Mt. AIRY V.H.F. RADIO CLUB, INC.



W3CCX **CLUB MEMORIAL CALL**

ARRL Affiliated Club



Volume L July 2009 Number

PREZ

The election at the June meeting has produced of Directors. Most notably is that, after 5 terrific years as your President, Rick Rosen,

K1DS has finally been able to step down. With each change in leadership comes new challenges and a difference in leadership style. Rick has promised to share his wisdom and a few of his leadership techniques so the transition will be smooth. In addition, we do have a very capable Board of Directors with the new directors WA2OMY and WA3BZT and Rick as the Past President.

I look forward to helping the PACKRATS continue to be one of the leaders in the development of the higher frequencies. With our VHF, UHF, Microwave Contesting, Continuing Education via the Mid-Atlantic VHF Conference and active elmers, we can help keep the bands active so the FCC and the commercial interests can table all need help followed by cleanup after not justify taking the spectrum away.

Rick's accomplishments as President were many. Most notable were the 50th anniversary celebration and the 80th Birthday party for Ernie, W3KKN. His keen business skills got a lot done, most of which was self funded so the treasury could remain strong.

Looking forward, we have the fall contest season with club competitions in August and September, The Mid- Atlantic VHF Conference on September 26 th followed by HAMARAMA on the 27th. For all these events, we need your support.

Get on the air for the contests, and submit a log. Remember the league uses several changes in the Board the log submissions as a gauge to determine the interest in continuing every contest. The VHF and up contest are judged against the same measure as the far more popular HF, Phone and CW Contests.

> Support the conference by attending. Why not submit a paper for the proceeding or even make a presentation on some progress you have made in improving your station.

Your support of HAMARAMA is very important to the finances of the club.

We need you to take flyers to vendors and attendees at other hamfests and talk it up along with the conference. Your help is needed the evening before HAMARAMA to help set up the PA and arrange the tables for the inside vendors. On Sunday morning the early morning crew, gate keepers and club the events.

I can be reached by e-mail most anytime at: w3gad@arrl.net or you can always leave a message at 215-968-6397. I will be listening on the 222 repeater when in the shack and I have 2 meter mobile on most of the time (on either 147.090+ or 147.300+ during drive time.) The PACKRATS have been offered a 2 meter repeater as a club address but for it to be identified as the PACKRATS REPEATER there have to be PACKRATS on the frequency frequently.

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

SUBSCRIPTION RATE: \$16.00 PER YEAR (USA)

\$20.00 PER YEAR (CANADA)

\$10 PDF only

\$24.00 PER YEAR ELSEWHERE

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.

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PACKRAT 222 MHz REPEATER - W3CCX/R

222.98/224.58 MHz (PL 131.8) Hatfield, 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

TIME FREQUE		ICY	NET CONTROL
7:30 PM	50.145	MHz	K3EOD FM29II
8:00 PM	144.150	MHz	N3ITT FN20kl
8:30 PM	222.125	MHz	K3TUF FN10we
8:30 PM	224.58R	MHz	W3GXB FN20jm
9:00 PM	432.110	MHz	WA3EHD FN20kd
9:30 PM	1296.100	MHz	K3TUF FN10we
10:00 PM	903.125	MHz	W2SJ FM29LW
Visit the M	t Airy VHF	Radio	Club at: www.packratvhf.com of

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

www.w3ccx.com

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I again thank you for your display of confidence in electing me as your President. I will do my best to fulfill the commitment. I am looking forward to seeing all of you at the White Elephant Auction at WA2OMY"S QTH on July 16th. Gary promises us a lot of very interesting goodies and the WHITE ELEPHANTS will all have a few treasures and I am sure a few "gems" too.

73 de W3GAD and "Listen for the weak ones."

Editors Column

Our next meeting will be the White Elephant Sale on Thursday July 16 at the QTH of Gary Hitchner, WA2OMY, 39 West Mount Kirk Avenue, Norristown PA. Auction opens at 7 PM for inspection, meeting and auction start at 7:30 PM. Bring your radio or computer related stuff to sell at the auction, money to buy other's goodies and lawn chairs for seating. Refreshments provided. Open to guests. Questions? Contact Gary at ghitchner@trueposition.com or 610-539-6409 (H).

