



The VHF Transmitter



Keystone VHF Club, Inc. W3HZU Founded 1955 – York, PA

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CIRCULATION 160

November, 2003



November 2003 CALENDAR

*Edited by Bob Gundlach, N3NBT
n3nbt@aol.com*

- Nov. 1 VHF/Microwave Activity Day-W3HMS-717-697-3633
- Nov. 4 Hilltopper's ARC meeting
- Nov. 5 SPCG ARC meeting
- Nov. 6 Keystone ARC meeting- Pleasant Acres
- Nov. 8-9 Japan International DX Contest-CW
- Nov. 11 **Veteran's Day- REMEMBER OUR VETERAN'S**
- Nov. 11 York ARC meeting-Red Cross
- Nov.13 Penn-Mar ARC meeting
- Nov. 13 VE Exam-York-717-292-3529
- Nov. 15-17 ARRL November Sweepstakes-Phone
- Nov. 27 Thanksgiving Day
- Nov. 29-30 CQ WW DX Contest-CW
- Nov. 30 Hamfest-Tom's River, NJ-609-971-2792
- Last Hamfest in PA, MD, NJ, VA and DE this year

**NEXT MEETING
December 4th, 7 PM
Pleasant Acres!**

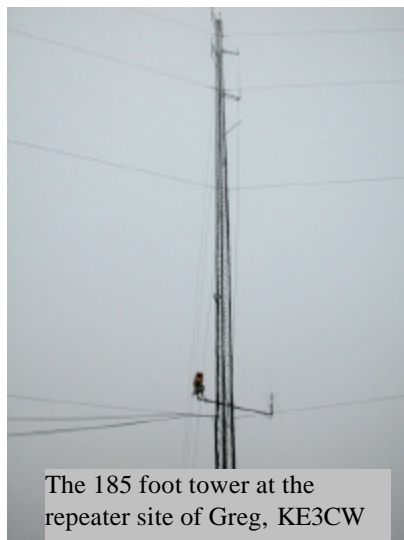
Hey gang ... don't forget about our Holiday Party on January 17th (see next page). It's a great time to meet & socialize and for the first time in KVHFC history, there will be dancing! It is said that Bob Riese, K3DJC is a real whiz in his dancing shoes ... come and see for yourself!!

146.97 REPEATER GETS NEW EARS

By Dick Goodman, WA3USG

Last Sunday the tech committee met up at Greg's (KE3CW) site to do a bit of last minute clean up and most importantly, to put back in service the remote receive site for our beloved 146.97 repeating machine. Perhaps many of you have noticed that for the last several months, the sensitivity of our repeater has been down. I had quite a bit of trouble hitting it with 60 watts from my car from many places in the Mechanicsburg area. Greg's site high atop Conowago Mountain with an elevation of about 1000 feet above sea level, really gives our repeater one hell of a "set of ears!" Last Summer, the original remote receive apparatus was struck by lightning, basically rendering it useless. Sundays effort replaced the original antenna with a large, rugged 2 meter Stationmaster. It was placed at about the 185 foot level on Greg's tower. Brand new hardline was run along with a new receiver with a .18 microvolt sensitivity rating. The output of this receiver is sent via a microwave link back to the repeater transmitter at the Rocky Ridge club site. From here the output of this remote receiver is retransmitted at a power level of about 100 watts from high atop our 175 foot tower. Up until Sunday, we used only a receiver located at the Rocky Ridge site. There's lots of RF and man made noise at that location. We believe that the guy wires on the tall tower are also resonating when we transmit and adding considerably to the noise level that the receiver hears. Having the receive site at Greg's avoids all of these issues. His site has no high power RF transmitters nearby. Nor are we transmitting at a high power close to our own receiver (thus desensing it). Finally Greg's site is HIGH! It has better coverage in most areas that we could ever hope to get from the club. So what was the "real world" improvement in repeater functionality? How much better did it work!

