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



CHEESE 3173

W3CCX

CLUB MEMORIAL CALL



CELEBRATING 50 years of VHF/UHF and MICROWAVE DEVELOPMENT and COMPETITION in 2006

Volume XLVII

AUGUST & SEPTEMBER 2006

Number 08

PREZ

SEZ

Old Dogs: New Tricks. New Dogs: what new dogs?? According to my calculations, we have two members in their twenties, and perhaps one member in their thirties. Yes, a few in their forties, a bunch in

their fifties, and an increasingly larger group in their sixties and seventies, and a few in their eighties. I don't think we have any nonagenarians yet, but will pretty shortly. As I looked through the archives and pictures of the early years of the club, I see youthful members and their families and children involved in many of the activities. Many of those same members remain with us in relatively active or retired status. There were rosters showing several "student" members, including Walt, K3BPP. We have had 1 student member in the past 10 years. The average age of the membership has shifted from the 30's to the 60's since the club was started.

So where are the new dogs? Us older dogs *have* been learning new tricks: higher bands, different modes, more power, solid state, MMICs and PICs. For long term planning for our next 50 years, the club needs a continued stream of new and youthful membership. We were planning an event for the fall that would have been attractive to students, but due to conflicts, our scheduled speaker, tourist astronaut Greg Olsen had to cancel the date. It appears essential to me that we need to have a plan to attract and retain more youth in order to perpetuate the wealth of knowledge and capability in VHF design, construction, recycling of commercial surplus and communications skills and techniques that we possess.

As much as we pass along some genetic features to our offspring, we need to attract, recruit and train those VHF Jedi Knights of the future.

The club officers are doing a substantial job in managing the activities of the club. Others, whether chairpersons of special events or just volunteering, have dedicated time and energy to their various efforts. We have requested a volunteer to serve as a membership chairperson for several months, and there have been many ideas on how to attract new and younger members, but no-one yet has stepped forth. I have heard and used the expression that the first third of life you learn, the next third you earn, and the last third you return. In a club such as ours, I tend to think that all of time we spend is in thirds, so that we are probably doing some of the learning, earning (designing, building, operating and contesting) and returning (teaching and serving group and individual needs) simultaneously. It's time to add more of the returning to your resume. Let's all focus on club growth and attracting and retaining youth to our roster. We still seek a membership chairperson, and a membership team. Volunteer now. Call or email me please. Rick1ds@hotmail.com

Thanks to Brian, N3EXA and Joe, AA3GN, we have a new home for our repeater (224.58-). The antenna will be improved and raised soon, and coverage should be improved. I have had only 3 contacts in the past month, so it's awfully quiet. Let's talk it up a bit. I'm adding a 20W amp so my 1W walkie will be heard better from the car. I was hoping that more of you would be active for the UHF and 10G and up activities, but very grateful for working those who were on the air all weekend!

73, Rick, K1DS

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PACKRAT 222 MHz REPEATER - W3CCX/R

222.98/224.58 MHz, Hilltown, PA

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PACKRAT BEACONS - W3CCX/B

FM29iw Philadelphia, PA

50.080, 144.284, 222.065, 432.295, 903.071, 1296.251,

2304.037, 3456.220, 5763.190, 10,368.140 MHz (as of 3/1/01)

MONDAY NIGHT NETS

TIME	FREQUENCY		NET CONTROL	
7:30 PM	50.150	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	WA3GFZ	FN20kc
9:30 PM	1296.100	MHz	WA3NUF	FN20le
10:00 PM	903.125	MHz	W2SJ	FM29lw
10:30 PM	2304.085 N	ЛHz	W3KJ	FN20hg

& go to 3.4G & up after Visit the Mt. Airy VHF Radio Club at:

http://www.ij.net/packrats

Editor's Column

Excuses, excuses—Those where my father's favorite words when I didn't do as he wanted, right or wrong. Well, no excuses. I have been hoping to see more contributions from the readership to help fill the pages with hints, tricks, new ideas, success, failures or whatever. Alas, This little newsletter is rapidly becoming a forum for K1DS and whatever I can rob from the internet and the ARRL Newsletters.