For newer members: this is a great event where you can pick up some excellent radio (especially vhf+) equipment ranging from teflon line and hardline to radios, transverters and measuring equipment. The auction price for this stuff is usually **very** reasonable. If you have radio or computer related equipment you'd like to sell, bring it on down. You can get cash for it (the club takes a small commission) or donate the proceeds of the sale to the club.

We always have one or more White Elephants; these are sealed boxes containing ????. You won't find out what's inside until you place the winning bid!

This years White Elephant promises to be one of the best in years with some really excellent items available for your bids. So come on down and join the fun!

73, Lenny W2BVH

This month marks the handover of the club's Presidency from Rick, K1DS to Doc, W3GAD. We're pleased to present two Prez Sez columns this month from our new President and Past President. At the same time please allow your editor to thank Rick for 5 excellent years of leadership and to thank Doc for his generosity in taking on the clubs executive position. --Ed.

PREZ

This will be the last of my PrezSez SEZ: installments, there should have been 60 by my count, but there were a few months

that some issues didn't get published a few years back, so we'll say it was about 55 editions. Although I won't be in the president's seat, I will still be active on the board and help to make this a smooth transition for Doc.

The mountain activity was one where everyone worked as a team to overcome some of the adversity we faced with the weather, the wet conditions on the ground at the storage barn, and the cranky amplifiers that seemed to know something that we didn't. It will be interesting to see what others scored, as our results were down from the previous years, but it seemed to be the activity and the weather rather than anything else. The absolute highlights included the team participation, and having enough helping hands with load and unload, and the flawless performance of the ethernet that linked all the stations with the logging software. The chow was delectable, and no-one was hungry, thirsty or bored. Our newly acquired electric jackhammer was of great utility, and we quickly learned that two operators made the job relatively easy. Phil and Al will conduct a post-contest wrap-up as we did last year, and plan on the modest changes and improvements

that we need to continue to make this continue to be an efficient operation in terms of manpower, muscle-power and monetary outlay.

I thought that I would have some time to get the dish on the trailer, but two brief business trips this week tempered the effort. And I wound up using my 70 element WIMO 1296 antenna to try and listen to the "Echoes of Apollo" EME activity this weekend. I plugged a 0.3db nf 37 db gain preamp in front of my TS2000x. The beacon sounds fantastic with this set-up atop the van in the driveway, but alas, I could not hear any of the fine SSB signals that were being broadcast to the moon and reflected from various large dish stations in Europe or from the SRI dish at Stanford. I did manage to decode a few JT65C signals but was not set up to transmit. I am sure I will get a "roundtuit" soon, and have the dish provide that extra 6-8 db gain needed to hear 1296 EME signals better. It was a satisfying surprise to see the EME activity and our own member Joe Taylor in the front page story of the EoA activity in the NY Times. We need to continue to make the VHF Conference successful on Saturday, September 26. Please check the Packrat website and sign up to come. You can also submit a paper or plan to give a talk. Paul W2PED is the program chairperson and Mike KB1JEY and Jim WA3EHD are handling the general arrangements. A fond farewell, and again a thanks to all who contribute to make this club such an outstanding organization, with support of all the members' technical radio needs and interpersonal issues.

73, Rick K1DS

A Note to the Membership from AI, N3ITT

Hi All,

Just like to thank all the Packrats and Friends who helped to make this years June Contest effort another great success!!

This year was challenging, with lots of obstacles to overcome. With rainy conditions for a full week up till Friday, the ground around my qth and Bob's was a soggy mess making load up a real challenge, but with many hands to help we were on the road only slightly behind schedule. Add to that our regular lunch spot at the base of the mountain was "Closed For Renovation" (how dare they!), sending us foraging elsewhere for food.

Speaking of food ,thanks Doc, (and helpers) for a great job on keeping everyone well fed thru the event (I think I gained 5lbs.) Thanks!! Also to Michael and his XYL for dinner Friday night.

Although persistent showers plagued us thru much of Friday and Saturday everything was on the air well before "0 Hour" of 2 pm Saturday.

Despite frequent visits from Murphy causing us to loose our 432, 6m and 2m power amps, and an as yet unsolved 432 antenna system problem, we kept the stations up and running and came up with a great score.

Again THANK YOU! to all the Band Captains, Committee Chairmen, the Cooking Crew, Ops and Guest Ops and those who worked behind the scenes with equipment and to everyone who helped out with this event.

Also **special thanks** to Rick,K1DS for getting the Rovers together and to Bill,K3EGE for coordinating the skeds.

