

Volume LVII

June 2016

Number 6



As we approach the mid point of the year, I can hardly believe we are already in the heat of summer. We've had some really good weather for antenna work. Let me know about the new band or antenna system you are

installing.

My reconstruction project is moving along, but I keep reminding myself of the setback, as I build the inside portion of the station from scratch, now that the room itself has been rebuilt. Nothing is in the same place, so **every cable has to be remade**. I try to make progress every day. I did manage to get in a couple of single band efforts using my Maestro on 432 and 50MHz.

It is imperative that you send your comments regarding the ARRL August UHF Contest to the committee at: vhf-input@arrl.org. I spoke with Kermit Carlson at Dayton, and he wants to hear from each of you with your thoughts. I know it was a topic of conversation and interest at the May meeting. Current state of the rules for consideration and comment are at: http://www.arrl.org/files/file/Contest%20-% 20General/

UHF_and_Above_Contest_Proposed_Version_4_4 b.pdf and comments must be submitted by June 15, 2016.

Our biggest annual on-air project is now upon us; the ARRL June VHF Contest. Six Packrats met at my place to work on the club trailer. We removed most of the contents and constructed an operating table across the back of the trailer for the 222 and 432 stations. While we had access to the rest of the inside WA3GFZ and myself made plans for the new arrangement of the 902 and above stations.

We will also be running a coordination position which will consist of a computer connected to the outside world for assistance coordination. This is a new position and will give us the needed communications to seek out and work the really far out weak ones.

Again this year we will operate from two enclosed, air conditioned, trailers with one dedicated to 6 and 2 meters (T3 provided by K2WB), and the other running all of the rest of the bands. N3NGE will be the mess chef again and has some good food planned.

You ought to come and be part of the fun and excitement of working VHF/UHF weak signal stations from one of the best locations in our area. We start set up on Friday afternoon after meeting at the sandwich shop on Camelback Road in Tannersville, PA. Then by 1 PM we are unpacking the trailers and beginning setup; someone unrolls the electric cables that run from the Cabin to provide our solid AC service for the weekend. While we go through this process we enjoy the breathtaking views that are possible when you are overlooking the world from over 2000 feet above sea level in Pennsylvania. The fellows from NJ erect their military tower usually before anyone else and the rest of us get one tower on a concrete pad and another on an N3ITT steel base while the microwave fellows use the trailer as a base hold down for two towers.

Often by Friday evening, if the weather allows, we

1

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

We operate on a .PDF exchange basis with other non-commercial publications. Anything that is printed in CHEESE BITS may be reprinted in a not for profit publication, unless stated otherwise, provided proper credit is given. Deadline for articles and swap-shop is the monthly meeting date. Non-commercial swap-shop items free of charge.

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 2014-2015

PRESIDENTK3TUF, Phil TheisphilVICE PRES:WA2OMY, Gary Hitchnertal.CORR. SEC:WA3EHD Jim AntonaccijjarSEC:KA3WXVGeorge Altemuska2TREAS:W3KM Dave Mascarow3DIRECTORS:KC2TN Joe FisherkcKA3FQS Tom Frederiksenka2W2SJ Bob FisherbcWA3DRC Ed FinnedHonorary Director W3GAD Doc Whitticarw

phil@k3tuf.com talgarth@comcast.net jjantonacci@verizon.net ka3wxv@yahoo.com w3km@verizon.net

kc2tn@comcast.net ka3fqs@gmail.com bobw2sj@gmail.com edfinn11@gmail.com w3gad@arrl.net

COMMITTEE CHAIRMEN

Quartermaster:

Membership Chairmen:

 January Contest
 Bill K3EGE billk3ege@gmail.com

 June Contest:
 Al N3ITT alitt@epix.net

 Phil K3TUF phil@k3tuf.com
 Phil K3TUF phil@k3tuf.com

 VHF Conference:
 Rick K1DS rick1ds@hotmail.com

 CoChairs
 George ka3wxv@yahoo.com

 Michael kb1jey@arrl.net
 Joe WA3SRU wa3sru@verizon.net

Bert K3IUV bsoltoff@comcast.net Rick K1DS rick1ds@hotmail.com Griff NE3I signalnaut@aol.com Jim WA3EHD jjantonacci@verizon.net

PACKRAT BEACONS - W3CCX/B

FM29jw Philadelphia, PA 50.080 144.284 222.062 432.290 903.072 1296.264 2304.043 3456.200 5760.195 10,368.034 MHz (as of 1/16)

MONDAY / TUESDAY NIGHT NETS

	wonuay.		
TIME	FREQUENCY		NET CONTROL
7:30 PM	50.145	MHz	N3RG FM29ki Ray
8:00 PM	144.150	MHz	K3GNC FN20ja Jerome
8:30 PM	222.125	MHz	KB1JEY FN20je Michael
8:30 PM	224.58R	MHz	W3GXB FN20jm Bob
9:00 PM	432.110	MHz	WB2RVX FM29mt Mike

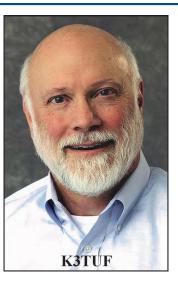
Microwave Tuesday:

7:30 Coordinate QSO's on 144.260 for all Microwave bands you'd like to work. Also setup Q's at w4dex.com/uhfqso or **Packrat Chat Page W3SZ.COM**

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

have some stations receiving and testing transmitter output. Then we all adjourn to Barley Creek Brewing Company for dinner.

