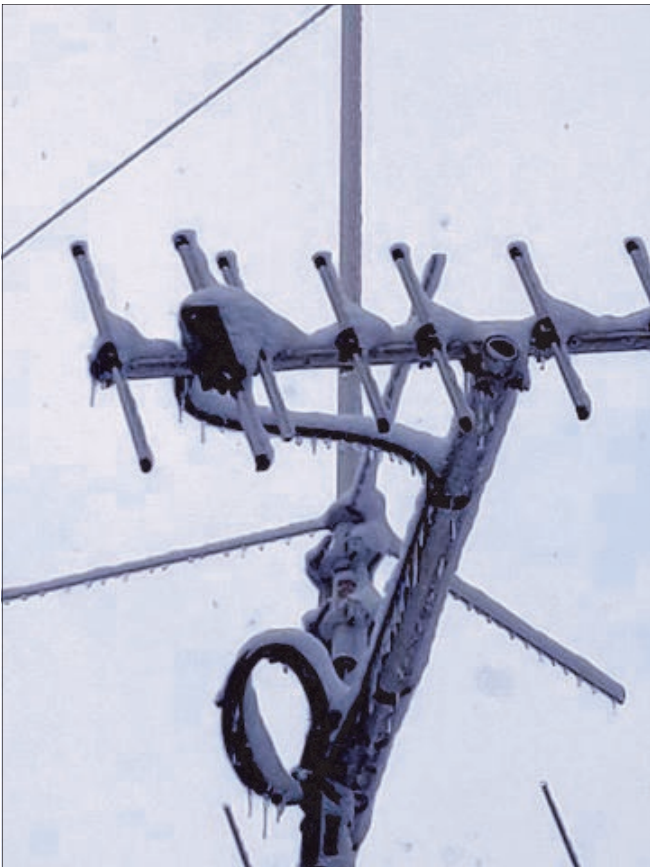
The part I need to work on for the next contest? How to work Packrats on bands where I do not see them on FT-8. Possibilities are using the proposed "FT-8 Exchange", skeds, Slack, ON4KST, cellphone, DMR, 222 MHz FM and email. A discussion of these alternatives is perhaps a good subject for our wrap-up meeting.

From Alex KR1ST

This is a personal best for me for a January contest. I had a lot of fun and really enjoyed the conversations I had with folks. I probably should concentrate on maximizing my score, but I don't. Maximizing fun is more important to me. On Saturday I worked SSB/CW/FM only until about 10pm. Then I switched to FT8. Sunday morning started with a few Q's on SSB/CW but that dried up quickly and there was no point calling CQ for me on voice, so I worked mostly FT8 for the rest of the day. This time I paid more attention to FM and had some nice Q's which I really appreciated.

The bands seemed flat to me, except for small peaks of Es on 6m to FL, but too short for an exchange. There was a little tropo to the west of me that netted in a few extra much needed grids, especially on 2m. I did not try MS. I was pleasantly

surprised that there was an opening to South America near the end of the contest and was really happy to get Chile, Argentina and Brazil in the log. That was a really nice treat! Unfortunately, at the same time the ice started building up on my antennas and I started losing bands one by one. Six meters was the last band left I could still work folks on regularly, but I could see the SWR creeping up with every transmission. The Gemini HF-1k has a really neat feature where it lowers the power by changing the voltage to the LDMOS when the SWR starts to approach 2:1. That kept me going for a wee bit longer. My last QSO was on 2m with a local ham, KB3VQL, with me running just 5W and a 3:1 SWR. I then decided to pack it in about an hour and a half before the contest ended. Thanks for all the Q's!



From Rick K1DS & George WA2VNV

Quick comment: Oh, how I miss the days when as a rover with harmonic Leon, we could rove 8 grids with 11 bands and turn in scores of 100,000 to 150,000 points each toward an aggregate of 2-3 million club points. How VHF contesting has changed. But here's what happened this year:

George WA2VNV and I operated the Boca Raton ARA station for the VHF contest. Murphy strikes as usual - - Saturday, around 6 pm, I discovered that on the big tower the 7 El 6 meter beam was not pointing NW as the meter on the controller indicated, but was actually beaming South!!! Not good. I couldn't understand why the smaller 5 El beam on the VHF tower using the IC-7300 was hearing & performing better with only 100 Watts than station 1 with the IC 7600+ 500 Watt output amplifier. It seems the tower mast has rotated/ slipped in the rotor clamps due to wind at some point. I tried to correct this and it resulted in the rotor indicating South but the antenna beaming NE and stuck there. We'll work on fixing this Wednesday morning.

Another issue started on Sunday afternoon, the AC Power strip on the wall with the IC-7300 started tripping off at random times crashing the computer & station and requiring a PC restart & logging + WSJT program recovery. No heavy AC power load, just the PC & power supply for the 7300, that's all. Another project. All this created somewhat of an problem later combining the logs from the 3 station logs, but I was able to get it all merged and the contest log submitted.

Conditions were flat and 6 meters finally opened to South Florida from NE & Canada VE3 land about 8 pm Sunday night with only a few hours to the end. That got me about 50+ more Q's on 6m before it died around 10 pm . There was some E-Skip / TE to South America, but it skipped over Florida. There was little from FN20 or FN30 in the opening, but I must have worked 20+ VE2/3's in FN02 & 03. Of course, the first station I saw was Jeff K1TEO that indicated enhancement had started. It seemed like a opening followed up the Hudson valley to Canada and moved west toward Ohio. Maybe a storm front up there. I remember a similar Sunday evening opening time happened last January. Always a fun time.

