



The VHF Transmitter

Keystone VHF Club, Inc.

W3HZU

Founded 1955 – York, PA



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CIRCULATION 175

April 2016

March has been an extremely busy month! With so many things going on it would be virtually impossible to describe everything in the newsletter ... but I'll give it a try.

Over the last 4 weeks, club members have built 15 Tape Measure beams. Not only did they build them, they were all tested and they work! This comes right on the heels of the 18 Slim Jim antennas that our members built! I was around for most of these building sessions and I got the impression that everyone was having a hell of a good time.

Last Thursday, we had our first impromptu Fox Hunt in the forest behind the club. Ryan, KC3FSJ hid the beacon transmitter (Fox) and two teams with their Tape Measure antennas & went out searching. Each team took about 25 minutes to locate the Foxes! The first formal fox hunt will be an hour before the club meeting in May ... so get ready!

Last Saturday, we had about a dozen members show up at our northern site near Dover. Actually, this is the QTH of club member Greg Hagens, KE3CW. Greg has some property high atop Conowago Mountain where he has erected a 170 foot tower. The club has always had equipment there and we've always helped to clear the site of underbrush. Last Saturday, we were busy with chainsaws, nippers, rakes and shovels clearing out several years of growth from around Greg's communications shed. We also cut back a lot of growth along the road that leads to this site. The response to the request for help for this endeavor was incredible ... but that's been happening a lot lately. Way to go guys!

We got the remote receiver for the 146.97 repeater in operation at Greg's site. To use this receiver, in lieu of the main receiver up at the club, simply set your transmitted tone to a 127.3 Hz. You don't have to change anything else. Leave your frequency & offset the way it. I think that you will find a very noticeable improvement on about 80% of all our member's signal levels into the 97 machine.

Tim, W3TWB has gotten our portable 2 meter repeater fully operational. This repeater was donated to us by the Civil Air patrol (CAP). We gave it the first real test in Michaux State forest about 2 weeks ago. We located it on the top of a near by mountain and tested out repeater coverage along the 31 mile Iron masters Challenge (IMC) hike route. For the last 5 years, we have provided communications services for this event (see last month's newsletter for details). Up until now, we have run this entire event on 2 meter simplex. We had several areas where we had very poor coverage, or it was necessary to have a substantial antenna and high power to get back to our net control. Upon testing the portable repeater, we found that we had HT coverage everywhere along the route!

Between Tim, W3TWB and Steve Cline, KC3CPL, we have our 40 foot pneumatic mast capable of being mounted on either our small communications trailer or on the trailer hitch on the back of Tim's pickup truck. This in conjunction with our portable repeater gives us extremely flexible capabilities when operating at public service events.

Adding to the flexibility above, Tim has constructed a rotatable dipole that may be mounted at the top of our 40 foot pneumatic mast. This antenna covers 10, 15, and 20 meters. Since it is rotatable, our signal may be aimed exactly where we want it! To go along with this, Tim also constructed two Inverted Vee antennas. These antennas are cut for 80 and 40 meters. The apex of these antennas may be mounted right under the rotatable dipole. The bottom supports for both of these Inverted Vee's are plastic encased weights (about 30 - 40 pounds) with a 4 foot fiberglass rod extending from the top. Eyebolts are mounted on the top of the fiberglass rods. Each is placed on opposite sides of the pneumatic mast and the ends of the Vee is clipped on to them. They are then moved to the proper position to support the Inverted Vee.

The great thing about this is two fold. You can set up the complete antenna system (rotatable dipole and Inverted Vee) without any other external supports. Nothing needs to be driven into the ground, a big plus when operating from a parking lot! Additionally, since the Vee apex is basically mounted on a slip ring at the top of the mast, the entire Vee

may be rotated by picking up the supporting weights and repositioning them. This will optimize our signal in a preferred direction. If desired, both the rotatable dipole and Inverted Vee may be pointed independently of each other.

With the addition of the 2 meter vertical on the very top, our portable repeater (or 2 meter transceiver) may also be used in conjunction with this. What a great system for Field day, Public service events, contests, and a variety of other uses.

