



CHEESE BITS

W3CCX
CLUB MEMORIAL CALL

ARRL
Affiliated
Club



Volume LV

October 2014

Number 10

PREZ SEZ:

The weather is starting to chill and it's a great time to get your long awaited tower / antenna work complete before the real cold arrives. There are only three months left in the year now, and then it will be 2015 and the January VHF event will be upon us. Lets get all systems working while we have time.

Last month was an exciting one beginning with the September VHF Contest and culminating in the annual Mid Atlantic VHF Conference in Bensalem. I hope you were one of the lucky ones who made it to the event; everyone enjoyed a fun and information packed weekend, and there are lots of pictures in this issue to prove it.

Judging from what I saw from up front, the talks were spell-binding and kept everyone in rapt attention. There were three rounds of prizes for everyone. Ken Kent, KA2LIM told us all about the contest station and various events that happened in the Limo during the evening banquet. **Be sure and sign up early for next year; the date will be announced soon.**

While you're thinking ahead about next years' conference, lets talk 2016. In 2016 near the time of the normal SVHFS Conference there will be a conference to end all conferences. It will be attended by folks all up and down the East Coast. It will be a **joint effort of NEWS, SVHFS and the Packrats** and will be held in VA near the Air and

Space Museum. We are close to ironing out the details and will pass them along as soon as they are complete. It will be an event not to miss.

How did you do in the September VHF Contest?

It is a great time to tune things up for the "big one". There were some six meter openings and higher band enhancement that really made the contest more fun than usual. I tried my new Flex 6700 on two bands and the performance is outstanding; the radio was also just ranked number one by Rob Sherwood on his SEI site and I can attest to the dynamic range performance. You can see the results at: <http://www.sherweng.com/table.html>. There is still a ways to go for the **SmartSDR** software to be VHF / UHF ready, but it will come in due time. Having the radio as a server on the ethernet network really opens up the possibilities for new frontiers of automation. I'm excited to clear time for myself to get working on it.

If you are a League member, then you need to be sure you have located your electronic ballot and don't forget to vote. **I've been running ragged** traveling to the far reaches of the Division to get my word out on why to vote for me. Soon the travel will stop and I will rest, trusting the faithful members of the division to make the decision for us.

Another shameless plug for a project I am involved in: In November I will accompany N3BNA to Haiti to begin the process of rebuilding an AM radio tower that will be able to have double use as an amateur radio tower. It's 315 feet tall and several of

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

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Pack Rat Web Site: <http://www.packratvhf.com>

SUBSCRIPTION/ADVERTISING MANAGER:

Bob Fischer, W2SJ 23 Morning Glory Circle, Mullica Hill, NJ 08062 (609) 440-2916 bobw2sj@gmail.com

EDITOR:

Lenny Wintfeld W2BVH 709 Lincoln Av., Cranford NJ 07016 (908)-272-0559 lennyw@comcast.net

CLUB TREASURER:

Dave Mascaro, W3KM 1603 Mink Road Ottsville, PA 18942 (215)-795-2648 w3km@verizon.net

TRUSTEE OF CLUB CALL - W3CCX

Brian Taylor N3EXA (215)-257-6303 n3exa@verizon.net

PACKRAT 222 MHz REPEATER - W3CCX/R

222.98/224.58 MHz (PL 136.5) Hilltown, PA

OFFICERS 2013-2014

PRESIDENT K3TUF, Phil Theis phil@k3tuf.com
VICE PRES: WA2OMY, Gary Hitchner talgarth@comcast.net
CORR. SEC: WA3EHD Jim Antonacci jjantonacci@verizon.net
SEC: KA3WXV George Altemus ka3wxv@yahoo.com
TREAS: W3KM Dave Mascaro w3km@verizon.net
DIRECTORS:
KC2TN Joe Fisher kc2tn@comcast.net
KA3FQS Tom Frederiksen
KB1JEY Michael Davis Michael.Davis@alumni.duke.edu
K1DS Rick Rosen rick1ds@hotmail.com
PAST PRESIDENT: W3GAD Doc Whitticar w3gad@arrl.net

COMMITTEE CHAIRMEN

January Contest K3EGE billk3ege@gmail.com
June Contest: N3ITT & K3TUF
HAMARAMA: WA3DRC & KA3WXV
VHF Conference: Rick K1DS rick1ds@hotmail.com
CoChairs
George ka3wxv@yahoo.com
Michael kb1jey@arrl.net

Awards Chairman KB3GJT
Quartermaster: K3IUV bsoltoff@comcast.net

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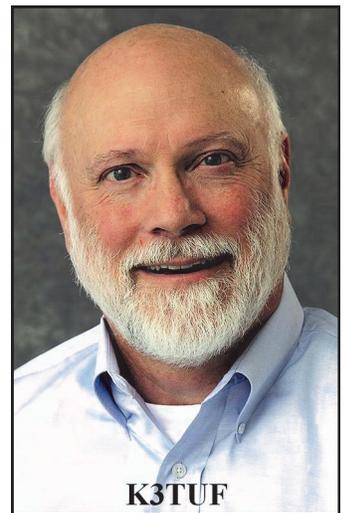
FM29jw Philadelphia, PA
50.080 144.284 222.064 432.286 903.072 1296.245 MHz
2304.043 3456.207 5763.196 10,368.062 MHz (as of 1/08)

MONDAY NIGHT NETS

<u>TIME</u>	<u>FREQUENCY</u>	<u>NET CONTROL</u>
7:30 PM	50.145 MHz	K3EOD FM29II WA3QPX FM29di
8:00 PM	144.150 MHz	N3ITT FN20ki
8:30 PM	222.125 MHz	KB1JEY FN20je
8:30 PM	224.58R MHz	W3GXB FN20jm
9:00 PM	432.110 MHz	WB2RVX FM29mt
9:30 PM	1296.100 MHz	K3TUF FN10we
10:00 PM	903.100 MHz	WA3SRU FN20le

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

the packrats are involved. If you want more information, or are willing to donate, please check: <http://www.haiti-international-friendship-arc.org/>



K3TUF

Excitement is building for next years 10 Gig and up contest. I've had many conversations about our plans to activate both rover stations and another W3CCX effort on Camelback like we did this year. Be sure and indicate your interest to me so we can include you in our plans for next year. After all, **next year will be here before we know it.**

See you at the Meeting and lets work on lots of bands,

Phil, K3TUF

SEPTEMBER VHF CONTEST REPORTS

From Phil, W3TUF: Wow, what a fun time! Unfortunately I could only be on for less than half the contest, having some division campaign requirements, but the time that I was on was packed with activity. It was a great to be busy in the contest. We were graced with Es and TEP on 6m, It was nice to have FL stations answering a routine CQ. Then the upper bands exhibited enhancement to our SW. Had N4 Quick Walking Zebra banging in on all bands up through 1296 for both evenings; FN10>EM66. All of the bands were working; I got the 5/10 feeds fixed from their water incursion bringing in an additional 15 grids. No one was around with 24G equipment, so no contacts there. It was the best I could do score wise with limited time on the air.

From Jerome, K3GNC:

Band	QSOs	Pt	QSO pts.	Grids	Pts
50	34	1	34	14	476
144	57	1	57	21	1197
222	32	2	64	16	1024
432	45	2	90	16	1440
1296	12	3	36	6	216

TOT 180 281 73

Claimed score = 20513

I actually spent some significant time in this one. I was on from near the start to late night Saturday and from 1700 EDT to the end on Sunday. I wasn't aggressive enough going after 1296 contacts, but overall I was pleased with the effort since I am almost totally blocked to the West through NNE and parts of SW. I was using a 98 ft end fed wire on 6 meters, 4 ele CCs on 144 and 222 MHz, 4 ft CC beam on 432, and 22 el M2 on 1296 all at

about 62 ft! I will have larger antennas on 144, 432, and 1296 for January. I also hope to have 2304 and possibly 903.

