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



#### W3CCX **CLUB MEMORIAL CALL**

ARRL Affiliated Club



Volume L September 2009 Number

PREZ

The PACKRATS are on the move and the fall contest season is upon us.

The MID-ATLANTIC VHF CONFERENCE has a

good number already registered. The technical session and the beginner's sessions promise to be very informative. Dale Clements AF1T, and his always smiling assistant Mickey, W1MKY, will be presenting a very enlightening primer on antennas. This is a great presentation with lots of excellent demonstrations to support the theory.

We need your smiling faces to support your conference and the following day's HAMARAMA. If you have not offered your services in support of HAMARAMA please let BITS is being published in a more timely WA3DRC, Ed Finn, know how you are willing to assist with buyer tickets, parking, set up take down, clean up, talk-in, vendor tickets and parking. Remember these two events are what keep the treasury funded for all the other activities for the year.

Gary, WA2OMY and Elliot, K3JJZ have done a fantastic job getting the 2304 project underway. I am sure there will be several configurations of these transverters. I know my system has already gone in a slightly different direction than the original plan but it looks like it will be as compact as the package will allow.

Phil, K3TUF has been guiding the 903 amplifier project forward and we have a

TECH NIGHT scheduled for one of the meetings so these projects can all be tested in their final configurations.

Also, thanks to Phil, K3TUF we have several very interesting programs scheduled for the fall season. The September meeting will feature N4HY, Bob McGuire updating us on software defined radio. Bob is one of the key people involved with the SDR 1000. 3000 and 5000 radios as well as Technical Director for AMSAT; and he is also working in the world of 1's and 0's which involves a lot of travel. Give a job to a busy man and the job will get done.

Let's not forget Lenny, W2BVH. With assistance from Ed, WA3BZT, CHEESE manner. They need your articles to keep the monthly publication interesting. Ed is hoping to see several offerings showing off your stations with some description and pictures. Everyone's station is unique so why not show us where you operate for the nets and contests. We know not everyone has a "MEGA" station but they're all worth while.

Having mentioned the nets I want to remind everyone we have 7 nets on Monday evenings starting at 7:30 on 6 meters and moving up the bands every half hour. To keep these nets operating we need alternates for the net control duties. Experience is not required. With so many good stations within the PACKRATS community surely there are more than 7

1

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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	FREQUENCY		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 NALASSA VIJE Deals Obab at account a closet deficient			

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

www.w3ccx.com

... Prez Sez

people capable of running the nets. Being a net control is a great way to get to know many of the PACKRATS and to become more familiar with where to look for those rare grids during the sprints and contests. Please volunteer to back up one of the nets In the mean time "LISTEN FOR THE WEAK ONES".

73 de Doc W3GAD

#### **Editors Column**

Our next meeting will be at our usual meeting site, the Ben Wilson Senior Center, 580 Delmont Avenue, Warminster PA. The meeting starts at 7:30 pm. This month we'll have a pre-meeting dinner to welcome our guest speaker. Dinner is at 6pm and is dutch treat at Giuseppe's directly across from the Ben Wilson Center at 1523 West Streeet Rd. All are invited to join us.

The September meeting will feature **guest** speaker Bob McGwier, N4HY who will be bringing us up to date on recent developments in Software Defined Radio. Bob is a very dynamic speaker and is always fascinating to listen to, so come on down, it promises to be a great evening.

I've been experimenting with some of the very simple (and very wallet friendly) software defined radios available from the "Softrock 40" group (see https:// www.kb9yig.com/ for additional information). Though far from state of the art, many of these radios can be used for routine operations at minimal outlay of cash and they serve very well as a learning tool. For example I can receive 40 meter cw with a software defined 50 Hz wide filter that has steep skirts and virtually no ringing. All this with a 10 year old computer with 10 year old audio hardware in it! While the sensitivity isn't very good (mds about -122 dbm) it is serviceable and educational. And if you're asking what has this got to do with vhf? Well they've got a 6 or 2 meter downconverter available for the princely sum of \$18. Check it out, you may find it interesting enough to get hooked! 73, Lenny W2BVH

# 2009 Annual Packrat Picnic

Reported by Rick, K1DS

It couldn't have been a more perfect weather day for this year's club picnic/August meeting. Parking was no problem as the logistics for finding space for the cars was easily handled. We were hosted by Michael (KB1JEY) and Carol Davis in their spacious back yard, complete with shaded seating and a perfectly delightful in-ground swimming pool. Our new club 10' X 20' portable pavilion was easily erected by a few members who came early to help. This was the first time the club picnic was held in the Ambler, PA area. yet we had attendees from as far away as Delaware, Connecticut and Ephrata, PA. Folks gathered after 2 PM and we enjoyed chats about our families, summer vacations, pets, and even some ham radio operations. Several of the XYLs were in attendance and everyone seemed to be enjoying the snacks and the brews to get started.

