



CHEESE BITS

W3CCX
CLUB MEMORIAL CALL

ARRL
Affiliated
Club



Volume LV

September 2014

Number 9

PREZ SEZ:

Labor day has just passed, and the summer is officially but not actually over. We've now had the ARRL UHF Contest, the Packrat Picnic, the first weekend of the 10 Gig and up Contest and the September VHF Contest is upon us. It will be a fun and busy fall season with both the September VHF Contest and the Mid Atlantic VHF Conference this month.

So how many of you were able to enjoy the UHF Contest? We had some Rover involvement and I hear from K9JK that I was the 100th log to be submitted. We'd like to see more logs, but as of mid month we had ten logs submitted. Even if you are beyond the deadline, submit your log for checking purposes. While there was no particular enhancement, there were a steady stream of stations to work. As you know, I just love the duration of this Contest.

While we would love to see more, the nearly 30 attendees to the Picnic all boasted of a good time and great food; a fine combination.

That same weekend was the first weekend of the 10 Gig and up Contest and W3CCX was activated on Camelback. WB2RVX and K3TUF traveled to Tannersville on Friday; we left the K3IPM tower trailer next to the Cattell Cabin where our electric feed originates. After a nice dinner and overnight stay at the new location for our June excursion (Days Inn) we went on the mountain top

to get set up. We managed to get things set and be on the air by 11 AM, a poor plan given that lots of activity had already taken place. Next time we'd like to get the setup out of the way on Friday evening so that we can get a fresh start on Saturday morning when everyone is ready for contacts. By the time we were activated some rovers were already going to their second location.

Here's what I'd love to see next year: A two day event with two shifts of operators, one for Saturday and another for Sunday. Crew one goes up on Friday evening and get things set up, stays overnight and begins operations for the first day. Crew two comes up Saturday evening and shares a meal with the first crew then stays for day two. When day two of operating is over, they tear down and return the trailer. It's another great way to get W3CCX on the air. Let me know if you are interested in the 10 Gig Contest for next year.

September does host the second weekend of this contest, but it's too short notice to pull off my plan this year. Camelback is a great location for 10 GHz operations, and with Stan's tower trailer we are well over the obstructions.

The highlight of our year is the Mid Atlantic VHF Conference. This year, once again, Rick, K1DS, has pulled together a fine event. Speakers are lined up, registrations are coming in, and we are nearly at the half way point. Packrats are starting to register. I know we are usually the last to get that taken care of, but you can do the organizers a favor

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

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PACKRAT BEACONS - W3CCX/B

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

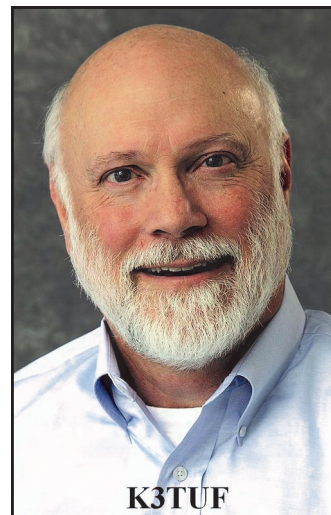
Visit the Mt Airy VHF Radio Club at: www.packratvhf.com or www.w3ccx.com

if you register soon. Many are signed up who will be traveling from afar.

Looking ahead further into the fall, think about getting your HF station in shape for the CQ events in October and November. The SSB DX Contest is a great way to enhance your DXCC pursuit; I recently finished my 5B DXCC and am looking to further the numbers with the upcoming contest season. The CW DX Contest, even if you only dabble, is a great way to sharpen your CW skills for the January VHF Contest.

So get on the air when you can; and... Lets work on lots of bands,

Phil, K3TUF



CAMPAIGN STATEMENT

The ARRL needs to actively seek out the needs and opinions of the amateur community by increasing the lines of communications, especially from the grassroots up. Bidirectional communication with you will be one of my top priorities. As your representative, I'll solicit your input and ideas, keep you advised of issues affecting amateur radio along with topics scheduled for Board of Directors action. I'll solicit your input and opinions before the vote, let you know how the item turned out, and the reasons for how I voted.

There are other areas where I believe the League could improve. Ironically, the common root of the problems I perceive is a failure to communicate. When an organization seeks to represent a group of people, it's that organization's responsibility to actively seek input from that group and act upon it. It is also that organization's responsibility to keep the group informed. The lines of communication must be kept open at all times and function in both directions.

I want to restore grassroots control of the organization by keeping you informed of what is going on in Newington so that you can keep Newington informed of your ideas and opinions. I want the voices of all of the members of the Atlantic Division to be heard; I want to fix the missing communications link and serve as a Director that represents you and your interests.

I also have thoughts on representing the interests of amateurs at large within the Atlantic Division. If we are to persuade these amateurs to ultimately become members we cannot treat them as anything less than we would treat our members. They must be communicated with as a potential member and not pushed off to the side as second class citizens.

One of my first actions will be to create a Council of Club Presidents as an advisory group (ACCP; Advisory Council of Club Presidents). The Atlantic Division is far too expansive for the Director and Vice Director to attend every meeting at every club, so the Council will provide a conduit for amateurs' voices and concerns to be heard from every corner of the Division. I want the affiliated club presidents to feel like they are a part of the team and have direct access to League matters. This will also give their members (comprised of ARRL and non ARRL members) a clear path to ARRL policy issues.

I will appoint Assistant Directors from around the entire Division. I'll lead a team made up of the Vice Director and the Assistant Directors that will work to keep you informed, solicit your input, and assist me in ensuring that all of the vast Division is represented. I'll work closely with the Section Managers to see that their needs and concerns are addressed. I will work closely with the Vice Director to ensure that we provide the best representation possible.