Maybe there is some truth to the aging syndrome. Maybe we are all getting to tired to expand our knowledge or to share useful ideas. I really do not know what is happening. The "FAMILY PICNICS", while quite enjoyable, are attend by a very small percentage of PACKRATS, and it seems it is the same group every year. Any EXCUSES here? The is always plenty of notice at the meetings, CHEESEBITS and the weekly net announcements.

Oh! Yea! About those nets—when was the last time you checked into even one net. I try to be there when I am in the area. What's your EXCUSE.

Need a net directory just look to the left near the bottom. Need it bigger I can send you the list in large type. Why not invite a younger ham over to see your station and check into the nets, maybe it would light a fire and inspire them to look further into the wondrous world of VHF, UHF and MICROWAVE communications.

Our new officers (were you there to cast a vote?) have been hard at work planning the calendar for the next year of meetings, which by the way, are still held the third Thursday of the month at the library in Southampton. We have technical presentations, conference reports, looks at new modes of operation and new designs of equipment to expand your enjoyment of the hobby.

The CHEESEBITS is your newsletter and I am giving it my best, I missed the August edition, sorry it just didn't happen, but here is a bigger than usual combined edition.

I should apologize for the tone of this column; however, the message is from the heart. We need to get it together and work to grow the MOUNT AIRY VHF RA-DIO CLUB or it will "SLOWLY FADE TO GRAY" and disappear and that would be very sad indeed.

> P.S. For Sale Cheap!! One CHEESEBITS editor's position Any takers?

> > Listen for the WEAK ONES

73

W3GAD Doc





PACKRATS ANNUAL WHITE ELEPHANT SALE

The Man in Charge: K3JJZ, Elliott was in excellent form—don't scratch your nose of you just could be taking that rare treasure home for a donation to the treasury



Above: Some of the enthusiastic shoppers

Left: It pays to arrive early, unload your stuff and do a bit of previewing of all the wonderful and rare treasures to offered for the evening.

... Continued on page 4

3





Whatever you were looking for—it was probably somewhere in the collection. Here is a low mileage sweep generator—just broken in.



At this auction we have lots of collected knowledge in old manuals and equipment that will get you on the air on HF as well as goodies for up to 24 GHz. Here is a homebrew power amp built by PACKRAT WA3AQA Walt, plus a collection of test gear and handi-talkies too



We did a variety of transactions and W3KM tries to keep track of who donated what to the evenings activities while Elliott make an emergency repair to the PA system.



As these shoppers discovered, there are plenty of goodies to go around and the prices are set by the bidders.

If you missed this years opportunity to rotate your inventory of ham parts (Shame on you) plan on joining the fun in 2007. All we can promise is that there are plenty of boxes in everyone basement that need to see the light of day and it may be your opportunity to make some changes in you own collection by moving some stuff out to make room for a few new acquisitions.

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PERFECT PICNIC WEATHER

THE ANNUAL PACKRATS FAMILY PICNIC

Al and Carol Sheppard were the perfect host and hostess again for this year's picnic bash. The weather was so cooperative that almost everyone was enjoying a dip in the pool. It was great to see so many new faces and families there, and this portends greater participation by our newest members. The food, as usual, was delicious and plentiful, and well complemented by the generous supply of liquid refreshment and covered dishes and desserts brought by the attendees. N1XKT brought his guitar and serenaded the group for a while, strumming his favorite popular rock tunes. Folks came and went all day long and the party lasted well into the late afternoon and early evening hours. The kids seemed to enjoy every aspect of the day, and kept cool in the water most of the afternoon. We brought our "grand-doggy," Glow, a Japanese Chin, who also enjoyed meeting everyone there, and also a good snooxe in the shade. Everyone also got a peek at Al's latest road machine, a Ford Mustand GT convertible. What a beauty! It was a great and relaxing way to spend a summer afternoon, spending time with your club buddies and their familes, and enjoying some great eats and cool drinks.