Many years ago when the original remote receive equipment was newly installed and was working quite well, using a 2 watt HT, I was able to get into the 97 machine somewhat noisily from select places in my back yard. From my car I could get in from virtually anywhere in the Mechanicsburg/Harrisburg area. I could also hit the machine from my car down in Maryland and sometimes even Virginia. It was hit or miss but easily accomplished. Monday night I grabbed my HT and set it for 1 watt output. I was down in the shack ... I pushed the PTT and was greeted with the sound of our repeater kerchunking! Hey! Is that ME doing that?? Let me see ... Kerchunk ... Kerchunk ... Kerchunk! I stuck the HT up to my face and whistled. Whoa! I heard my whistle come back through my base rig I keep tuned to the repeater. I said "Hello Hello Hello" and it came back almost full quieting! Let me tell you folks ... this is a dramatic ... no ... an absolutely ASTOUNDING increase in sensitivity and performance. Tuesday morning I took my HT to work with me. I got in contact with Tim, AA3BJ. He was copying me fairly well from many places in Mechanicsburg with the HT inside the car on a rubber ducky! This is the best that the repeater has EVER worked in its lifetime!! Keep in mind that to take advantage of this increase in performance, you must have your CTCSS tone activated (123 Hz). At this time if you do not use your tone, you will still get into the repeater but you will get in using the Rocky Ridge receive site. Again, this receiver is located in an RF noisy area and lacks the sensitivity of the remote receiver at Gregs. *Kudo's go to Greg, KE3CW for the use of his site and to the Tech Committee for all their work!*



The 185 foot tower at the repeater site of Greg, KE3CW

Have you paid your Dues ?
Your club membership dues for the year 2003 are still due and payable.
(Just in case that you forgot !)

Full Membership only	\$20.00
Family Members still	\$ 5.00
Full members under 18	\$10.00

Make checks payable to: Keystone VHF Club

See your treasurer at the next club meeting or for same day service send check directly to:
Linda Warner
125 Southview Dr.
York, PA. 17402



TRUSTEE'S REPORT

May 2003

Jack Dellinger
N3BQB

jdkdelli@aol.com

The club site is in good condition for the coming winter months. A good deal the weeds and tall grasses have been cut. Most of the broken limbs and twigs have been removed. The grass will have been mowed one more time by the time you read this. The building generator has had its oil changed. A supply of oil and other supplies have been purchased to maintain all the generators and lawn mowers.

The gas heater has been installed. However, the heater has not been connected to the gas supply. Having trouble finding the correct size connections. Hope to have that all done soon.

We are waiting for contact from Holiday Gas so that the third propane tank can be installed. Expect that to happen in the next month.

We have not been able to organize a work party to reinstall the 6 meter beam. This will require two good climbers and several ground crew folks. We will address this at the e-board meeting.

We currently have two walk behind lawn mowers. One is still working fairly well. The other mower has a broken front wheel assembly. We may have to shoot this horse!!!!

If anyone has a mower that they are thinking of retiring, but may have a few good summers left in it, think about donating it to the club.... A riding mower would NOT be refused, Hi Hi..

Stop by the club house and check out large parking area we now have. We need to give a lot the thanks to Tim AA3BJ for arranging the win/win between York Water and the club.

The VHF Transmitter

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Mechanicsburg, Pa.
(same as above)

KEYSTONE VHF HOLIDAY PARTY

Date: Saturday, January 17, 2004

Time: 6:00 - ???