From Bob W2SJ

My apologies to any Packrats I missed during the contest especially W3ICC/R. I was distracted most of the contest trying to get ready for the Texas trip the next day to see my granddaughter Lexie graduate from Basic Training in the US Air Force. I enjoyed the contest on Saturday with lots of SSB activity up until about 9 PM. After that, most activity

shifted to FT-8. I used FT-8 to "grid-mine" for new grids. At 12 midnight I switched to MSK-144. It was not very productive for me this time, only netting 3 contacts in 3 grids. Sunday was very similar to Saturday, with lots of opportunity to work missed members on the upper bands. Activity the last 2 hours of the contest seemed focused on 6 & 2 meter FT-8. I had no equipment failures just operator failures!

From Michelle KB3MTW

As you all know the biggest no-no for the contest is do not wait till the last minute to do radio/antenna adjustments. So what did I do? Wait till 11:30 the day of the contest. I didn't want another FM only 3 lower band contest. So decided why not use the 2m/440 vertical on SSB with the 224 mag mount. All I needed was 6 meters to have the lower 4. I tried using the Super Antenna for 6 meters. It worked great in the warmer months, but decided not to resonate on 6 meters this time. Since I had to do this all by myself, I hooked up an SWR meter ran onto the deck and tried lengthening the antenna. After running back and forth 5 times from the radios to the deck and back I pulled that antenna in and went to the trusty 6 meter inverted V which, of course, decided to be too short. Running around again to find some metal to attach to the ends, I chose bag twisty ties. Got it close enough with a tuner to make contacts. With very compromised antennas, with so-so SWR levels I plodded on. Wish I could have hit 1000, but still did much better than in the past year. Here's to increasing the score in the future.

From Ray N3RG

I began getting ready for the January VHF contest about a month or so ago by determining which bands were operational. I knew the bottom four were working because I get on for the nets. (Thanks Jim!) I also knew my 10GHz box had a problem that required pulling down the tower. And that was just not happening! 5.7ghz seemed to work listening to my beacon box. The 3.4ghz conversion wasn't finished so that band was out. The 2.3ghz box had a problem that turned out to be a bad GaAs FET and I replaced it and got that band working. 902/3 MHz and 1296 MHz were working fine. So, I decided to go with what I had. Next I tested the digital setup accessed through

N1MM and discovered it wasn't working so I consulted with my Guru KC2TN and got that working. I did several tests to make sure I could get into FT8 and other digital modes and back out to analog without crashing. Next I copied and renamed the WSJT contest log and cleared it. By the contest I thought I was ready and all I had left to do with N1MM was create new database for 2023 and then create a contest log in the database. Seemed easy so I left that for Saturday morning.

Thanks to Mike N2DEQ I set up a new contest clock spreadsheet in my second computer and entered contest schedules from the rovers with times and grids for each of them. I also included beam headings and reverse headings in my clock sheet to make it easier for the rovers to find me.

Saturday morning breakfast with my bride and home with time to spare! I started the contest on 6M ssb and everything worked fine using the TE systems amp at 200 watts. After I ran that dry I moved to 2 meters and started a new run on that band. When I was a little over 100 Qs I discovered I was using the wrong log file in N1MM and entering grids in the Name window. Oh No! Should I stop and start a new ARRL JanVHF log or continue and fix things after the contest? I decided to continue! The contest went well and using Mike's new contest clock spreadsheet I knew where to be and what to do most of the time. At my age I need something like that, and it even tells me who I am in a senior moment!

So, I worked a good mix between SSB, CW and digital modes especially MSK144 which got me about 25 grids. I took a nice nap between 1am and 6am Saturday night and had more fun Sunday until I fell asleep at the helm Sunday night around 8:15 pm and woke up, shut everything off, and went to bed! Sorry I missed the end of the contest but I had a great time working everyone I could hear.

Monday I spent half the day creating a cabrillo log I could submit to the ARRL and after several failed attempts, I was able to successfully submit my log. You can bet I'll double check the N1MM log before the contest next time! 351 Qs 650 Qpts x 109 mults = 70,850

From Warren WB2ONA

I didn't have a lot of time or energy for the contest. Thought about not doing anything. I did get on but worked very few Packrats. I transferred my paper log to a logging program so that I could send in a Cabrillo log. Been working 7 days a week. 32 Q's 342 pts.

From Al K2UYH

We were away in Las Vegas at a microwave/satellite conference during the Jan Contest week. So I missed it. We were back for the following weekend when I operated the 1296 SSB Funtest (F5SE Memorial Contest). George, NE2U joined me. It was not my best SSB Contest. Not sure why. We made only 12 QSOs. It is only a one day event, but In my best SSB Funtest I made 31 QSOs. The highest was OK2DL with 48 SSB QSOs.

From Lenny W2BVH

Incidents and accidents (as Paul Simon would say):

I had some very nice results (for me) on the micros: 8Q's on 902, 17 Q's on 1296 , and 5 Q's on 2304 (didn't complete with everyone but well worth the effort).

Band noise on 6 Meters, which is often s7-s9 here was MUCH better than usual, which is good for my nerves. They're rewiring a swath of my neighborhood. They're going from 13KV to 69kv right in front of the house. I guess replacing all the old 13 KV wire has benefitted my 6 Meter reception. But I don't want to know what happens to 6 Meters in the future when the 69KV lines start degrading.

Surprisingly the rf feedback that I suffer from on my Harris 6M amp is much improved for with no reason why. I didn't do anything. But I'll take it for as long as it lasts.

An intermittent mic connector on the Elecraft K2 I.F. rig was an annoyance, and I'll have to work on that before the spring sprints.

On Sunday I did phone/cw all day and switched to FT8 at night. My Q's for the contest were about

50/50 analog - digital on 2 Meters and 75% digital on 6 Meters

I always dread the N1MM+ setup before a contest. I've got lots of notes on doing it but they're disorganized, so I don't have a real "cookbook" on getting going. I have to organize better for next June. As it is, I started setting up around 1pm Saturday and didn't get on until 3pm.