The PACKSRATS Picnis has been faithfully attended by Erniw Keenas, W3KKN, for most of

Not only was the food good but the Shepards' have a beautiful pool for those who enjoy a dip before and after all that delightful food.



WHO DO WE HAVE HERE??



Once in a while we have an opportunity to dig into someones personal archives and find some really interesting photos. This one is from Richard Pierce, K3MWV's collection. I am sure you can at least get a shot at the MARIO TABLE for getting these PACKRATS names right. Extra points if you can also tell us what was going on and with whom. By the way, who's leg is that under the back of the car?



Leon Rosen, K1XKT, was our "Minstral for a Day"



What would a picnic be without at least one animated vacuum cleaner. Looks like this little guy has been enjoying the fallout.



What doesn't fall on the ground goes to waist anyway. Here we have a couple of our more malnourished revelers demonstrating the clean plate techniques need to qualify for the dessert line—the author was right behind them on both counts.

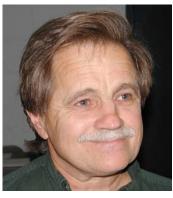
INTRODUCING NEW MEMBERS



W2BVH - EXTRA LENARD M. WINTFELD (LENNY) Cranford, NJ FN20up







WA3QPX - GENERAL PAUL J DOMANSKI Townsend, MD FM29dj

N3RG - EXTRA RAYMOND M. GOLLEY Vorrhees, NJ FM29mu

From time to time I will try to provide these introductions of recent new members. As Rick points out in his PREZ SEZ comment the club is not getting any younger. We all need to work at getting the new, younger hams interested in the many aspects of VHF, UHF and MICROWAVE development and competitions. Keep in touch with other clubs and try to encourage younger hams to expand their horizon to the higher frequencies and their challenges. W3GAD

Try for a little variety in your operating

After success with my first EME QSO on 2m from the rover van, I rearranged the antenna complement and decided to operate the CQWW contest. Mother Nature was not kind, as almost exactly at 2PM we had extremely heavy rains which would last for over an hour as a line of thunder storms, complete with lightning worked its way through the area. Perhaps this was the chance to just use the rig in the shack in the basement, although the antenna is a G5RV, that is set-up for 40m-10m and strung loosely around the attic.

The band was hopping with stations in EN and EM grids, so I gave a shout, and the contest was on! Despite the limited power and marginal antenna, folks were hearing me adequately and I was making QSOs. Stations like K2DRH in EN41 were 40+/S9. We were working some EU, the Caribbean, and double hop across the US. Occasionally a station in IL or other Midwest station would tell me that I'm 30+/S9. Such is the magic of the band, and the near truth of the adage that you only need a wet noodle for an antenna when it's happening. I did manage a few hours upstairs with the van, and added a few 2 meter contacts, but the 6m activity was no better or worse using 160 watts and a Moxon antenna.

A few other 'rats were enjoying the activity also. The band stayed open virtually all of the weekend, and with my few operating hours, I managed to have about 110 QSOs on 6 with 75 grids in the log, and even had a nice run of CW contacts with me calling CQ. I know that it'll be amazing to see the totals of the big guns, as I heard K8GP, K3EAR, K2DRH, K1TEO, W0HA and several K5's all weekend. Onto the pasta noodles for dinner, now that the event is over. 73, Rick, K1DS

K3MQH—SK

Date: Sat, 12 Aug 2006 15:52:04 -0400

Sad news Dick, K3MQH, that organized the South Mountain VHF Contest group, passed away this week. Dick sold his site several years ago and moved to Fla and was getting active in ARES/RACES. He was a friend and will be missed. He was active from Big Flat and always had a loud signal.

Bob K3DJC

Subject: K3MQH Saturday, August 12, 2006 Early this past week Dick Balou, K3MQH now of Sarasota, Florida passed away.