Location: Holiday Inn - York I-83 & Arnsenal Rd.(across from Round the Clock Diner)

Price: \$20.00 per person

Please RSVP to Sandi Barefoot

sandibare@suscom.net or

717-292-6404 by October 31, 2003

Holiday Menu Buffet:

Vegetable display with Herb Dip

Tossed Garden Greens

Fruit Salad

Pasta Salad

Roast Sirloin of Beef au jus

Stuffed Chicken Breast Supreme

Vegetable and Potato

Rolls and Butter

Assorted Dessert Display

Coffee, Tea, Decaf & Iced Tea

Hi Dick, Tim Bearfoot suggested I send you some very preliminary info on a relatively new program called "InterAce" available to "Hams Only" for sending pictures back and forth to other stations while operating on EchoLink. This is another one of those freebee programs enabling one to send pix back and forth almost instantly at the "click of the mouse" while still talking to other hams and also receiving them from other hams instantly, again while carrying on a QSO. The pictures are of supreme quality and of course can be printed out. Perhaps you can put a brief mention in the latest newsletter if it's not too late. More info to come later if desired and perhaps we can even put a talk on about it at an upcoming club meeting. Al.

The post office box has been changed. Our address is now Keystone VHF Club P.O. Box 20143, York, PA 17402.

There will be a V.E. session given at the Naylor Observatory in Lewisberry on November 18th. This is the home of the Harrisburg Astronomical Society. Following testing (weather permitting of course) there will be an Observing session using the facilities telescopes. The session will begin at 7 PM.

Did anyone see the Aurora on the last Thursday evening in October? We were up at the club site for E-Board meeting when we noticed the red glow in the sky. Ted Nichols, a fellow club member & President of the Astronomical Society of Harrisburg took pictures of the Aurora and has them posted at

<http://public.fotki.com/tanichols/aurora>



YARS/EMS
By
Jack Dellinger
N3BQB
jkdelli@aol.com

The final planned event for 2003 was held on October 19, 2003. We again provided communications for March of Dimes 'Ride for Babies'. Sixteen Hams from both York and Adams Counties participated. March of Dimes collected \$7500 from the event. Another job well done.

This has been a very busy year for YARS. We provided communications for the Dallastown/Red Lion gas outage and hurricane Isabel. We participated in several drills thru out the county. We provided communications for five special events during the year. A good many Fire/Police/EMS/EMA officials became aware of the ability that Ham Radio Emergency Communications has to provide communications. Many YARS members are also members of HEARS, which also proved its worth during events this year..

If you are interested in Emergency Communications (EmComm) we would highly recommend you take the ARRL EmComm Level I course. The course costs \$45, but you are reimbursed after you complete the course! It is fairly hard to enroll. You must register on the first Monday of the month and you really need to register immediately after midnight Sunday. This course will take between 20 and 30 hours of your time. But it is well worth your time...

ATV Progress in Central PA.

1. LOCATION: Finding tower climbers has been difficult. The coax, jumper, or 3480 mhz omni antenna was damaged during a storm at White Rock. We are hoping to lower the antenna and jumper on Saturday, Oct 11. The transmitter has been on the air from WITF using a panel antenna with 13 dB gain and 85 degree beamwidth to 3 dB points. The coverage in Cumberland County has not been as good. For all of the above reasons a move to a Fire tower at Mt Holly where tower climbers are not needed seems to be prudent. The Mt Holly tower can be climbed by most hams due to the inside stairs. The elevation at Mt Holly is actually 1460 feet amsl. That is 150 feet higher than White Rock. The paths to PEMA, Dauphin Co EOC, Cumberland Co EOC, Cornwall ATV rpt (421.25 mhz), York ATV rpt (439.25 mhz), Adams County EOC, Buck Relay in Southern Lancaster County, Pine Grove rpt site, Cumberland Co Red Cross, WB3EAF relay, WITF, and most locations in Cumberland County are excellent according to the Com Study program. Additional repeaters at WITF and Buck relay would saturate Central Pa.

York ATV Receive: We have a 439.25 mhz Yagi with 15 dB gain and a cable TV demodulator to receive the York ATV rpt (19 miles).

3. 1247 Or 1255 mhz Repeater input: We are waiting for the 1.2 Ghz preamp from SSB electronics. This has a bandpass filter and 25 dB gain. We are hopeful that a commercial satellite receiver such as a Scientific Atlanta 9700 or a Standard 830B, or similar, will come this week. I have a COP receiver that could be used initially. It does not require a preamp but it has a lower sensitivity(-73 dB). The 1.2 Ghz omni antenna is here.

