



CHEESE BITS

W3CCX
CLUB MEMORIAL CALL

ARRL
Affiliated
Club



Volume LVIII

June 2017

Number 6

PREZ SEZ:

June is here and that means Es season is upon us. It looks like the DN grids have been blessed with some really good openings, both to the east and to Japan. Maybe that will happen to us in the east soon. I joined the fun on May 24 and 25 just to be sure the station was working. Standby listening to the bands, or you can set an alert on DXMAPS that will send you an email when possible contacts above a specified distance occur.

Dayton was at it's new location this year and it sure was most fun to get together with many like minded VHF enthusiasts. Steve, W1SMS and I attended the VHF Banquet which is back with a great crowd of weak signal aficionado's. And the food was good too. We certainly enjoyed our obligatory visit to Jay's Seafood downtown, and the Contest Suite was an active place from Wednesday evening up through Saturday evening, with the main event taking place on Friday evening. It highlighted the "Spurious Emissions" band. If you haven't heard what Sean Kutzko, KX9X and Ward Silver, N0AX have put together, you need to make it to Dayton at least once to hear them. What a great way to enjoy a weekend of radio fun!

The new site at Dayton is good; there is room for improvement, but that is taking place. Traffic was improved significantly from Friday to Saturday when everything seemed very smooth. They ran many shuttle buses from a good number of parking facilities around the area.

Inside expositions were spread across a number of buildings and in the center was a very good number of food vendors with a vast improvement in choices over the old location. I enjoyed several 'walking tacos' that were exceptional.

As for the flea market, the fact that it was on a grassy surface, didn't mesh well with the rain that came down on the two days that I was in attendance. Mud was the word of the day, but they were equipped with quite a number of tractors at the ready to pull stuck vehicles out of their predicament.

It's now time for our annual trip to 'the mountain'. It's a must visit for everyone. You really need to experience conditions from the mountaintop. Come when you can and leave when you must, but do visit to contribute to this major event with the club.

This year we will have a special time running EME on two bands. The EME'ers will be up with the rest of us on Friday setting up and running stations that evening to be sure everything is working.

We arrive at Big Pocono State Park on Friday around noon, most of us stop at the Village Inn for sandwiches and then up to the top. I suspect the Jersey Boys will be already getting things going as they like to be first in operation. We use commercial power and have a full kitchen facility setup to feed the group.

Hopefully all of the towers get into the air on Friday, then Saturday is spent getting the stations operating to their full potential. Meals are delivered at the club tent at 8AM, Noon and 5PM.

Pack Rats **CHEESE BITS** is a monthly publication of the
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PACKRAT BEACONS - W3CCX/B

FM29jw Philadelphia, PA
50.080 144.300 222.062 432.290 903.072 1296.264 **2304.043**
3456.200 **5760.195** 10,368.034 MHz (as of 1/17, red = off the air)

MONDAY / TUESDAY NIGHT NETS

VHF/UHF Monday:

TIME	FREQUENCY	NET CONTROL
7:30 PM	50.145 MHz	N3RG FM29ki Ray
8:00 PM	144.150 MHz	K3GNC FN20ja Jerome
8:30 PM	222.125 MHz	KB1JEY FN20je Michael
8:30 PM	224.58R MHz	W3GXB FN20jm Bob
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

Thanks to all of the band captains who have been diligently working for these past months, and are likely working now to make sure everything is ready.

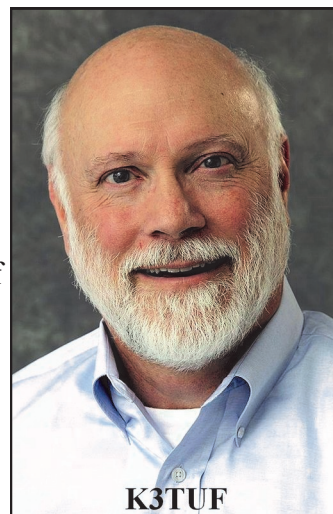
There are several DXpeditions of interest to us originating from our group. First is W3CMP going back to HH land. I would go but have other obligations and will return at another time. Also K5QE is heading for FO10, north in Canada. You'll want to keep an eye out for these stations.

The registration web page is ready for the Mid Atlantic VHF Conference that takes place this October. You need to go to the Packrat website: <http://www.packratvhf.com/> and get yourself registered. **No time like the present.** This year will be another great one now that we are back with our own conference. It's at the same location in Bensalem and it's good to support our club with this major event. Co-Chairs Rick, K1DS and Guy, WA3JZN are keeping things happening with the conference.

I want to say '**Thanks**' for five years of support in this job. It's all because you support our club, it's officers and activities that we get everything accomplished. I'm not going anywhere, just able to concentrate on special activities, including June VHF Contest and the Mid Atlantic VHF Conference along with our Tri-Annual VHF Super Conference.

And as I always say,
Lets work on lots of bands,

Phil, K3TUF



MAY MEETING PICTURES



Tnx K3JJZ for Pix

SPRING SPRINT

RESULTS

Here are some more log summaries and reports from the Spring Sprints. They arrived after the publication date of the May Cheese Bits

432 MHZ

From Bill AA2UK

I felt the activity for the 432 Sprint was excellent. However I was disappointed with my score. I worked 38 Q's and 19 Grids. In addition I heard 7 grids that I wasn't able to work usually due to the large number of stations calling them. Some of the close in grids were missing from action. I feel that the ON4KST chat page was a great tool....
73, Bill AA2UK

From Dave W2KV

I had fun with the Sprint. Running here 100W to 17 el at 125 feet. My FT-847 is kinda deaf on 432 and also discovered that my frequency was off by +1.2 kHz (not uncommon with the 847 it seems). Best DX was VE3ZV at 354 miles, probably my best ever on 432. Also worked VE3ELE in both EN92 and FN02. Worked N1JEZ in FN44 and ran with K1DY but nada either way. I thought activity was pretty good.
73 Dave W2KV

From Bob W2SJ

Had a blast in the Sprint...As you know I am somewhat CW challenged so this time I decided to work all the CW I could decipher and then any other contacts along the way. I went up band to .186 to test my audio for the SSB contacts later. Within seconds KA3FQS answered as he "saw" me on his Flex. You can't hide anywhere these days :-))

After that I started picking out and working the CW contacts. The activity seemed very good unless you were not doing CW. It's amazing and great to see that CW is very much alive.

I use a 19 el K2RIW at about 48ft and 200 watts with a preamp in the shack until I get my mast

mounted preamps installed. So here are the results:

39 Q's, 15 grids, 585 points and 7259 km. Best QSO was with VE3ZV in EN92 same as on the 222 sprint. Tried with VE3DS but could not complete. SSB Q's 19 CW Q's 20

ON4KST is a great aid for making contacts. I use it after making as many contacts as I can first. Seems like a lot of the guys start out there first giving the casual listener the feeling that the band is not that active. We all have to remember as WA3NUF puts it, "this is a Radio contest" and keep our operation balanced.
73, Bob W2SJ

From Doc W3GAD

Got on Late and had to quit early. Still have a few limitations with the right shoulder recovery which keeps the CW hand in a sling. Managed some pretty sloppy CW but made the Q's anyway FN42 was best on CW.
Summary is 16 Q's and 6 grids - Used ON4KST for the first time and it helped find a couple of good Q's. Like Dave, I missed a lot and also had challenges writing to the correct screen. The chat page does not accept log entries (HI HI)
73, Doc W3GAD

From John K3MD

I had fun, quit around 0300.. slowing down. Chat page very useful, as usual. Nice to check the MM preamp and AM-6155. Many Q's made just listening and answering CQ's on CW! Worked VE3, VA, OH, as well as many stations in NJ, EPA, MDC, CT, etc.
73, John K3MD

MICROWAVES

From Lenny W2BVH

3 Bands (902, 1296, 2304), 17 Q's, 11 Grids. About 2300 Km cumulative distance. My first microwave sprint. Had a lot of fun in this event. Very happy to have completed 4 Q's on 2304: with leaves on the trees (some as close as 15') this was a better result than I expected. You could hear the multipath through the vegetation! Had to jump out the inline cavity filter on 902 to go up to 903 for a Q with WA3DRC.