Saturday starts with the completion of the setup and the contest begins at 2 PM. By the end of the contest we are ready for a rest, and in the morning (Monday) tear down is greatly expedited now that we have our own dedicated trailer. We are clean off the mountain by 10 or 11 at the latest.



This year we will have no rented trucks, a real cost savings. Our June meeting follows on the 16th where we wrap up the contest and have annual elections. This year our July Auction and White Elephant sale will be hosted by Bruce, WA3YUE. You need to plan to come and bring some cash for deals.

The Picnic this year is going to be held on the 13th of August (put it on your calendar) at the home of KB1JEY; come enjoy the view of his new solar modules and take a dip in the pool.

The September Kickoff Meeting is slated to be an exciting one, so stay tuned for a great lineup of talks this fall season. I'm looking forward to it.

So until then, as I continue to rebuild my station, lets work on lots of bands,

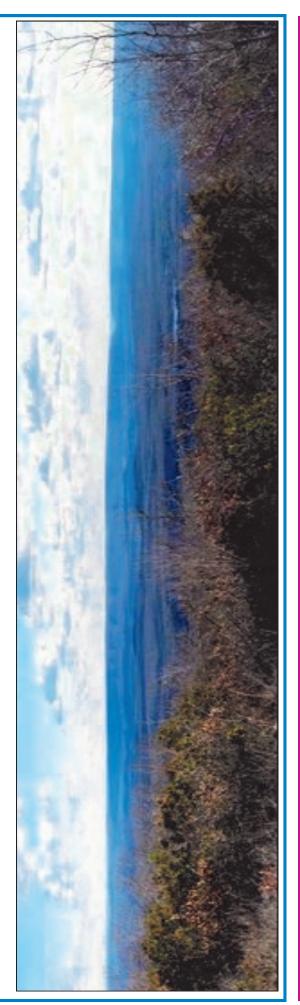
Phil, K3TUF



Station rebuild progress. Many cables to go!!



Come join the fun! Friday June 10 - Monday June 13. As many days as you can spare. More days = more fun.



(OK, you can turn your head vertical again --Ed.)

CALLING ALL PACKRATS (FOR 6 & 2 IN THE JUNE CONTEST)

We will have good stations on the air for 6 & 2 meters this year housed in Ken's (K2WB) Air Conditioned trailer, also known as "T3". Both stations will have at least 600 watts, good antennas, preamps, Winkeyers, WSJT capability and of course N1MM+ logging software. They will also be set up plug & play for Heil headsets, so bring your favorite.

All we need now is **more operators** to keep these two important stations on the air for the entire 32 hours. Please email me or call for info on the time slots available for you to operate on these bands. Many slots are still available. The slots are not cast in stone and operators will need some breaks along the way so even if a slot you're interested in is already scheduled you can still get in as a relief operator. Ken & I will most likely be running WSJT overnight but feel fee to join in for that shift as well, if interested.

Please let me know if you have an interest in 6 & 2 this year. We have had some new members join this year and would like to have you join in on the fun!

73, Bob W2SJ

A Short Trip to ARRL Headquarters

Hello Lenny,

I took advantage, while traveling through Connecticut on a weekday and poked my head into W1AW and ARRL HQ on my return from Massachusetts. I said hello to Joe Carcia NJ1Q, the W1AW Station Manager who was pleased about restoring his old Tek oscilloscope to life but not so happy about band conditions (I offered to make a contact to him from the Mighty Manly Minivan II). Not having time available to visit everywhere, I decided to revisit the ARRL Lab with Skip Colton W1FTE, a volunteer tour guide. The object that Skip is holding in the picture is the famous Tuna Tin QRP transceiver, constructed by the late Doug DeMaw W1FB. Your readers can learn more at the following link:

http://www.arrl.org/news/museum-donates-doug-demaw-w1fb-homebrew-equipment Skip did not flinch when I mentioned his visage might appear in Cheese Bits. 73,



Michael KB1JEY

W1FTE with the original W1FB Tuna Tin Transmitter. Please see the web article for the fascinating story of this classic QRP transmitter. QRP has a lot in common with VHF weak signal operation.

Cheese Bits editor W2BVH with his version of the Tuna Tin transmitter. It makes 330 mW and is a veteran of 100's of QSO's, including a fair number of EU and SA DX with a wire antenna. The second can houses a H.B. Colpitts vfo. A more complete and fancier version of the Tuna Tin kit is still available today for ~\$35



Mission Accomplished, Thanks to Packrats

During the last January VHF SS, I ran into a problem with my Yaesu FT736R in the rover van. The power switch intermittently didn't want to close and stay on. I had encountered a bit of this problem previously, but with a few on-off cycles, I could count on it being operable.

By the end of Saturday's operating, I pulled out the defective '736R and swapped it for the another FT736R that is now a club rig. The replacement rig was still at my QTH as I had taken it home to check it out operationally.

I was able to finish out my route on Sunday, and left my powerless FT736R to be repaired at a later date as we headed back to Florida after the contest.

So, where does one get a new power switch for a rig that was built in the early 90's and now is no longer available? **Ask the Packrats!** Sure enough, with one post, I was answered by Bob, W2SJ, who pointed me to an eBay seller who was parting out and FT736 and had that power switch available. Not only did I quickly jump on the internet to buy it, but I also found a second seller of the same switch. I got it too: there's nothing bad about having another spare part available.