Unfortunately there have already been some posts on other Reflectors containing inaccurate information. To set the record straight the "site" was purchased from Dick 5 years ago. He originally was selling it as land for development when he saw no ham interest. When an offer to purchase fell thru to make it into a camp I stepped in. I was already negotiating the purchase of equipment from him. In the sale, the land was separated from the remaining equipment under separate purchase agreements. The majority of prior operations, especially those of the last year, were only on the bottom 4 bands. There had been no efforts over 10 Ghz. There was no club formed, scores were donated to other clubs that Dick belonged to. There were some interesting controversies over the station operation that arose over the years. All formal operations were held under the K3MQH call. From the recorded Deed that I saw, Dick purchased the place in 1991. Dick was a very colorful individual who became well known in VHF circles. He was also a great HF operator, well traveled and had a nice station at his home in York. There is absolutely no connection between him and the current club that occupies the South Mountain site. I will be happy to fill in the blanks on a private basis. I was corresponding with him regularly over the years and aware of his illness. He had planned on several occasions to come operate with us at the new station. He was happy that another Ham had ultimately purchased the site and took it to the 'next level' as he put it.

For now, let us pay our respects to Dick and hope he has found peace after all. Best 73's to K3MQH. The Legend will live on.

AUGUST UHF CONTEST A SOLO RUN BY K1DS

Almost 90K points--it was fun despite blowing up the new 1296 amp. Had the spare 40W back home for Sunday. Nothing really exotic, although non expected because I wasn't on any mountaintops. Hope you all had fun. I made ***3*** 24GHz QSOs with W3SZ from FM19, FN10 and FN20. and ***1*** 24 GHz QSO with N3EMF from FN20 near Lenny's in Churchville. The FM19wn spot in Havre de Grace, MD was a bust. But I did get my pictures taken there by the state trooper who allowed me to stay at the commuter parking lot "without a permit."



It was a bit more exhausting without Leon doing some of the pushing up of the main mast and the dishes, but nevertheless, a great contest. 73, Rick W3CCX/R



A GREAT START FOR THE 10 GHz CONTEST

10GHz first weekend report

K1DS and N2UO headed up to Camelback for the 10GHz and Up first weekend on Saturday morning. K1DS arrived about 9:15AM and quickly found K1TEO and W2SJ on 2m, however, without a 10GHz beacon, getting the dish accurately oriented was not that easy. It was overcast and we were unable to even get a reading from the sun. I got a call on 2m from W1AUV on Mt. Equinox in VT, and based on my 2m beam calibration to the beacon, I turned the dish northeastward, and as luck would have it, I was able to hear his CW sigs on 10G and finally was able to calibrate the azimuth for the dish. As you can see by the pictures, the shrubbery and trees on the mountain top are quite high, and I'm sure that both of us has significant attenuation of the transmitted and received microwave signals as our dishes were just skimming the greenery.

Marc and his XYL Patty arrived at about 10AM and were quickly set-up on the lower parking lot, while I stayed on the uppermost gravel area. We



coordinated most of our 2m and 10G contacts. I had the bigger 2m station running 350W and 10 elements, while he had the bigger 10Ghz signal, with a 1m dish and 20Watts at the feed. As I often heard a whisper of a CW signal, his setup easily heard everyone easily on SSB! I thought I needed a bigger dish! Actually, I was able to work and everyone that N2UO did, although I had to strain a lot to hear some of the weaker stations.

Later in the morning there was a group of seven Maseratis that drove up Camelback on a tour and spent enough time for me to snap a few pictures. As there was no view, since the day was a bit foggy and overcast, they didn't stay for more that 10 minutes.



At about 3PM Lenny, W2BVH arrived on Camelback to check out the stations and get a taste of 10G operations. He was just in time to get a quick tour of the rover van, as I needed to pack up and head home for another social engagement. Lenny spent some more time with Marc and Patty and operated a bit of Marc's station.