Phil, K3TUF

EME Conference Report

The 16th International EME (moon bounce) Conference was held in Brittany, France on August 24-26, 2014. The meeting was held at Pleumeur-Bodou, the site of the 64 meter wide radome, housing the immense **340 ton antenna** that captured the first live television signals broadcast from the US via Telstar satellite to France in June of 1962. More than 100 EME enthusiasts and their spouses participated in this three day event. Starting with a tour of the rose granite rocky coast, attendees had visits to the Telecommunications Museum and the giant microwave antenna in the radome. www.cite-telecoms.com/



The conference had more than 23 presentations over two days with topics in all fields related to moon bounce activity and **frequencies as high as 77GHz**. Speakers from countries all over the world contributed their experience, technical achievements and research. Workshops and demonstrations were interlaced with the program and included operation of the 144MHz digital EME station, the 5.6GHz CW/SSB EME station, and **reception of the 10GHz EME beacon with a small 50cm dish**, preamp and down-converter. The attendees and spouses enjoyed meals together for each of the 3 days, which facilitated a great exchange of technical knowledge and camaraderie. I especially enjoyed all the French beers, wines, croissants, baguettes, cheeses and crepes.

Packrat members **K1DS, K1JT and K2UYH** and their wives attended. Both Al and Joe were speakers, as they have been multiple times in the past. They both will also be presenting EME topics at the **Mid-Atlantic States VHF Conference** that we are hosting at the end of September. One of my favorite parts of the meeting is picking up little pearls from the other EME ops. I also bought several little buffer boards made by Dave, G4HUP to install in my VHF radios in order to have some IF output directed into one of my SDR receivers or FunCube Dongle. Dave will be back in the states next month and will sell these small inexpensive boards if you want them and he can mail them to you with less expensive US postage. See <http://g4hup.com/> for the description of the boards he has available and installation and ordering instructions.



The group of French amateurs and others who organized this conference spent the past 2 years insuring a great result for all attendees. We thank Chairman Andre Gilloire, Co-chair Lucien Serrano F1TE, Co-chair Guy Gervais F2CT, Franck Tonna F5SE, Sylvain Meyer F6DBI, Corine Guillard, Lucien Mace F3ME, Herve Sizun, Philippe Dupuis, Pierre-Francois Monet F5BQP, and the

....EME Conference cont'd

....EME Conference cont'd

Observation Radio Pleumeur Bodou. The 17th International EME Conference will be held in Venice, 2016.

The ARRL EME Contest will be held on the weekends of October 11-12, November 8-9 and December 6-7. See the Contest Calendar and ARRL website for complete details.



Radome Model

Reported by Rick, K1DS

K3MF EME Station Update

(From EME Newsletter)

K3MF: Wayde (k3mf@aol.com) updates us on his station's status – I have been QRT for a while because of moving my QTH. I have finished the 432 EME station here at my new QTH in Fawn Grove, PA. I moved from FM19xp in Maryland to FM19sr in PA. **[Because of his change in State, Wayde should now count as a new initial.]** The 8 x 25 K1FO array is working great. My azimuth and elevation system has also been changed to an OR2800 and a MT-3000. The noise level here is also a lot lower. I am now using an 8938 amplifier putting out 1200 W. I worked so far from the new QTH on 2 Aug LU7HI for an initial for me KD5CHG, and on 3 Aug VK4CDI, LZ1DX, UT5DL, ES3RF, LU8ENU and DL7APV. All QSO's were JT65B.

Packrat Picnic 2014

At N3ITT's

Attended by N3ITT & XYL, KC2TN & XYL, N3RG & XYL, W3KM & XYL & granddaughter, K3IUV & XYL, K1DS & XYL, W3GAD & XYL, WA3SRU & XYL, KB1JEY, KA3WXY, W3GXB, K0BAK, W0RSJ, and Rose, Al's mom, and more!



Tnx to K1DS for photo

Joke

Two antennas met on a roof, fell in love and got married. The ceremony wasn't much but the reception was excellent.

Submitted by Warren WB2ONA, from <http://www.tickld.com/x/20-jokes-so-terrible-theyre-actually-funny-14-is-gold>

ARRL AUGUST UHF CONTEST REPORTS

From John K3MD

High Power SOP

222 19 11
432 16 11
1296 7 7
TOT 42 27 3967

No activity on Sun. 10 hrs operating. New homebrew mast-mounted 432 preamp worked well (Dow key 402s... 24V, MFJ preamp, MFJ DC injector, W6PQL sequencer)..

From Phil K3TUF

SOHP

222 39 15
432 44 14
902 17 9
1296 21 9
3456 11 7
TOT 132 54 32,886

Activity Sunday was markedly down from Saturday, but still managed to add a few q's and grids. Too bad the activity is down, I really like the duration of this contest. It was fun regardless.

From Lenny W2BVH

FN20 SINGLE-OP ALL HIGH
NNJ Section

Band QSOs X pt = QSO
pts. X Grids = Points

222	22	3	66	10	660
432	15	3	45	8	360

TOTAL 37 111 18 1998

Claimed score = 1998

Condx not that good this year, though I'm pretty happy with the results for a 2 band op. Tnx to all who participated Especially those who pulled my 432 12W sig out of the noise)...

From Rick K1DS

Freq	Qs	Grids
222	36	12
432	36	12
903	11	5
1.2	21	8
2.3	6	2
3.4	6	3
5.7	1	1
10	1	1

117 44+2=46 score = 26,772

Slow activity--thanks to those who managed to get on the air.

From Ray N3RG

SOLP

Freq	Q	Pts	Gr
222	26	78	11
432	25	75	11
903	14	84	9
1.2	17	102	8
2.3	4	48	3
3.4	4	48	3

90 435 45 score = 19,575

Six hours on six bands - not much activity but still managed to have fun! Thanks to everyone who got on the air.