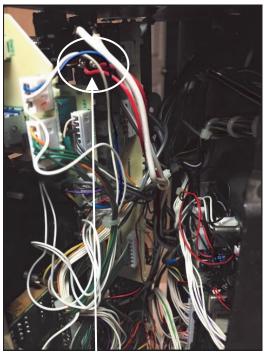
Fast forward four months, and I'm back in Blue Bell, and ready to make the repair. The rig goes

down to my work bench and I survey the task. It's necessary to remove the front panel to get to the switch. The front panel removal needs multiple knobs to be removed. No problem, eh. Well, this Japanese made rig has metric sized Allen screws that attach the knobs. A quick trip to the hardware shop and \$14 dollars later, I have a set of 11 metric Allen wrenches. So off come the knobs. but the panel won't yield. It appears that there is a trick to removing the central main tuning knob. Turning again to the internet, I got a guick response from another ham, with the secret. Remove the rubber ring of the main tuning knob to reveal the set screw and the last screw holding the front panel to the chassis. Luckily I had the whole set of metric Allen wrenches, as this one required the next size up from the smaller knobs. Carefully placing all the screws and knobs in separate containers for future remounting, I proceeded to find the two screws that free up the power switch. After they are removed, there is yet one more problem. How to get the switch out from its home on the chassis, as there is little space to manipulate it, and the space for the push-button knob seems too small to pass it through.



Back to the internet and the Packrat reflector with a request for more help. Ron W3RJW answers my plea with a link to an online Tech Manual for the rig. The secret here is to remove the bottom panel of the rig and expose **two hidden screws**, which, when removed allow the front chassis to fold down and expose the space for the power switch removal. The switch is removed through the undersized hole by rotating it 45 degrees so that the corners of the push-button can pass through strategic slots. Now I can unsolder the wires from the switch, reconnect them to the new switch and install it back in that slot.

One last trick to this puzzle, and that's how to put the faceplate back on the rig. The Yaesu FT736R has multiple plastic push buttons—17 of them that are loose and come off with the faceplate. They don't seem to want to stay in position on the rig to have the faceplate lowered on to the front chassis. Plan B is to place all the plastic push-buttons into the back of the faceplate and then lower the rig into the back of the faceplate. By putting the faceplate with all the buttons on two edge supports, that allowed the shaft of the main tuning knob and the other shorter control shafts to have room to poke through the face plate for final assembly. There were 5 black screws left in



Power Switch with red wires in upper left corner

the container—4 for the edges and one for the center under the tuning knob. Nine single knobs and four concentric dual control knobs were then reinstalled, using the metric 1.5mm Allen wrench for assistance, and the next size up for the main tuning knob. **Mission accomplished**. Now to get my repaired rig back in the van and deliver the club's newest acquisition, the FT736R with bands 2-222-432-1296 to the club for use on the mountain.

Whoops, I put all the external power cables and antenna cables on, but it did not play well. The power came on, but **none of the functions operated by the myriad of push buttons would work**. I couldn't change bands, modes or anything using a push button. Boo hoo! Back to the work-bench. I decided that when I opened the rig, that I would carefully check to see that all the internal connectors were hooked up and that nothing was loose. This time I did not take the front panel bezel off, merely opened the top and bottom and exposed all the circuitry, switches and wiring behind the front panel. Everything looked copacetic. But my eye thought that the plastic push buttons just seemed a bit too prominent through their openings. I gently



Here's the culprit after the switchectomy

pushed each one into its place and felt the positive sense of seating it in place. I powered up the rig again and behold—everything was working again as normal.

So here's a hint if you need to fix your FT736. **Don't remove the faceplate!** Everything is accessible by removing the two hidden screws under the lower cover plate and you can tilt the front panel forward for access. No need for those metric wrenches, removal of the knobs, or main tuning knob as I described above. All lessons learned cost you time or money.

Rick, K1DS

Refurbishing Coax at K3HUW

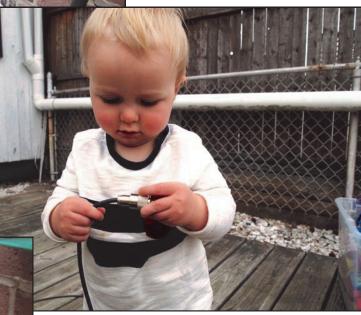
Hello Lenny,

It's been a while since I've been able to make it to the Packrats meeting, and even longer since I've been on the air. But here are a few radio related pictures. I have had some help getting my coax back in order and my assistant has been inspecting my PL-259 work. Maybe there is hope for me after all...

Marten Beels K3HUW







Huw, able assistant of Marten K3HUW, repairing and inspecting new coax

Roger Amidon K2SMN, SK

Roger, K2SMN, well known contester and VHF enthusiast and long time net-control of the 2 Meter **S**unday **M**orning **N**et became SK May 13, 2016. He held the call K2SMN for over 60 years. He was known to most Packrats and a friend to many. An obituary can be found at http://www.hopewellmemorial.com/obituaries/Roger-Amidon/#!/Obituary. Here are some observations from some of his fellow hams:

I am very sorry to hear that Roger passed away today. He had been hospitalized for several weeks. I was praying that he would be with us longer. Sadly his COPD finally caught up with him. I have known Roger since the 6th grade. I will miss him greatly and know that he will be missed by his family and many friends. RIP dear friend. --**AI K2UYH**

So sorry to hear about Roger. He ran the SMN, Sunday Morning Net for many years faithfully and was a true weak signal enthusiast. He is in my log on many bands on many occasions. RIP Roger -- **Phil K3TUF**

Please join me in prayers for Roger and his XYL, Nancy. Sadly, --Russ K2TXB

We will be missing a great VHF ham who, despite his medical issues, pushed through with on the air activity, participated at VHF conferences, and lived to see a new granddaughter of whom he was so proud. He'd always seem to show up on the Sunday evenings of the VHF contests and create pile ups on his signal. RIP. --**Rick K1DS**

I am very sorry to hear this! Please pass along my condolences to Nancy and the family. 73, -- Roger W3SZ

It's very sad news. Attendees at Friday "ham lunches" at KC Prime will miss the "Chairman". Sincere condolences to his family. RIP, Roger. --Lenny W2BVH

I'm so saddened to hear this. Roger was one of those rare diplomats of the airways, a true gentleman who always took time to help and inspire others.