I think I'll be getting a GPS locked Demi Apollo L.O. for my 432 transverter and hobo it in. As things are, 432 is not stable enough for reliable FT8 QSOs.

All in all I was very happy with the participation in this years contest and I had a great time. The highlight was running 6 bands in 6 minutes twice(!) with W3ICC/R. And runner up to that is finally getting a microwave QSO with NN3Q/R. ~21K points.

From Bill K1DY

I've been VHF contesting for over 60 years. Some of those years have been "good ones" (won nationwide single op twice in January , once with grids, once with sections) plus I did a 10 band rover tour to 8 Maine sections for K1WHS in the September 2010 contest - we won!!!). Here's the rover:



Other times over those 60 years I just "participated" hah hah. 2023 was a "participation" year. I think the Rats got my message about losing my 110 foot tower in December in the "bomb cyclone" storm. So as many of you know, this isn't my first time this sort of thing has happened. When I was still in

Contest Rpts cont'd...

Revere, PA, (home of the W3CCX 432 EME station), my 70ft Heights tower with a quad of KLM 12 element 2M Yagis blew down in a windstorm with one Yagi piecing the bedroom window of my housemates Steve and Linda!! This was 1973. 74? No one was hurt whew.. Point being this ain't my first rodeo! So, anyway, I've been here in Maine for almost 40 years and, being here at the end of the universe things are different. Not a lot of "close in" QSO's but truthfully, not a lot of noise either.

Anyway, the tower fell and the January contest was coming up. What to do? I have 70-80 foot trees all around. I wanted to, at least, show some presence on the contest. So I decided to strap my 2 element 6M rover antenna to the side of the shop (the old



DEMI shop folks) and see what I could do. Here's the pic, hah hah, a 2 element beam fed with half inch Heliac! See you all in June!! Maybe with a better setup.

From AL W9KXI

For the first time...ever I was not able to operate from FN12 for this contest. Somehow, our annual trip to Florida interfered. Annually, we visit Indialantic Florida (EL98rc) and there has been no conflict in the past. This year, there was. Determined not to miss the contest entirely, I packed up a four day old IC-705, a PAR 2M Omni and associated peripherals for the trip. We arrived to our rental on Saturday but there was no time to setup. Sunday was...a different story.

The operating position was not particularly ideal. (See picture)



Because of the layout of our rental, the antenna could not "see" in either the Northerly or Westerly directions. I was limited to East and South. Here is a view (looking East) of my antenna installation:



Obviously... there was No activity to my EAST.

In the end, I had four contacts, all FT8. Two were in EL96 and two were in EL97. My first contact was with N4BRF – The BOCA RATON AMATEUR RADIO ASSOCIATION INC, the club station that K1DS was operating from. I found no SSB or CW stations.

Next year, I'll be back with 2 bands and more than 10 watts output!!

KOBAK January Rove Report

Dead Batteries in TV Van

The rental garage I use for the "TV" rover van is expanding into adjacent space, shuffling their many client vehicles (mostly expensive performance and classic cars) between garage spaces as they renovate. The van is normally plugged in to keep its 7 batteries charged. In the process of moving my van, garage personnel unplugged it of course but did not plug it in again. That wouldn't be a problem if the charging system for the main station battery pair was disconnected properly, but I wasn't there to do it, and the combo inverter/charger drains some current when it is in inverter mode (when commercial power is not available). When I visited the van a couple weeks before the contest, those main station batteries were 8.7v, so low that the charging circuit would not recognize them so I couldn't try to charge them.

Those two big 200Ah AGM batteries are six years old and were already not holding charge as well as they used to, so they were due for replacement, although I had hoped to squeeze a little more use from them. Because the 3kW inverter/charger is hard wired with 0000-gauge cables, all behind panels and with little room to work, attempting to connect a high-capacity battery "restore" charger is non-trivial and risky. Even if I could have gotten the batteries initially charged, their capacity will likely be even further reduced by the deep discharge. I'm also worried about outgassing during charging in this scenario even though they are designed not to vent in normal operation. There is a relief vent but that just means I'd have hydrogen floating around the inside of the van with lots of possible spark sources.

Fast Building and Planning for Driveway Rove

I sent an email to the reflector saying I couldn't operate the TV van. A day or two later Doc W3GAD suggested picking up the club's venerable 6-band QRP microwave box (902-10G) and laser transceiver. I decided to resurrect my January driveway/laser rove I did for a few years before. While I retrieved the equipment from Doc six days before the contest, it stayed in its carrying bin until Friday because of other commitments including working on a Thursday presentation for Holmesburg ARC.

By reusing the IC-7100 radio, 90Ah lithium battery, DC distribution, and voltage booster that was already in my Subaru Forrester's trunk for HF contests and POTA, I was able to install the front-seat control desk and the microwave box quicker than expected on Friday. I intended to use my 3-band HT for a convenient way to make 2M through 70cm contacts while I was indoors with a Packrat making a laser contact, and I'd use the HF output of the IC-7100 connected to a 2-foot interior wire for 6M.

While waiting to drive over to Gary WA2OMY's to test the microwaves, I decided to also test-install two mag-mount vertical antennas on the roof: the lower mast part of a Hustler mobile HF antenna system that is the right height for 6m, and a ~4-foot triple-band (2m 1.25m 70cm) antenna that I could connect to the VHF/UHF output of the IC-7100 for 144 and 432 on SSB or WSJT. The mag-mounts would only be put up at each site where I needed SSB or WSJT. At most Packrat stops I wouldn't need to because I had the HT plus the 7100's 6M on a short wire to cover the lower four bands. I know vertical antennas are a real bad choice for VHF "weak signal" contacts, but I didn't want to risk putting up my hitch-mounted 6M & 2M horizontal halos with so little time left.