From Griff NE3I

Made one Q on 432 with K1DS/r Saturday at 1800 local, while mobile on the way to dinner. Heard nothing on Sunday when I checked the bands.

From Bob W2SJ

FM29 SINGLE-OP ALL LOW

SNJ Section

Band QSOs X pt = QSO pts X Grids = Points

222	12	3	36	6	216
432	9	3	27	4	108
903	3	6	18	2	36
1296	5	6	30	2	60
2304	2	12	24	1	24
3456	1	12	12	1	12

TOTALS 32 147 16 2352

....August UHF cont'd

Bob W2SJ cont'd

Claimed score = 2352

I was not able to operate on Saturday at all. Sunday I put in about 3 hours off and on. This contest is one of my favorites and I will try to plan better next year!

From Warren WB2ONA

LIMITED ROVER EPA
Band QSOs QSO pts. Mults.

222	8	24	4
432	12	36	4
903	4	24	3
1296	4	24	3
2304	2	24	1
3456	3	36	2
10G	1	12	1
24G	1	12	1

35 192 19 + 3 = 22

Claimed score = 4,224

I had the rover out for the UHF contest. Did FN21, FN11 and FN12. Still have a few things in the rover to work on but did manage to make a few contacts. I did computer log the contacts, but the logging is something that I have a few issues with. (Mostly because I'm not as radio active as I need to be!) Ran out of daylight and access on Saturday at Camelback. There is a lot more for me to do but at least I've started with getting the rover together.

From Joe WA3SRU

Band Q's Points Grids Points

222	19	57	9	513
432	20	60	10	600
903	10	60	5	300
1296	11	66	4	264

Totals 60 243 28 6804

Claimed Score = 6804

From Mike WB2RVX

FM29mt Single Op HP
Operating Time (hrs): 6
Band QSOs Mults

222:	16	7
432:	18	8
903:	10	7
1.2:	12	6
2.3:	5	4
3.4:	6	4
5.7:	3	3
10G:	2	2

Total: 72 41 Total Score = 16,974

From K2LIM Group

Band Q's Grids

1.25	47	24
70cm	58	24
33cm	19	13
23cm	24	15
13cm	6	5
9cm	2	2
3cm	1	1
1.2cm	1	1

Total score – 64,005

Total contacts – 163

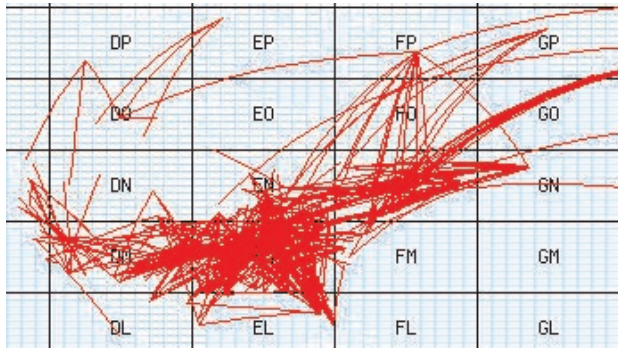
We want to thank everyone who took time to work us and a special thanks to all the ROVERS who went out and activated so many grids and gave us so many contacts. Here is a list of the rovers in no particular order: AB2YI/R, K1DS/R, KF2MR/R, N2DCH/R, N2QIP/R, VE3OIL/R, WB2ONA/R.

We had a great time operating, great food again, a few refreshments and a great time rag chewing with Warren. Got a few things to tweak before September but we are looking forward to the September contest. For the K2LIM contest group, More details of the UHF contest can be found at <http://www.ka2lim.com/10.html>

Six Meter DX Report

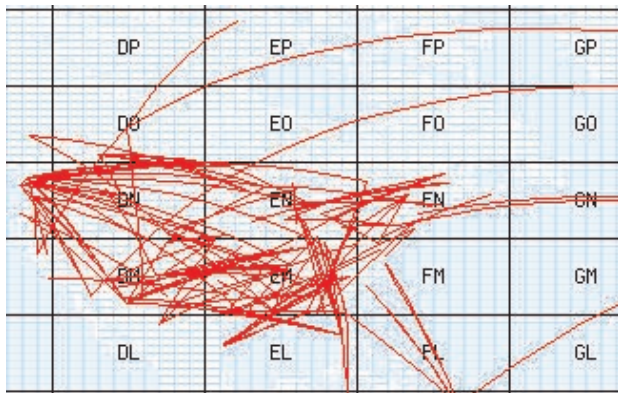
14 Aug 2014

Since the second week of July, E skip propagation on six meters has been steadily decreasing. The decline in multihop propagation is generally expected as the summer E season comes to an end. However, there were a couple of nice openings to this area. On July 13th IK0GHB and IK0FTA were on early in the morning, and on the 21st Johan ON4IQ worked a lot of stations on the East Coast, including me. On the 26th of July the band opened in the evening to VO1, TF (Iceland) and OX (Greenland), and MM (Scotland). There generally seems to be at least one opening via the northern path during the second half of the E season. What made this opening unusual was that David MM0AMW was in here and the northeastern US for over an hour. The mode is believed to be Auroral E. At the same time KU9C/VP9 in Bermuda was working stations in the eastern US. A screenshot of the July 26th ON4KST DX map is attached to show the opening to the US and a large opening from JA to Europe the same day.



ON4KST Six Meter Prop 26 July 2014

There are still brief and isolated openings to Europe. Today's ON4KST map, also attached, shows some transatlantic propagation. I don't think this is abnormal; more likely it is attributable to people who monitor the band constantly and use the ON4KST chat page to catch brief, isolated openings that in years past would have gone unnoticed.



ON4KST Six Meter Prop 14 August 2014

The Perseids meteor shower, which peaked on August 12th, did not seem to produce anything unusual. I have not heard how the K5N grid DXpedition fared; I may have information in an upcoming report.