From Herb, Stn Mgr at WA2FGK:

Low Power 3 Bands

50 MHz 133 Q's 36 Grids

144 MHz 94 Q's 31 grids

432 MHz 48 Q's 24 grids

Totals: Q's 275 Grids 91

Claimed score = 29,575

About a week ago, I decided to give a so/so effort on the three bands we still have working. I have not run low power in many years, but felt my 2,000 foot asl and large array's would make it a bit easier. I was wrong. Thanks to my ability to do CW, 60% of my contacts were made on that mode. Especially on 50 mhz., where we actually have a segment to operate CW. Surely wish we had a segment on 2 meters. My biggest problem was on 432. My contest antenna has been taken down and sold. The only array I had was beaming into trees at 25 feet. I was surprised how well it actually did. It was a surprise to work EM66 on 144 and 432 mhz. There must have been a tremendous duct heading that way. I'm sure that station gave many stations a smile when logged. Six meters did open for a bit on Saturday, but I only grabbed 3 new grids from the opening. Where was all the expected Aurora that the news media told us would ruin our communications? No buzz heard. I'm not sure what I will do in the future contest wise. But it was still fun to work some of my friends from fifty years of VHF contesting. I will operate the 10 GHz test next weekend in the mornings. I took down the entire system and redid a few things. The sad thing, it's been back up for two months without making one contact. Very sad. This probably explains why I am going in different directions. Far too much white noise. Our new 2304 EME system is very close to being completed. Hope to have it running for the first leg of the EME contest. We should have around 150 watts at the feed, with the 12 foot dish. That's it from Bear Creek gentlemen.

From Lenny, W2BVH:

Band	QSOs	Pt	QSO pts.	Grids	Pts
50	56	1	56	19	1064
144	71	1	71	23	1633
222	22	2	44	11	484
432	16	2	32	8	256

TOT 165 203 61 12383

Claimed score = 12383

Really enjoyed this contest. There was quite a bit of activity & quite a few unfamiliar calls participating. Some Es on 6 meters on Saturday added 5 Florida grids. I only heard/worked around half a dozen Packrats. The Phils NUF/TUF were louder than usual here in N. Jersey. This years September contest was well worth doing. Hope to be adding 902 & 2304 in the near future -- maybe before January, if the antennas can be raised before the snow flies and the transverters can be finished up.

From John, K3MD:

SO HP Fixed

50	91	24
144	90	24
222	34	18
432	32	18
1296	12	7

259 91

22 hrs

Henry 2002A FB! Best personal score in Sept. or Jan. (except maybe in Sept. 96 or so from WPA when 6 opened for the last hour). Good tropo.

From John, W3HMS:

Band	QSOs	QSO pts.	Mults.
50	38	38	10
144	34	34	10
222	24	48	6
432	22	44	6
1296	7	21	3
2304	8	32	4
3456	7	28	3
10368	5	20	2

TOT 145 265 44 + 3 = 47

Claimed score = 12,455

From Jim, WA3EHD:

Band	QSOs	Pt	QSO pts.	Grids	Pts
50	38	1	38	14	532
144	39	1	39	13	507
222	19	2	38	7	266
432	23	2	46	8	368
903	9	3	27	5	135
1296	9	3	27	4	108
2304	5	4	20	3	60
3456	3	4	12	3	36
Laser	1	4	4	1	4

TOT 146 251 58 14558

Claimed score = 14558

Lenny: Sorry we did not complete QSO's but I learned later that the key line to my 222 amplifier came out and I was only putting out about 10 watts. So, your receiver was working. Fixed it and did well afterwards.

From Doc, W3GAD:

Band	QSOs	Pt	QSO pts.	Grids	Pts
50	19	1	19	9	171
144	35	1	35	12	420
222	18	2	36	9	324
432	16	2	32	8	256
903	6	3	18	5	90
1296	8	3	24	5	120

TOT 102 164 48 7872

Claimed score = 7872

Hi Len. We spoke briefly during the contest but everything worked out. There are many challenges for me working a contest. The biggest issue is the continued degradation of my hearing. The hearing loss makes it very difficult to tune in a SSB signal. I must have it just right to understand the call, so search and pounce has become the operating style. I will be working on improving my CW skills. Had a major failure on 6 meters, (the 350 Watt started to make that tell tale smell of the smoke leaking out). Also had, severe distortion using the headset microphone with the Kenwood 570. I switched to the desk mic and everything was totally improved. The headset mic still worked just fine on the YAESU FT857.

Had some lightning fast band runs with WA3EHD, WB2RVX and K3TUF toward the end

of the test. Chair time was about 10 hours and the results show time out for repairs involving totally reconfiguring the 6m transverter for barefoot operation and other duties that kept me away from the radio. The amp failure will now force the issue to complete the Ch 2 amp project.

From Steve N3FTI:

Band	QSOs	Pt	QSO pts.	Grids	Pts
50	5	1	5	4	20
144	7	1	7	6	42
222	5	2	10	4	40
432	5	2	10	4	40
TOT	22	32	18		576

Claimed score = 576

I got on and played between home projects and mowing the yard. Had fun, bring on January!

From Griff, NE3I:

Band	QSOs	Pt	QSO pts.	Grids	Pts
50	12	1	12	7	84
144	9	1	9	5	45
222	3	2	6	1	6
432	1	2	2	1	2
TOT	25		29	14	406

Claimed score = 406

Due to social engagements, (and the usual deed restricted antenna limitations), I had limited operating and QSO opportunities. I was delighted to find that my 4 watt 220 FM HT was 59 at N3ITT using the 4 element yagi in the garage "attic" fixed in that direction. (Our repeater is also somewhere down range in that direction.) I also tried a couple of times to do Meteor Scatter on 6 Meters but, without Ping Jockey, (I think the rules preclude its use), I could not know whether any other MS types were on, where they were or whether or not "Rox" were colliding with the "Blue Marble's" atmosphere. Presumably, one needs to have skeds set up in advance for MS to be useful during contests. The 2 element home brew 6 Meter Hamstick Yagi at 22 feet worked well, considering its height and a power level of only 50 watts. I was not on during any Sporadic E. I am going to pull everything down, (there is not much up as it is), and do a redo. Maybe a DXpedition to a portable class site may be a more rewarding proposition. We journey on. It is at least another Club log to the ARRL. Thanks for

the Qs.

From Walt, K3BPP:

50 MHz 4Q's 4 grids
144MHz 11 Q's 8 grids

I had hoped to get on 432 but I did not get the antenna completed until Monday night. I was able to check into the 432 net with the antenna in the shack. Will have it on the tower for Jan.

From Tom, KA3FQS:

Band	QSOs	Pt	QSO pts.	Grids	Pts
50	70	1	70	25	1750
144	50	1	50	20	1000
222	28	2	56	14	784
432	29	2	58	13	754

TOT 177 234 72 16848

Claimed score = 16848

This was the first contest with the new antennas from this QTH. Caught some of the 6 m opening which really was fun. Hope to have a couple of more bands for January.