K0BAK cont'd

Late Friday afternoon I arrived at Gary's to test; he has all but the 10G band. The testing went smoothly on all five bands. In fact, I don't remember ever testing all bands on the microwave box without any significant issue. (The 9cm band is on the old calling frequency before part of the band was taken by boundless corporate greed and their corrupt government enablers.) Usually, one of the tiny fragile antennas need to be tightened or one of the exposed relays must be re-seated. So, I left Gary's with good confidence that the microwave box would work during the contest rove.

In some other years, I started a rove on Saturday with a decent mobile setup on Mt. Penn in Reading, a good high spot that's not too far from western superstations K3TUF and N3NGE that I would visit afterward. With a junky station and the good parking area at the top inexplicably locked up (at least as of last year), I wouldn't bother with Mt. Penn this year. That freed up at least two hours. Drex and Paul in W3ICC/R would be in the same area on Saturday so I would try to meet up with them two or three times.

Rats at two of my Sunday stops north of Philly in previous roves were not available (Ed DRC moved out of the area and Elliot had a health issue). I sent an email for more Packrats who owned lasers, and quickly Michael KB1JEY and Phil WA3NUF volunteered to be interrupted by a visit. My usual four South Jersey Rats were all available in the afternoon. My rove schedule was now set.

Saturday Rove

Saturday afternoon W3ICC would be in northwest FM29 for an hour. My plan was to start the contest getting general contacts with my verticals in a nearby spot in southwest FN20 for about a half-hour, then go visit ICC in FM29. We'd make our short-distance contacts, and then I'd stay to make more general contacts in FM29 after they left. I'd meet them in FM19 when I was done, and proceed to visit N3NGE in FN20 and contact K3TUF from FN10. Phil was operating his station remote; we would attempt 1km line-of-sight contacts that we made in other years. Finally, I would meet ICC again at their Shady Maple FN10 site. I thought it was a fun and effective plan, leapfrogging ICC with the superstation locations.



Contacts at the start of the contest in FN20ca were difficult; not surprising with those verticals and modest power. Listening for and calling SSB on 6M and 2M for almost 20 minutes netted just one contact, pretty much a waste of time. W3ICC said they were running late, so I decided to stay in my FN20 location, then go directly to their FM19 location bypassing FM29. Operating on FT8 gave just 5 more contacts in 20 minutes. While I decoded quite a few stations, I'm guessing less than 10% of my contact attempts were successful. This was the opposite of my TV van experience in September, where I felt I was making 85-90% of my FT8 contact attempts...just click and log, click and log.

On purpose I got to ICC's FM19 location earlier than their scheduled arrival. Setting up my verticals again, I was slightly more successful at getting 8 Qs on 2M FT8 20 minutes before ICC arrived. It was fun watching their setup, then we made a laser and 3 low-band SSB contacts pretty quickly. 1296 was quite weak but workable. 2304 was strangely too weak in my original parking lot location, so I drove farther away (trying to get more of their antenna

lobe) and oriented my SUV so my microwave box was visible directly to their antennas. After a few attempts we were able to log a contact on their highest band.

Leaving ICC to their normal operation, I traveled back roads I've never seen before for almost an hour to reach N3NGE. Len and Bill K3EGE were the only ops this year, as opposed to the basketball-sized team I've seen during some other visits. Len and Bill were friendly and welcoming as always, despite almost certainly losing net contacts by focusing on me during my visit. The three of us made laser and HT contacts indoors, which also enabled Bill to submit a log.

When I returned to my car to make microwave contacts, we were met with total disappointment in not hearing each other. Len saw a wide noise-like signal when I transmitted, but no voice could be discerned. I couldn't hear anything (the IC-7100 doesn't have a bandscope so I couldn't see if anything at all was being received). We tried all available bands with the same result. Len tried hard and made suggestions but checking several times I couldn't find an issue in the power, IF, and PTT connections; nor loose antennas or relays that often cause problems on *individual bands*. *My 144MHz IC-7100 output power was set to 20% = 10 watts as required by the microwave box's IF input. The microwave box was now unusable.*

The next step in my plan was to be a parking lot across a valley from K3TUF's station, but it didn't make sense to me to go out there just for 3-4 low-band contacts. Dejected and suddenly tired, I drove home directly from N3NGE, and sent an email warning my planned Sunday station stops that microwaves would not be available from me. I now regret not going down to the FN10 meeting place with W3ICC/R, making what contacts I could with my verticals while waiting for them...but a sudden dark mood often results in poor decisions.

Sunday Rove

My first stop Sunday was to Gary WA2OMY's house at 8am, originally to make contest contacts. I assumed we would just spend a few moments trying to make contacts hoping for a miracle. Instead, Gary greeted me in his driveway with his spectrum analyzer. He tried sampling the box's signals over the air and with a direct connection but didn't see anything other than a noise-like signal. He also looked at my IF signal going into the box from my IC-7100 radio. I am grateful to Gary for taking time out from the contest to see if there was an easy fix to the microwave box's problem, as well as the many other times he's helped get this non-RF-engineer on the air. We finished the visit with an unsatisfying set of four low-band contacts.

I was now a bit behind schedule having spent more time than planned troubleshooting at Gary's, but without trying microwave contacts in subsequent visits the lost time should be recovered. My next stop at Tom KA3FQS went smoothly as it always has for laser plus four low-bands, the best I could do the rest of the rove. At new rove stop Michael KB1JEY's, 4 contacts were made while an unusually affectionate Drake the cat was pleasantly distracting. Jim WA3EHD made laser and HT contacts with me in his basement. The microwave box had given Jim his only 10G contact in the past by using his table-top 10G system with horn antenna pointed through his front window to my vehicle on the street, so it was especially unfortunate the microwave box was kaput for him.