Over the last month, Eric Smyder, KB3CNH and Tony McMonagle have been working on implementing EchoLink on both our 2 meter machine and the 440 repeater. The platform to do this has been the Raspberry Pi microprocessor. Tony & Eric have worked together and as of two days before this writing, Eric had a test system on line at his house linked to our 2 meter repeater. I listened to a couple of QSO's through it. They system sounded good. I was sitting in my car in Boiling Springs. I got out my I-Phone and connected with the EchoLink node myself and chatted with Tony for about a minute. A major Kudo's to both of you guys ... we haven't had EchoLink up for the past three years and that's about to change!

On the VHF side of things, the club was donated a Heathkit SB220 Linear Amplifier. This runs 1.5 Killowatts on the HF bands. Since we don't want to run high power on HF ... and we are a VHF Club, we decided to have this amplifier converted to a 6 meters. We shipped the amplifier to a Ham in Connecticut who specializes in this process. The conversion was completed about a week ago and the amplifier was measured to put out 1.5 KW on 6 meters! We will be heard! Rich Reese, KR3EE then volunteered to make a road trip up to Connecticut to pick it up (saving the club \$\$\$ in shipping costs).

While our communications dish project has been put on hiatus over the Winter, work on it is going to restart very soon. The mount is complete and the azimuth drive has been tested. We have ordered and received and Azimuth/Elevation drive control unit. Our next step is to assemble and mount the 15 foot dish itself. Spring is right around the corner. With the arrival of good weather this effort should be started in the next couple of weeks.

Finally, Tech sessions and Ragchews up at the club have been extremely enjoyable. Antenna building, equipment testing, and just plain taking about ham Radio. Lot's of questions have been asked & answered and everyone is enjoying this incredible hobby! I am seeing a degree of enthusiasm in the ranks of both new Hams and us old timers that I have not seen since the early 1980's. Actually, I think that today may be the most active the Keystone VHF Club has EVER been!

After our Tech Sessions, on many evenings we end the night by stopping off at either 4B's or Kelly's for an 807' (a vacuum tube very similar in size and appearance to a bottle of beer) and some food. There are times when we have 16 folks in attendance. Lots of good comradeship!

All three of our club nets have had significant increased participation over the last 3 months. The Monday night net now averages over 30 check in's. Our Tuesday night Digital Net is averaging 11 check in's and our new ELMER Net is getting the same amount. There are lots of lively technical discussion on both of these nets that make them a real pleasure to run. Thanks everyone!

We have a Hamfest coming up this coming Saturday (April 9th). The Keystone VHF Club is going to have a table there. I hope that everyone can make it. As well as finding that special "deal" on a new rig, antenna, or piece of equipment, I hope that you can all stop over at our club table to say "hello" And simply to yak about Ham radio! 73, Dick, WA3USG

NEXT MEETING

Thursday, April 7th at the York County EOC

Located on Davies Drive

May 5th meeting at the club site

Schedule of Keystone VHF Club Sponsored VE Testing for 2016

Laurel VE Group Testing sponsored by the Keystone VHF Club are held the second Saturday of the odd months. All tests are at 10 AM, pre-registration is appreciated except at the Hamfest. Contact, Ralph Brandt at ralph.brandt@comcast.net or phone 717-792-1017.

Locations are York EMA Office at 120 Davies Road, York, or Keystone VHF Club on Deining Road, York, near the Rocky Ridge Park

Testing dates: May 14 Jul 9 Sep 10 Nov 12

Keystone VHF Club sponsored testing by the Laurel V.E. Group. These sessions are held in the Training Room at the York County EOC, 120 Davies Rd., York, PA. Testing starts at 10:00 AM. Preregistration is appreciated. *Contact Ralph Brandt at: Ralph.brandt@comcast.net or phone 717-792-1017 to register.*

VE exams will be sponsored by Southern Pennsylvania Communications Group (SPCG). These sessions are held at the Shrewsbury Borough Building, 35 Railroad Ave., Shrewsbury, PA. Testing starts at 9:30 AM. *The point of contact for these sessions is Nate, WN3I at wn3i@comcast.net.*

Apr 9 Jun 11 Aug 13 Oct 8 Dec 10

Local area nets:

Capitol Area Traffic Net starts **Monday at 8 PM** on the South Mountain Radio Amateurs (SMRA) repeater on 146.46 (67.0 tone), 1 MHz offset.