The Davis' basset hound attended also, and was kept company by out petite Japanese Chin. The dogs were always on the prowl for a chip or pretzel that might have fallen, and I even think they enjoyed a little brew. All attendees contributed covered dishes and we polished off most of the appetizers as the grills were fired up, the brew tub was refilled, and the appetites continued to grow.

Ed White WA3BZT and I decided to play grill-masters and we got the meats on the fire—burgers, dogs

and marinated chicken breasts were the main courses of the feast, well complemented by bowls of chili, baked beans, a bevy of salads and condiments. Round one, round two, round three, anybody still hungry? Hopefully you saved a little room for dessert, as there were several delicious selections to feed any palate—coffee, fruits, cakes, jells and chocolate brownies. I'm glad I made the picnic my one (continuous) meal that day!

The pool was enjoyed by at least one member, KB3GJT kept cool that way, while several others of us played with the radio controlled boat, submarine and watched the power fish swim around. Michael's tower and antennas were inspected by all, and he got plenty of advice and encouragement on getting them erected.

All who attended agreed that they had a great time, a gastronomic treat, and shared some great eyeball time with each other. We again thank Michael and Carol Davis for opening up their home to us and providing the support for this event. 73, Rick K1DS



KB1JEY's Pool, ready for a refreshing dip



[Clockwise from left] Doc Whitticar W3GAD, Jim Antonacci, WA3EHD, Jim's XYL Pat, and Doc's XYL Arlene share a conversation around the pool.



Sampling the various culinary delights, from left to right: Carol, XYL of KB1JEY, Al Sheppard N3ITT [back towards camera]; sitting at the table with the red table cloth are Kathleen, friend of AA3GN[?], Rich Enwright Kb3NRL, Phil Theis K3TUF, Arlene [standing], XYL of Joe Siebel WA3SRU (sitting in lawn chair) and Steve Simons KF6AJ. Way in the back, admiring Carol's garden is Jani, XYL of Rick, K1DS

Thanks to KB1JEY WA3BZT for pix & captions!

# Chris Patterson W3CMP Reports on the 8R1DB/8R1TO 6 Meter DXPedition

Here is a brief report of 8R1DB operation; the 8R1TO crew is returning to FL as I write this.

Dave Craig, N3DB, from Shady Side, MD, and I met on Monday, June 15th in Annapolis. We drove to Reagan Int'l in Washington and flew to JFK. After a thunderstorm delay, we arrived at JFK at 9:30 pm. There was absolutely nothing to do; all of the restaurants and newsstands were closed!

We left JFK at 1:30 am and arrived in Guyana about 7:00 am on the 16th. We were met by Peter Denny, 8R1WD. Peter was a gracious and kind host. He drove us around Georgetown, the capital city, on a daily basis, and showed us many of the local sites.

The drive from the airport to our hotel, the Ocean View International, took about an hour. Guyana is a former British Colony so everyone drives on the left. Quite unnerving when combined with local suicide driving techniques.

After checking into the hotel, which is located along the seawall that protects Georgetown from flooding, we met Raj 8R1RJN. Raj lent us the 45' tower we used. The Ocean View management kindly agreed to let us put up the tower on the premises. We got the tower up on Wednesday using unusual gin poles. We used a M2 6M7JHV which cleared the roof and overlooked the ocean. Takeoff angle for antenna was tremendous-I'm sure that helped immeasurably.

We put my Yaesu FT-897 on in beacon mode late Wednesday afternoon. Later that

evening we got the Elecraft K-3 on line. The homebrew 3CX800 amp which Dave built was jostled around quite a bit in transit and **promptly blew up** when we turned it on. Dave was able to get parts in Georgetown to fix it by Friday, but it turned out the amp didn't do a whole lot for us anyway because the 220v line voltage was so low. The amp never put out more than 300 watts. Most of our operation was done barefoot with the K-3 which runs 120 watts.