My next stop was another rove first-timer at the home of highly successful contester Phil WA3NUF. I enjoyed seeing his impressive and organized station, and he was the only op with a serious tripod-mounted laser transceiver. After making the laser contact, I reached for my 3-band HT in the same box I carried my laser, but the HT was missing. A search of the car was also unsuccessful. Apparently, I left the radio at Jim's house, which was almost an hour round-trip from Phil's. After mounting my 2M-70cm vertical, Phil and I made 3 low-band contacts on SSB, deferring 222 until I could come back with my HT from Jim's. Immediately after my 432 contact with Phil, Michelle KB3MTW jumped in for a surprise contact; Michelle and I went back to also make 2M and 6M contacts on SSB. I promised Michelle I would call her when I returned with my HT to attempt a fourth contact on 222.

KOBAK cont'd

After retrieving my HT, which was fortunately easy to find in Jim's basement, I drove back to Phil's. This misadventure got me further behind schedule. After parking on the street for a fast getaway, I made a quick contact on 223.5 with Phil because he monitors that frequency during the contest. After calling Michelle, we also were able to make a 1.25M contact although it took a few tries with just my HT and rubber ducky antenna.

My last Pennsylvania stop was to Doc W3GAD, who figuratively got me on the road for this rove by suggesting taking the microwave box. Normally my last two PA stops would be Jim WA3EHD then Elliot K3JJZ in Northeast Philly, followed by a drive down Roosevelt Blvd and across to New Jersey. Having Doc in Newtown be the last stop in Pennsylvania allowed me to avoid most of the craziness of the northeast portion of Philly albeit being longer in distance than a more direct route across the river into NJ. Contacts with Doc typically take a little longer than other stops, but without microwaves it wasn't too bad. Before I left Doc's I warned my four planned NJ stations that I was about an hour behind schedule.

Soon after I crossed into NJ, I was struck again at how all the roads radiating from the Delaware River bridges look the same to me. If you blindfolded me until a few minutes after we crossed the Delaware, I could tell you I was near the river in South Jersey but would have no idea where. That's not a put-down, just an observation. After branching away from the bridge, I enjoyed seeing Joe KC2TN's big 40M beams again as I approached his house. He opened his garage door right after I arrived, so I brought in my laser + HT to his spiffy dark-wood station. After our laser contact, he used his Flex contesting radio to make three FM contacts to my HT. I remarked how I hoped he got all his SDR software settings back to normal afterward.

As I drove the relatively short route from Joe's house to Mike WB2RVX's superstation, I'm always reminded of key intersections I had to remember in my past charity bicycle rides from Philly to Atlantic City...a ride I can no longer hope to finish again. Mike's contacts with the microwave box were always fast and clean in previous roves, so I especially missed having the box with me now. Mike didn't have normal high-power 6M capability, but his FM HT included 6M. I was happy I could go out to the car to make an FM 6m contact with Mike on his HT for his only 6M contest contact. Although my radio was not as happy as me based on my IC-7100's control display glitching while I was transmitting.

Other than the Delaware crossing, the ride from Mike's to Bob W2SJ's house is the longest segment at over an hour. Bob was in good spirits (when is he not?). We made our contacts easily, and I hustled through cold rain to my car on the street, carrying my laser + HT cardboard box that now included a gift I would deliver from Bob to Ray N3RG. The route to and from Ray's house as prescribed by Google Maps was different than other years, but the travel time was close to that on my rove plan. Ray was welcoming, as he always is, and I got to admire his impressively automated station again. After our contacts, I stayed a little longer than at other rove stops due to his place being the end of my rove plan, but I was more tired than I remember in other years so left earlier than normal.

The two-hour ride back home was blessedly uneventful. All my Packrat visit contacts were logged on paper, and I entered them into a Cabrillo log between 4am and 5am Monday when I couldn't sleep, almost certainly due to the unusual quantity of caffeine that kept the rove going.

Summary Stats

12 PackRat stations visited, 377 miles driven, 19 hours total on the road, 69 contacts during visits including 12 laser contacts,. Overall: 83 contacts, 205 Qpoints x 21 Mults = 4,305 claimed score

The Wayback Machine In CHEESE BITS, 50 Years Ago

Nibbles from February 1973. Vol. XV Nr 2 de
K3IUUV Bert
(author's comments in italics)

“Our Prez Sez”. Prez Walt, **K3BPP** thanked the “crying Towel” participants for their tales. He also thanked Harry Brown, **WA3NGK** (later **W3IIT**) for him and his team’s efforts in pushing the club to a top score in the January contest. And he noted that planning for a good score in June was underway, with Tony, **K1SFF/3** (later **W3HMU**) taking the chairman role. He closed by reminding us of the coming homebrew night.

Calendar. February 7th, June contest planning meeting, headed by Tony. February 21st regular meeting where the topic will be Homebrew Night. Finish up your project to be in the running for an award. Several prizes will be available. Moonbounce committee meets next month. May 5th, planning underway for the Ladies Nite celebration, to be held at The Buck Hotel.

New Products of Interest to Hams.

W3NSI, Lyn’s always interesting article offered up the following new items: 1) Ten-Tec Model 315 receiver. This new receiver covers 10 through 80 meters. All solid state, with permeability tuning and a slide rule dial, and a 100-kHz calibrator built-in. Most of the circuits are contained on 5 plug-in boards. Price is \$229. 2) Swan Transmitter / Receiver units. Swan released a set of three similar designs, differing in power level. The SS-15 (15 watts), SS-100 (100 watts), and SS-200 (200 watts). They are all 6” high, 12-1/2”

wide, and range in depth from 10” to 12” depending on power level. Priced at \$579, \$699 and \$779 respectively, for the three models.