The Combined Club ARES/RACES Net meets **Monday at 8:30 PM** on the Keystone 146.97 Repeater (Tone: 123 Hz).

South Mountain Radio Amateurs (SMRA) Net on **Monday at 9 PM** on the 145.43 (Tone: 67 Hz) repeater located in Mt. Holly Springs. *After the normal FM net, a group moves off to 144.210 MHz, operates SSB*

The Keystone VHF Club Digital Net on **Tuesday at 8 PM** on the York 146.97 Repeater.

The Keystone VJF Club ELMER Net on **Tuesday at 9 PM** on the York 146.97 Repeater right after the Digital net

A local FM Simplex Net runs **Thursday at 8:30 PM** on 146.55 MHz.

South Central PA 10 Meter Net **Friday at 8 PM** 28.495 MHz USB

**** Listed below are some local 10 meter nets ****

Ham Shack Talk Net - Monday at 9 PM: 28.335 MHZ.

Delaware Lehigh Valley ARC Net - Sunday 4:00 PM: 28.430 MHZ

Do Drop In net - Sunday 8:30 PM: 28.450 MHZ

Penn- Mar Club net - Friday. 8:30 PM: 28.495 MHZ.

10 Meter Ragchew Net - Every evening starting 7:30PM: 28.600 Mhz

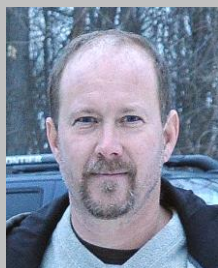
Trustee's Report



Tim, W3TWB



Dick, WA3USG



Jeff, KB3RCT

We need to start thinking about a Spring Clean up work party. Getting leaves raked up, branches and twigs removed. Cleaning out the inside of the pavilion. Sounds to me that we could also cook of burgers on the grill and make a real day of it!

Scheduled Club P.S. Events for 2016

* **April 10, 2016 - Buckridge Burn Hike Pine Grove ***SJ**

POC: Dick Goodman, WA3USG wa3usg@verizon.net

* **Date April 27, 2016 - Peach Bottom Nuclear Power Drill**

POC: Sandy Goodman, N3ECF slgoodman1@verizon.net

* **April 17, 2016 - York MS Walk**

POC: Sandy Goodman, N3ECF slgoodman1@verizon.net

* **April 24 2016 - Ironmasters Challenge Hike *** SJ**

POC: Dick Goodman, WA3USG wa3usg@verizon.net

* **May 1, 2016 - March of Dimes March for Babies**

POC: Jack Dellinger, KC3JD jkdelli@aol.com

* **June 5, 2016 - 5K/Walk Run (Rudy park)**

POC: (Brian, KC3CFW bkimes@klimesgroup.com)

* **June 18, 2016 - Double Creek Half Marathon**

POC: Sandy, N3ECF slgoodman1@verizon.net

* **Date May 15, 2016 - The York Marathon *** SJ**

POC: Jack Dellinger, KC3JD jdelli@aol.com

* **Aug 13, 2016 - Red Lion Street Fair**

POC: Jack Dellinger, KC3JD jdelli@aol.com

*** SJ (Your Slim Jim will work here)

* **Aug 6-7, 2016 - MS Bike Tour Gettysburg *** SJ**

POC: Sandy Goodman, N3ECF slgoodman1@verizon.net

* **Sept 3, 2016 - Kings Gap Time Trials**

POC: (Micah Neff, KB3TGY tortmentor@aol.com)

* **Sept 10, 2016 - KTA Superhike *** SJ**

POC: Ken Wiggins, N2DYK n2dyk1940@yahoo.com

* **Sept 18, 2016 - Three Creek Century Bike Tour *** SJ**

POC: Dick Goodman, WA3USG wa3usg@verizon.net

* **Oct 30, 2016 - Michaux Team Challenge *** SJ**

POC: Dan McGlothlin kb3mun@mcglothlin.us

* **Dec 24-25, 2016 - Glen Rock Carolers**

POC: Stan Walters, AB3EM abacuspc@comcast.net

Do you belong to our Facebook page?