Extra special thanks go to the crew that hung on thru the insanity of putting the equipment away this year! This year we had to deal with 3 load up sites, plus the rental place, and also a 2nd trip from Bob's to Cotner to remove the remainder of the equipment from Bob's barn. The ground on Monday, especially at Bob's was even soggier than Friday.

Thanks again this year to W0RSJ, who followed me back to return the trucks.

TNX. TO ALL, LET'S DO IT AGAIN NEXT YEAR!!

73 , AI N3ITT

Phil, K3TUF Sweeps 2008 Sprints

--by WA3BZT

Here Is a news flash. The Pack Rats Phil K3TUF took a clean sweep of the sprints last year and won the top three awards. Which was gift certificates from DEMI (I think) \$100 each. He took the top place in Microwave bands 222 MHz and 432 MHz. The sprints are supported by the SVHF group. Well done Phil K3TUF!!



June Contest Low Microwaves Operations Report

-- by Rick K1DS

Set-up went rather smoothly as the 903 and 1296 transverters and amplifiers were each in their own modular boxes, needing only to be hooked to power, IF rig and antenna.

This year the 903 and 1296 antennas were on their own tower and rotor so that once stations were worked there, they could be passed off to the high microwaves ops and the low microwaves antennas could be rotated again without interrupting the 2304 and up contacts.

We were using IC821H 144/432 dual band transceivers as our IF rigs, turned down to minimal output of 6W using a 6db pad to cut down the output to 1.5W. Each of the amplifiers was running about 100W output through 24' of LMR600 and a rotor loop of 18' of LMR400UF.

The 1296 looper was mounted upright with the 903 looper facing downward below on the prefab mast clamps. Remember that information, it will be important later on!

As usual, there was very little microwave activity at the start of the contest as most everybody was running 6 and 2, and interestingly enough, there was 6m Es from the beginning.

Then BANG the rain started 18 minutes into the contest and yet, we were able to start making QSOs as soon as we could locate a few capable stations and rovers.

As the afternoon progressed we started to add a few contacts on each of the bands, and the rains persisted on and off until we got a thunderous downpour that sounded like a machine gun on the roof of the truck! Shortly thereafter, the 1296 amplifier shut down, showing the two orange bars in the middle of the output indicator.

What happened? Why did the amp protection circuit shut it down? Must be the rain causing high SWR on the looper. Well, perhaps it will get better as it dries up.

We found that we can use SSB and reduce the mike gain to get some lower output power that would avoid tripping the SWR shut-down protection. Unfortunately we could not use CW as there was no way to further reduce output power of the IF as it was cranked down as far as it would go. We were loathe to open the transverter and run back the output power, thinking that things would dry out soon.

The fog was dense on the mountain after the rain, and as things were quiet, we headed down to the chow tent for dinner.

There was a banded pigeon walking around outside the microwave truck, unafraid as we walked by. After dinner when we returned, the pigeon was still walking around up there, apparently unable to fly anywhere in the dense fog. As we returned to the rigs, the pigeon climbed up the ramp also, ducking it's head in and out of the truck through the 6" opening we had left in the door. After several ins and outs, the pigeon headed over to a spot on the floor and then decided that sitting atop the Astron power supply was a good place to keep warm.

But you know what comes from pigeons-pigeon droppings--and after we wiped up some, Paul decided he's got to chase the pigeon out or risk more droppings on the gear.

We found a rag to cover the power supply, since the pigeon came right back in after being chased! After we closed up for the night, we left the truck rear door open 6" for the bird to find its way home at sun-up, which it apparently did, as it was gone when we returned in the morning. The rag had plenty of evidence of the pigeon's night activity.

Much to our chagrin the SWR protection circuit was still being triggered, despite clearer and drier Sunday weather. The SWR meter said about 60W out and about 30W reflected. The amplifier didn't like that, and it was not that way when we set-up.

Could there be water in the coax? We called the tech team --- we first dropped the tower and dissembled the coax. Each of the connectors were dry and the cables themselves tested fine. Then we got the screwdriver to open up the taper cap between the UT141 and the N connector on the driven element--drip, drip, drip comes the water that apparently seeped in through the upper portion of the UT141 that connects to the loop. When mounted upright, rain seeps in and collects in the rear taper cap of the N connector! None of the other loopers had this problem, as they were either mounted upside down, or the open end of the UT141 at the driven element loop junction was sealed with a special 3M product. To finish the job, Phil called for a hair dryer--- a what?? a bunch of hams on a weekend mountain radio contest with a hair dryer? But wait, Phil remembered that he has a heat gun that he brought for the heat shrink tubing sleeves we might need---it did the job drying out the remainder of the connector.