He was also a founder and organizer of the Trenton Computer Fest, way back from the earliest days of personal computing. I will so miss hearing his voice on the "K 2 Sunday Morning Net", and the many fascinating stories and observations he shared with us over the years. Rest in peace dear friend, and my condolences to Nancy and the family. --73 **Ron WZ1V**

He will be missed on the bands for sure. RIP Sugar Mike Nancy. --Jeff K1TEO

Roger was always encouraging all of us in the Weak Signal Community to get on the air, passing out information and promoting the VHF+ bands with his Sunday Morning Net, and helping new folks get involved. He would always make a point to seek out the weakest, smallest station and let them know they were being heard. God Bless. --**Mark Casey , K1MAP**



K2SMN, at head of the table. The "Chairman" of "Friday Ham Lunch" at KC Prime in Hamilton NJ.

Some members of the ham community paying respects at Roger's Funeral. George, NE2U, Russ K2TXB, Joe K1JT, Dave W2KV and Al K2UYH



June 2016

KB1JEY Goes Shopping at Dayton

My original shopping plan at Dayton was this: I have all the radio gear that I need for the moment for my shack. So I wanted to add some test equipment. Before Dayton, I tried to buy a used spectrum analyzer (and perhaps a tracking generator) from a Packrat. He was nervous about its condition and declined to sell it to me. Other good used spectrum analyzers did not appear to be available so on the advice of some folks I trust, my plan was to buy the Rigol DSA815-TG as a Dayton show special at roughly \$1,500-\$1,600.

Friday morning, George KA3WXV spotted some used Tek spectrum analyzers being sold outside. On Saturday morning, Tom KA3FQS and I hiked over to the location and became interested in a Tek 492A SA (8 GHz) that looked pretty clean. We liked the answers of the seller. He originally asked \$800 but in the interest of getting sold before the rain, he offered it for \$650. With some encouragement from Tom, I decided to take a chance. I bought it and dragged it back to the MMM II (it turned out to weigh 42 lbs). When we brought it back to the hotel last (Fri) night, George KA3WXV and I puzzled over the controls but got it to display some 2 meter spectrum with an HT. So it appears to work pretty fine. No TG though but see a later part of the story.

What to do with the extra loot? Friday afternoon, I walked by the Siglent and Rigol displays. Siglent had two digital scopes on display as show specials. They wanted about \$500 for a 100 MHz model and \$695 for a SDS1202X 200 MHz model. I really didn't plan to buy a digital oscilloscope (I have a 150 MHz B-K analog scope that is still working well). But this scope was marked over \$200 off MSR. I thought, "I have the money left over from my SA purchase budget. If I don't buy it, I will kick myself in a while." So the AMEX came out. Oddly, they wrote up the purchase at \$626, not \$695. George bought the 100 MHz Siglent scope earlier Friday afternoon. BTW, Saturday, a refurbished Rigol 100 MHz digital scope with nylon case was offered for \$399. The Rigol and Siglent displays are across from each other so George and I imagine they "compete". Note from KA3WXV: make sure that the scope comes with the software you need. The Siglent comes with the software built-in. Some other brands do not. See the article in the June 2016 QST on pg 52 for what you can do with a digital oscilloscope.

Friday, Tom KA3FQS bought a RF Explorer 6 GHz signal generator that among other things, sweeps. HRO normally sells them for \$190 but was offering a 5% discount, shipped from California. I was going to wait until Tom's signal generator arrived and see how he liked it. But "Nuts about Nets" had a booth at Dayton and was offering a 10% discount for items purchased at Hamvention. So Saturday morning, I said, "Why not?" Out came the AMEX for \$170. It will be shipped as well.

So I ended up with different test gear than I had planned but I think I received some good value for my purchases. It is amazing what kinds of VHF/UHF/uWave test gear that can be bought for reasonable amounts if you look around and take an occasional gamble.

On another front, I brought five items to sell at Dayton and they all found good homes. My secret: Price aggressively low and take reasonable offers. The goal is not to become rich but to clear out the clutter and make other hams happy. Besides, you need room in your vehicle to take your finds

...KB1JEY cont'd

back home. The best part of the tailgating/fleamarket is engaging the hams that walk by. I had KA3WXV and KA3FQS rolling with laughter at my banter.