... Sprints cont'd

(W2BVH cont'd)

Thanks to the sponsors and participants!
73, --Lenny W2BVH

From Mike N1JEZ (N.E.W.S.)

QSOs = 7 Max Dist(km) = 535 Total Score = 2,189

Club: North East Weak Signal Group
Conditions seemed pretty poor. I was unable to complete with station I usually work. It was still fun trying. See everyone in the 6M Sprint.
73, Mike, N1JEZ

6 METERS

From Rick K1DS

This was the only Sprint I was equipped for this spring. I turned on the rig at about 8:30 PM when we returned from a social dinner out and the band was quiet. I was surprised that my rig was actually putting out 100 watts into my G5RV dipole in the attic. I managed to put 12 contacts in the log, mostly locals and several of them Packrats including WS3O, N3RG, W3GAD, W2SJ, W3SZ and WC2K. I was just about to shut down when W5PR appeared on 50.130 with QSB signals from 59 down to nothing. I quickly called and worked him from his grid in EL29, a contact of 1352Km.

73, Rick, K1DS

LATE CUMULATIVE REPORTS

From Tom KA3FQS

I enjoy the sprints because of their brevity. So far this year I have participated in the 144, 222, and 432 sprints and while these are not record setting scores here are my results.

Band	Q's	Grids
144	36	11
222	27	8
432	24	7.

Special thanks to K1RZ for making an extra effort to work me.

73, Tom KA3FQS

From Pete K0BAK

My rove plan for 4-hour sprints is now pretty solid. After Rick K1DS clued me into a better FM19 location in Gap, which only adds about 5-10 minutes to the rove, I'm comfortable with my plan to cover four grids. I start in Mt. Penn (FN20bi) at the highest location in the Reading-Gap grid corner area and spend about 1.5 hours at that best location trying to collect as many Qs as possible at the start. I then operate near the Shady Maple complex (FN10xc) about 9:00-9:30. Lastly I go down to locations west of Gap (FM19xx) and east of Gap (FM29ax) in the last hour.

The **144 sprint** was pretty successful; though it appears I ended just out of the money in 4th. Didn't help that a husband and wife team tied for 2nd in the same rover, with a perfectly matched score. Do I sound bitter? Or maybe jealous since my wife has absolutely no interest in sharing roves with me?

144: 73 Qs, 29 mults, 13 unique grids
Thanks to clean sweepers who got me in all my grids: K1RZ, K3TUF, N3NGE; and all-but-one: AA2UK, N3JDR.

I decided not to go out for 222 because of predicted sustained rain. My cable entry scheme is not good enough for a lot of rain.

Seemed to do OK in the **432 sprint**, but it's always disappointing compared to the number of Qs on 144. My spots on ON4KST and Packrat chat rooms generated a few Qs, but otherwise didn't get many responses to my CQ runs. Because of high winds when I was outfitting the minivan, I wasn't prepared to raise the antenna higher at the first stop, though it actually wasn't that bad up on Mt. Penn. A few sketchy people up there that night, but I'm getting used to it. The drive from Shady Maple to Gap through Amish farms was **olfactorily challenging**, providing a surprising variety of freshly-spread natural fertilizer smells.

432: 36 Qs, 19 mults, 12 unique grids
Thanks to clean sweepers who got me in all my grids: K1RZ, K3TUF, W3SZ; and all-but-one: AA2UK, WB2RVX, W2SJ.
73, Pete K0BAK

Analysis: W3CCX June Contest QSO's Vs Distance

Here are some data from the last three June VHF Contests. The table gives some summary data for contacts between W3CCX and other fixed stations (these should be more consistent than looking at the rover station activity). All three parameters are a measure of the activity and band conditions. The plots show the distribution of contacts as a function of distance.