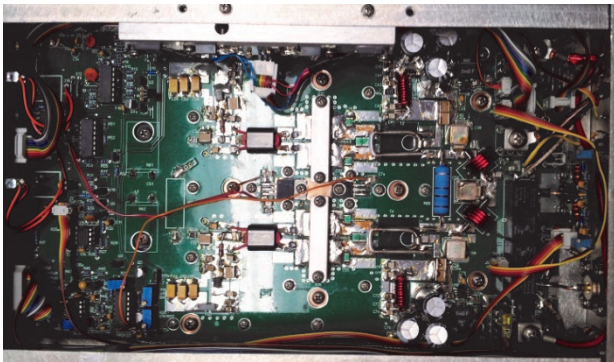
Soon we will be in a transitional period from the Summer E to Fall TEP seasons. As we approach the Fall Equinox we may see some north south openings to South America. If we are real lucky, we may

catch a whiff of F2 to Africa or the South Pacific. I am not expecting much if any F2 propagation to Europe

...6M Report cont'd

or to the Far East.

Last item of interest is the M2 6M-1000 portable amp that I am finally getting ready to fire up. Lance W7GJ has used this type of amp on several of his EME DXpeditions. A picture of the interior of the amp is attached. It uses a pair of Freescale MRFE6VP5600H LDMOS transistors. M2 rates the amp for over a kW out with 80 watts drive. It weighs only 12 lbs.



M2 6M-1000 amplifier

I recently got a case for the Eltek 2000 watt 50 volt switching power supply I intend to use with it. The Eltek power supply weighs less than 5 lbs., so the total weight of the amp and power supply should be less than 17 lbs. That shows how far equipment has progressed; a few years ago my DXpedition amp was a modified Commander II with lightweight transformer that put out about 700 watts, weighed about 45 lbs., and was more than twice as large. This amp should make a huge difference on DXpeditions.

73, Chris W3CMP

New East Coast 78 GHz Record

During the 10 GHz contest, through planning and deliberate effort, Don W1FKF, Mark KA1OJ, Mike N1JEZ and Tom WA1MBA extended the local (New England/East Coast) 78 GHz DX from its long standing 43 km to 88 km and then to 125.4 km. Signals were SSB and CW at 88km, and CW at 125 km. LNAs were used both in receive and transmit at both ends for the 125 km QSOs.

We had excellent weather, great spots to work from, and a lot of satisfaction in the midst of all the work. There will be a full report at Microwave Update this October. **Tom WA1MBA**

GPS Stabilized Freq Reference Less Than \$30

Two modules from eBay can be easily and simply configured to produce a GPS disciplined oscillator that can output **any fundamental frequency from 0.25 Hz to 10 MHz** with GPS precision. Strong harmonics from the square wave output are useful well into the GHz range. The module can be configured via the USB interface with downloaded software from u-Blox, the module manufacturer. The configuration is saved in battery backed up RAM so the USB interface can be disconnected once programmed. A really cheap, fun, and useful project!

Search for "Ublox NEO-7M GPS/GNSS" and for "CP2102 STC" on eBay.

This came from a message by allgyer@gmail.com on the Softrock40 reflector.

Editors note: This will make a stable **frequency** reference. It may be possible to make a stable **phase** reference by adding a clock multiplier chip to the output. You'll have to try it and see what happens. Food for thought. —W2BVH

Some Recent Microwave EME as Reported by W5LUA

I had a pretty good month on 24 GHz working VK7MO/P in QF22, QF31 and QF32 using JT-4F for 2 new initials. I was also pleased to work VK3NX on 24 GHz 2X CW with M/O reports. We then proceeded to work each other using JT-4F. I also worked VK7MO/P on 10 GHz using JT-4F in QF31, QF32, QF46 and QF28. I ventured back to 432 and worked VE3ELE, K5DOG, K2UYH, NC1I, and WA4NJP bringing my initial count up to 207. My first 200 initials were made over 20 years ago! Just getting back into 432. Having had a great amount of success in working VK7MO in multiple grids with Rex's .9 m dish and 50 watts, I decided to put together a similar small EME station for a demonstration on July 25th at the Central States VHF Society Conference in Austin, Texas. I used my terrestrial setup which consisted of a DEMI transverter, homebrew 2 stage LNA with about a 1.2 dB noise figure and a 20 watt twt. I also incorporated an N5AC A-32 PLL board so that the transverter could be locked to a 10 MHz TCXO. I then took the 2M IF and converted it to 10M with a W1GHZ mini-verter with the 116 MHz LO obtained with an N5AC VHF Apollo board which is also locked to the 10 MHz TCXO. The 10m is then connected to a Flex-1500 as an IF. I also incorporated an N5AC A-32 PLL board so that the transverter could be locked to a 10 MHz TCXO. I then took the 2M IF and converted it to 10M with a W1GHZ mini-verter with the 116 MHz



obtained with an N5AC VHF Apollo board which is also locked to the 10 MHz TCXO. The 10m is then connected to a Flex-1500 as an IF. This setup was mated to a 36 inch prime focus dish and mount built by WA5YWC. Bob used 3/4 inch copper pipe in a shepherd's hook configuration and a VE4MA feed with scalar ring. During our test, moon degradation was nearly 2 dB as it was close to apogee but WA5YWC was able to QSO OK1KIR with -16/-18 dB reports using JT-4F. Our sun noise measured 5 dB. We were also able to measure 0.2 to 0.25 dB of moon noise which helped us in tracking the moon. Interest in small station EME was very high at the conference. I was very pleased with this demo.

73 Al W5LUA August 8, 2014 (TNX K2UYH who forwarded this and to W3HMS for some add'l info)

LETTER FROM ED, W3ZCY

Dear Packrats:

Re Harry W3CL.