The Hara Arena and parking lot is in pretty sad repair but that is part of the charm of Dayton. That and seeing the ARRL folks and other friends. I made my hotel reservations for next year. BTW, a public thank you to K3TUF, who got four vendor parking spots together and close to the arena. It was fun hanging out with KA3FQS, KA3WXV, WA3JZN, WB2RVX, and other Packrat friends. Phil, let me put in dibs for a vendor spot for next year !!! 73, **Michael KB1JEY**

SOME DAYTON PICTURES



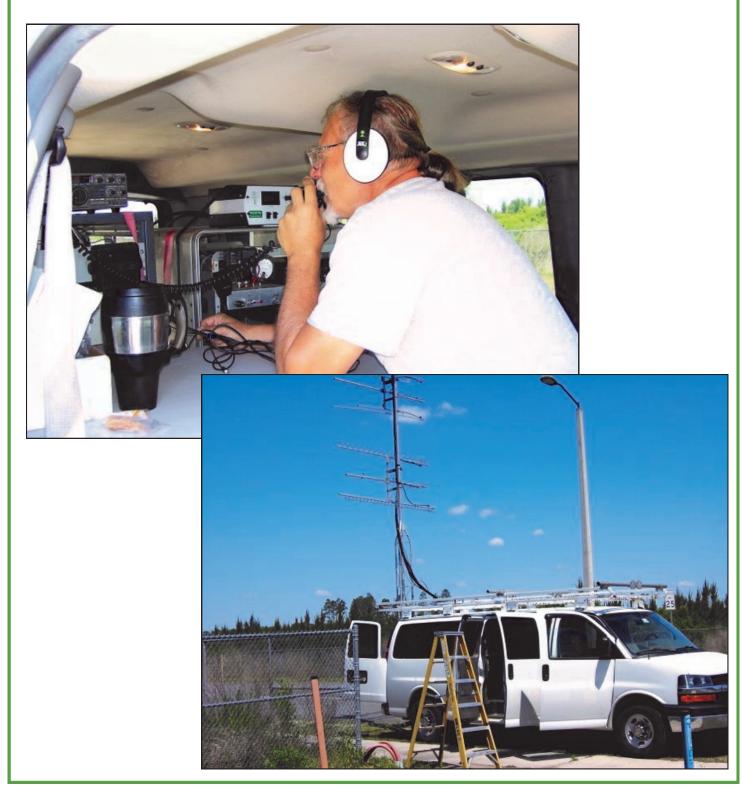
K1JT accepting the Hamvention's 2016 Amateur of the Year award from Michael Kalter, W8CI, at the Awards Dinner. A few further details were posted at <u>http://</u> <u>hamvention.org/event-details/</u> <u>awards/</u>.



Some Packrat attendees at Dayton. Per K3TUF, this is whoever could be rounded up at the time the photo was taken. W2KV (2nd from right) is not a Packrat but his application is in for membership.

Some Photos of a Southern "Downeast" Rover

Warren, WB2ONA sent along these rare pictures of a well equipped rover from somewhere down south or is it downeast? Warren asks: "Hey, This bubba looks like he's having FUN..... Anybody know who he is?" Maybe N2CEI, formerly of Frenchtown NJ?



May Packrat Meeting Report

There was excellent attendance at the May meeting in spite of the date conflict with the Dayton Hamvention.

Gary WA2OMY and Bruce WA3YUE gave an excellent presentation on a new club project that they have put together, a GPS receiver and 10 MHz disciplined oscillator. The device uses the same 10 MHz precision 10 MHz oscillator that Gary made available for the last club project, and a GPS board that Gary obtained from the same source is used to discipline this oscillator. Gary presented the overall view of the project and its electrical details, and Bruce described the Arduino software used to control the device.

The oscillator and board are being made available to club members for only \$40 for both, and the only additional parts needed are a two-line I2C display available for less than \$7 on eBay, an Arduino Uno R3 which can be had via eBay for less than \$5 including shipping, a power supply, a GPS antenna, a couple of push button switches, and a cabinet.

So for the many PackRats with extensive junk boxes, the total cost will likely be little if any more than the \$40 cost of the oscillator and GPS board.

The Mario Table had many great items which were quickly snatched up by enthusiastic ticket-holders, including a 432 MHz cavity amplifier, multiple SMA / BNC cables, SMA adapters, SMA relays, micro-wave oscillators, to name just a few of the items available. Those who missed out on the meeting missed an A+++ Mario offering!

73, Roger W3SZ







Comments and Ideas Solicited for the New ARRL UHF Contest

Here is some info on the proposed new UHF Contest rules:

The rules are at:

http://www.arrl.org/files/file/Contest%20-% 20General/ UHF and Above Contest Proposed Version 4 4b.pdf

The address to send your comments to is: <u>vhf-input@arrl.org</u>

As you may have heard at the last Packrat's meeting, the 3 issues I thought were most significant [and which I strongly support] are:

1. Distance scoring [very helpful to those of us in crowded grids like FN20]

2. Much better band factor for scoring than current rules

3. No EME [EME and distance scoring are not compatible].

I sent in my strong support for the new rules. Promptly got a note of thanks from Kermit, W9XA. The Committee is very responsive and really wants to do the right thing!

PLEASE give the rules some careful thought and submit your ideas and comments to ARRL. They really are anxious to hear your ideas and comments!

73, Roger W3SZ

2016 UHF Contest (1)

The August UHF Contest is in full swing as far as preparations. We now have a contest robot to submit scores to.

Please check the website: http:// www.augustuhf.com/ for updates periodically.

We look forward to a very active Contest on the first weekend in August.

Get your station ready 73, Phil K3TUF

2016 UHF Contest (2)

John Kalenowsky, K9JK, has arranged a log submission procedure for the contest that is identical to what we've had for years, except that logs will be sent directly to K5KO's contest robot, not via ARRL. This year's cabrillo logs go to augustuhf@kkn.net. It will work exactly as it did before. You'll get a reply to the email address from which you sent the log. The robot will tell you if the log is okay or if you need to make changes. You can resubmit as often as you like (until the log deadline) and only the last log will be saved.