From Al, K2UYH:

I made only a few contacts on the Moon because of family activities during the weekend. QSO'd during the contest on 1296 were I5MPK (569/559), SP6DCS (569/579), 0624 I5QLO (449/559), DL6SH (559/569), UA4HTS (559/579), PE1LTW (549/559), DF3RU (559/559) and IK3COJ (559/569), and on 432 K5QE (15DB/O) JT65B and N2NT on SSB tropo.

From Jon, W2MC/R:

Had trouble with the computer and logged by hand. Rover locations: FM28, FM29, FN20. Bands 6M-432. Q's in FM28:3. Q's in FM29: 33. Q's in FN20: 8.

From Mike, WB2RVX:

Band	QSOs	Mults	Band	QSOs	Mults
6:	83	27	5.7:	4	4
2:	65	23	10G:	4	4
222:	34	14	Tot:	275	114
432:	43	18			
903:	12	6	Score	53,694	
1.2:	19	8			
2.3:	6	5	Contest had some nice Es and improved condx on Sunday.		
3.4:	5	5			

NN3Q/R September Contest Results

Band Mode QSOs Pts Grd

50	USB	30	30	14
144	USB	80	80	22
222	FM	2	6	0
222	USB	38	77	17
420	CW	37	74	16
902	CW	5	15	2
902	USB	9	27	7
1240	CW	6	18	2
1240	USB	14	42	8
2300	CW	8	32	5
2300	USB	7	28	3
3300	CW	3	12	1
3300	USB	4	16	2
5650	CW	2	8	0
5650	USB	4	16	2
10000	USB	3	12	2

Total Both 252 493 103
Claimed Score : 50,779

WHAT WEATHER!! Crappy one day, to die for the next!! Well Russ and I planned on a one day event and we chose Sunday. Lucky for us the WX on Sunday was incredible for roving. We started at FN21 Big Mount Pocono State Park and parked on the very top of the hill, a little over 2,000'. Conditions were OK; nothing spectacular but that site is very productive for rovers... Thanks to Rick K1DS for operating W2EA and Phil K3TUF to help make a our 10 Ghz contacts from the Mountain.

We were sad to leave but had to crack the whip and get moving to our second grid for the day.

Traveling West we set up in FN10, Pissmire Ridge, (just west of Hazleton). Another productive site for rovers as this little scrap of a piece of reclaimed strip mine sits at over 1,900/ above sea level. A very sweet operating position posting some new grids and many more microwave contacts. It was just pleasant to sit in the van a enjoy the scenery and work the crowd.

Traveling South to FN20 Mount Penn, Reading, PA we had a quick Deli encounter for protein and

From Mike WB2RVX (cont'd):

Band QSOs Mults (Mike)
5.7: 4 4
10G: 4 4
Tot: 275 114

Score 53,694

Contest had some nice Es and improved condx on Sun..

From Mike, N2DEQ:

Band QSOs Pt QSO pts. Grids Pts

50	25	1	25	12	300
144	24	1	24	10	240
222	1	2	2	1	2
432	4	2	8	2	16

TOT 54 59 25 1475

Claimed score = 1475

Only worked Saturday. Sunday minimal effort with conditions that were for me, poor. Still had fun!!! (cont'd on p.15)

some needed energy food, and arrived ready to again ply the bands for more contacts. Mount Penn at about 1100 above sea level is productive to the North, West and Southwest at this time of the year. Other directions from the rover van, for the microwaves, are hampered by the rather full growth of trees a few feet higher then the rover van (hi hi). What a great RF sink nature created!

As Normal 6 meters was not a big producer for the rover crew, but Two meters and the microwaves pulled their weight.

We did observe a slight enhancement late in the afternoon toward the midwest on two meters. Mother nature was not helping out too much during our one day op.

We appreciate all those out there that helped our one day score be the best one day score we have had, and to all those who had to wait, just a bit, and queue up for the microwave bands - we say "Thank You!"

See You in January 2015!!

73 AI K3WGR (1/2 NN3Q/r)

K3MF September VHF Contest – EME

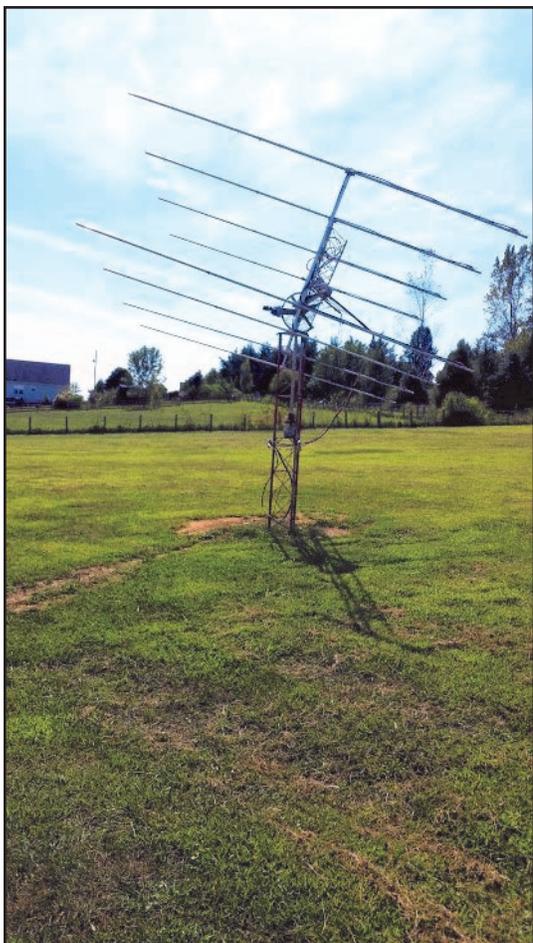
Here is my info for the VHF contest. I tried to put 6, 2, 432, and 1296 on the air but the 6 meter antenna had a broken gamma match that would not work, the 2 meter antenna has a bad gamma match, for 432 I could not bring the swr down and when those did not work, I just gave up on 1296. I could have used my 432 EME array but it has a pattern so narrow I had to be within 5 degrees to hear anyone....so I just pointed it where it works best...the moon. Here are some pictures of the failed tropo effort on my boom lift and the EME array that kept me on the air.

73, Wayde K3MF

Band:432. Q's:23 Grids:21



Tropo Array



8 Yagis on a boom. NOT a 6 meter antenna

WA3GFZ 10G Contest

9/22/14 — Had fun this weekend working the contest from home. I had one contact in January, but things picked up with a total of 11 contacts Sat. and Sun. Farthest distance of 275 miles with AF1T and W1MKY. Couldn't seem to get that elusive FN20 grid. Most contacts were just out of the noise.

Paul

Check out some Antique Radio Pix at Kutztown

See <http://hagstar.phanfare.com/6675787>

Tnx to K3IUUV & W3SYN for the URL

Six Meter DX Report

10 September 2014

Six meters has entered into the Fall TEP season. Although there are not the almost daily openings that characterize the summer E season, there is still considerable action if you are at the radio at the right time. Most of the TEP openings occur from 22:00z--01:00z. They are characterized by deep QSB. From here they generally run roughly north-south to fairly well defined areas of South America.

I've missed most of the openings but did work PY1RO on August 31st. The TEP openings sometimes also extend into the South Pacific but the lack of land and six meter operators limits the contacts there. In recent years the North and South Cook islands (E51) have been active and worked about an hour or two after the South American stations. I've heard that Warwick E51WL in the North Cook Islands suffered damage to his station in a recent storm and is temporarily QRT. If that is correct that will really curtail contacts with that DXCC entity.

As we approach the Fall equinox there is always the possibility of a TEP-F2 link to ZL or VK. It happens just often enough to make it worthwhile to keep the radio tuned to 50.110MHz.