In the Mid-1960's I was a W3CCX Packrat living in Lansdale. I enjoyed the Monday night nets. Harry was net control for 6M, Joe W2EIF was on 2M, Doc on 220 & 1296. Back then it was 1215 MHz with my IFF APX-6 running 5 watts on AM with plenty of radar QRM from Willow Grove NAS. Harry & Doc were my elmers. I also remember Franky W3SAO with his raspy voice; W3ZD's auctions at his QTH and the October Ham-a-rama at the drive-in on 611.

Checking QRZ, I looked up W3CL, now a ham in NC. I wrote him telling him how Harry was an elmer to many and how we visited his QTH in Glenside. On 6M Harry would swing the beam north saying "Looking for Hill Billys North"

Got a nice letter from the current W3CL and here it is:

Dear Ed,

Sat, Aug 02, 2014 12:38 PM

I want to thank you so much for sending me the letter in which you spoke about Harry Stein. When I received the W3CL call sign a few months ago I tried to research the hams who were W3CL before me. I found quite a bit of information about Carl Lagota who was active at the Smithsonian Air & Space museum. I also found a picture of Harry Stein from a Packrat's newsletter. I'm glad to hear that Harry was one of your Elmers! I was originally licensed KA8BFQ (Novice, 1978 age 15), N8AQB (General) and KB8JH (Advanced). I was very active in radio up until about my sophomore year in college. I remember working the W8SH club station at Michigan State University in '81 and '82. My most memorable Elmer is Tom Miller (K8PNW) who was the adult advisor to the Boy Scout Explorer post I was a member of back in the days. I have fond memories of setting-up our Post's field day station probably in 1980.

I pretty much took a 30 year break from radio. About 2 years ago I taught a group of Scouts for the Radio merit badge. It really got me interested in radio again. Back in November I passed the Extra exam. Back in 1980 I just couldn't get to 20 WPM which kept me from getting the Extra ticket.

I always dreamed of having a Wx2 call sign. I really wanted one from 3-land, even though I am now living in NC. The competition for the vanity call signs is very high, so I decided to try for W3CL when it became available. I joined the local Mecklenburg Amateur Radio Society. They meet once a month and I joined them this year for Field Day. I spent some time in the CW tent logging calls.

This morning I was copying CW at 22 WPM from a practice tape. I haven't had a QSO on the air at 20 WPM yet, I'm still only comfortable around 16 WPM. As soon as I finish a QSO at 20 WPM I will feel that earned my Extra ticket. I was sitting here with my 9 year-old daughter teaching her more code. She has now mastered 9 letters and is adding a few more each week. I am really proud that she has shown an interest in radio. Hopefully I can get her licensed in the next couple of years.

My mom and dad were both hams as well, KA8LME and KN8ANB. I think he was licensed in 1960 (+/-). I don't think dad ever made it to Technician.

My first station was his Heathkit DX-20 with a Halicrafters SX-101A. I soon upgraded my Novice station to a DX-40 paired with a Drake 2B that my scout troop purchased. I probably earned DXCC, but I never actually counted the number of countries in my QSL card file.

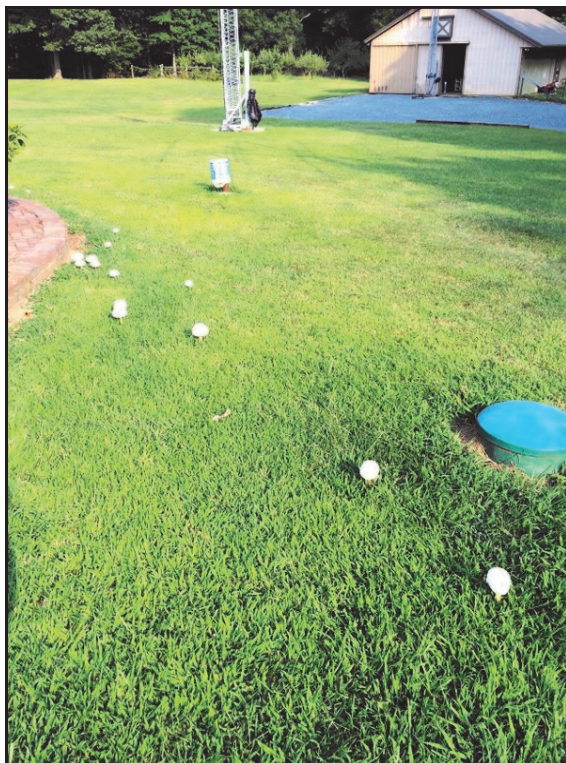
When I became an Advanced, dad bought me a Kenwood TS-820 which I still have and operate to this day. I went to the Dayton Hamfest in May with my best friend when I was growing up (Walt, KB8R). I bought a new FlexRadio 6300 at the show. I love my Kenwood, but there is so much more I can do with the Flex SDR. I am having fun on 6M and with the digital modes (PSK31). However, the attic mounted G5RV Jr limits who can hear me. I have a new Carolina Windom which I hope to get up in the trees in the next couple of weeks. I have to do it on a night when the neighbors are not watching (hi hi).

I am still an Assistant Scoutmaster in my son's troop. He is nearly 17, but sadly he's not interested in ham radio. I taught another group of 8 scouts for their radio merit badge back in the Spring.

Thanks again Ed for your very thoughtful letter. I enjoyed reading about your connection with Harry and Sylvia. I hope that I will be a good steward of W3CL, just as Harry and Carl were.