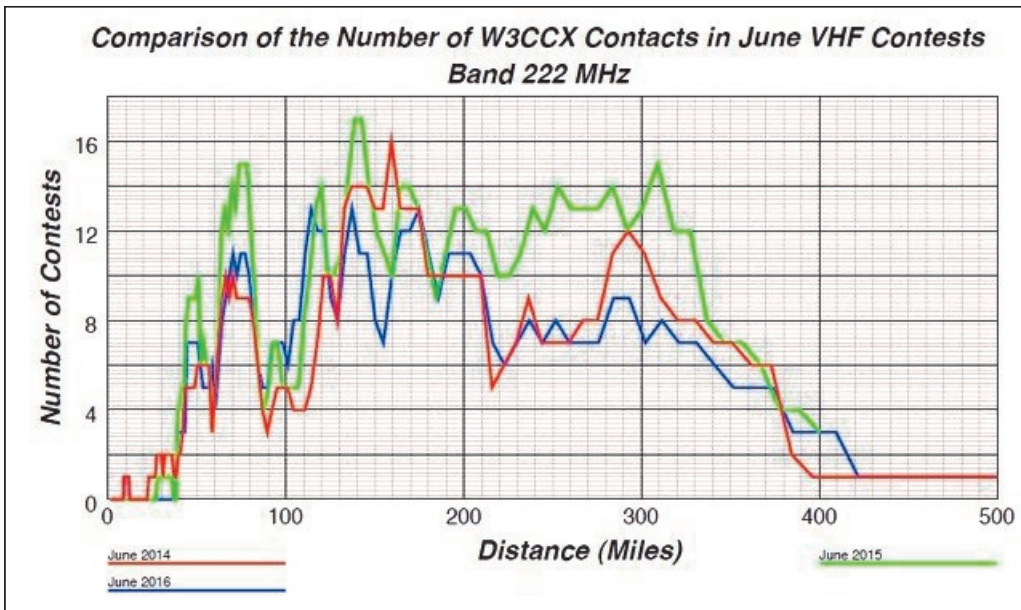
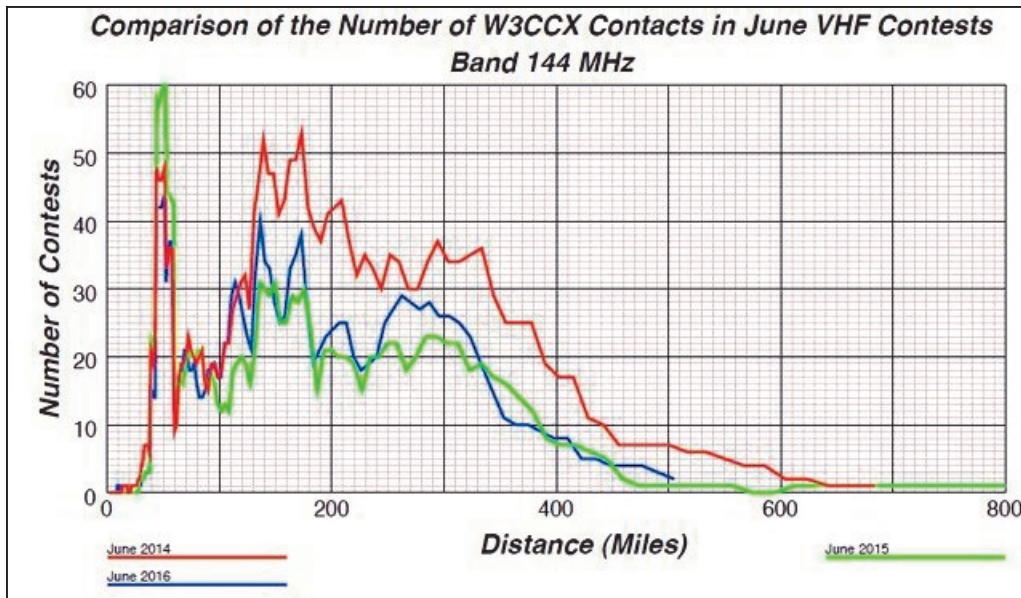
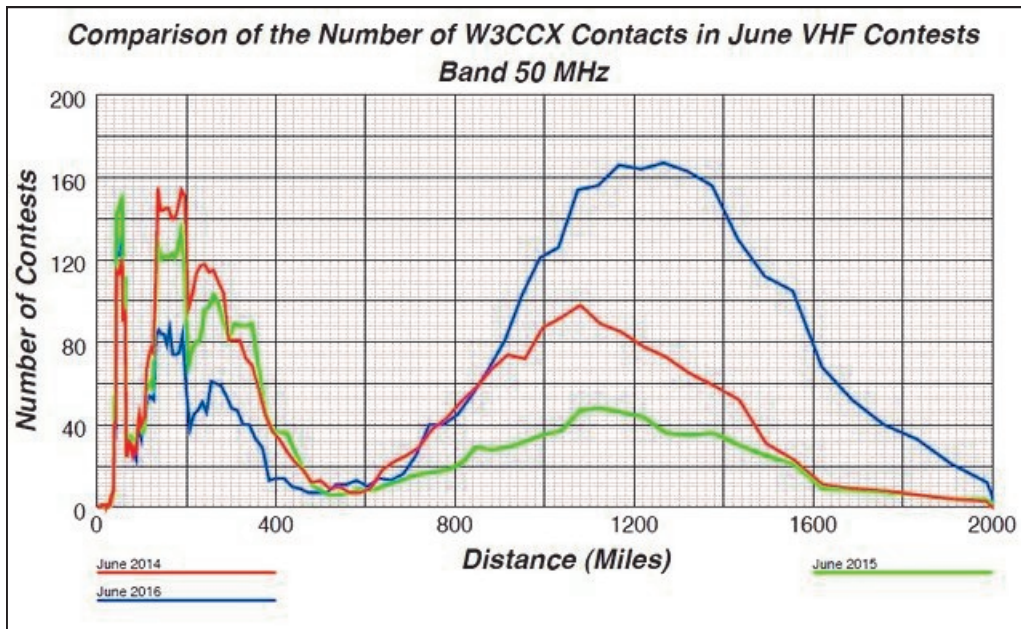
Table summarizing activity between W3CCX (FN21hb) and fixed stations during the June 2014, 2015 and 2016 ARRL VHF contests. **73, Ben WA3RLT**

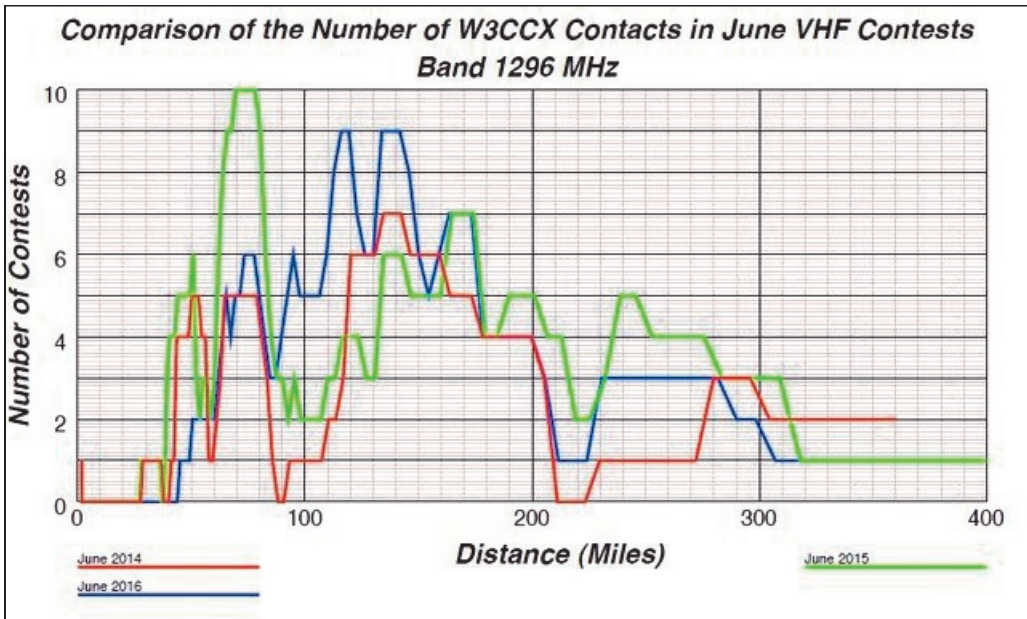
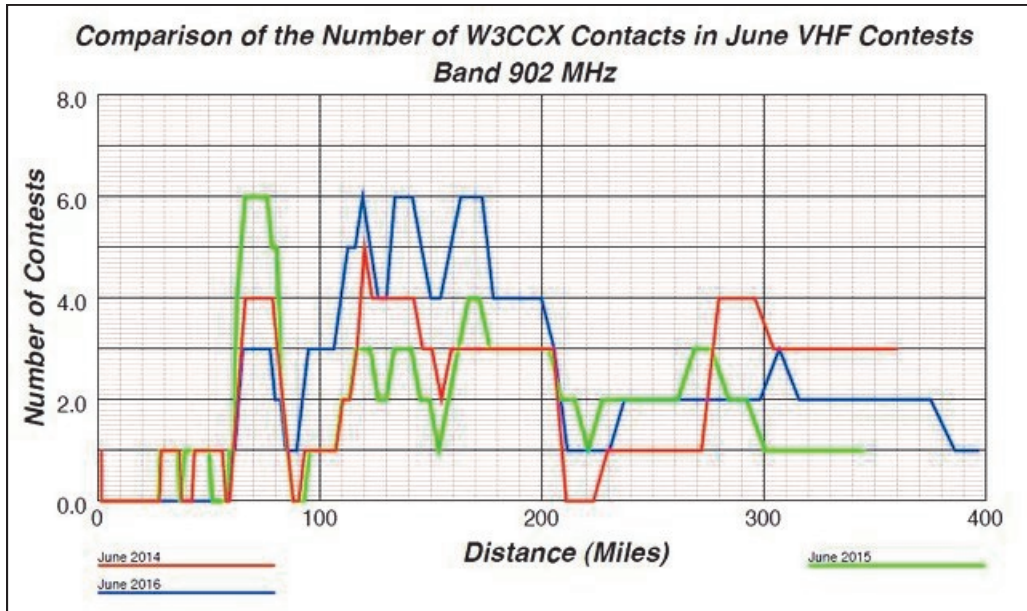
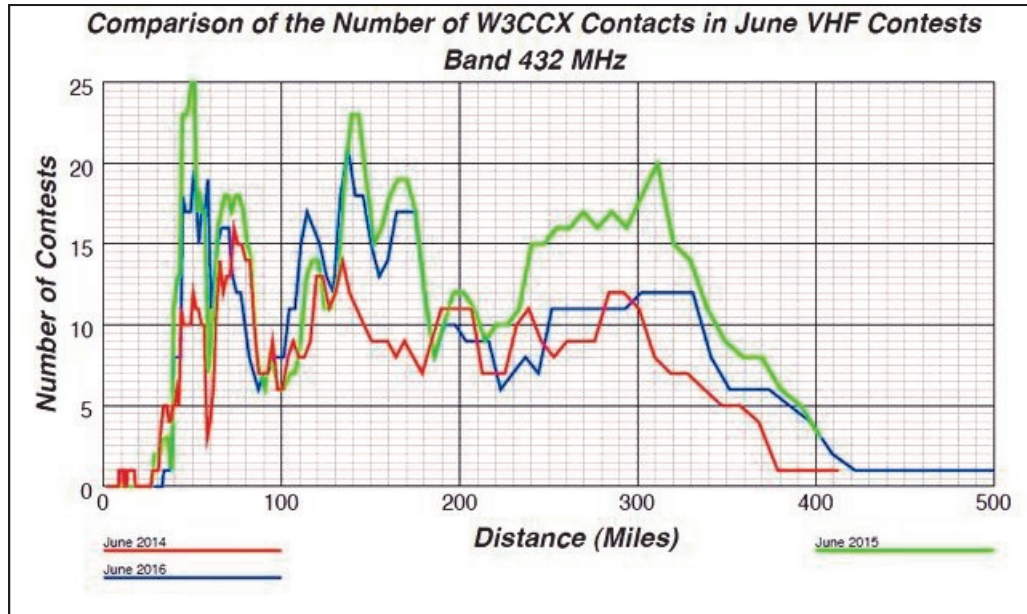
A similar analysis of Packrat Q's vs. Distance in the **January** contest will be published in an upcoming issue of Cheese Bits. --W2BVH