The K-3 worked extremely well. With its optional external preamp it is a very good performer on 6 meters. We could hear just about anything that was there. Its receiver didn't collapse in the **huge openings**, and the 400Hz filter and DSP allowed us to ratchet the bandpass down to 150 Hz when needed. Its internal keyer is excellent-easy to program and operate.

We had our first contacts Thursday morning with a US station then ON4IQ and ON4GG. About an hour later, and almost every succeeding day, we had wild openings to EU, NA, and the Caribbean. At times we would be called by stations in 5-10 countries at the same time. We had only one day without propagation. We made about 2000 contacts in about 60 DXCC entities. We worked VE7 to the northwest, Iceland (TF) to the north, and as far east as the Ukraine (UT). We were heard in 4J and 4X (over 10,000 miles) but could not work those stations because of the massive pileups in Europe.

Propagation was very strange, often skewed. I was surprised at the number and quality of the openings because of the distance from Guyana to the US and Europe. Florida is 2 E hops away, and the northeast US is over 2500 miles distant. Most of Europe is between 3700 and 5500 miles away. Often we would point northeast for best signals to the US while the US

stations were pointed directly at us.

Propagation also seemed to favor a northern path. We never heard Malta (9H) but worked Finnish, Norwegian, and Swedish stations with regularity. Worked a number of Greek (SV) and lots of Balkan stations (9A, S5, E, YU, etc). Pileup **discipline in EU** was horrible, even worse than the US. We missed many contacts because of QRM by stations calling over others. Best openings were generally between 16:00-22:00 utc.

I traveled to **Kaieteur Falls** on Sunday, June 20 (see photo). It is one of the highest single drop falls in the world. Its drop is 741 feet. About 20 people flew to Kaieteur in a small plane. We got to see much of the rainforest on the way. After landing we hiked through jungle to the falls. **That visit alone was worth the trip.** 

Food in Guyana is "interesting". Lots of curry, rice and vegetables I couldn't identify. The hotel had an extensive dinner menu-"Chicken or Fish." We ate at the hotel bar most nights. Had curried chicken, rice and stir fry vegetables almost every night. It got so bad one night we ordered take out from Pizza Hut. Perhaps because of the large Muslim population the "pepperoni" was made with turkey. Amazing how good bad pizza can taste! Because of concerns about drinking local water we drank bottled water, soda, or beer. "Banks" is local beer. It is brewed in Georgetown and is very good. Sugar cane is listed as one of ingredients. The daily highlight was fresh pineapple in the morning and a beer with dinner.

Guyanese culture is very interesting. It is the only English speaking country in South America. The coastal area where about 90 percent of population lives is more Caribbean-like than South American. Everyone speaks with a heavy Caribbean accent. Many races are represented in the population-a few Whites, many Blacks (descendents of slaves), Amerindians (descendants of original inhabitants), East Indians (Indians, Pakistanis, Chinese) who are descendants of indentured servants brought over to replace slaves when slavery was outlawed in early 1800's.

On Friday, June 26 we tore down the 8R1DB station about 9:00 pm. We went to airport and met our 8R1TO replacement team, Ken, AC4TO, and Terry, K4RX. They were on the air until July 5.

They were very active on 6 and other bands. I worked them from home on June 30th, and from the spots on DX Summit it looks like they had very good openings also. At the end of the operation Ken and Terry were charged with removing the tower and antenna and putting the antenna up at 8R1WD's QTH. From an e-mail today I learned that they were successful and that 8R1WD now has a 6M7JHV up. They also activated the 8R1DB 6 meter beacon, which will serve as a propagation indicator to northeast South America. The 8R1DB beacon transmitter was donated by the "6 Meter Beacon Project", a non-profit organization whose purpose is to place beacon transmitters in areas of the world where no 6 meter propagation indicators exist.

Dave and I flew out of Guyana at 9:00 am Saturday, June 27, and arrived back in Annapolis about 10:00 pm. I got home about 11:30 pm. It was a rewarding experience.



Initial assembly of the 6M7 Antenna

# Pix from 8R1DB / 8R1TO DxPedition



Antenna on Tower, propped up by a ladder



Antenna set to go, ladder still attached



GENTS

Raj 8R1RJN and Peter 8R1WD



W3CMP at Kaieteur Falls (white dot on the rock ledge to the right of the falls)



Local street market

#### Packrats in the News

Packrat Michael Davis, KB1JEY had a nice article on page 58 of the September QST. It's one of the "Hints & Kinks". It relates how he was able to repair the PTT switch button on a hand mic using nothing more than a trash bag tie. And this happened in the "heat of battle" during the January contest.