Best Regards, Greg

TWO SEASONS AT WA3QPX



Summer Mushrooms



Winter "Mushrooms"

ADDED CAMPAIGN COMMENTS BY K3TUF

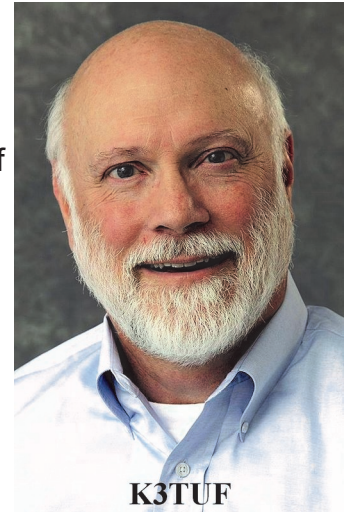
The lifeblood of amateur radio is the affiliated clubs of the ARRL. Here is the cradle for all new licensees and the place where we go to share our interests and experience the wonderful social and technical aspects of our hobby. Clubs are the key to growth in amateur radio—not just raw license numbers, but actual knowledge and skills. They are also key to the health and growth of the League.

Since they are so important, I believe that the League needs to pay careful attention to the affiliated clubs and consider and act on their ideas and concerns. Club input is an important tool in the development of amateur radio.

Let's use the clubs as a communications conduit to League activities and include clubs in the process of decision making at the highest level, to give every amateur who is a member of an affiliated club a feeling of inclusion.

Affiliation with the League needs to be seen as a significant benefit to every amateur radio club. When elected, I intend to use the office of Atlantic Division Director as a means to convey the benefits of the ARRL to each affiliated club, and bring every member of each club in closer to the League policy formation process.

Please see my website for more details: k3tuf.com



LIFTING CRANE FOR STAN'S TRAILER TOWER By Bert, K3IUUV

Many of you have seen the nifty trailer mounted Tower that Stan (K3IPM) uses in the January contest. It has been relocated to Camelback for club use in June, several times. The Tower itself consists of nested square Aluminum extrusions, raised by a winch (Drill driven) near the base. Stan recently increased the Tower height by about 10', with the addition of a new bottom section. This addition made manual erection very difficult, particularly when loaded with the antenna assemblies. Stan had a lifting crane designed and fabricated, to allow easy crank-up of the Tower (now a one-man operation). I recently assisted in the installation and checkout of the Crane assembly.

The Crane arrived on site fully assembled (welded aluminum construction). Installation was tedious because of the detailed fitting needed to install and secure it on the Trailer. However, when finished it **worked perfectly**.

Using a standard Tower winch which is attached to the Crane, it was a one-man job to

fully erect and lower the Tower. In addition, it greatly increased the personnel safety during the erection. The design could easily be adapted to other Tower installations. The attached photographs show the installation process.

A video of the Crane in operation will be posted to YouTube shortly, and should be available by the time you read this.



<- The Crane assembly adjacent to the trailer, ready to be lifted into place.

The Crane installed and attached to the Tower.



The Pennsylvania Amateur Radio Conference (PARC)

Oct 4, 2014

The South Mountain Radio Amateurs (SMRA) of the Carlisle, PA area are pleased to announce a conference devoted to inspiring new technologies in our beloved hobby. This will be held at the Whispering Pines Lodge, north of Carlisle, PA 4 Oct 2014.

We have been able to schedule speakers who are outstanding in their specialty. The **fee is \$9** for this one day event.

Agenda includes:

- Building High Quality VHF and UHF Antennas... yourself!
- Live demonstration of the latest HF Flex Radio software defined (SDR) transceiver.
- Working the World on the low power HF WSJT-X data mode
- A photo visit to an outstanding HF, VHF, UHF, microwave, contest station
- Automating Your HF/VHF Station logging and control of radios

Registration with payment processing and receipts is on the following SMRA Web site<http://n3twf.org/events/parc> (all lower case)

For program/technical questions not addressed above, please contact **John Jaminet, W3HMS**, at EMAIL: w3hms@aol.com.

DONATIONS PLEASE!!

We are currently soliciting donations of items for the Mid-Atlantic VHF Conference. If you or your employer has the availability of test gear, components, logo items, tools, antennas, radios, power supplies, cables, texts, gift certificates, computer related items, discs, software, or anything else that would be useful or pertinent to the hobby, please let me know and we can arrange shipping to my QTH or to the conference venue. I have several interesting microwave items that were sent to me from Reno, NV by our member **Randy, NR6CA**. Please look around and see what can be made available. All donors are given publicity at the conference. **Thanks, Rick, K1DS 215-284-5517**

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 (though you wouldn't know it by the calendar and the summer weather). 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, September 1964

(Vol. VII Nr. 6)

(Authors comments in *italics*)

- “Our Prez Sez” made the front cover in this issue. The new President, K3GAS “Doc” reminded the members to prepare for the Jan contest doing the following: a) survey your equipment status; b) Get your antenna work done now; and c) ask for help if you need it. He concludes with “You can’t win the game without the rest of the team!” Helen embellished the article with her usual cartoon (baseball pitcher and catcher). (***This was 50 years ago. Has anything changed? Remember one of the Packrat’s Objectives [Constitution Article II, paragraph 5 “...to assist each other in the design, construction, and adjustment of radio equipment.”]***).
- 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!*)
- **ARRL 50th anniversary convention.**

K3HWZ, Grandpop Bill, described the events in detail. Five Packrats attended the event, held in NYC. A few highlights included; a) The ARRL speaker recognized The Packrats as the first visitors to the new ARRL quarters building, arriving with a busload of ‘Rats!; b) Talks by the league president Herbert Hoover Jr., presidential aspirant K7UGA, Barry Goldwater, and the ARRL co-founder, Clarence Tuska!; and c) an initiation ceremony for the Royal Order of the Wouff Hong. The 5 rats attending were inducted. (*Any current Rats members? Do you know what a Wouff Hong is?*) Sam Harris played tapes of his moonbounce signals, and W1OUN discussed the recent use of the 1000’ dish at Arecibo to conduct amateur moonbounce tests using the call KP4BPZ (*sound familiar, Joe? For more details, read the full article at W3CCX.com*).