Band	2014			2015			2016		
MHz	QSOs Fixed	Max. Miles	Median Miles	QSOs Fixed	Max. Miles	Median Miles	QSOs Fixed	Max. Miles	Median Miles
50	662	3366	155	585	3366	132	619	3680	206
144	254	516	129	184	613	88	196	386	108
222	64	434	122	82	309	119	63	434	111
432	80	318	93	117	311	108	95	434	103
902	19	279	114	18	268	109	20	307	132
1296	27	279	109	36	309	88	30	307	111
2304	12	226	64	18	226	80	8	160	109
3456	11	226	89	16	226	80	7	155	89
5760	9	226	89	10	226	114	4	160	155
10368	5	89	42	11	226	89	5	160	114

Note to hard-copy recipients of Cheese Bits: The table above does not render correctly on paper. A pdf is available from the author and from the editor.

Note, in the following graphs, the y-axes are labeled "Number of Contests" and should be labeled "Number of Contacts"





THE EASTERN PENNSYLVANIA CONVENTION AND WARMINSTER HAMFEST REPORT

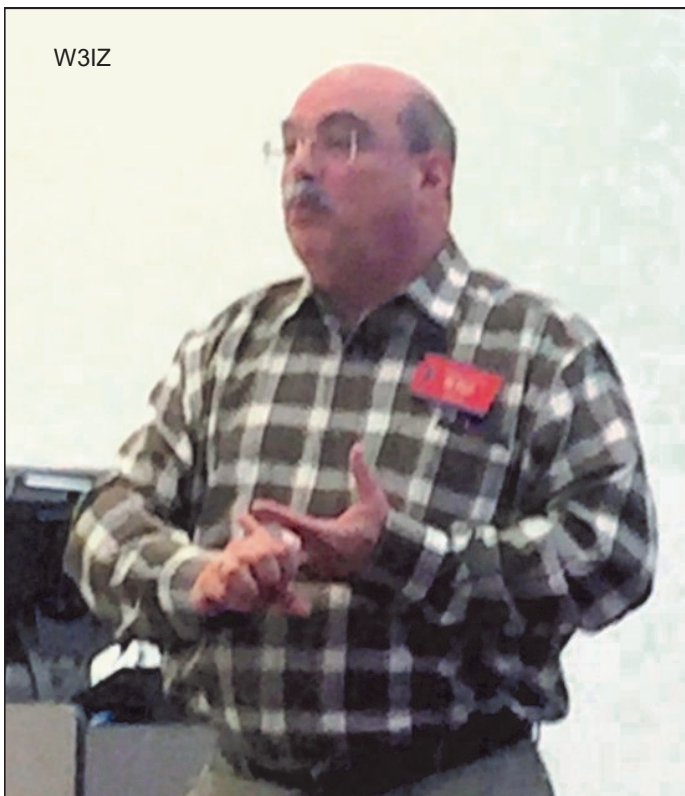
By Rick, K1DS

It was a cool and cloudy Sunday morning on May 7th, but the crowd was there to buy, sell, chat, and hear the speakers at the convention and hamfest. The new venue was the Bucks County Community College Lower Bucks Campus. It was a great spot as there was plenty of parking near the building and on well marked blacktop. No mud, despite the previous day's rain and a few sprinkles in the morning.

Although there were several tailgating sellers, the crowd has thinned out quite a bit. Packrats WA3GFZ and W3RJW were there to get early spots and set up a nice spread of many useful items. I met many of the Packrats as I cruised around the indoor and outdoor sellers.

My focus was on the three speaker sessions that were held between 9AM and noon. Indoor sellers lined the main floor and the school's snack bar was selling food. There were clean bathroom facilities on each floor, conveniently located near the elevator that could take you up to the second floor classroom. The classroom used for the talks was equipped with padded lounge chairs on rollers with a swivel desk-top built onto it. There were white boards and a built-in projector and screen. Oh, to be a student again in such luxurious settings!!

I had my first introduction to FLDIGI, thanks to Barry Feerman, K3EUI. He had the projector showing his laptop images on the big screen and he explained the various digital communications programs that were available. Several of the modes were demonstrated with a shill stationed in the back of the room who sent various messages in different modes during the presentation. Barry also explained the interfaces and methods of linking the radio and the computer and what digital modes might be used under various communication conditions. I think I've got to download the FLDIGI suite and get started sometime soon in their use.



Norm Fusaro, W3IZ, the ARRL Radio Sport Department Manager was next to speak. Norm comes from the local area and being an ARRL manager seems to be his dream job. He gave a synopsis of his ham career and focused on where we as hams might be headed. He repeated this phrase several times during his talk: "If you are not a participant in progress, you may wind up as a victim of progress." The focus was on getting newcomers involved, mentoring them in the hobby and incorporating the newer aspects of communication into daily (ham) lives. Software Defined Radio (SDR), digital modes, and unique hamming activity were topics covered that resonated with the audience.