VHF Report. Joe, **W2EIF** noted a decrease in activity on 6-meters, but saw some improvement on 2-meters. He reported hearing some poor signals during the contest, with “a lot of overmodulation, flat topping and even oscillating rigs!” He noted that **W8DGF** and **W8III** in Ohio are heard here regularly. And he reported that Carl, **W2AZL** worked **W6PO** in California via **moonbounce** on 2-meters in January. Carl was using a quad of 11-element Cushcraft antennas and a kW amplifier. The California station also uses a kW and a tiltable array of colinear beams. *(I note that **W2AZL** designed the 2-meter converter used by most of the club members.)*

Membership Report. Application received from **K3HIN**, Richard Albert. Sponsors **K3JJZ** and **WA3BIV**.

Contest Results. The members scores in the January contest were listed, showing contact quantity, sections *(ARRL sections were the multiplier then, not “grids”)*, and total score. 60 logs were submitted, with 59 members participating. Top score in the contest was our recent SK, Stan, **K3IPM**. Yours truly placed 6th, with 353 contacts. Others still active in the list were El, **K3JJZ**, Walt, **K3BPP** and Ron, **WA3AXV** (now **W3RJW**).

Official Bulletin 410. Issued 1/19/73, this bulletin detailed the highlights of the recent ARRL board meeting. “A major action was the unanimous adoption of a resolution expressing deep concern over the apparent trend toward

restrictive regulations in recent FCC Actions.” They directed league officers to undertake a vigorous program “seeking reasonable philosophies and interpretation.” They identified repeater operation, message traffic handling and phone-band sub-allocations as being of particular interest. Additionally, the Board chose AMSAT to receive the Technical Merit award.

The Surprising Moon. An interesting article submitted by Tony Slapkowski, **WB2MTU**. Tony described some of the new knowledge about the moon that has been gleaned from the recent Apollo missions. He related the contrast with earlier “opinions” in many cases. In this period, Tony ran “The VHF Space Net” and conducted frequent contests where participants were awarded NASA badges and patches.

Tidbits. Ralph, **WA3FOF** received an ARRL Public Services Certificate, presented at the club’s January meeting. The certificate was in recognition of his work during the Hurricane Agnes disaster, and was described in the November 1972 **QST** issue. The Mobile Sixers club will be conducting classes at the Springfield High School for anyone wishing to upgrade their license, and Scott Lusky, a representative from Scott Paper Company will be teaching beginner radio classes at the Franklin Institute on Saturday mornings.

Philadelphia Area Repeater Association. Two years prior, the “Les Voyageurs” and the Main Line VHF Association merged to become what is now known as the Philadelphia Area Repeaters Association (**PARA**). The new officers were announced. They included Marsha,

WA3TEM as the recording secretary. Marsha was the daughter of our own Harry, **W3CL**, and frequently served as the typist for Cheese Bits. A map attached to the article showed the location of a number of repeaters in our area. They ranged from Souderton in the north to Newtown Square on the west, to Neshaminy in the northeast and “Waterford Works” in the southeast in Jersey.

Swap Shoppe. By W3ZRR. (*Always nostalgia. Now we use the club reflector.*) For sale by Marty Cooper, **WA3IFQ**, a Collins KWM-2 in “super mint condition.” \$625 cash, no trades. Also looking for a 312B-4 or 5. From Joe Calder, a 4-element 6-meter Telrex antenna. Also, a modified Sixer with external xtal socket and 12-volt supply. \$35 or best offer. Still available from Herm, **K3GOZ**, a 6-meter Saturn Halo with matching transformer. Includes bumper mount bracket and coil spring. Original cost \$8 (!). Also, a Shakespeare 6-meter whip. Contact Herm for a reasonable deal. A number of items from the estate of W3AJO were listed, including: BC-342 surplus receiver (\$20), GR-805 signal generator \$(20), Hallicrafters HT-32B (\$285), and an AR22 rotor for \$15.

Ads. *The February 73 issue included the half page back cover ad from club member Ham Buerger (HAM-M Jr (TR44) Rotor for \$69.95, Model PP Phone Patch {remember them} for \$14.95.) The usual 27 business card ads were included in this issue. I note the current Cheese Bits Ad complement includes only 4 small ads, a ¼ page from Beko and a ½ page from Down East. If you’d like to join them, contact the ad chairman, Bob,*

W2SJ.

Miscellany. *Postage for this issue was a single 8-cent "Flag" stamp. (7 double sided, 8-½ x 11" sheets). (Don't forget, current postage went to 63-cents on January 1st, and a penny postcard now costs 44-cents!) As usual, many "folksy" comments about members, their families, and activities were included in this edition of Cheese Bits. If interested, or for more detail on any of the above items, visit our website (www.W3CCX.COM) and read the full issue scanned by **K3IUV** (me), and posted on the website by **WS3O**, our webmaster. I have also posted the club Officers history, club Membership history, and Packrat Inventory (updated frequently) on the **W3CCX** website. These files are password protected, and only accessible to registered members. Are you registered? I hope you enjoyed reading these bits of nostalgia as much as I did in writing the article. If yes, you might let me know. Thanks to those that did.*



*thirty, de **K3IUV** (comments or corrections to: K3IUV@ARRL.net)*

W2DRZ Controllers CT-2 Antenna Controller

Hi. This month I am featuring the W2DRZ Antenna Controller. It can be used to automatically track the moon, and also to provide handy control of your terrestrial antennas. It can connect to a variety of position sensors, but the easiest to use is the potentiometer that is already in your rotator. You can directly connect the pot to the controller and it will read out your current position (see below). Then, using the free tracking program, DrzTrack, you can track the moon or sun, or automatically aim the antenna at known station locations.