Want to know what's happening in the club, or to our club members on a real time, day to day basis? We have an extremely active Facebook page. There are probably at least a half dozen or more posts a day in reference to club activities or about something our members are doing. These include pictures and videos. Lots of Ham Radio related articles that our members post that are applicable to us. Chick on the link below and we will make you part of all this (you may have to paste this link into your browser:

<https://www.facebook.com/groups/311697959703/>

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**Keystone VHF Club
General Meeting Minutes of
March 3, 2016
By Sandy Goodman, N3ECF – Secretary**

The General Club Meeting held at York County Emergency Management Center was called to order by Pres. Mike, N3VQH, at 19:02. There were 36 members present and 3 prospective members.

TECHNICAL HAPPENINGS:

Tim, W3TWB, talked about Dan Melato, KB3JSV, wiring 2 batteries in series instead of parallel and burned out his new Yeasu FT-2900. Dick, WA3USG, described losing sight of Chris, K2HAE, when he fell through the garage ceiling when they were working on Chris's antenna in the attic.

SECRETARY REPORT: Sandy, N3ECF. Jim, N3QZS, moved to accept the February minutes as published, 2nd by Joe, KB3TCM. Motion carried.

TREASURER REPORT: Anne, KB3ZLJ, reported for February: Income: \$2093.42; Expenses: \$1239.39 with \$314.39 for electric; Balances: Club CD \$7,647.18; Checking Acct \$2799.68; Trustee Acct \$932.13; Total \$11,378.99. Jack, KC3JD, moved to accept the report. Ed, KB3WQI, seconded the motion. Motion carried.

COMMITTEE REPORTS:

TRUSTEE REPORT –

The shed has been cleaned out. We will have a work party soon for the usual spring cleaning.

TECHNICAL COMMITTEE REPORT –

The committee will meet Saturday to plan work. Many attended a DMR seminar in Harrisburg. The team did some testing with the air mast antenna and portable repeater. Details are in the newsletter.

EMCOMM/PUBLIC SERVICE NEWS –

March 19 will be the ARWG drill. The weather drill for March 30 was cancelled by PEMA. Peach Bottom Drill will be April 27. Sandy, Dick, and Jack worked at another EMI class on Feb 24. Details are in the newsletter. The FEMA Communications rally will be held on April 21 in Hershey. Details will be provided later. Sandy, N3ECF, will be attending both the SCTF Homeland Security Conference in March and the PEMA ACS conference in May. For public service we have events starting in April. April 17 is the MS Walk in Rudy Park and April 24 is the Iron Masters Hike in Pine Grove Furnance State Park. Watch for emails asking for volunteers or check with Sandy or Dick.

VE/ED REPORT - no report

CONTEST REPORT -

ARRL International DX SSB is this weekend (March 5). Start thinking about the June VHF contest and Field Day. We don't have any plans ourselves, but several other clubs in York will have activities on Field Day.

NEWSLETTER/WEBSITE –

Website is up to date, and newsletter was sent.

OLD BUSINESS:

Second readings were done for Chris Gianios, K2HAE, John Ingram, KC3AJH, Andrew Hahn, KB3CHT, Charles Golembewski, KC3FAF, and Mike Weiss, KC3GEM. All were voted into membership. The 440 repeater has been on loan from Kevin, KA0JQO. He would like it back or for us to purchase it at \$750. The group discussed pros and cons about DMR and Fusion and whether or not now is the time for our club to moved to one of those. Brad, KO3T, made a motion for the Technical Committee to make a decision and set a firm price by the next meeting, seconded by Ed, KB3WQI. Following discussin a few approved, but the motion was overturned. Rich, KR3EE, moved to authorize the purchase of a used Kenwood repeater for up to \$750. Jim, N3QZS, seconded the motion. Motion carried, with 1 nay and 1 absention.

NEW BUSINESS:

First Readings were done for Dave Case, KC3EKR, and David Smith, KC3GMQ.