When I left, we each had 18 QSOs in our logs, having worked the groups stations on mountaintops in NH, VT, ME, and MA, AF1T and W1MKY on Block Island, and a few home stations in CT, NJ, and MD. By this time we had about 6K points (100 points for each new call and add to that the distance of the QSO in Km). We attempted contacts with VE2SMA in FN02 and a WA4 in FM07, but were unsuccessful with those long hauls. Hopefully we'll be able to add more Pack Rat QSOs along with some 24GHz activity and LASER Q's to the logs in the September 10G weekend. 73, K1DS & N2UO



HEADS UP JANUARY VHF SWEEPSTAKES

Fellow Rats.

Yes, now is the time to start thinking about January!

First thing on the agenda is to mark you calendars now! Tell your wife, girlfriends, family, relatives, boss, or anyone else who might want you the weekend of January 20-21st 2007, that you will not be available.

Second, take out a piece of paper and write down all the things that need to be repaired, tweaked, or added before the January contest. Now is the time to get busy working on them, or if it is a 2 person job, to ask for help! Don't wait until December to repair your antennas that need attention today!!!

Third, rovers and multi-ops should be planning your strategies. Rovers, make sure you (and everyone else knows!) where you will be going. Also have a back up plan in case of poor weather. Multi-Ops, do you have enough operators to cover all the bands for the entire contest. Now is the time to shore up these issues, not a week before the contest.

Lets get started off on a good foot toward another January Unlimited Club victory!

73

Steve, N3FTI, January Contest Chairman

MICROWAVE PROPAGATION PREDICTIONS SITES

Tom, WA1MBA wrote:

Another Hepburn site is listed on my site http://www.wa1mba.org/interest.htm which gives predictions daily for several days into the future.

kb0pe@netzero.com wrote:

Hello to ALL, I was wondering if I was still living under a rock.... I have been using the Hepburn site for many years now as a week by week heads up and now along with the "VHF Propagation Map" at: http://www.mountainlake.k12.mn.us/ham/aprs/path.cgi?map=na

Has this site been working (proven) for 1296 and the higher bands for conditions? Is there maybe even a better tracking method for the uW bands that I do not know about?

Thanks for your time and 73, Dave - KB0PE/ EM48ts

BUILD A TAPPING AID FOR YOUR BENCH

On tapping aids, I built myself one. I broke a 2-56 tap once by bumping it while it was in the piece and decide to make something to guide the tap.

I started to describe it just with words, but



(saving many) here's a picture: http://www.xertech.net/pub/tap_guide.jpg

I mounted a small drill press vise onto a board. The aluminum strip to the right in the picture is permanantly attached to the base and fixed vertically relative to the vise for the length taps I use. The notch provides clearance for the tap and the thing to be tapped (represented by the plastic sheet in the picture -- I didn't bother to drill it) is clamped to this aluminum base.

The aluminum rectangular extrusion clamped in the vise has two holes drilled near the end. Each hole matches the shank diameter of a tap, one for my 4-40 tap and one for the 2-56. This guide can be tweaked vertically depending on the length of the tap and the thickness of the piece to be tapped.

The piece to be tapped is clamped loosely to the aluminum support and moved slightly until the tap is perpendicular to the hole to be tapped. The clamp is tightened and tapping begins.

There could be problems with clamping, depending on where the hole is located on the piece, but so far this rig has worked for me with some juggling of the piece and where the C-clamp is placed.