73, Chris W3CMP

Adendum:

Six meters is not dead for those who have a lot of aluminum in the air. Not mentioned is the Fall tropo season which is now underway. This is the time when one can fill in those grids a few hundred miles away. A couple of days ago, I was copying KC2GOW on Staten Island weak but readable on my loop antenna. He was very busy. I did not try to work him. **73, George W3FEY (FN10)**

WHO'S MURPHY?

What do Resica Falls, Marshalls Creek and Murphy have in common? They were all part of the September W2EA VHF contest operation on High Knob near Bushkill, PA. Many surprises awaited the gang who drove up there Friday, loaded with all the equipment and generators. The power company is restringing high voltage wires right through the middle of the High Knob site, and there were several LARGE construction vehicles on site, aside from many changes to the old and new towers. Since I agreed to do the microwave bands for the South Jersey Mountain Toppers ARC team, I planned to pack the rover van on Friday and drive up there Saturday morning. I got the long loopers for 903, 1296, 2304 and 3456. The dishes for 5G, 10G and 24G were already in the vehicle. I packed some warm clothes, rain gear, and some snacks and headed north. Just as I pulled out of the driveway, it started to rain. The rain continued lightly all the way up to High Knob, which is 25 miles further north than Camelback, with the same grid (FN21).

After the 2-1/2 hour ride, I was warmly greeted. There were 6 Packrats including me, and 5 other members of the SJMT ARC who operated over the weekend. Sadly, it was still raining. But it was only 2 hours until the start of the contest, and I knew that I had to get the antennas ready. With a hand from KB1JEY and W2SJ, we got the four loopers and a 432 yagi set up on my rover mast. It was not without some "fun." When I looked at the side arms that we usually use to mount the yagis, one of the plates was missing. I'll presume it's either at Phil's or Cotner's, and was just not where it was supposed to be.

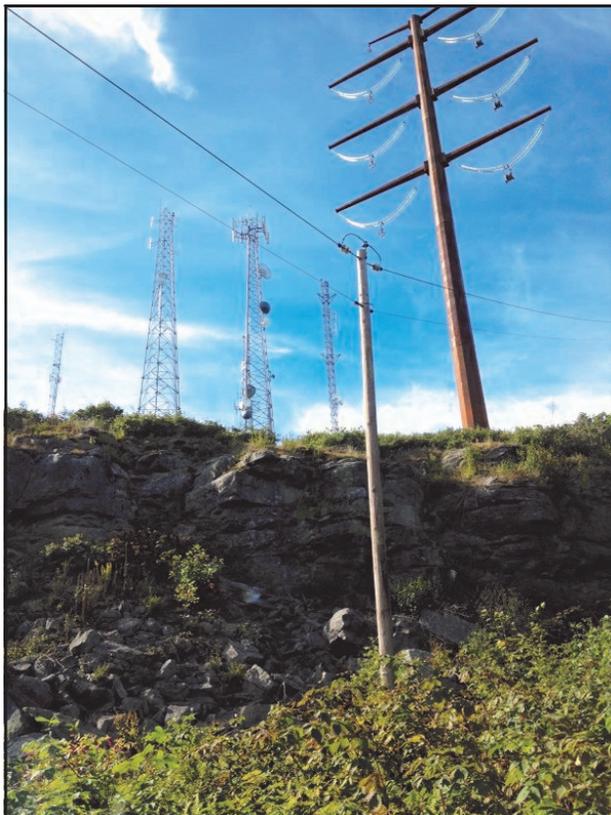
I guess it's stored away so a pair of 2304 loopers can be used in June. So Bob and I set to work on a U-bolt for **one** of the yagis. We had some that were too big, and another that was just a smidge too little. Well, the little one could easily be convinced to fit with a little muscle, wrenches and a drill. I was soaked after getting them all mounted, but they played pretty well for the weekend. Keeping the coax connector joints dry was tough, but thanks to a handy roll of Michael's 3M #33, they were good.

It was start time, and we were soaked and tired already. So we just took a break for lunch and coffee. By about 3:30 we were on the air. Things were very slow on the high bands due to the nice 6m openings. Joe, KC2TN did a super job on 6m for the first 5 hours of the contest. The large solar coronal mass ejection that brightened the northern skies with aurora borealis was facilitating nice activity.

It was a challenge to get passes from the lower bands to the microwave station (isn't that a common story) for several reasons—first, little incentive as everyone was on 6m, secondly, the 432 main station did not seem to be playing well, and thirdly, there was the need for better logger gab line info on who was being passed where, and finally we had the need for 6 digit grid locators for more accurate antenna pointing and communication which we weren't getting.

Little by little, the obstacles abated. It stopped raining. The sun showed a little color before sunset. We were fed a nice chicken stew dinner (thanks to Ray N3RG), the team learned the ropes of the gab line and 6 digit grids, and 6M slowly went quiet. The 432 duties were reassigned to me in the rover van, and that made it easier to coordinate microwave QSOs.

Like most mountain tops, this one has vegetation and it grows every year. The construction vehicles also created a huge mound of dirt in the northern direction of our operation, and the oversized construction



vehicles were partially blocking some of my antennas, which were only about 15' high. In addition, the commercial communications towers created a huge amount of noise.

Little by little, the QSOs started coming. I can't say that we set any records, but at least we showed that all the gear was working.

N3RG also got to test his newer microwave gear on 2G, 3G, 5G and 10G, making his QSOs on each of those bands, but finding that his 10G receive will need some

attention.

It was getting late. On-the-air traffic was slowing down. Time to find my assigned bunk and get some sleep. I stepped out of the van and went to check the rear. MURPHY!! Yep, scared me out of my skin, it was Ted W2TAG's pet dog, which just looked like some forest creature in the dim night moonlight! He had escaped from Ted's tent and went to explore a bit. Ted was scared for a moment that he had wandered away, but Murphy knew where his home was!

Sunday morning found us ready for another go at it, with the sun out and the air clear. Luckily, everything had dried out, we had a nice brunch of French toast, and contacts were coming in steadily.

In mid-afternoon, Ken K2WB flew his quad copter for some aerial videos. It must have been a football afternoon as the bands were real slow for a while, but things picked up nicely after awhile. I was able to pack and head home in the late afternoon, leaving the gang with bands through 5G that were operational, thanks to Ray's set-up.

The September contest is a focal point for the W2EA gang, and it's a bit different than June or January. There were several rovers out on the road, including our own W2MC/R and NN3Q/R. Preliminary results show the club set some of their own records in number of QSOs per band on 6m and grids per band on 2m. Lots of camaraderie, some challenges, and things to think about for next time.



73, Rick, K1DS

Call:	W2EA		
Category:	Multi Multi		
Power:	High Power		
State:	NJ		
BAND	QSO	QSO PTS	GRIDS
50	342	342	43
144	227	227	47
222	61	122	22
432	63	126	23
903	9	27	6
1.2	24	72	15
2.3	11	44	8
3.4	10	40	6
5.7	6	24	4
10G	3	12	2
LHT	9	36	1
Totals	765	1072	177 = 189,744

Plumber's Delight, Inexpensive, Antenna Side Mount

De K3IUUV, Bert

I needed a quick side-mount for a short 903 Loop Yagi. The junk-box did not offer any good prospects without a lot of sawing and filing, so I looked for an easier way. It occurred to me that the variety of PVC tubing available in the home repair stores might do the job.