"JK" has also agreed to handle all of the administrative chores of log processing, including what the paid staff at ARRL has been doing. He has set up a new online help desk (uhfcontesthelp@gmail.com). He is willing to handle any and all problems related to log submission and even to type logs for people who can't use a computer, (for example, a well-known contester whose eyesight doesn't permit him to use a computer). It turns out JK has been doing this all along as well as writing the results article (which he has also offered to handle again). I really appreciate JK's assistance. Yes, he

CSVHFS Conference 2016: Call for Papers

The Central States VHF Society is soliciting papers, presentations, and Poster displays for the 50th Annual CSVHFS Conference to be held in Rochester, Minnesota on 28 - 31 July, 2016. Papers, presentations, and Posters on all aspects of weak-signal VHF and above amateur radio are requested. You do not need to attend the conference, nor present your paper, to have it published in the Proceedings. Posters will be displayed during the two days of the Conference.

Topics of interest include (but are not limited to):

* Antennas, including Modeling/Design, Arrays, and Control

* Construction of equipment, such as Transmitters, Receivers, and Transverters

* RF amplifiers (power amps), including Single-band and Multiband Vacuum Tube and solid-state

* Pre-amplifiers (low noise)

* Propagation, including Ducting, Sporadic E, and Meteor Scatter, etc.

* Test Equipment, including Homebrew, Using, and making measurements

* Regulatory topics

* Operating, including Contesting, Roving, and DXpeditions

- * EME
- * Digital Signal Processing (DSP)
- * Software-defined Radio (SDR)

* Digitial Modes, such as WSJT, JT65, etc.

Generally, topics not related to weak signal VHF, such as FM Repeaters and packet radio, are not accepted for presentation or publication. However, there are always exceptions.

Please contact either the Technical Program Chairman, or the Proceedings Chairman, at the email addresses below.

DEADLINES FOR SUBMISSIONS:

For the Proceedings: SUNDAY, 12 JUNE 2016 (. For Presentations to be delivered at the conference: TUESDAY, 5 JULY 2016. For Posters to be Displayed at the conference: THURSDAY, 29 JULY 2016

...UHF (2) cont'd

says he knows how much work he's getting himself into.

One possible rule change is being considered: Currently there's no place for mobile stations in ARRL VHF-UHF contests, including the UHF Contest. You're not eligible to be a rover unless you activate two or more grid squares. You're not eligible for a fixed category if you move more than 500 meters during the contest. Mobiles are left out. ARRL is now working to fix that loophole by allowing anyone who moves to be a rover even without visiting two grid squares.

Comments? Other ideas? Suggestions? 73, Wayne Overbeck,

N6NB woverbeck@Exchange.FULLERTON. EDU

... CSVHFC cont'd

Further information is available at the CSVHFS web site (<u>www.csvhfs.org</u>), "The 2016 Conference," and "Guidance for Proceedings Authors," "Guidance for Presenters," and "Guidance for Table-top/Poster Displays."

CONTACTS:

(Note: (replace '(at)' with the @-sign to use the e-mail addresses) Technical Program Chairman: Barry Malowanchuk, ve4ma (at) shaw.ca Proceedings Chairman: Glen Overby, kc0iyt (at) arrl.net

Lightwave Madness

Steve, VE7SL highlights a light wave QSO of 288 km and the equipment used to achieve it. Not cheap, but impressive. See the blog at http://www.amateurradio.com/lightwave-madness/

KIDS Rover Van at the Car Show

Now that we have a great community center at Blue Bell Country Club, activities for the residents are gaining traction. On May 14 we had a small car show of the residents' special autos, along with some fire and police vehicles. I volunteered the van as a special purpose vehicle and it was made part of the show. One added bonus for me is that after owning it for 12 years, I finally got to wash it, clean the glass inside and out and scrub down the entry foot sills. I made a trifold brochure for public relations and gave out a few QSL cards.

There was a parade of an antique fire engine, a 1919 beauty in mostly original condition, along with a vintage 1929 Oakland and several other muscle and sports cars. I set up the van in the corner of the lot between the two antiques, and got a lot of viewers and questions about ham radio. No other hams came by, yet there were others who related stories about their fathers, uncles or friends who were hams. I was also approached by an interested educational contractor to come and do some ham radio demo and introduction to middleschool students. I'll look for some of you to assist





K1DS at car show between the 1926 Oakland and the 1919 fire truck

me with that. I had the beacons playing for a while, then tuned onto 40m with my FT100 and had the rig tuned to a W9 station who was making QSOs from the infield at the Indy Race Track in anticipation of the Grand Prix of Indiana. It played in the background during the entire show. It was a pleasant afternoon for the event and fun to be able to talk about the hobby and eyeball with our neighbors.

73, Rick, K1DS

Shira, a grandaughter of K1DS on the antique fire engine

Pirate alert!

From Southgate Amateur Radio News. 'The Daily DX' reports:

The ever-persistent Hassan, the pirate from Baghdad, Iraq, continues to

plague the Amateur Radio bands. This guy has been pirating and bootlegging multiple calls for several years. He has been heard bootlegging the calls YI1HR, YI1HR, YI1HRP and YI1HI and pirating the calls YI1BGD, YI1IRQ, YI1DZ and most recently TA7/YI1RZ.

Unfortunately in Iraq there does not seem to be any enforcement to take Hassan off the air, much less do anything about the situation. Therefore let's get the word out not to work or spot Hassan, who operates on 20 Meters SSB, usually around 14178-14188.

In fact the best policy is to ignore him completely on the air.