Packrat Joe Taylor, K1JT is pictured on page 13 of the September QST with descendants of fellow Nobel Laureate **Guglielmo Marconi** and other notable people in San Remo, Italy. Joe was there to speak and to the celebrate the Centenary of Sr. Marconi's Nobel Prize.

Congratulations to both members!

#### FN21 - EN51 10GHz

Herb, WA2FGK in FN21bf worked Ron W9ZIH in EN51 on 10 GHz during the first leg of the **10 GHz and Up Contest** last month. A super contact. And WA2FGK is new at 10 GHz!

Congratulations!

--- Reported by W1MKY, AF1T and W3GAD via the internet Microwave reflector

## W3HZU 1296 Beacon Back up on New Frequency

Hi Guys.....I am pleased to announce that, since Wed 2 Sep 09, the W3MMV, K3VDB, W3HMS sponsored beacon is on the air again on a new frequency of 1296.256 MHz in regular CW. The CW note is much improved.

It is intentionally just above the Packrats beacon to encourage all to listen to both.

The QTH is very close to FN10pa and it signs this grid under the call W3HZU.

Please send QSLs to me at the EMAIL address listed below.

The beacon uses 4 positions of telemetry to show chassis and outside temperature plus buss VDC and FANS ON/OFF

Details of decoding on request. Contact John at W3HMS@aol.com.

73, John, W3HMS

If you worked the CQWW VHF
Contest, the ARRL UHF Contest, or
the first leg of the 10 GHz and Up
Contest last month or will be working
the second leg of the 10 GHz and Up
Contest or the SVHFS Sprints later
this month, please send Q's, Mults,
Score, operating time and especially
SOAPBOX to lennyw@comcast.net and
I'll report the numbers in an upcoming
issue of Cheese Bits. -- Lenny W2BVH

# Ham Radio URL of the Month

As a tie-in to this months presentation on Software Defined Radio at the regular club meeting, we present **several** URL's on that subject.

First we have reprints of a 4 part article in the ARRL's QEX journal for ham experimenters. They're in pdf format. The first article can be reached at www.flex-radio.com/Data/Doc/qex1.pdf. The remaining 3 articles are at the same address except their document names are each incremented by 1. (e.g. the second article is named qex2.pdf, etc).

These articles show some theoretical and practical work that's used to design and architect a software defined radio. Much of this work was used in architecting the popular Flex Radio SDR's.

Next we have SDR Software. There's a lot of SDR software available to download for free on the internet: more than can be listed here. But here are a couple of the more popular downloads: For Windows you can get "Rocky" at www.dxatlas.com/Rocky/. It is simple to use and easy to install but some people find it somewhat limited in capability. Other popular packages include "PowerSDR" available at support.flex-radio.com/Downloads.aspx. Though designed specifically for the Flex Radio products, this software will work with most other hardware. Another very popular package is "Winrad" at www.winrad.org. For Linux users, check out "Linrad" at www.nitehawk.com/ sm5bsz/linuxdsp/linrad.htm or www.nitehawk.com/w3sz/xlinrad-deb.htm (that call look familiar?).

Finally you may consider joining the Softrock40 yahoo group: go to **groups.yahoo.com/search? query=softrock40**.

Enjoy!

--Lenny W2BVH

### HAMARAMA!!

#### 38TH ANNUAL PACKRAT FLEA MARKET

Sunday September 27th, 2009

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**EMAIL**: info@packratvhf.com

#### **Events**

For inclusion, please direct event notices to the editor.

**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

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

#### Southeastern VHF Society Fall Sprints

- September 21 - 144 MHz Sprint. See http://www.svhfs.org/fall\_sprint\_rules\_2009.pdf for details. Scoring similar to the ARRL June contest with special rules for rovers

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.

#### Southeastern VHF Society Fall Sprints

- September 29 - 222 MHz Sprint. See http://www.svhfs.org/fall\_sprint\_rules\_2009.pdf for details.

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

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

... Events continued

**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

#### **Southeastern VHF Society Fall Sprints**

- October 7 - 432 MHz Sprint. See http://www.svhfs.org/fall\_sprint\_rules\_2009.pdf for details.