A visit to my local big box store provided the solution. Tubing and associated tees, couplings and adapters are available in a variety of sizes. Figure 1 shows the parts I assembled in sequential order (top to bottom, parts 1 – 5). Typically, these parts have 1/8" walls and size stated is the **ID of the tubing**. Thus, the OD of one size will mate with the ID of the next size [e.g., a 1" ID pipe with an OD of 1-1/4" will fit inside a 1-1/4" pipe].

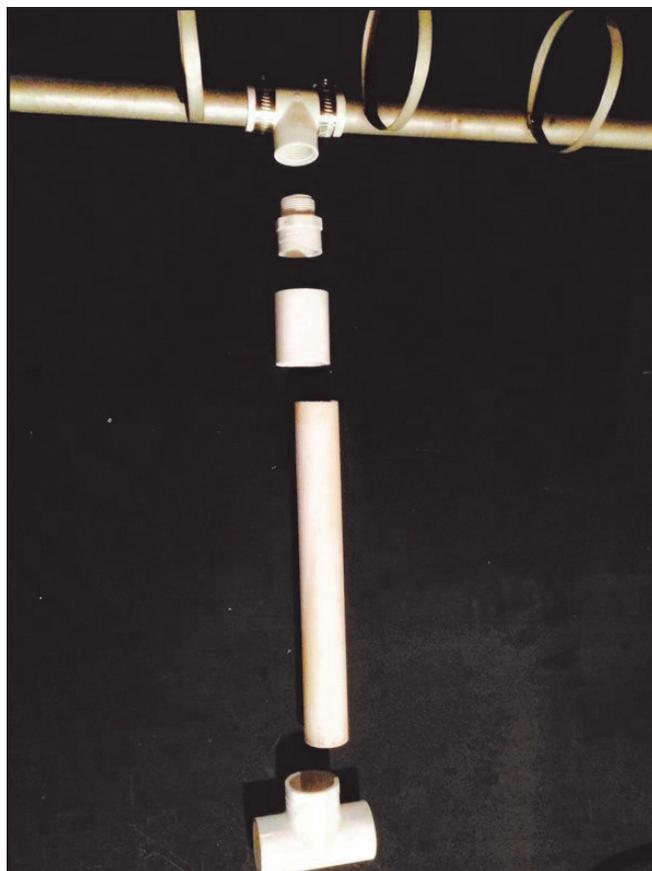
The Yagi boom was 1" OD, so I chose a "support" (item 1) intended to snap on a 1" OD pipe. To be sure it stayed locked in place I notched the support and clamped it to the boom with the adjustable clamps shown in the picture. This allows for rotation to the desired loop orientation (I use Down, to avoid loop distortion from roosting birds). To remove the boom, simply loosen the clamps and snap it away.

Next I needed a short "arm" to space the Yagi away from the mast. The support (item 1) has a threaded female port, so I used a "female adapter to slip fit" next (item 2). Item 3 (Coupling) joins the adapter to a short section (about 12") of 1-1/4" OD pipe (item 4). Lastly, the short pipe is fitted to the side port of a PVC Tee (item 5).

The Tee is a slip fit on the mast, and is available in a variety of sizes to fit different mast diameters. Not shown, I intend to notch the Tee and use two aviation clamps to prevent slippage (You could also use a through bolt).

The parts are assembled using standard PVC solvent/glue from the big box store.

Total cost under \$5, including the aviation clamps.



A Visit to the Central States VHF Society Conference

by John Jaminet, W3HMS

The XYL and I flew to Austin and stayed in the Conference Hotel, Austin Marriott South. This was our second CSVHF Conference, the first being in 2007 at San Antonio. Next year, 2015, is at Denver, CO.

These are the highlights as I saw them:

The 10 GHz EME contact by Al Ward, W5LUA with OK1KIR. This is a club station in the Czech Republic. Al used JT-4., a 3 ft round dish and 19 watts from a TWT. His signal is GPS locked. He peaked the dish on moon noise with an analogue meter and the variation in signal strength really showed up clearly.

An antenna range for gain measuring was presided over by Kent Brittain, WA5VJB. I missed this as it was concurrent with the EME sked...and **big antennas don't fit in suitcases!**

It was a pleasure to meet fellow Packrat, Bill Murphy, W0RSJ, and chat about mutual interests. I enjoyed meeting fellow contesters, Dave, K1RZ and Terry, W8ZN, their XYLs and chatting at the banquet.

Wayne Overbeck, N6NB, had two very interesting presentations. One was about his trailer with a 40ft hydraulic mast and bands through 10 Ghz. His conclusion...higher is better!!! His other covered history of CA to HI QSOs on 2m and higher bands.

In this, the home of Flex Radio, it was great to see a live demo of the new FLEX 6000 line and to talk extensively with well informed tech sales advisors.....and buying a 6300 two receiver unit with 100 W XMTR due in late August.

I also like the neat looking VHF/UHF Power/SWR meter by Daiwa that I won.

Jim, W6PQL, gave a superb talk on the high power SSPAs that he builds and kits he makes up. He explained the issues with getting high power from the physically small devices.

Most of the Tech presentations were quite good and most were very interesting. Some slides were "too busy". Some presentations were technically first rate but presentation skills sometimes evoked "eyelid leakage checking".

Dr. Jim Kennedy gave an excellent presentation on 6m DX (which seldom comes to my QTH!!).

On arriving home, I did the usual EXCEL for expenses and just about fell out of the station chair.....one question for my wife has to be: "which one of us bought all the vendors' products", HI!!!

73, John W3HMS

PIX FROM THE MID-ATLANTIC VHF CONFERENCE



TNX K3JJZ
& WZ1V for
PIX!

Roving in Florida

Here are a few pictures of my rover out for the 10 GHz contest,. We were out on the panhandle of Florida. The picture at dusk is of me and Terry, AA2LY, operating at Mexico Beach, EL79hw, Florida. The picture at the sea wall is at EL79hq, Cape San Blas, Florida.

There was a loosely organized effort between stations in Florida, Alabama, Mississippi and Texas. 432.150 MHz and 40 meters were used for liaison.

While there wasn't as much DX as we were hoping for, everybody says that they will return again next year. A get together of "THE GULF THIRTEEN" 10 GHz Adventure participants is planned for MUD.

Warren WB2ONA



222 Fall Sprint Reports

Worked 17 stations in 8 grids. With single loop omni-directional antennas at 35 ft, it never ceases to amaze me that I can work, K1WHS, KA2LIM, W1AN, & WZ1V, but some of the locals present a challenge. Hope I can still work them with the new tower and real antennas! **73, Bob W2SJ**

Worked 35 stations in 18 grids. Conditions seemed down tonight. Great to work everyone. **73, Phil K3TUF**

Worked 21 stations in 10 grids. Nice to work W2SJ with his discone. Also nice to work N2SLN, FN22 not heard in every contest. **73, Lenny W2BVH**

Got to FM29 to start the sprint and worked a bunch of folks in the first 30 mins, then things seemed to slow down, so I drove back to FN20 and set-up on the Nike site hill where the chain has been down for the past year. No RF noise up there and only 5 mins from home. Worked a bunch of same and many new stations. Best surprise was working VE3DS in FN02 and another VE3 in EN92 and finally K2OS in FN13. Also got AF1T in FN43 but couldn't raise N1JEZ from FN44. Conditions seemed favorable and K1WHS was booming in all eve. **73, Rick K1DS**

Note from WA2FGK

Thanks to Mike WB2RVX for helping me figure out a frequency problem today on 10 GHz.

It seems I was 30 kHz high for some unknown reason. Even more confusing, especially since I have 10 MHz lock.