-- From HRAC Newsletter, May 2016.

```
17
```

The Wayback Machine In CHEESE BITS, 50 Years Ago Nibbles from June 1966. Vol. IX Nr. 3 de Bert, K3IUV (author's comments in italics)	 Meet K3HWZ. K3HWZ, "Grandpop" Bill McCutcheon was an active club member in this period. He authored a very interesting article in this issue, entitled "Views on Incentive Licensing". The FCC at the time was involved in "Incentive Licensing" proposals and actions. Bill detailed his extensive background in Amotour radio, starting
 "Our Prez Sez". Prez K3GAS, Doc notes: 1."At the last meeting, W1HDQ, Ed Tilton (Mr. VHF) presented the ARRL Gavel to the club for winning the January contest (now "almost" an annual event). He also presented the ARRL certificate for highest score to our own K3IPM, Stan (Stan, do you know where it is now?). 2. The winner of the "Cheese Bits" article will be announced next month (any guesses?). Footnote: With tongue-in-cheek, Ed said the league was thinking of changing the 	background in Amateur radio, starting with his backyard telegraph in 1909 using a home-made battery in a Mason jar. That was followed by "going on the air" in 1912 using a rotary spark- gap transmitter. His career travels included residence in New Zealand and Australia, where he continued his hobby. The article then details his views on the licensing proposals. (<i>I'll</i> <i>invite you to read the full article at</i> <i>W3CCX.com</i>).
 Election of Officers. Scheduled for June, candidates were listed. Among them was K3JJZ, El for Director (<i>and</i> <i>yes, he was elected</i>). 	• K.U.I. <u>Keeping You Informed by</u> W3HKZ, Ed. He detailed the topics and discussion at last month's ARRL convention. Emphasis was on the struggle to "preserve amateur frequency allocations". Pressure by other interests was trying to reallocate some of our frequencies. (<i>Still a major</i>
• ARRL Bulletin Nr. 59. 5/8/1966. The ARRL reports on the recent Directors meeting, including new Officers and extensive updates to the Articles of Association and By-Laws. Full details to be published in the July QST.	 concern). Humor. Our frequent contributor, K3JJZ, EI, wrote about "A Ladies Night Casualty". Please read the details and chuckle, in the copy posted at W3CCX.com.

 Transmitter Hunt Report. The 2-meter "fox" was found by the team effort of K3IUV (ye author), K3JJZ, and recently

•

ARRL Bulletin Nr. 60. 5/13/1966. The

amateurs to participate in the June VHF

ARRL invited "all VHF minded"

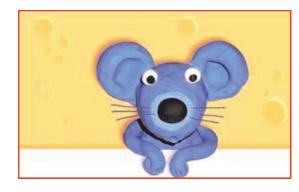
QSO party; June 11-12.

deceased K3EOD. The 2-meter hunters had included our auction namesake K3UJD, Mario, and W3VGN Harvey who hunted on a motorcycle. A total of twelve 6-meter hunters tracked the fox, with the team of K3ACR and K3LOM coming in first. The hunters included K3IPM, Stan (*runner-up, 1-minute behind*). The transmitters were hidden at a day camp in Horsham, not far from our current meeting place! A good time was had by all, with prizes from Trevose Electronics.

- **Contesting Comments**. An article cribbed from the "W6SO Carrier" discusses the difficulty western stations have in competing against the East Coast with its higher population densities, available contacts, and favorable geography. (*Still an interesting and debated topic*).
- Meeting Schedule. June, K3IUV, talking on Weather Satellites. July, NASA films of Gemini IX; and August, White Elephant sale.
- Swap & Shoppe. The monthly column by W3ZRR. Available from W3GXB was a 40' "Triangular Aluminum Tower" (\$30), and a Sola Constant voltage transformer (\$10). (*I wonder if that is the same one the club recently "lost"*?).
- **New Members**. WA3CND, Howard Candy was elected to membership.

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 K3IUV

2.4 GHz "Air-Mobile Operation"

On a recent vacation trip out west I was able to "operate" 2.4 GHz mobile on the plane. Not ham radio though. JetBlue has in-flight internet service called "Fly-Fi " on the 2.4 GHz wifi channels. Subjectively it's as fast as my home broadband internet connection. And it's FREE! Maybe this is a sign of things to come.

73, Lenny W2BVH

K2DZM, SK

More sad news: Just heard Mike K2DZM passed away April 9, 2016. For years Mike was a fixture on contests, regular operating, and on our weekly 1296 informal net. You'd never guess he was in his nineties by listening to the exuberance in his voice. Another fine gentleman of the airwaves lost, RIP Mike. -73 Ron WZ1V

A gentleman with a fine signal, and a great voice. Helped me out a multiple times with airchecks while I was debugging my equipment (especially 222). RIP Mike. --Lenny W2BVH

Events

For inclusion, please direct event notices to the editor.

June VHF - **Contest** - June 11 - 13, 2016. Our annual trek to Camelback. See http://www.arrl.org/ june-vhf and info in this issue for Cheese Bits for further information.

Eastern Pennsylvania Section Convention (Firecracker Hamfest) - Hamfest - July 2, 2016. Harrisburg Area Community College, Harrisburg, PA. See http://www.w3uu.org for details.

Valley Forge Hamfest - Hamfest - July 9, 2016. Kimberton Fire Company Fairgrounds, Kimberton, PA. See http://www.marc-radio.org/ for details.

UHF Contest - August 6-7, 2016. See <u>http://</u> <u>uhfcontest.org</u> for additional info (Note, topics on the main page are all hyperlinks).