- Six Meters. K3ACR, Rich reports the summer doldrums have set in, with DX contacts fewer. He notes a growth in mobile operations, with W3OR, Alan approaching 2000 contacts with mobiles. Rich operated mobile in Maine on his recent vacation, and worked club member K3LOM, Harry.
- Two Meter Report. W3LHF, Dave reported that the band was “jumping”. Notable stations heard nightly include W3NSD/1 (Wayne Green) in New

... Wayback cont'd

- Hampshire (with a 346 element antenna!), K1IED/4 in VA (*frequent caller to our net*), and K2ISA, Paul in Albany NY. (*As I recall, Paul had a 150' rotating Tower, which awed me at the time*). W8KAY in Ohio heard almost nightly. Dave berates the lack of Packrat activity on the band (*sound familiar? Get on and check out your gear!*).
- UHF Report. K3IUV, Bert reported that 221.4 activity has dwindled, with some evenings where no one was heard (*221.4 fm was the club "intercom" frequency, with most members listening with a squelched receiver at all times. If you needed to talk to anyone, you just picked up the mike and called. Sort of like our current repeater, but nobody uses it!*). A group in Long Island is active nightly on 220.050. 432 activity also at a low ebb. A group buy of Link taxicab rigs is in process, with 5 more needed for the price break. (*The Link rig easily tuned to 432, and served as the station gear for many of us at that time. A 5894 gave 50 -w out, and fm was then in vogue. I used to have nightly contacts with K1PXE, Pete, and still have my rig in the basement! I am a Packrat packrat*).
- New Products, by W3NSI, Lynn. He reported that in September, GE will release a transistorized 9" TV, with ac or rechargeable battery operation. (*The first Transistorized TV was the Philco Safari, which used a 2" CRT with a reflective mirrored hood that provided the equivalent of a 14" image. Of course, I have one in the basement*). Also, a pocket tool is now available with 3 hex

drivers, Phillips screwdriver, spirit level, miniature screwdriver and a high voltage tester. (*An early Swiss Army Knife?*).

- June QSO Party results. K3IPM, Stan, and W3CCX/3 were number one in the E. PA section (*single op and multi-op. Any surprises?*)
- January contest chairman, W3LHF, gave a pep talk (*written?*) reminding members to prepare by fixing antennas before the snow arrives (*a Packrat tradition, we still have members that procrastinate until the cold weather arrives!*). Appointments for team captains and coordinators to be announced shortly.
- From the Florida Skip (a club newsletter), W4IYT reported the earliest known reference to an antenna for wireless use was found in a Library of Congress manuscript. "Sent signals by aerial telegraph between two stations by elevating a kite whose string was a small copper wire, attached to a galvanometer terminating in water." The demonstration occurred in the Deer Mountains of VA, in 1865, over a distance of 14 miles. On July 30th, 1872, Patent 129,971 was issued for this "improvement in Telegraphy". This was the 1st patent issued for wireless telegraphy, two years before Marconi was born!
- Swap Shoppe (*before the reflector the way to sell your gear was via the Cheese Bits*). For Sale: 40'; crank-up

... Wayback cont'd

tower, \$50.00. Contact K3IPM, Stan.

•
October speaker. The October club meeting speaker would be W3YA, Gil Crossley, Atlantic Division Director. Topic TBD.

- *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



Small Station EME on 432

(TNX to AI, K2UYH for the info)

After my article about EME on 70cm with small antennas a lot of people did write me.

http://www.ok2kkw.com/next/dj3jj_70cm2010.htm

Feedback: For most of them it was lower effort to become QRV on 70cm than on 23cm. But everybody seems to think that activity is much higher on 23cm than on 70cm....

23cm did make a big step forward since there are nice inexpensive SSPA modules available, and due to circular polarization, faraday rotation is not a problem... This makes 23cm more and more attractive.

In my opinion that is why people think there are more stations on 23cm and less on 70cm.

Kind regards and hope to work you soon via the moon.

Andreas, DJ3JJ

Events

For inclusion, please direct event notices to the editor.

September VHF QSO Party - Contest

September 13-15, 2014. See <http://www.arrl.org/september-vhf> for details.

10 GHz and Up (round 2) Contest -

September 20-21, 2014. See <http://www.arrl.org/10-ghz-up> for details

Fall Sprints –2 Meter - Contest

September 22, 2014. 11 pm local time. See <http://svhfs.org/wp/rules-for-2014-vhf-fall-sprints/> for details

Fall Sprints –222 Mhz - Contest

September 30, 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 –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 6M - 23 cm Contest -

November 8-9, 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 (round 2) Contest -

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

MID-ATLANTIC STATES VHF CONFERENCE SEPT 26-27-28

InnPlace Hotel, Bensalem, PA (NOW a Holiday Inn)

**Special Conf rate \$79/night + Tax, includes light continental breakfast
Early Bird Registration (\$40) through Sept 12th online**

http://dataandwireless.com/packrat/2014_vhf_registration.php

Fri Sept 26-Hospitality and table-top selling 7P-11P

Sat Sept 27- Conference 8A-5P Pizza lunch and snacks included for paid registrants

Technical equipment testing by **Rohde & Schwarz**

Antenna range testing--please let us know what you are bringing.

Saturday evening buffet banquet and door prizes* \$40

Sun Sept 28-8A-11A mini-outdoor flea market

TENTATIVE SPEAKERS & TOPICS:

K3RWR-Quit Jamming Yourself and Let the Weak Signals Through!