One thing got accomplished. After being on the band for quite a few years, I finally worked the state of New York. I was able to work K2DH in FN12 and afterwards W1JHR - WA2BTR and N1DPM. **When it rains it pours!** We are going to pull the complete system off the tower on Tuesday and make some tests. New York is state number 14 for me and now have 23 grids. **73's**
Herb at WA2FGK

From Michelle, KB3MTW:

Band	QSOs	Pt	QSO pts.	Grids	Pts
50	19	1	19	3	57
144	18	1	18	3	54
222	10	2	20	2	40
432	14	2	28	2	56

TOT	61		85	10	850
Claimed score = 850					

Well finally submitted my score to ARRL. Not as good as January. There just wasn't as many ops on the air as there are in January. I also was working vertical on a mobile 6 meter antenna and didn't have the 1296 band either. Getting better antennas and adding 903/1296 in the future will pull the score up much further. Just time and money are needed.

Mount Airy VHF Radio Club, Inc. Southampton, PA.

APPLICATION FOR MEMBERSHIP

Call K0BAK	Class General	License Expiration date 5/17/24	Application date 9/19/14
Name Peter (Pete) Kobak		E-mail address rxr978-vhf@yahoo.com	
Address 6 Dana Dr		XYL's Name Geraldine	Call [redacted]
City Collegeville		Harmonics (1 st names): Mary, Patty, John	
State PA	Zip 19426		
Phone 6109839356 H, 4849194449 C		ARRL Member? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Life (check one)	
Business employed by Vanguard		Other Radio Clubs PAARC	
Bus. Addr. [redacted]		Other Hobbies cycling, golf, video, computers & software	
Bus. Phone [redacted]		Grid Locator: FN20gd (no home antennas yet, just roving) (6 digit if possible)	

Station Equipment

Band MHz	Radio	Output power	Antenna
A 50	ICOM IC-7100	100 (300 w/ amp)	loop & short 3el
B 144	ICOM IC-7100	50 (160 w/ amp)	loop & 7el
C 222	own downeast transverter, not online yet	20	none yet
D 432	ICOM IC-7100	35 (100 w/ amp)	loop & 14el
9 903	[redacted]	[redacted]	[redacted]
E 1296	[redacted]	[redacted]	[redacted]
F 2304	[redacted]	[redacted]	[redacted]
G 3456	[redacted]	[redacted]	[redacted]
H 5760	[redacted]	[redacted]	[redacted]
I 10368	[redacted]	[redacted]	[redacted]

Applicant's reasons for joining this club:

Want to be part of one of the top VHF clubs in the country. Want to learn more about: operating in VHF contests, overcoming the challenges of cm bands & microwaves, get help with improving my rover capabilities, and experience working with a pro-level club operating station. Over time, as I learn from current club members, I want to be able to help the club continue to be successful, and help new VHF operators.

Applicant's signature:

Reasons for Sponsoring

pete has been to a few meetings, the picnic and he is a new rover active on the air. He has VHF capability, checks into the nets and has the right stuff (attieeude)to be a contributing member to the club

Sponsor 1 call & initials **K1DS-RR**

Sponsor 2 Call and initials **[redacted]**

2 Meter Sprint Reports

Had fun at Len's working the 2meter Sprint.

Had 65 Q's and 24 grids Best DX:

- Northeast FN43
- North. FN04
- Northwest. EN93
- West EM99. EN90
- South. FM07

No real enhancement and activity was again down from last time
73, Bill K3EGE

Had fun in the sprint, but score was lighter than I had expected. Most ops bailed early and so did I. 18 Q's 7 Grids.
73, Lenny W2BVH

MURPHY STRIKES !!

THE BEST LAID PLANS... ? ? ?

De W3BFC

9/7/2014

I worked all day Friday and 7am – 7pm Saturday to do the 100 steps to install the 2nd 12 el K1FO on my tower for the Net last night.

Mr. MURPHY WATCHED AND WAITED.... IT HAD BEEN A LONG TIME SINCE HE VISITED !! BAMM !!

The second K1FO had a bad piece of aluminum that was formed into a bracket to hold the feed connector “N”...the stress used to bend the bracket totally fractured the metal causing it to simply break off just like a scored piece of paper.. **Murphy is laughing.** It's 10am and I have a long way to go on the tower....Bummers! I call K3CB and relay my dilemma. He says “come over and I'll make a new bracket for you!”[K3CB was the owner of C3iantennas as some of you will remember].2 hours later I am back at my QTH with the new part.... [Made much better than the original, far better].

Heat index is 99 deg. **HOT.** I am determined to make the Net....Re-cable tower, install the power divider, remove 432 yagi. Didn't drop a single nut, screw, washer, etc... goin good!...

Murphy watching !! XYL does heroic service putting tension on the tower with rope to align the bolt hole in the last tower leg! Ahh !! HOT ! HOTTER !

Net time:9:30pm local. STORMS EVERY WHERE.... LIGHTNING,QRN AND MORE QRN. WIND. RAIN. This is the very first time that the Net has had bad weather at my QTH!!

Murphy strikes ! I forgot the email reminder for the Net ! Oh my ! Hear K3IP, N3MWQ, KY4MCZ AND K3GNC. BUT **ANTENNA WILL NOT TURN TOWARD NY AND CT.**WHAT GIVES ??

When I removed the short boom 432 and replaced it with the new 12 el for 2M, I FORGOT TO CONSIDER THE TURNING RADIUS HAD CHANGED at that lower level AND NOW THE

NEW ANTENNA GETS **HUNG UP** HITTING THE 160M VERTICAL. **MURPHY WINS !.** Six inches is the problem and its because of my total failure to consider all the consequences of the changes I was making.

Storms got very bad and I could not turn to NY, CT, nor south toward KD4AA and the VA group. KJ4MCZ in FM06 was heard because K3IB heard him first and called my attention..... KJ4MCZ was the limit of my antenna to the SW before it hit the 160 M antenna on the southern swing.....

So, thats my story..... **Murphy NEVER tires** of his “fun”

Now I have to lower the 160 antenna and shorten it 6-8 inches BUMMERS... and a ton of work to do !

This is my story and I am sticking to it..... hihi!!

Next week is the ARRL VHF Contest, so NO NET. It is also the Celebration of our National Anthem in Baltimore at Fort McHenry. A huge fireworks will replay the “**Rockets' Red Glare**”

73's W3BFC, Ray

TNX to Walt K3BPP for sending this report to the Packats

Net INFO: Chesapeake area 2 meter Net 144.205 MHZ, Saturdays at 9:30pm.

W3BFC calls for local check-ins starting in the Annapolis-Easton area FM18, then I beam north toward Philadelphia/ New Jersey listening for check ins, then I move the beam westerly toward Lancaster, Westminster, Frederick, West Virginia, and on toward Richmond, VA. Then further south to Williamsburg/Newport News and Norfolk, finally stopping looking down the Outer Banks of NC. And back around to the north again. After check ins are complete I go around for comments and signal reports from everyone. Early check-ins relay weak signals and listen in the opposite direction as W3BFC rotates his antenna in the pattern described above. All welcome!