4. Control: We may be able to purchase an inexpensive 440 mhz control receiver from CPRA. The board from Intuitive Technology is here but needs hard wired into a rf proof rack panel. Any volunteers? This controller can be built by a ham with common hand tools and some building experience but not an expert and no exotic test gear is needed.

5. NASA Video: I plan to uplink NASA video and audio from my QTH on occasion. My tower is up with line of sight to Mt Holly (7 miles). The transmit & receive antennas and transmission lines are in place.

6. Additional Commercial Receivers for PEMA and County EOCs: I am looking for additional sources.

7. Work Party: Additional help would be appreciated in moving the transmitter from WITF, and installing the antennas at Mt Holly. Please email me if you are interested.

8. Meeting: Do you want to have a face to face meeting to discuss the issues? Please email your response to wa3cpo@arll.net

FOR SALE/WANTED

Panasonic Digital Camcorder Model PV-DV901

Barely used. 100x zoom.

MiniDV Tapes

Mega pixel CCD For clear crisp video

Image Stabilizer

HUGE 3.0" Color Flip out Viewfinder

Photo Mode on 16MB SD memory card

Software, Fire wire Cable included.

\$500.00 OBO For more info

Call Mike Stackpoole, N3VQH 717-514-9736

Enjoy Breakfast Out ?

Well folks, I've needed to update this breakfast schedule for a long time. The club currently holds one (1) regularly scheduled breakfast. It's held at the Shiloh Family Restaurant at 9 AM on Saturday morning. Check in on the 97 machine before you show up to see how the turn out is going to be. There is also growing popularity in chowing down at the Route 74 Diner. This is a breakfast for hearty souls as it meets (WHEN IT MEETS) at 7 AM on Saturday mornings. This is not a regularly scheduled breakfast so check on 97 before you show! **If anyone has any more ideas for breakfast, let us know!**



**Keystone VHF Club
General Meeting
Minutes of 2 Oct 2003
By
Charlotte Markley,
N3URR**

Meeting called to order at 19:15 by Ernie K3ELM. 31 members present.

SECRETARY'S REPORT:

Charlotte N3URR Minutes for Sept. 4th Gen. Mtg., Minutes for Sept. 25 E-Board Mtg., read and approved.

TREASURER'S REPORT:

Linda KB3EBV Total Inflow ----- \$360.00
 Total Outflow ----- 428.29
 Overall Total ----- -68.29
 Balance in Checking Acct. ----- 3,571.02
 Balance in 3-CD's ----- 6,090.97
 Overall balance ----- 9,661.99

TECHNICAL REPORT & HAPPENINGS:

Tim AA3BJ Chain with combination lock will be put at club entrance.

NOMINATING COMMITTEE REPORT:

Slate of officers presented by Tim AA3BJ.

Slate: President-----Ernie Mellinger, K3ELM
 1st Vice President----Bruce Buddinger, AB3BB
 2nd Vice President----Dan Shortencarrier, N3EEI
 Secretary-----Donna Lee Hoover, N3VPJ
 Asst. Secretary-----Kathy Dellinger, KA3THC
 Treasurer-----Linda Warner, KB3EBV
 Trustee(3 yr.term)----Bob Gundlach, N3NBT

Motion to close slate of officers made by Dottie N3LTZ, Dick WA3USG 2nd motion, motion carried.

ECHO LINK:

Still working on getting hookup for Internet a club site.

CLUB PROJECT:

Bob K3DJC, meeting at club site Oct. 23, 2003. Kits are ready to give to new members.

NEWSLETTER:

Dick WA3USG Newsletter was placed on club web site.