Bob Famiglio, K3RF, ARRL Atlantic Division Vice Director & Volunteer Legal Counsel gave us his perspective on issues affecting licensees. He started with the trinity of main issues: spectrum, RFI and useable antennas. Over the past several years, ham privileges have changed, with additions of the WARC

... Convention cont'd

bands, reduction of the 220-222MHz segment, and the recent addition of VLF frequencies. The RFI caused by various electronic products that don't comply with FCC Part 15 rules remains an issue and solar installations may be generating RFI. Although last year's CCR antenna legislation got stalled in the US Senate, this year's House Bill HR 555 has already been passed and awaits action again in the Senate.

I thought that I really didn't need anything more for my shack or rover, as I am gradually lightening my load as we are spending more time in Florida. Just as folks were taking down most of their items around noon, I wandered the parking lot and halls one more time. Something called to me and in an instant I had a Kenwood MC-60 desk-top mike to complement my Kenwood rigs. As my friend KB1JEY says, "You can never have enough...." Just don't tell the XYL.



K3RF

WSJT-X Brings the Nicest Hams Together

I'll admit that I am not a computer guru, so mating my HF and VHF capabilities to the computer is always a chore. It has not always been plug-and-play, as I have learned. And when you start with an older Rigblaster that only has a serial port output and a computer that only has a USB input, how do you get the two to work together? Simple you may say, but I had to find out that they were serial to USB adapter cables. So I ordered one off the internet, plugged the two units together and voila—nothing! Who knew that there were only certain adapter cables that would work and you needed to load a driver to get them functional? New order, new adapter cable, new driver, and finally, the Rigblaster is making music with my rig. Now that was a nice set-up, using my older XP laptop, my TS2000x and the Rigblaster.

More recently, I upgraded my laptop to an i5 Intel processor with Windows 7 OS and discovered that there was a glass bead stuck into the microphone input jack. Curious to see why this was blocked, I pried and broke the bead, hoping that the microphone socket underneath was intact. It appeared that way, but when I plugged an input there, it didn't work. I scratched my head, headed down to Florida for the winter and left that problem to be solved when I returned north in May.

When I wintered in Florida, the laptop was in constant use, and on occasion used for Skype and Webex conferences. I realized that the internal microphone and camera from the laptop were the default devices, and I tried to change the microphone jack to the default input, but did not succeed. Fast forward to an on-line session with W3SZ, my Packrat mentor for all things computer. Using a team program, he remotely found the way to silence the internal mike and allow only the input from the mike jack.

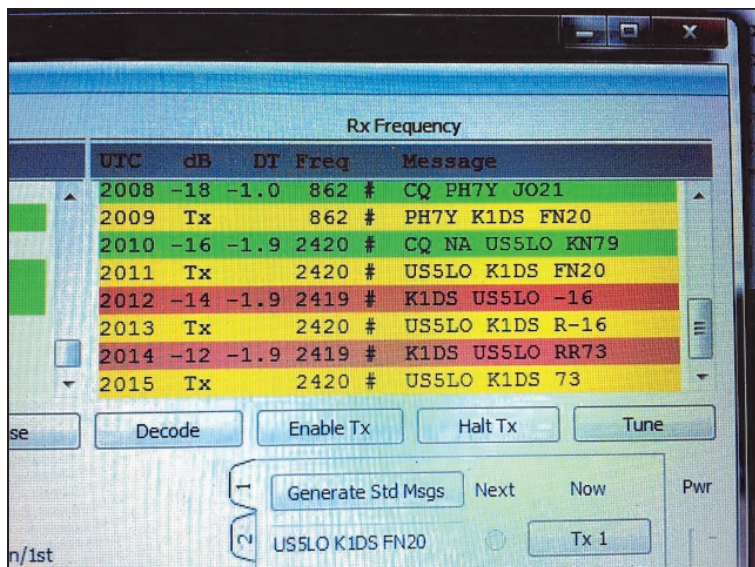
The next step was to take the Rigblaster set-up and plug it into the USB port on the newer laptop and see if we could get it to run WSJT. Remember that USB adapter cable? It had a driver that was not yet installed in the newer laptop, and despite a

...WSJT cont'd

search on the internet, the required driver could not be properly downloaded. And there was an additional issue remaining: the computer needs to provide the PTT when the JT program goes into transmit.

Eventually these issues were all resolved.

Over the years, as a good Packrat, I have managed to acquire additional versions of the Rigblaster, including a NOMIC unit that happened to be handy.



Simple as pie, it plugs into the USB port, the input and output plugs fit right into the mike and earphone jacks, and with the proper software check marks on the set-up drop-down screen, we were in business.

As I am setting the Kenwood to 14.076, I see the call N3PLM, working some fine DX. I manage to call a few DX stations myself and with a modest 20 watts and a dipole in the attic, I am working stations in Europe.

As the minutes tick by, I see KC3ACQ calling a DX station also. I pop in my call and within a minute the phone rings—Vitaly is on the line! We chatted for a bit about our rigs and antennas. He apparently needs to do a bit more tuning to lower the SWR for his triband beam. Now that I have the WSJT-X programs working on both laptops with independent hardware, I have a main source and back-up for our planned EME activity on Camelback. If you have not yet experienced digital communications from your station, now is the time. You meet the nicest hams on XXXX.076!
73, Rick, K1DS

Mt Washington 10GHz Beacon Back on the Air

After being off the air for several months now, the 10 GHz Mt Washington beacon is back on, including GPS lock. Cause of the failure? Combination of an Ice Storm and 138 mph wind...

A short write up on what we found on Mt Washington can be found at:

<https://www.dropbox.com/s/k28sxqgu5p5ymiwl/The%20NEWS%20Group%20K1FO%2010%20GHz%20Beacon.pdf?dl=0>



Building housing the beacon is held down to the ground with 3 chains. Without them it would be blown away by frequent high winds.



Bent waveguide with slot antenna ripped out of flange

73, Don, W1FKF - Paul, W1IMD - Mike, N1JEZ

ROVER RECOGNITION AWARD

2017

The Mount Airy VHF Radio Club established the Rover Recognition Award in 2005 to honor the efforts of rover stations in VHF, UHF and microwave contesting. The Packrat Board of Directors reviews the activity of the rover stations in all of the competitive VHF events throughout the year. Consideration is given to the effort, regularity of operation, bands operated, grids covered, and contribution to the VHF community, unique factors, and operating characteristics. Although total scores are factored in, they are not significant criteria for this award.

Jarred Jackson, KF2MR, is the recipient of this year's award, presented at the Packrats' Awards Night meeting on April 20, 2017. The KF2MR/R activity during 2016 included roves during the ARRL VHF contests to many grids and operation on multiple bands, giving fixed stations and other rovers many additional QSO points and multipliers.

The memory of Bill Seabreeze, W3IY (SK), is honored by the Rover Recognition Award. The Mt. Airy VHF Radio Club, Inc. members were fortunate to have had Bill operate the VHF contests and other on-the-air activities from Bill's rover van in grids adjacent to "Packrat territory" and were responsible for hundreds of QSOs, dozens of grid multipliers and thousands of contest points for the Packrats in each of these events. Christophe ON4IY was also Bill's roving partner for many years.