A Remembrance of W3VIR

I met Bill W3VIR back in the late 50's. I was a high school student and a ham. I was enamored with VHF. Somehow I got on 2 meters with a SCR 522 from Don Hampton W3CJU (SK) and Packrat member. Being on 2 meters with a technician license got me connected with the Packrats. I would take a bus from Doylestown to Willow Grove and meet up with K3CIV Ralph Hirsch and he would drive me to the meetings at the West Oak Lane Jewish Community Center.. This activity along with becoming active on 220 MHz got me to become the first student member of the Packrats. Eventually I got a drivers license and was able to visit a number of the hams I met on the air. Among them were W3KKN and Bill W3VIR. Bill was an Elmer before there were Elmer's. He encouraged me to get on 220 and 432 and loaned me a 5894 tripler from 144 to 432. At this time Bill was living with his parents in Willow Grove a few blocks from Ernie W3KKN. In the late 50's F2 activity was quite good and Bill was working South Africa on 6 meters which excited me to no end. I was on 6 meters with a converted DX 35 and worked lots of West Coast Stations and heard beacons and TV stations from across the pond. **Bill was a meticulous builder** of equipment. On more than one of the circuits I had built Bill was able to point out building problems. Bill was a regular attending Packrat member through the early 60 's. During that time I went away to college and sort of lost touch. Fast forward to the 1980's , I had completed college and had started working in the Antenna Lab at American Electronics Labs in Lansdale Pa. Additionally I got married and started to get back into ham radio.. Out of the blue Bill had tracked me down and was asking some questions about 1296 equipment. At this time Bill had purchased a house in Holland Pa. I visited Bill a few time at his house and we worked a few times on 1296. As time moves on I became less active and lost track of Bill. I am certainly sorry to hear of his passing. He was certainly an inspiration to me.

RIP Bill Best 73's,
Walt K3BPP

MUD 2014!

Now's the time! If you're planning on attending MUD2014 in Rochester this year, PLEASE register for the conference and let us know you're coming!

The conference promises to have plenty of interesting topics, including 78GHz work in VK-land and undoubtedly presentations about receiving systems and solid-state transmit power amplifiers.

Time is getting short. The conference will be held October 24-25, 2014 in Rochester, NY. The Rochester VHF Group has gotten commitments from the hotel for great rates and we've planned some activities for early arrivers before the conference and spouses during the conference days.

Registration is open and is reasonably priced.

Airline fares to Rochester are also reasonable; we are served by the major carriers, through New York, Philadelphia, Washington, and Chicago.

Go to: www.microwaveupdate.org to register for the conference, which will be held at the Rochester Airport Marriott.

We're looking for presenters and articles for the proceedings, as well. So if you're doing anything microwave-related, please consider doing a presentation or at least submitting a paper for the proceedings.

I hope we see you at MUD2014!

73
Dave Hallidy K2DH
MUD2014 Co-chairman

The Wayback Machine

Gleaned from the pages of
Cheese Bits, October 1964

(Vol. VII Nr. 7)

(Authors comments in *italics*)

- “Ladies Night”, announced, to be held at the Buck Hotel. (*Another Packrat tradition, over 50 years old*).
- ARRL Bulletin 969, reminded us that the following countries prohibit communication with their amateurs by US Hams: Cambodia, Indonesia, Thailand and Vietnam. (*50 years later, the names have changed but there are still some that are banned!*).
- Member W3ELI, George Van Dyke, State MARS Director reminded us that the MARS net on 49.94 conducts code practice sessions every evening at 8:00pm.
- September speaker was Bert, K3IUV, talking about the Nimbus Satellite.
- K3GAS, “Doc” reported that he stripped a surplus chassis and retrieved 19 types of components useful for homebrew gear (*in addition to the stripped chassis!*) (*It was common at that time to strip down defunct TV receivers or radios. The TV transformers made an easy source for a B+ supply for rigs up to about 100 watts*).
- New Products, by W3NSI, Lynn. He reported that Davco Electronics has just released an all-transistor Ham receiver covering 80 – 6 meters. Using a Collins

mechanical filter, it contains 25 transistors and 10 diodes. (*And you thought transistors were a “modern” development?*). Price \$315.00

- January contest chairman, W3LHF, announced the list of contest coordinators. They will be available to help the members to get ready. (*Coordinators were assigned a specific group of members to aid and encourage. This was part of our “winning strategy” at the time*).
- ARRL Bulletin Nr 966. The annual Simulated Emergency Test (SET) to be held in October. All Amateurs were urged to participate in traffic handling exercises for the Red Cross, Civil Defense and other agencies. Your EC (Emergency Coordinator) will have details. If you are not a member of the AREC, join now. (*50 years passed, still needed!*)
- Two Meter Report. W3LHF, Dave reported his own activity low due to personal conflicts. However, many stations were worked from NC, including W4FOO who was using a Gonset. A Midwest opening provided a few contacts into Wisconsin. Dave noted that in the contest, “Two” is always good for a few sections not available on “Six”.
- UHF Report. K3IUV, Bert reported increasing 220 activity, with “W2EIF working stations up and down the coast”. A reminder to use the club intercom on 221.4 to alert other members of openings. On 432, he

- worked W1HDQ (*Ed Tilton, Mr. VHF*) with S9 signals for several hours. Ed was on FM. Reception used “slope detection” (*do you remember that!*). On 1296, renewed interest in APX-6 conversions has K2HQL operating, K3GAY with receiver going and xvtr in debug and W3LXP modifying his recently acquired unit. K3IUUV, W3GGR (Elkton, Md) and W3CGV (Wilmington, DE) are testing new xtal controlled converters. APX-6 units now available for \$16.95 from Fair Radio in Lima Ohio.
- “Where Your Halo Go”. The title of the humor article (*but true story*) that K3JJZ, EI contributed. Synopsis: EI arrived at Bert’s house to pick him up for a meeting. They waited for K3IPM, Stan to arrive with his 432 converter that needed repair. Stan arrived and parked in back of EI’s car. While the repair was being done, someone hit the rear of Stan’s car, smacking it into EI’s car and bringing down the halo. (*The full story, and more laughs in the edition on our website (W3CCX.com)*).
- The Southwest Amateur club in Cleveland will be launching a 6’ balloon on Nov. 2. It will transmit with low power (30mw) on 50.05, and send the club call in cw (*using a motor-driven code wheel as the source*). Reception reports are requested. They expect the flight to last about six days, and were offering a trophy for the most distant reception.
- Technical article. A schematic and description shows use of the ubiquitous carbon mike (*from any telephone mouthpiece or Mil surplus*) in lieu of the normal mobile rig crystal mike. The close-speaking nature of the carbon mike greatly reduces background noise. The schematic showed how to use a

switch to put the carbon mike in a grounded grid configuration, or the crystal mike in the normal amplifier configuration.

- Rebuttal to EI’s previous article which had berated XYL’s interference to Ham Radio Time. K8NQD, an XYL, penned a very nice letter giving the other side of the story (*her vision*). It was published in full (*14” page*). *I encourage you to read it at W3CCX.com*).
- Swap Shoppe. For Sale by W3BRU: 90’ tower, 10’ sections, \$12.50 per section (*yes, there were some tall towers used 50 years ago*). By K3WEU: Instructograph with 10 tapes, \$40.00 (*Anyone else remember this? Motor driven with punched paper tapes, it was a common way to learn, or build your code speed*).
- New Members. **K3UJD, Mario**, was inducted into the club in September. Mario was an outstanding member of the club. His technical prowess is remembered today in our monthly “Mario” raffles.

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
K3IUUV**

The Richmond VA area 144.280 and 432.300 beacons are now on a 200 foot water tower south of Petersburg in FM17. They are not GPS locked. Power on both is 15 watts. Call sign is now WA4FC/B. The antenna is a Diamond multi-band vertical until we can swap out with horizontal antennas,

The Petersburg site is also the location of the 28.231/50.070 dual band beacon.

The 222.060 beacon is still operating GPS locked as N4MW/B. Other N4MW beacons will return later, perhaps from higher locations.