Screws are tightened back up, some makeshift tape covers applied to the driven element attachment to the UT141 and the connectors are all resealed. The SWR is tested once more---a perfect 1:1 and we are back on the air with full function and power.

As things remained slow on Sunday afternoon, Rich KB3NRL/R and Mike KB3GJT/R got the rover gear together, using the K1DS rover van and transverters supplied by NR6CA and a bunch of loaner antennas and batteries.

Mike was able to make QSOs on 6-2-222-432-903-2304 and 10GHz, while Rich made the sweep from 6 thru 24G. As an extra added bonus they both made several additional QSOs when W1RT/R pulled up to Alamuchy in FN20, in addition to other stations easily worked from that site!

The final numbers were almost exactly what we had last year, despite some loss of contacts during the heaviest downpours and the problems with the SWR shut-down protection.

The freedom of having these two bands separated from the other microwave bands was useful. The 222 FM liaison box was also on the table, so that either operator could use it to talk back with other microwave stations if needed.

I'm looking forward to next year! We may improve the band and mode switching of the 903 and 1296 and have the IF rigs directly connected to the intranet and WriteLog.

Additional rover activity would certainly complement the station capability.

-- Rick, K1DS

Camelback 2009 In Pictures









K1DS, Rover Par Excellence

Camelback 2009



W3GAD, President, Op, Chef



K3JJZ Computer / Networking Guru, setting up the log



WA3RLT and WA3GFZ attaching the 10GHz feed



2304 and up, set to go



A short ragchew session before "Zero Hour"



Setting up 903/1296 loopers

Camelback 2009



Layout of the operating trucks and most of the antennas. Note the ominous sky which will pour down and shake the ground any minute



Phil, Michael and George getting the hang of the new electric jackhammer.



KB3NRL unloading some of the weekend's food and supplies



K3ESJ, N3EXA and K3TUF with 2m antennas



WA3SRU logging another QSO



WA3RLT & WA3GFZ at 2304 and up station

Thanks to WA3SRU, K3JJZ and K1DS for the pix.See http://www.packratvhf.com/June%20Contest%202009/pictures/dscn0814.html for more.

South East VHF Conference EME Pix

Here are some pictures that I took at the South East VHF conference this year. They show what it takes to do a mobile EME system. This one is for 144 and 432 EME. As you can see in the pictures, KC3RE uses a winch attached to the towing hitch to elevate the antennas. He has them hinged at the back. He has to point the Land Rover at the moon by steering it towards the moon. The first picture shows the way it goes down the road. All this kind of makes K1DS's look like a family van! To get the proper spacing for the four antennas he pulls out the antennas to a stop and pins them into place. Not a bad idea for getting on the moon.

-- Ed WA3BZT





Events

For inclusion, please direct event notices to the editor.

ARRL EPA Section Convention + Firecracker Hamfest - July 4. Bressler PA. see hrac.tripod.com

Valley Forge Hamfest & Computer Fair - July 12. See www.marc-radio.org

CQ WW VHF Contest - July 18-19. see http://www.cqww-vhf.com/

Central States VHF Conference - July 23-25 Elk Grove Village IL. Spr: Central States VHF Soc. See www.csvhfs.org/conference/index.html

Reading Radio Club Hamfest August 8. See www.readingradioclub.org

ARRL UHF Contest - August 1-2. See www.arrl.org/contests/calendar.html for details.

ARRL 10GHz & up Contest - August 15-16. See www.arrl.org/contests/ calendar.html for details.

JSARS Hamfest - Aug 16. See www.jsars.org

Pocono Area Hamfest - Sept 12 . See www.qsl.net/n3is/hamfest/index.html

ARRL Sept. VHF QSO Party - September 12-13. See www.arrl.org/contests/calendar.html for details

Gloucester County Amateur Radio Club Hamfest - September 20. See www.w2mmd.com Events continued form p. 10.....

ARRL 10GHz & up Contest 2nd Weekend-September 19-20. See www.arrl.org/ contests/calendar.html for details.

Mid-Atlantic VHF Conference - Sept 26 with Hamarama 9/27. Spr. Packrats. Mt Carmel Club /Mariott Hotel. Complete details at www. packratvhf.com/VHF%20Conf/vhf% 20conf.html. Registration is now open.