WAYS & MEANS REPORT:

Sandi N3NCF, Spaghetti dinner and auction will be postponed until March 2004. Motion made to pay \$300.00 deposit to Holiday Inn to reserve room for January 17th banquet, motion made by Tim AA3BJ, Bob K3DJC 2nd motion, motion carried. Sandi will also have Ham raffle tickets at Nov. Mtg. drawing of tickets will be held at Dec. meeting.

ATV REPORT:

Dick WA3USG parts are ordered for ATV.

OLD BUSINESS:

2nd reading for Jennifer Geary KB3JSJ, read and approved for full membership.

NEW BUSINESS:

Ray W3AXC needs more volunteers to help call Monday night net. Will discontinue if they can't get more net controllers to call net.

Meeting Adjourned at 20:30

E-Board Meeting of October 30 By Donna Lee, N3VPJ

Meeting was called to order at 1915 by Ernie K3ELM. There were 15 members present.

SECRETARY'S REPORT: Donna Lee N3VPJ read the minutes for the Oct. 2 meeting submitted by Charlotte N3URR. They were approved.

TREASURER'S REPORT: Linda KB3EBV Oct 1—30,2003

Inflows	\$827.17	3CD's	\$6132.69
Outflows	\$505.50	Checking	\$3892.69
Total	\$321.67		\$10,025.38

TECH REPORT: Tim AA3BJ There will be a work party at Greg KE3CW site on Nov. 2 at 9:00 AM to get 2 meter receiver up the tower. Perspective tenant for club and also the company would use Greg's site. It would net the club \$300 a month.

WEB SITE REPORT: Bruce AB3BB Up and working . There are new pictures on the web.

TRUSTEE REPORT: Jack N3BQB Final mowing done (he hopes) The 6 meter antenna is waiting to go up. Generator service is done. Black X's on trees signify they are dead and need to be removed. More stones will be placed on the parking area. Gas heater and lines are installed and the rest of work is almost done. Concrete pad for the 3rd gas tank is ready. Need to do inventory of club site and it will be done after the e-board meeting

CLUB PROJECT: Bob K3DJC Kits for an antenna are being made-up and will be for sell for \$10

NEWSLETTER: Rick WA3USG Will be sent on Tues. Nov 4 to the web

WAYS/MEANS: Sandy N3NCF Ham raffle tickets mailing labels will be printed up by Rick WA3USG Tickets will be handed out at Nov 6 general meeting to keep postage costs down. Christmas Party is \$20 per person. There will be a DJ at party. Question was raised about having a 50-50 drawing at party. It was approved. The deposit was sent to Holiday Inn.

VE/ED REPORT: Ray W3AXC Nov. 3 is the next test session for the General class. They offer a free test for class members. 6 times a year they offer the ARRL test. Not sure what class license will be taught at the next class, maybe Extra class? Nov 18 they will hold a testing session at the Harrisburg Astronomical Society.

HAMFEST: Ray W3AXC Almost \$530 to the good. Next meeting of hamfest board is Nov. 9th to discuss future hamfests. It was discussed that the Keystone club consider the prices of food items and also consider soup and/or breakfast items. The committee forgave the \$150 cost of kitchen for the club and donated \$100 for the use of the club at their discretion.

ATV REPORT: Greg KE3CW Everything is working

NEW BUSINESS: Jack N3BQB Mike N3VQH will be on the ballot for Vice President. Kathy KA3THC will not be able to run for Assistant Secretary so we will need someone to fill that position.

Mike N3VQH discussed a paper he is writing on "Broadband over Powerlines" Question was raised about the club giving a donation to ARRL to fight this issue. It was decided that Mike N3VQH would present the issue to the club at the Dec. meeting and the hat will be passed for donations.

Bob N3NBT: Conflicting dates of meetings for 2004 Jan 1st will be moved to Jan 8th. Nov 25th moved to Nov. 18. Bob N3NBT has the emergency list ready to go to county 911. Question was raised if clubs by-laws are in electronic format and if so who might have them?

Jack N3BQB We are down to 1 lawnmower. Any one have one they would like to donate.

Meeting adjourned at 2025.