Dave Meier N4MW

The 2015 edition of the ARRL's January VHF Contest will fall on the fourth weekend of January (24-26 January 2015), not the customary third weekend. The fourth weekend was chosen to avoid conflict with NFL playoffs and the Super Bowl. In 2016, things will probably return to normal. (Thanks, ARRL Contest Branch Manager, Matt W1MSW)
I confirmed this with Matt. 73, Rick, K1DS

Packrats in The News

A recent ARRL newsletter (9/4/14 issue) mentions a couple of Packrats.

In the EME conference (held in Brittany, France last month) article, Rick, K1DS summarized some of the highlights, including a synopsis of the talk by Al, K2UYH on aspects of Doppler shift, particularly as regards moving higher in frequency.

In the article "A Century of Amateur Radio and ARRL", Al, K2UYH is noted for his achievement of WAC (worked all continents) on 432, as reported in the September 1976 issue of QST (guess who provided AL with his last needed continent?).

Good job, Packrats

K3IUV, Bert

W2KV Down the Shore

Here are a couple of shots from a visit we made to W2KV's place at Shipbottom, NJ last month. Dave asked me to help set up some antennas so he can be QRV from his Jersey Shore location. Fortunately (?) Dave was finished with his initial installation by time we got there. Planned is a 75M half sloper, 2-meter halo, 2-meter yagi and maybe others. —Lenny W2BVH



W2BVH & W2KV on the second deck with 20 M vertical



Ben, Wendy & Lenny (W2BVH) on Dave's dock

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Events

For inclusion, please direct event notices to the editor.

Fall Sprints –432 Mhz - Contest

October 8, 2014. 7-11 pm local time. See <http://svhfs.org/wp/rules-for-2014-vhf-fall-sprints/> for details

EME Contest 2.3 GHz & Up Contest -

October 11-12, 2014. See <http://www.arrl.org/eme-contest> for details.

Fall Sprints –Microwave 902 Mhz+ - Contest

October 18, 2014. 6am—1pm local time. See <http://svhfs.org/wp/rules-for-2014-vhf-fall-sprints/> for details

EME Contest 6M - 23 cm Contest -

November 8-9, 2014. See <http://www.arrl.org/eme-contest> for details.

EME Contest 6M - 23 cm (round 2) Contest -

November 16-17, 2014. See <http://www.arrl.org/eme-contest> for details.

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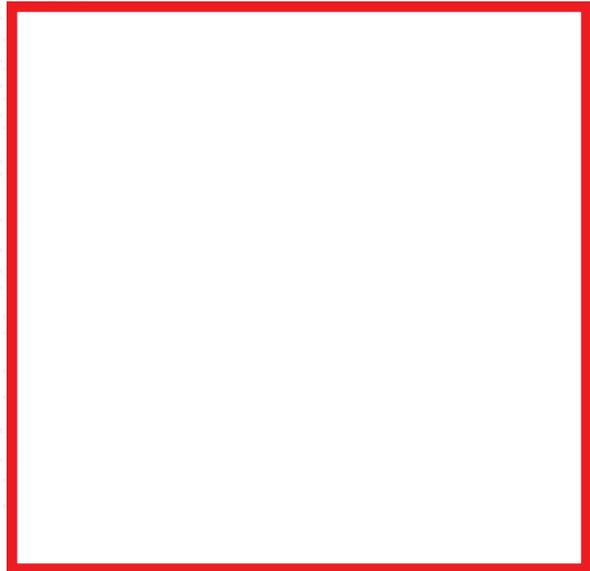
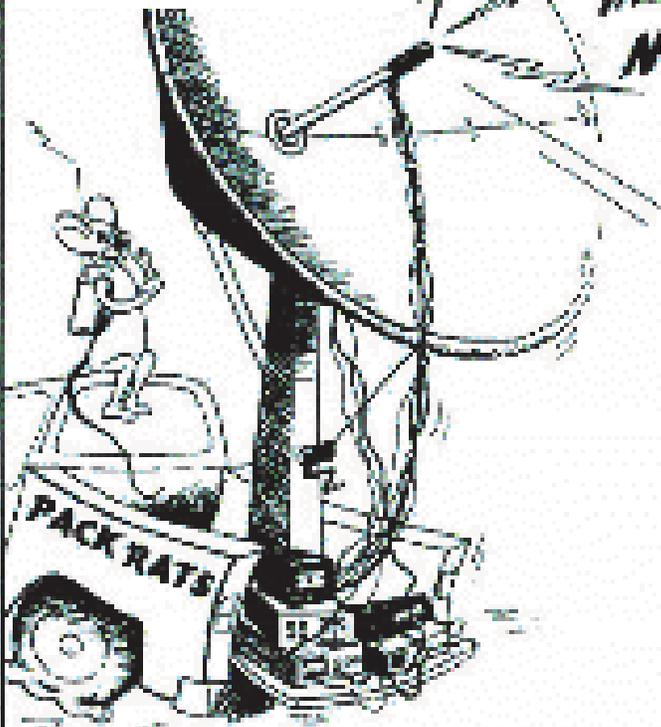
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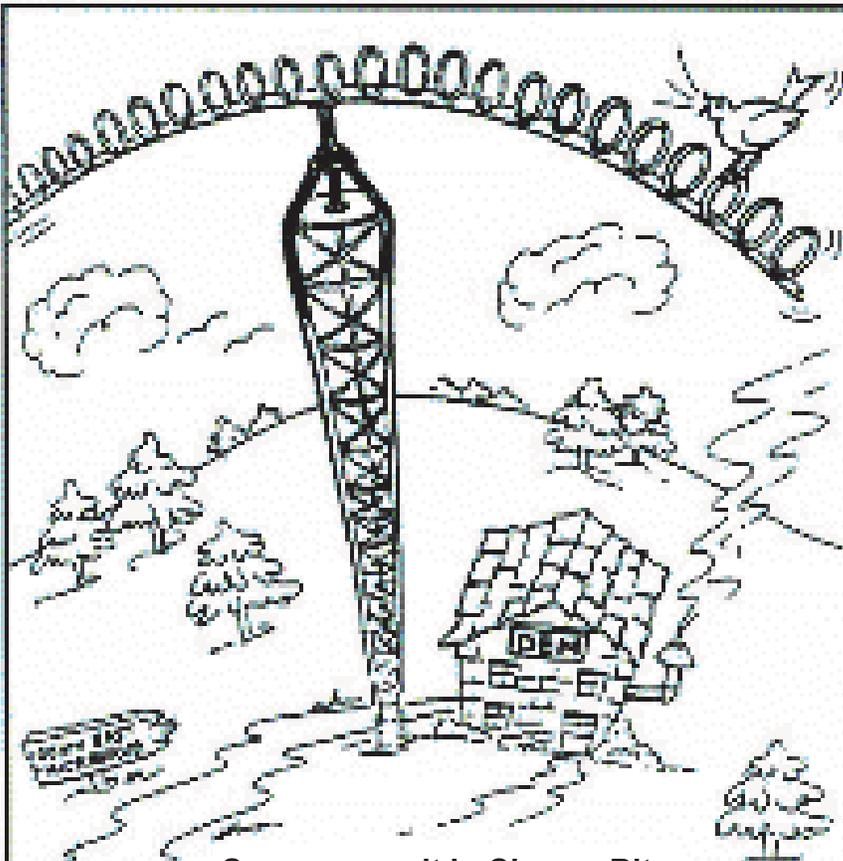
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**MEETING
NOTICE**



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