The full details for installing and using the controller and software are on the web site at: <http://w2drz.ramcoinc.com>. The web pages also have information on enclosures, connectors, and other related products. Regular price \$270,. Price for Packrats and readers of Cheese Bits: \$199. **To Order, email k2txb@comcast.net, or call 856-866-6611 .**
73, Russ K2TXB

In the Ad, I mentioned connecting the potentiometer in your antenna directly to the controller. This can only be done if the maximum voltage output from



the pot is no more than +5 volts. There are a number of antennas that meet this specification, but make sure yours is correct. Higher voltages can damage the CT-2 controller. For example. you can directly connect the CT-2 controller to a Yaesu G5500 control box. The G5500 box supplies power to the CT-2 as well as the required 0 to +5 volt outputs from the azimuth and elevation rotators. You can do the same with the Yaesu G800 - G1000 series rotators. Some of them have a special DIN plug that provides all the signals and voltage . Others will require opening the Yaesu control box to connect to the remote control terminals. You can also bypass the control box and connect directly to the rotator pot output. In this case you might have to rewire the pot connections in the rotator to provide the necessary voltage. If you do that, the existing control box would only be able to be used to provide the power to turn the rotator, and you could more easily do that with a 12 volt power supply. All rotator control would then be done via the CT-2 controller. An arrangement like that would normally only be used for EME antennas, but one could also use it in a case where the original control box was not available. See w2drz.ramcoinc.com/din8jack.htm for wiring and pin-out details.

The DrzTrack program has a special mode for control of terrestrial antennas, called the local control panel.. Use this link: w2drz.ramcoinc.com/LocalControlPanel.htm for details.

For all other information use the tabs and indexes in the web page w2drz.ramcoinc.com/index.htm.

Morse Code is Back

Here's a Smithsonian Magazine article for the general public on Morse code. Includes some history and an explanation of its advantages. It seems people are charmed by its effectiveness and simplicity in the age of Twitter / Facebook. Its described as both a code and a language. Interesting reading and quality writing (as you'd expect from Smithsonian). See it at <https://www.smithsonianmag.com/innovation/morse-code-back-looking-ditch-twitter-180981309/> —W2BVH

More on Morse

Kids as young as 5 are being charmed by Morse code and becoming fluent in it. This Daily Mail (UK Paper) article explains how kids who hear Morse used by their favorite KPop bands have latched onto it and ended up as Hams. The Long Island CW Club is teaching Morse to anyone who cares to connect to their Zoom lessons. To the kids it's a "secret" way of communicating. See <https://www.dailymail.co.uk/sciencetech/article-11640643/Morse-Code-making-comeback-Children-young-FIVE-learning-it.html> —W2BVH

The Inner Beauty of Basic Electronics

The web page of the IEEE Spectrum Magazine has a nice article showing magnified views of the insides of passive electronic components. The components are sliced in half and the photographed close up. A nice mixture of art and science. The photos are captivating enough that the people who took them ended up making a whole book of these close-ups. See it at <https://spectrum.ieee.org/open-circuits#toggle-gdpr> —W2BVH

Thanks to all Packrats and 'Rat friends who voted for my QST article about my 2022 fly-away station for Florida parks.

I got a call today (1/30/23) from our new Atlantic Division Director Bruce Famiglio that my article won. I couldn't answer the call live because coincidentally I was activating a POTA park in Florida at the time, with substantially the same station I wrote about in the article.

-- Pete K0BAK

Get Going on Meteor Scatter

Here's a one page list of things you need to do to get going on MSK144. If you've become familiar with FT8, getting QSO's off flying rocks should be pretty straight forward by following this list. <https://www.parkerradio.org/community/general/simple-guide-to-meteor-scatter-msk-144/>

I ran this list by Ray N3RG (experienced rock communicator) and he thought it was pretty good. He had the following advice to add on to the list above. Here it is:

"Check out chat activity on the internet at pingjockey or better yet pingjockey client (PjClient at n5tm Version 1.7.31.0). The client uses the pingjockey site and presents it in a much better way.

It's important to set up the radio and the interface correctly: passband 3KHz, agc=off, wsjt rx audio level around 50% (green scale).

Six meters is much better than other bands 50.260, eastern stations (that's us) call CQ 2nd sequence (odd numbered times), when their antenna az = west."

Meteor Shower Calendar

Here's a Meteor Shower Calendar show the dates for all the Meteor Showers in 2023. They're correct for our location in the Northeast. <https://www.timeanddate.com/astronomy/meteor-shower/list.html>

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Reminders:

- Ham Cram starts at 9:00 am
- Talks start at 10:15 am
- Vendors close at 3:30 pm
- Banquet: 6:30 pm (extra fee)

Theme: Electric Vehicles and Related Technologies



Keynote Speaker :
Lee Goldberg, 3:40pm ET

Contributing Editor of Electronic
Design Magazine
Author of the book "Green Electronics"



Photo: Peers.com (3)

50+ Talks, Workshops, Tutorials, Demos, and Vendor Faire!
Robotics | Drones | Gaming | EV Car Show with Ride & Drive (10am to 2pm) | OOP University (Python & Java)

Some of the many talks at TCF'23:



Jonathan Allen
How Green is an
Electric Vehicle?