Dick, WA3USG, and Tim, W3TWB, talked about building several tape measure antennas. They also talked about doing Fox Hunting. That used to be done at hamfests in the past. They demonstrated using a direction finder and field strength meter to do the hunt. Tim moved to buy a 700 milliwatt transceiver, for \$110, to use as a Fox. Rich, KR3EE, seconded the motion. Motion was approved.

GOOD OF THE CLUB –

York Hamfest will be April 9th at Spring Grove. Keystone VHF Club will have a table.

50-50: Chris, WY6Z, won \$35.

Adjourned at 20:00

**Keystone VHF Club Executive Board Meeting
Minutes of March 8, 2016**

By Sandy Goodman, N3ECF - Secretary

President, Mike, N3VQH, brought the Executive Board Meeting to order at 7 PM at the Keystone VHF Club. Attendees: President Mike Stackpoole, N3VQH; 1st Vice-President Joe Imgrund, KB3TCM; 2nd Vice-President Jack Dellinger, KC3JD; Assistant Treasurer, Tim Snook, KB3WZX; Secretary Sandy Goodman, N3ECF; Trustees: Dick Goodman, WA3USG; Tim Barefoot, W3TWB

Absent: Treasurer, Anne Zarlenga, KB3ZLJ and Asst. Secretary, Kathy Dellinger, KA3THC

1. Using remote sites to get into the repeater was discussed. Dover will be put back up, with a second site eventually. The remote sites will use a different PL tone.
2. Discussions were held about a few particular members. Club officers will handle each case individually with the person involved.
3. Projects
 - a. A Foxhunt will be held at the May club meeting. The hunt will begin at 5 PM at the club, staggering starters to go to the park. Tim plans to use 2 foxes, and punch cards to note when operators find the fox. A mobile hunt may be planned for the summer.
 - b. We want to keep the momentum going with the new members. Some additional Elmers are needed to help new hams install antennas at their homes.
4. The Trustee's debit card got cancelled when Anne and Tim took over from Dan at the bank. An email has been sent to get a new card issued. Anne has requested a debit card for the checking account also. She will keep that in the checkbook and can loan it out when needed. Tim asked that the cost of the Electric bill be included in the monthly Treasurer reports.

5. Dick was given a transceiver from Bob Storm. Bob wants \$200 for it, and thought it could be used for an ATV station. No interest was shown. Dick will coordinate with Bob.

6. We set the date for the Corn Roast/Chicken Barbeque for August 27. Some work needs to be done to raise the level of the grills. Plan for a foxhunt prior to the lunch.

7. Tests on the portable repeater were successful on the rail trail. We scheduled a date for testing it in Pine Grove Furnace. (The date was changed to March 20 after this meeting.)

We don't need regular executive board meetings, so the next one might happen in the fall.

Adjourned at 8 PM

**In the last 18 months the Keystone VHF Club
had 35 new members join our ranks. That's a
20% growth!**

KEYSTONE VHF CLUB OF YORK, PA



Membership Application

Name: _____ Phone: _____ - _____

Address: _____ Callsign: _____ Expires: _____

City: _____ State: _____ Zip: _____ Lic Class: _____

Occupation: _____ E-Mail: _____

Membership Desired

- Full** → Full Club Privileges
\$25.00 annually & one time \$5.00 Application fee
- Family** → Sponsoring members call: _____
Privileges same as Full membership
\$6.25 annually & a one time \$5.00 Application fee
- Associate** → Repeater Support
\$20.00 annually & a one time \$5.00 Application fee

Are you a member of:

- ARRL Y-N
- ARES Y-N
- RACES Y-N
- OCWA Y-N

Special Areas of Interest (circle all that apply)

AM Antenna building ATV Contesting CW Digital (Packet, RTTY, PSK-31, etc)
DX FM HF QRP Satellites SSB SSTV SWL Tower climbing LF DSP
UHF/Microwaves VHF Astronomy Photography Other: _____

Application & Dues Mailing Address:

Make checks payable to: *Keystone VHF Club Inc.* Mail to: *PO Box 20143*

York, Pa. 17402-0140

FOR CLUB USE ONLY

First Reading Date: _____ Second Reading Date: _____
Date voted IN-OUT: _____ Date Dues Collected: _____
Applicant Sponsored by: _____