K3TUF-Look What I can do with my SDR

K1JT-Optimized Small-Station EME: X-pol at 432 MHz

K2UYH- Getting started on 1296MHz EME

N1JEZ- Linearization of Your Transmitted Signal

W1GHZ-Comb-line filters for VHF and Up

W1RFI, ARRL LAB SPEAKER-Dealing With Noise

K2WB- The W2EA Contest station- History & operations

W8ZN-K3 controlling a VHF station and the ultimate rover controller

K4MEP-Loop Yagi assembly

WA3GFZ- Station Automation

WB2RVX- Applied Station Automation for VHF Contesting

Check the web page for updates and speaker list www.packratvhf.com

Questions or paper & presentation submissions to rick1ds@hotmail.com

or call Rick 215-284-5517

*You must be registered and paid for both conference and banquet to be eligible for door prizes

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75

W43QPK

Paul



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W3VIR, SK

I have very sad news. I just learned from Doug, WA2LTM that W3VIR passed away. I believe he was a Pack Rat at one time. In any case, Bill did not have any close relatives and wanted to give his ham radio equipment to the Pack Rats for distribution.

You can contact Doug for more details.

May Bill RIP.

73, AI - K2UYH

Note: Ask AI for contact info [Ed.]

Radio History

I got the following link from Ted, W3SYN. It will take you to an incredible collection of scanned documents related to radio, TV, electronics and similar. Many date from the 30's. It includes magazines, catalogs, service manuals, etc. All searchable and readable for no charge. I don't know who did the scanning or organizing, but my hat is off to them. You might want to browse the site and see for yourself.

<http://www.americanradiohistory.com/index.htm> 73, Bert K3IUU

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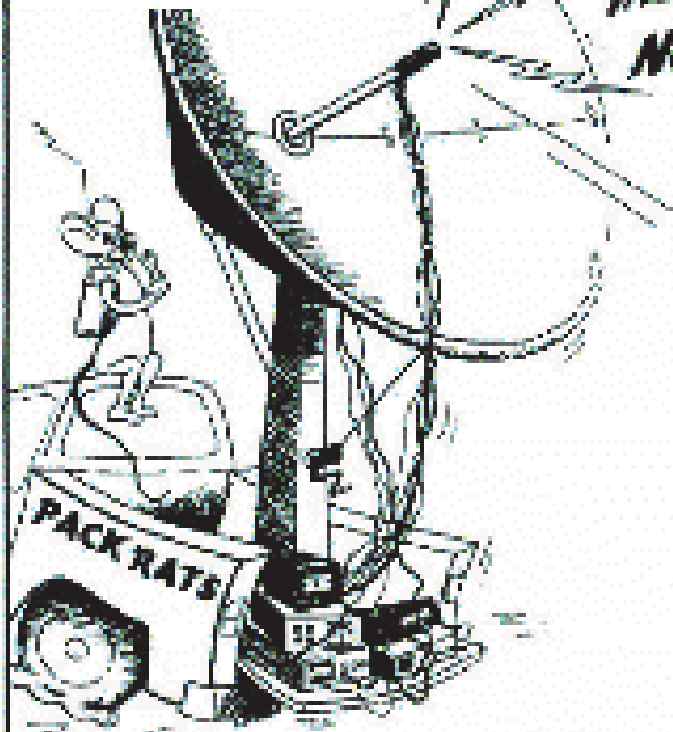
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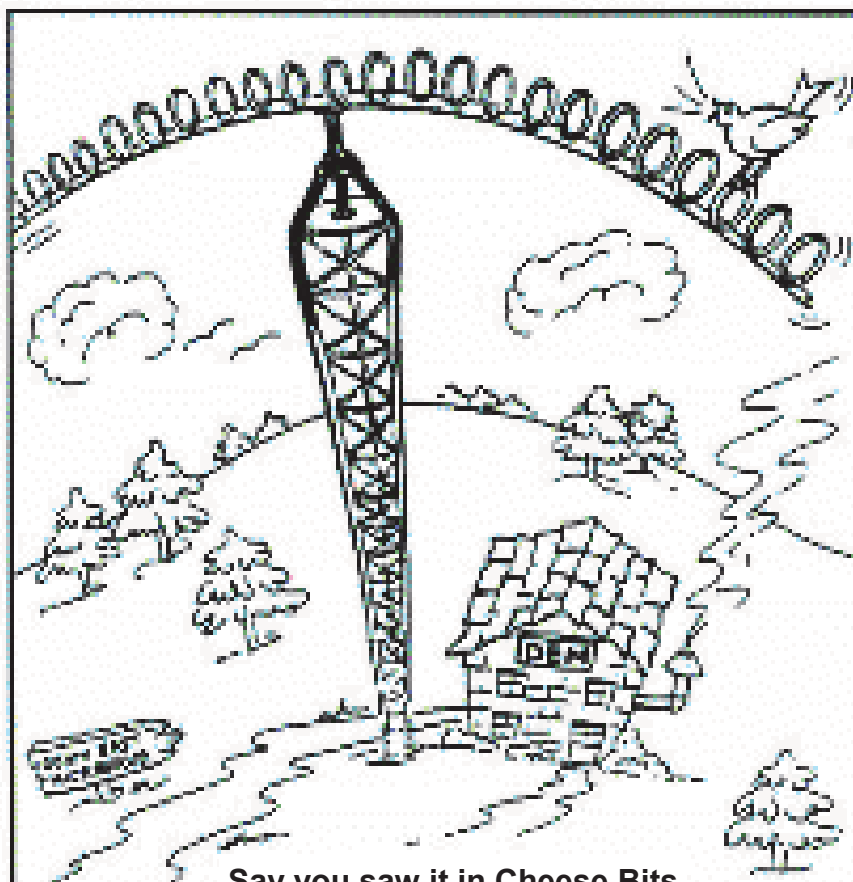
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