Joe Jesson
Global Communication
After Power Failure



Chuck Knight
Program your EV with
Python



Lou Judice
WordPress Bootcamp



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Saturday March 18, 2023
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Info: <https://hackiothon.pages.tcnj.edu>

Ham Cram Session & Exam:
Saturday March 18, 2023
Get an Amateur Radio License
in ONE DAY at TCF!
Cram begins at 9:00 am

Photo: Peers.com



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** The ITPro (Friday) Conference requires separate registration.



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<https://electrical-computerengineering.tcnj.edu/>



Photo: Peers.com



The 2023 TCF™ is sponsored by The College of New Jersey, its School of Engineering and supporting organizations.

Events

For inclusion, please direct event notices to the editor.

York Hamfest - Hamfest - April 29, 2023. Spring Grove PA. Sponsored by York Hamfest Foundation. See <http://yorkhamfest.org> for details

Firecracker - Hamfest - July 1, 2023. Sponsored by HRAC. Harrisburg PA. Details at: <http://www.w3uu.org/firecracker/>

Sussex County (NJ) Hamfest - Hamfest - July 16, 2023. See <http://scarcnj.org> for details.

2M Spring Sprint -Contest- Date TBA

222 MHz Spring Sprint -Contest - Date TBA.

432 MHz Spring Sprint -Contest- Date TBA

Microwave Spring Sprint -Contest- Date TBA

6M Spring Sprint -Contest- Date TBA

North American Meteor Scatter Sprint - Contest - August 2023. Date TBA. Details will be found at <https://kv5w.com/2022/07/24/na-meteor-scatter-sprint-digital-rules/>

Raspberry Pi Resources

Neil Goldstein W2NDG's presentation from last month's Packrat meeting and a host of additional resources pertaining to Raspberry Pi's (mostly as hyperlinks) can be found at <http://fofio.blogspot.com/2023/01/raspberry-pi-applications-for-ham-radio.html>

Copper Foil Vertical Dipoles

Here's a YouTube video of 145 and 433 MHz vertical dipoles made from copper foil tape on a window. They're functional if not super performers. Includes swr sweeps and some test QSO's. Entertaining and good exercise in trying to understand British English. <https://www.youtube.com/watch?v=SpB070sgjE>

Call For Papers

Microwave Update 2023 (postponed from 2020, 2021, and 2022) plus Northeast VHF/UHF Conference April 14 & 15, 2023 Hilton Garden Inn @ Bradley Airport, Windsor, CT

Details for registration and hotel coming very soon at microwaveupdate.org

Presentations and papers for PROCEEDINGS needed (you've had three years, so there must be some good stuff out there).

More info, email me: Paul Wade w1ghz@arrl.org

KC3BVL Friday Net

Lately Packrat Jim KC3BVL has been conducting a Friday night net with schedule as follows:

7:30 pm	144.160
8 pm	50.160
8:30 pm	222.150
8:45 pm	1296.160
9 pm	432.160
9:15 pm	2304.100

Reminder: there are 3 FT8 VHF / UHF Activity Contests each month. For info see: <http://www.ft8activity.eu/index.php/en/>

For those interested in an online "Contest Only" event calendar for VHF+, see <https://www.qsl.net/n2sln/contestcalendar.html>

1296 MHz Activity Night

There's an informal 1296 activity night in the NY/ NJ/PA/CT region (and beyond) every Monday night starting around 9:30 pm (or so) on 1296.110. No coordination, just jump in and say hello W2BVH

222 MHz Activity Night

There's been an informal 222 activity night in the Northeast (and beyond) every Tuesday night starting around 7 pm (or so) Eastern Time. ON4KST is being used by some to coordinate Q's when direct CQ's are weak. W2BVH

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PLEASE SEND IN 2023 DUES

Club dues are due as of Jan 1st, 2022. Go to
https://www.qsl.net/w3km/MtAiryRC_Dues.htm and
use the "check here" link to see if you already paid.
If not, enter your callsign and click on "PayPal"

AS OF 1/8/23 21 DUES REMAIN UNPAID !

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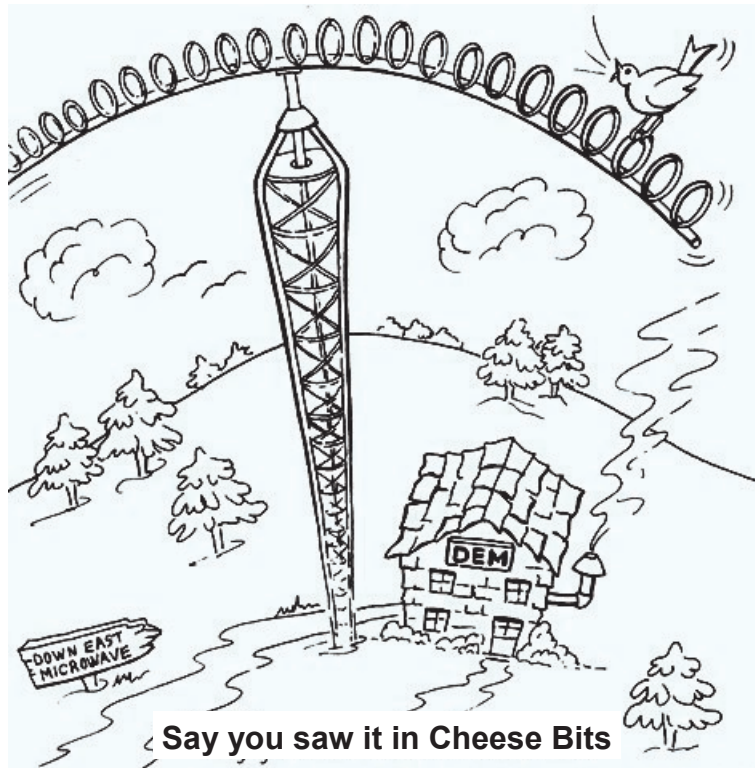
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