The club voted to make Bill Seabreeze, W3IY (SK) an Honorary Packrat and also awarded him a plaque in recognition of his efforts and achievements over the past several years. Not only had he been an active roving contester, but he stimulated significant microwave activity in the region with the consensus building of the designated "Microwave Activity Days," commonly referred to as MAD on the first Saturday morning and the first Monday evening of each month. Many of the rovers in the region try to get their vehicles out for these MAD periods, home stations are active, and all try to make sure that their gear is in working order, and possibly try out new modes, new paths and new bands. Additionally, Bill established an excellent web site as a resources page for rovers, including lots of pictures of his gear, rover vehicle and operating sites. There were also a host of links and other useful info on roving issues and how he had addressed them from his experience. The Rover contest designation was established in the early 90's as a new option for stations that were mobile through several grids that would have otherwise remained 'unactivated' during the contest. Many clubs supported the early rovers as a method of increasing both the activity and scores. According to Dan Henderson, N1ND, Contest Branch Manager, ARRL, (at the time) "...the rules change occurred in the '91-'92 contest season. The biggest reason of the establishment (of the) category was to open up the captive rovers and allow them to work more stations for score."

Congratulations to Jarred. We hope that you will hang this plaque in a prominent place and continue to rove in the spirit of Bill Seabreeze, W3IY/R, (SK).

Submitted by Rick Rosen, K1DS, President emeritus, Packrats.

SAVE THE DATE
MID-ATLANTIC STATES VHF CONFERENCE

Friday October 6--Sunday, October 8, 2017

*****PAPERS AND PRESENTATIONS SOLICITED NOW*****

Register on-line at www.packratvhf.com

Conference Early Bird** Registration only \$40

Saturday Evening Early Bird Banquet \$40

Contact Rick1ds@hotmail.com or www.packratvhf.com

Friday Afternoon seminar "Station Automation"

Friday evening hospitality and table-top selling

Saturday conference presentations & auctions

Registration includes pizza lunch and snacks

Rohde & Schwarz Technical Testing Room

Saturday evening Banquet buffet dinner with door prizes*

Sunday morning free outdoor mini-flea market

TENTATIVE SPEAKERS AND TOPICS:

Roger Rehr	W3SZ	Station Automation Seminar (+K3TUF & WA3DRC)
Phil Theis	K3TUF	Automation for VHF/UHF/uW Contesting
Jerome Byrd	K3GNC	"Apartmentyrinous Station Rex"
Steve Gross	N4PZ	Yagis: Tales, Tricks and Truths
Russ Lamm	NN3Q	Building and Operating the NN3Q Rover(+K3WGR)
Gary Hitchner	WA2OMY	The GPS Project and Packrat Beacon Update
Joe Jesson	W2JEJ	Dongle Developments
Al Katz	K2UYH	Getting started on microwave EME (+K1DS)
Joe Horanzy	AA3JH	Talking on 440 THz- Easy LASER! (+AC2CL)
Michael Davis	KB1JEY	Enhancing your Test Bench Capabilities
Ray Golley	N3RG	Practical Solutions for Station Automation
Steve Simons	W1SMS	RF Tower Safety and Construction
Pete Kobak	K0BAK	Rover Adventures and Automation

ADD YOUR NAME, CALL and TOPIC HERE!

DETAILS AND UPDATES: www.packratvhf.com

**** Early Bird price good through Sept 20.**

CONGRATULATIONS K1DS ! INTERNATIONAL EME CONTEST 2ND PLACE 2.4 GHZ



ON4KST Chat Room(s) in Multiple Windows

Action of the ON4KST Web Chat Page can be tough to follow.

I've found that an app called KST2ME makes it easier to follow. And you can set that up to follow two ON4KST chat pages at one time. During a contest that is a nice feature. You can for example follow 6 meters and VHF at the same time. You can also display with KST2ME MUF maps, VHF-DX maps, VHF-USERS maps, 50-DX maps, VHF-USERS maps, the Hepburn map, Solar and Earth indices, etc.

The URL for KST2ME is at:

<http://www.rudius.net/oz2m/software/kst2me/index.htm>

An example of how KST2ME looks right now at my QTH is here:

http://www.nitehawk.com/w3sz/KST2ME_Example.png

You can zoom on the photo to see details.

You can configure the KST2ME display to your liking.

73, Roger W3SZ

Central States VHF Society Conference Call for Papers

The Central States VHF Society is soliciting papers, presentations, and posters/tabletop displays for the 51st annual Central States VHF Society Conference, to be held in Albuquerque, New Mexico on 27–30 July, 2017 at the Sheraton Albuquerque Airport Hotel. Papers, presentations, and posters on all weak-signal VHF and above amateur radio topics are being sought.

KEY DEADLINES

- For papers to be included in the Proceedings: Monday, 12 June 2017
- For Presentations to be given at the Conference: Friday, 30 June 2017
- For Posters and Tabletops to be displayed at the Conference: Abstracts due by: Friday, 30 June 2017. Completed poster should be brought for setup at the Conference on 27 July.

POINT OF CONTACT FOR QUESTIONS, ABSTRACTS, DELIVERY:

Ed James KA8JMW

email: ka8jmw@arrl.net

Snail mail: 10 Trade Ct., Edgewood, NM 87105

FORMATTING AND DELIVERY:

See Conference website (<http://2017.csvhfs.org>) for Proceedings, Presentation, and Posterboard formatting guidelines

Submissions accepted via email, Dropbox, Google Drive, CD/DVD, USB stick/thumb drive, etc.

CONFERENCE DETAILS:

Visit the Conference website at <http://2017.csvhfs.org>.

Online registration will open on or shortly after May 1.

Additional conference details will be announced as opening of registration nears!

In the meantime, please rally all of the VHF/UHF/Microwave hams you know in your area and across the country, mark your calendars for July 27-30, and plan to join us at the 2017 Central States VHF Society Conference in sunny Albuquerque, New Mexico.

73,
Brian N5ZGT
2017 CSVHFS President

K2UYH 6cm EME to Japan

Hello AI

Thank you for the 6cm QSO last weekend.

I attach a SDR screenshot of Sunday morning. Shown are three North America stations at the same time "CQCQ" is very good! But in Japan I saw five lines HiHi Hope see you next on 3 cm....73' JA1WQF Mitsuo Kasai



UK Record Claimed for 122 & 241 GHz

Some millimetric orientated readers might be interested to look at my lengthy supporting video for the latest UK distance claim made 21st May on 122 & 241 GHz. Search YouTube channels for UKG8ACE. The videos also repeated on my website: www.microwaves.dsl.pipex.com

I had the valued assistance of G8KQW, as before on 134 GHz, to achieve the two way contacts necessary for a UK distance record. Two distances were worked on each band to ensure some sort of result would be achieved.

This was 'nice day' operating rather than frostbite conditions so there may be a little more distance to be made yet. Additionally for the 6.8Km path the clearance over the field hedges was about 1m at the worst point so no doubt there was some obstruction into the Fresnel zone.

Also some qsb no doubt assisted by shimmering heat rising from the fields on the test paths. G8ACE operated from his home qth.