EME 2016 - Conference - August 19 - 21, 2016, Venice Italy. See additional info shown at the right and at http://www.eme2016.org/

10 GHz and Up (Round 1)- Contest - August 20-21, 2016. Details to follow.

September VHF - Contest - September 10-12, 2016. Details to follow.

10 GHz and Up (Round 2)- Contest - September 17-19, 2016. Details to follow.

EME - 2.3 GHz & Up - Contest - September (TBA), 2016. Details to follow.

EME - 50 MHz to 1296 MHz - Contest - October (TBA), 2016. Details to follow.

MUD 2016 - Conference - October 13-15, 2016. St. Louis, MO. http://www.ullmann.us/MUD2016/ index.htm. Details to follow.

XVII International EME Conference

The conference will be held August 19-21, 2016 in Venice Italy.

The venue is BEST WESTERN PREMIER BHR Treviso Hotel, a contemporary building, conveniently located a few minutes from the old town and just 2 km away from Canova Treviso Airport

Presentations planned:

Introduction: A brief presentation on the conference. Welcome from the staff IW3HVB / CEO EME 2016

Techniques used in construction of a home brew 10 mt parabolic antenna VK5MC / Chris Skeer

Chapter II – Signal polarity in V/UHF bands IK1UWL & IK3XTV / Giorgio Marchi & Flavio Egano

Failure levels in LNAs G4DDK / Sam Jewell

On the Theoretical and Practical Limits of Digital QSOs DJ5HG / Klaus von der Heide

Stress Offset Dish for 1296 MHz K2UYH / Allen Katz

Portable EME MW Setups OK1DFC / Zdenek Samek

High Power Switching Class E and F amplifiers AD6IW / Goran Popovich

PB8 13mt Cassegrain Dish Adventure with ORPB society F2CT / Guy Gervais

Experiences with Circular Polarization on 10 GHz G3WDG / Charlie Suckling

...continued next page

Lunar-Link International

VHF & UHF amplifiers for demanding modes 50 - 144 - 222 - 432 MHz EME - Digital - Contesting



www.lunarlink.com

info@lunarlink.com 33 Ball Pond Road Danbury, CT

XVII International EME Conference cont'd ...

Azimuth Drive for Small Dishes G4HUP / Dave Powis

Let's Bounce PA3FXB / Jan van Muijlwijk

New Codes, Modes, and Tools for EME K1JT / Joe Taylor

Optimized EME reception with Linrad and WSJT under multi-polarization configuration ZS6EME / Alex Artieda

The Stealth Dish IONAA / Mario Armando Natali

Please Don't Throw Tomatoes – ARRL EME Rules K1DS / Rick Rosen

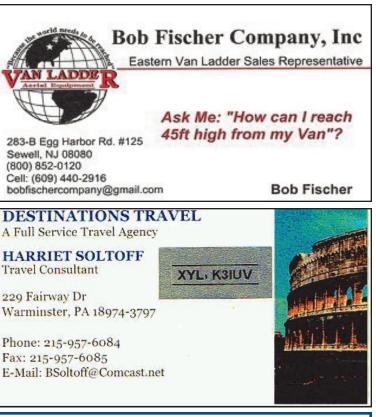
As you can see, several Packrats are among the presenters.

Should be a fun and informative conference, and it's in Venice! Would the family be interested in attending? Piazza San Marco with the Campanile, Grand Canal, Rialto, Bridge of Sighs, Doge's Palace, gondolas, genuine Italian food. I bet they would. G AND G ELECTRONICS

JEFF GOLDMAN, K3DUA

PO Box 222 Lisbon, MD 21765-0222 (301)258-7373 EMAIL: k3dua@erols.com

-Dealers in New and used electronics-



Joel Knoblock W3RFC www.therfc.com The R.F.Connection

213 N. Frederick Ave. #11WWW Gaithersburg, MD 20877 USA

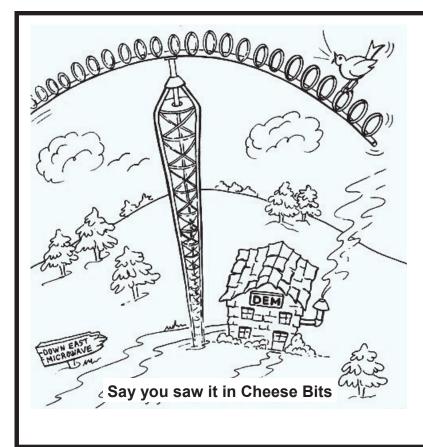
World wide shipping via FED-EX or US Post Office

Tech Line 301/840-5477 Order Line 800/783-2666

Fax Line 301/869-3680

Hours: Monday-Friday 9:30am-5:30pm Eastern All major credit cards accepted

Cheese Bits 709 Lincoln Avenue Cranford NJ 07016	MEETING NOTICE			
	000	то:		
PACK RATS				
	MT. AIRY VHF RADIO CLUB, INC.			



DOWN EAST MICROWAVE

Manufacturers and Distributors Of VHF/UHF/SHF Equipment and Parts 50 to 10,368 MHz

- No-Tune Linear Transverters
- Linear Power Amplifiers
- Low Noise Preamps
- Coax Relays, Coax Cable, Connectors
- Crystals, Chip Capacitors, MMICs, Transistors, RF Modules

For All Equipment Steve Kostro, N2CEI

http://www.downeastmicrowave.com

19519 78th Ter. Live Oak FL 32060 Tel. 386-364-5529 (Voice)