Tailgate Fest Hamfest- Oct 3. Spr: Red Rose Repeater Assoc See w3rrr.org

OMARC Hamfest - Oct 4. See www.omarc.org

RF Hill ARC Hamfest - Oct 18. See www.rfhill.ampr.org

MUD - Oct 25 The Westin, Dallas Fort Worth Airport 545 West John Carpenter Freeway Irving, Tx 75063. See www. microwaveupdate.org

Laura Smith, Successor to Riley Hollingsworth, K4ZDH, to Speak at Harrisburg RAC

The HRAC invites you to a special evening with Laura Smith, Esq, FCC Special Counsel for Amateur Enforcement on Wednesday, September 16, 2009 at 7:00 P.M.

Location: Holiday Inn and Convention Center, 148 Sheraton Drive, New Cumberland, PA (Exit 40A, Route 83, Limekiln Road). This exit is located just north the junction of the PA Turnpike -- Harrisburg West exit (#242) and Route 83.

This meeting is open to all amateurs! No reservations required!

Questions, contact:

Glenn Kurzenknabe, K3SWZ 717-774-1728 k3swz@arrl.net Joel Knoblock W3RFC www.therfc.com The R.F.Connection 213 N. Frederick Ave. #11WWW Gaithersburg, MD 20877 USA

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Ham Radio URL of the Month

This month's url is at http://en.wikipedia.org/wiki/Contesting.

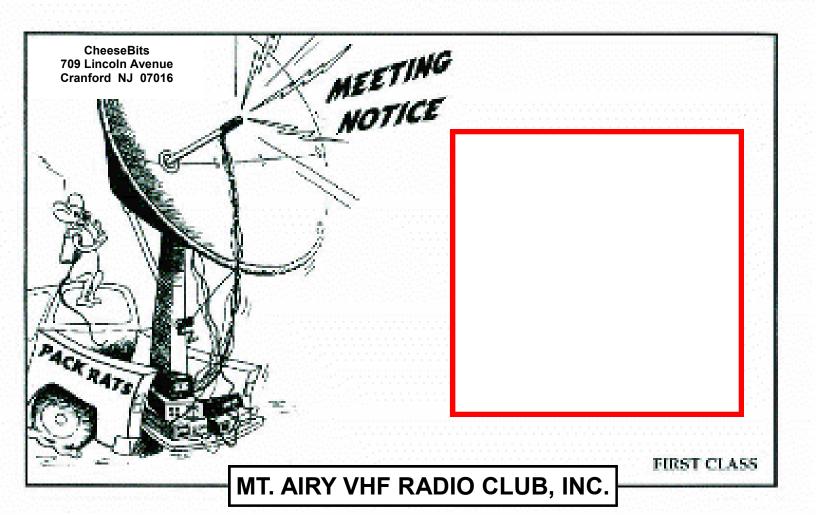
This is a rather comprehensive article in Wikipedia outlining ham radio contesting and radiosport. If you are not familiar with Wikipedia, it is an online encyclopedia which is edited by its own readers!

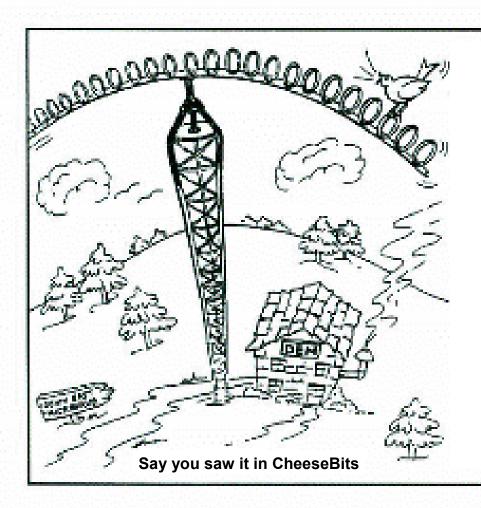
The article is quite general and is an example of how Ham Radio contesting can be presented to the average reader who knows little of contesting or even ham radio.

The nice thing about Wikipedia, is if you find an error, or if you feel there is something missing or something is not described clearly, there is nothing preventing you from editing the article to improve its content!

Like most Wikipedia articles, this one has a nice list of additional internet resources on Contesting in its "See Also" and "References" sections.

Enjoy! --W2BVH





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