122 GHz operation was by using two channels 145 MHz apart for the IF using an anti parallel HP diode tripler from 40GHz. For 241 GHz separate transmitters 10 KHz apart and receivers with 144 IF were used both with x6 multiplication again from 40 GHz.

Single diode for 241 Tx and anti parallel harmonic mixer diode for Rx. WG size 0.89mm diameter so as to place the Tx 5th harmonic around waveguide cut off.

Home brew designs with just the OCXO ref (10MHz) the 40GHz diode driver tripler amp and the dishes being re-used ex old link equipment. Phase noise may not be the best using an LMX synth chip however it gives flexibility to get onto other stations channels for future contacts.

I will add some supporting notes for those interested in these bands about the approach employed in building the equipment.

73 John G8ACE

A 0-6 and 0-15 GHz Synthesized SIGGEN is in the works

Ed Finn WA3DRC made me aware of this: <https://www.crowdsupply.com/era-instruments/erasynth>

0-15 GHz with CW or sweep for \$749 or 0-6 GHz with CW or sweep for \$499

Sometimes it is hard to say "No"! **73, Roger Rehr W3SZ**

This is a crowd funded project out of Turkey. As of Cheese Bits publication date \$19.5 K of required \$25 K has been raised with 11 days to go. Specs on this device are very nice. The only downsides I see are a) output drive is open loop b) second harmonic suppression isn't great. Not lab grade but a good value. Well worth considering. --W2BVH

The Wayback Machine **In CHEESE BITS, 50 Years Ago**

Nibbles from June 1967. Vol. X Nr. 4
de Bert, K3IUV
(author's comments in italics)

- **“Our Prez Sez”.** Jo, W2EIF reminded members to be ready to “vote for your candidate of choice” at the June meeting. Also if you will not be participating at the club site for the June QSO party, **“get on the air and give the club a contact on all your bands”.** *(Where have I heard that before? Current members, take notice).*
- **Silent Key.** Good member W3PXT, Carmen Diodati, died in his sleep, suddenly, on 6/3/1967. Carmen was known for his friendliness, and willingness to assist in any and every club undertaking.
- **ARRL Bulletin. NR 112.** 5/11/1967. The league is gathering information on possible disruption of normal radio conditions, caused by the artificial ionosphere cloud fired by rocket from Wallops Island. All Hams were requested to submit reports.
- **ARRL Bulletin. NR 147.** 4/25/1967. A reminder that Canada’s first ARRL National Convention will be held in Quebec, June 30 – July 2. “This is the first ARRL National Convention to be held outside the United States”.
- **SCM.** W3ZRQ, Al Breiner, resigned as the SCM for E. PA., and turned the office over to Packrat member W3ELI, George Van Dyke Jr.
- **Transmitter Hunt.** The next hunt was scheduled for June 25, 1 pm – 3 pm. Details will be announced on the Packrat nets. *(Why don’t we do this anymore? Hunt that is, not net announcements).*
- **Project Oscar.** The Euro-Oscar satellite was received in San Francisco, after a long flight from Germany. It is undergoing inspection and testing, in preparation for a launch sometime this year. It included a circularly polarized antenna.
- **Packrats Picnic Announcement.** The 12th annual picnic was scheduled at the Fort Washington State Park on August 13th, rain date Aug 20th. *(Had member Ed Kushner, W3HKZ, been planning it, he would have announced the rain date as August 6th. Think about it.).* Grab bags and games for the kids, free soda for all. W3CCX call-in will operate on 50.2 and 14.2.
- **Wallpaper.** The Harrisburg Radio Amateurs club will issue a nice certificate to any amateur that contacts 100 hams in Pa within one calendar year.
- **ARRL Headquarters Visit.** The Packrats are planning a second visit to league headquarters on September 9. More details to follow on the nets, at the meetings, and in Cheese Bits.
- **Coming Events.** *June meeting,* the speaker will be John Specialny, W3HIX. John was an application Engineer at Philco’s Kulpville plant. He designed the 432 transistor converters that many

...Wayback cont'd

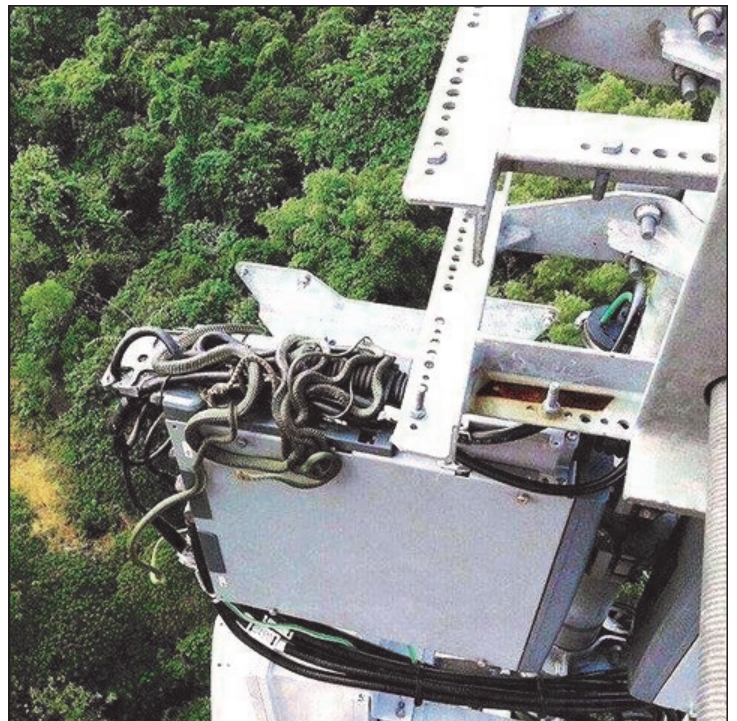
- Packrats used at that time. (*Mine is still in the basement!*). VHF QSO party. The Packrats will be at the Dutch Country Playhouse for our contest operations.
- **K3BPP graduating.** Walt, K3BPP, was the club's first "student member". He just finished his college courses, and will be upgraded from "Student", to a "full fledged Packrat".
- **Packrat Lapel Pins.** Announced that anyone still needing a Packrat lapel pin should contact K3HWZ, Grandpop Bill. (*Some of you that were at the club meeting a few months ago saw my original pin. Maybe we need a new one?*).
- **Swap & Shoppe.** For free. 88 mH toroid coils from K3AQH. (*We used these for the tone filters in our RTTY Terminal Units*). Heath Sixer, new, with mike, cables, and crystals: \$25 from K3IHF. Heath HX-10 Marauder transmitter. USB, LSB, AM, CW and FSK, \$235, K3YQO.
- **Miscellany.** *Postage remained at 10c this month. Cheese Bits was 5 sheets 8-1/2" x 14. I have found a treasure trove of early Packrat history, including photos, charts, slides and other memorabilia. All courtesy of KB3XG, John, who delivered it to my garage for safekeeping. In months to come, I plan to scan some of the photos and text to provide as material for Lenny to put in Cheese Bits. Stay tuned. As in previous editions, many "folksy" comments about members, their families, and activities were included in this edition of Cheese*

Bits. If interested, or for more detail on the above items, visit www.W3CCX.COM and read the full issue posted there by our Webmaster, Ron, W3RJW).



thirty, de K3IUU

SOMETHING YOU DON'T WANT TO FIND UP A TOWER



Events

For inclusion, please direct event notices to the editor.