#### Southeastern VHF Society Fall Sprints

- October 17 - Microwave (902 MHz and up) Sprint. See http://www.svhfs.org/fall sprint rules 2009.pdf for details

#### Southeastern VHF Society Fall Sprints

 October 24 - 50 MHz Sprint. See http:// www.svhfs.org/fall\_sprint\_rules\_2009.pdf for details

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## Mid Atlantic States VHF Conference!

http://packratvhf.com/VHF%20Conf/vhf%20conf.html



## SATURDAY SEPTEMBER 26, 2009

#### MT CARMEL CLUB

1210 E. Ridge Pike Plymouth Meeting PA 19462 610-277-5320

Conference and Dinner now at the same location !!

#### **Program**

AI, K2UYH - "Small Station EME for 432 and Up"
Steve, W1SMS - "Tower Construction and Safety"
Phil K3TUF & Len N3NGE - "Building a VHF Multi-Op Station"
Paul, W2PED - "A Compact 'Starter Rig' for 24 GHz"
Rich, KB3NRL - "A Low Cost, Digitally Modulated Optical Transceiver"
Dale, AF1T - "An Illuminating Introduction to Antennas"
Gary, WA2OMY - "Modifying Surplus MMDS Equipment for the 2304 Band Dave, G4HUP - "Bawdsey Beacon Monitoring Project"
Martin, W3YOZ - "What's Going on in FN00 at W3SO Multi-op

Beginners Program: 1-4 PM (free of charge, please register in advance)
Rick, K1DS - "VHF Basics"

Michael KB1JEY - "Introduction to Transverters and VHF Contesting Basics

Dinner Speaker - Gene Zimmerman W3ZZ QST Editor "The World Above 50MHz"

ALSO! Greg WA1VUG will have a Rohde & Schwarz test bench for measurement of noise figure, imd, gain, spurs, harmonics, power etc. Bring your equipment in and get it tested.

Most tests can go to 40 GHz

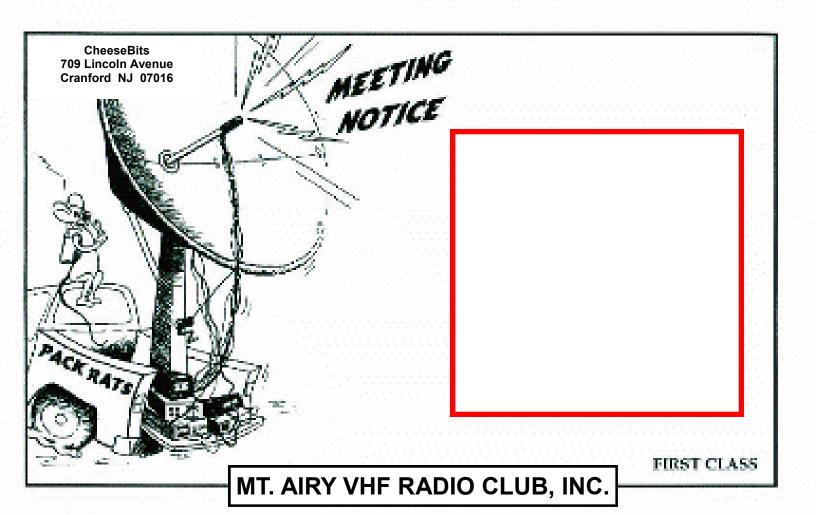
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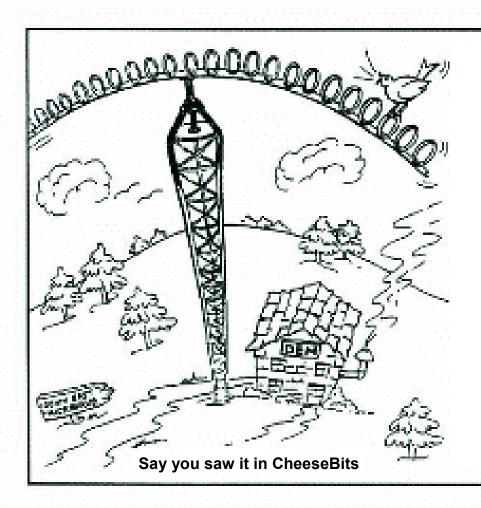
8/29/09 to 9/18/09 - \$60.00 9/19/09 to 9/26/09 - \$70.00

Additional Buffet Tickets \$20.00 Additional Proceedings CD \$5.00 Hamarama Ticket \$5.00

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Conference 8:30 AM at Mt. Carmel Club
Saturday Lunch at Mt. Carmel Club
Afternoon Snack
Buffet Saturday Evening at Mt. Carmel Club
Copy of Proceedings on CD
Door Prize





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