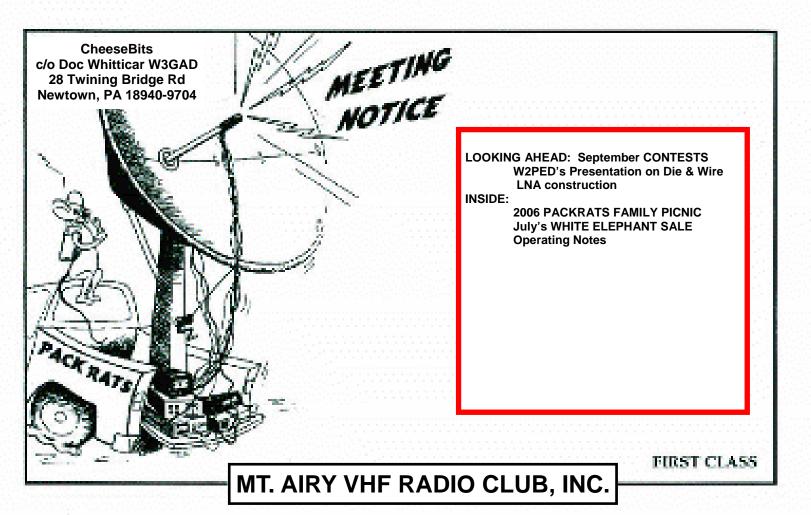
rexa@sonic.net

WHATS HAPPENING

A LISTING OF INTERESTING EVENTS

- **2 SEPTEMBER 2006**—MAD—Microwave activities day—With the Fall VHF QSO Party just 1 week away this is a good time to warm up you gear, evict the spiders and and see if the rotator still points in the desired direction.
- 9 TO 11 SEPTEMBER 2006—ARRL September VHF QSO PARTY—This is the big warm-up for the January Contest it is also a club competition so let us see if we can extend the PACKRATS winning tradition to another competition. Get on, operate, have fun and <u>submit your logs</u>.
- **14 SEPTEMBER 2006** Meeting of the PACKRATS Board of Directors at the QTH of KB3HCL, Dave Fleming, 794 Hallowell Drive, Huntingdon Valley, PA
- 16 TO 17 SEPTEMBER 2006 ARRL International EME COMPETITION also 14 to 15 October and 11 to 12 November 2006 to **16 TO 17 SEPTEMBER 2006 -** ARRL 10 GHz and UP CONTEST—Part TWO
- 18 SEPTEMBER 2006—MONDAY—Fall 144 MHz Sprint (See Announcement on Page— Rules will be published in the August CheeseBits.')
- **21 SEPTEMBER 2006**—Meeting of the MOUNT AIRY VHF RADIO CLUB Paul Drexler, W2PED will give a presentation on Construction techniques for 24 and 47 GHz LNA's using die and wire techniques. Bring yourself and bring a friend.
- 26 SEPTEMBER 2006-TUESDAY- Fall 222 MHz Sprint
- **1 OCTOBER 2006**—PACKRATS ANNUAL HAMFEST—Once again it will be held at the Middletown Grange Fair Grounds in Wrightstown, PA Your help is needed too.
- 4 OCTOBER 2006—WEDNESDAY—Fall 432 Sprint
- **12 OCTOBER 2006** Meeting of the PACKRATS Board of Directors
- 14 OCTOBER 2006—SATURDAY—Fall 903 and up Sprint
- **14 TO 15 OCTOBER 2005** PA QSO PARTY. Be the hunted rather than the hunter with this fun contest. Add it to your radio fun for a few hours and submit your logs to qualify for an award for making 100 or more "Q's"
- 19 OCTOBER 2006- Meeting of the MOUNT AIRY VHF RADIO CLUB—K1DS, K1JT and N2UO will bring us up to date on the International EME Conference. This promises to be more than the usual conference report but a bit of a travelogue of Europe too.
- 19 TO 22 OCTOBER 2006 MICROWAVE UPDATE 2006—DAYTON OHIO
- 21 OCTOBER 2006—SATURDAY—Fall 50 MHz Sprint

All meetings are announced on the regular Monday Evening Nets. (See Page 2) - Board meetings of the Mount Airy VHF Radio Club are open to all members. Teleconferencing for members is usually available. Regularly scheduled meetings of the PACKATS are held at 8 PM in the basement meeting room at the Southampton Public Library on Street Road in Southampton, PA. Meetings are open, not only to the membership, but to any party interested in VHF/UHF/Microwave contesting, equipment design and construction for use on the VHF/UHF and Microwave Frequencies or amateur radio in general.



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