"MWL Microwave Luncheon, a semiformal biweekly lunch meeting of hams in the FN10 - Elizabethtown, PA area. We meet at 11:00 at Hoss's Restaurant on Route 743 about 1 mile towards Etown. Those interested in microwave communications and wanting to attend please contact John Jaminet, w3hms@aol.com for details."
Next Date (tentative) : 6/15/2017... others to follow

ARRL June VHF QSO Party - Contest - June 10 - 12, 2017. Our annual trip to Camelback Please come help out, visit and/or operate during this annual event. This is a great opportunity to see (and use !) top quality vhf, uhf and microwave gear at a super location. In addition you can schmooze with your fellow 'Rats and enjoy a day (or more) out at a scenic location. If you can't make it up to the mountain please try and get on the air for this event. Your points become part of the club score. Resources: W3SZ's "Packrat Finder" and "Packrat Chat Room", ON4KST VHF chat page (signup takes 2 minutes). Directions to the Mountain can be had from any of the club officers or directors (phone numbers in the club directory).

Harrisburg Hamfest - Hamfest - July 1, 2017 - at Harrisburg CC Fire Training Grounds. 3599 Industrial Rd. See <http://www.w3uu.org> for details.

Valley Forge Hamfest - Hamfest - July 8, 2017 - at Kimberton Fire Co. Fairgrounds, Route 113 (Pike Springs Rd.) & Firehouse Lane • Kimberton / Phoenixville, PA. Details at <http://www.marc-radio.org/hamfest2.htm>

CQ WW VHF - Contest - July 15-16, 2017. See <https://www.cqww-vhf.com/> for details

Sussex County (NJ) ARC Hamfest - Hamfest - July 16, 2017. Sussex County Fair Grounds, 37 Plains Road Augusta, NJ 07822 . URL to follow.

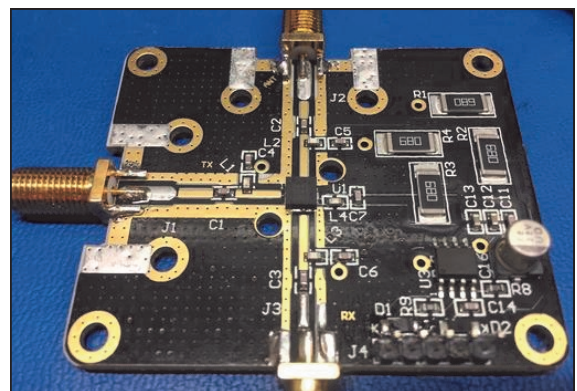
Pete K0BAK in June QST

For the second month in a row, Pete K0BAK has a feature article in QST. This time, in the June issue, he describes a "Nerd Wagon": a way to get portable ham gear organized and moved to a site not easily accessible by car. Check it out. CONGRATULATIONS PETE!



PIN Diode T-R Switch

SV1AFN has a 50MHz - 6 GHz PIN diode T-R switch for sale. It's fully assembled and tested and rated to 100W. Built on Teflon pcb. Further details at <https://www.sv1afn.com/high-power-rf-tr-switch-with-pin-diodes-ic.html>



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Congratulations K2UYH, NE2U,
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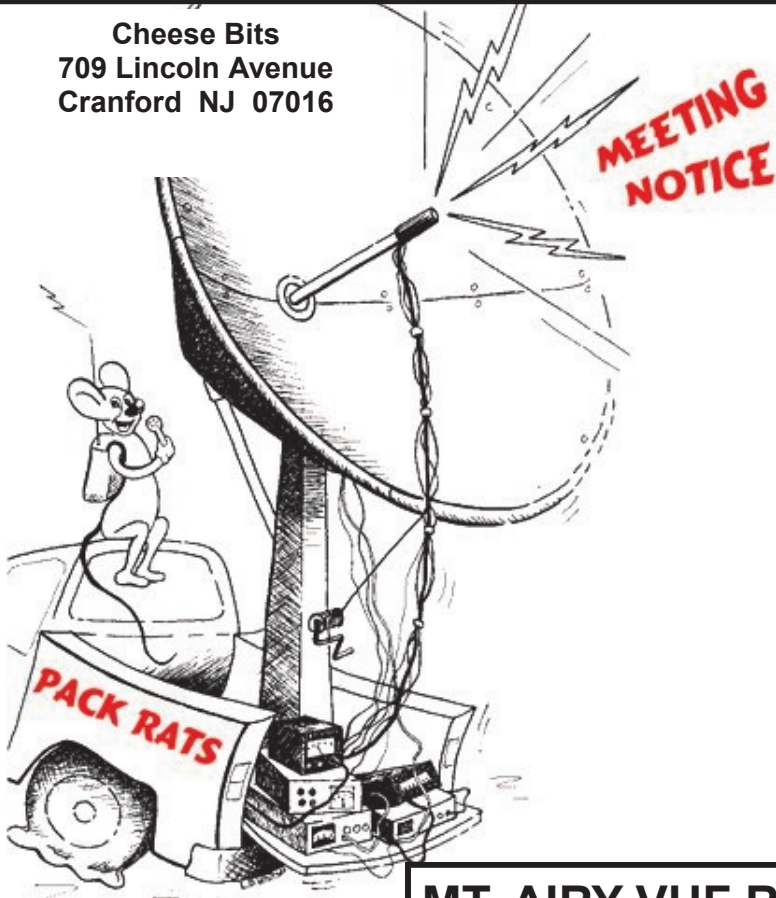
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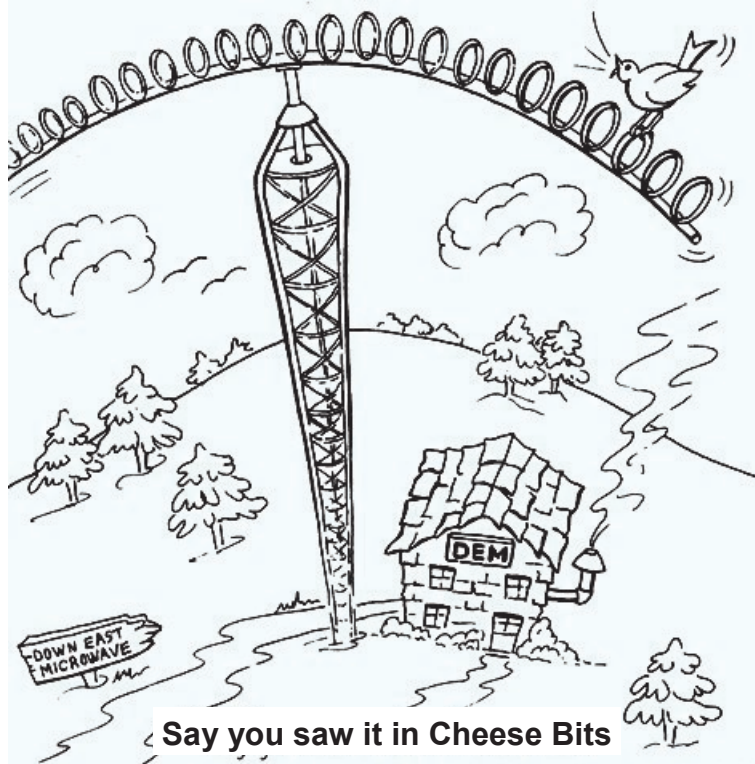
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