



The VHF Transmitter

Keystone VHF Club, Inc.

W3HZU

Founded 1955 – York, PA



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CIRCULATION 150

November, 2015

Some Basic Hints & Kinks for New Hams

By Dick Goodman, WA3USG

One of the things that you probably heard during your Ham classes or while studying to get your license, is that you should use only the minimum power necessary to maintain communications. This sounds like this makes a lot of common sense, but what exactly does it mean?

On the HF bands, it means something very different from what it means on VHF or UHF.

On HF you may have several dozen people competing to communicate in the space of 100 KHz or less. The HF bands are noisy to begin with, even if no one is on. There are always "atmospherics" present on the HF bands. Atmospherics are caused by a wild combination of things. Ongoing thunderstorms and lightning strikes from hundreds & even thousands of miles away. Steady state noise caused by the solar wind from the Sun exciting the ionosphere. Noise from the corona discharge from high voltage power lines. Interference from sparking brushes in nearby electric motors and other types of electrical noise caused by nearby appliances. All of these things plus more add together, are picked up by your antenna, and find their way to your receiver.

The final outcome of all of this is a level of hiss that emanates from your speaker. This noise, mixed in with local noise in the form of static, creates what is known as the "Noise Floor". You can check out the noise floor in your shack by tuning your receiver to where there is no signal present. Noise is very pronounced on the 160 meter, 80 meter, and 40 meter bands. Tune to a spot where no one is talking and look at your S-meter. On any of these bands, you may see a reading of S-1 to an S-6 or even higher. Disconnect your antenna ... the noise goes away! It's not your radio creating this noise, it's mostly from good old mother nature!

Now keep in mind, if you have an S-6 noise floor, anyone that you want to talk to needs to have enough signal strength to override it. Additionally realize that virtually everyone else probably has a fairly substantial noise floor on the HF bands. You will find that your noise floor varies. Some days it may be as low as an S-1, other days it might be as high as an S-8.

On HF, you will find that on some days, you may reliably talk to folks out to several thousand miles with only 100 watts or less. On other days, when the noise floor is higher, or propagation conditions are poorer, you may find they can hardly hear you with that amount of power. In that scenario, you may want to considerably increase your power. 800 to 1,000 watts is optimal in cases such as this. A power increase from 100 watts to 800 watts will give you an additional 9 dB of gain (6 dB is 1 S unit of improvement). 1000 watts gives you a gain a bit over 10 dB. You are legally limited to 1500 watts of output which is hardly worth the effort to obtain. Amplifiers with that rating get very expensive and at the receiving end, the difference between 800 and 1500 watts is barely detectable.

Another reason to run higher power is to "stand out" during contests, or override other stations in a pile up trying to work a DX station. On this matter let your conscience be your guide.

Your signal on the air adds to everyone's noise floor. When you increase your power, you add that much more. The bottom line is that on HF, there are times when it makes sense to run low power and times that you want to crank on the afterburner!

On 2 meters, and for that matter anywhere on VHF & UHF, the rationale for running higher power is quite different. On VHF & UHF there is only a minimal noise floor. When you are using your 2 meter HT or mobile rig, you are the only one on the frequency ... you are not competing with anyone else. On FM, you want a good sounding, full quieting, crisp signal to come out of the receiver of the person that you are talking to. Especially if you are checking into a net where you want many people to understand what you are saying.

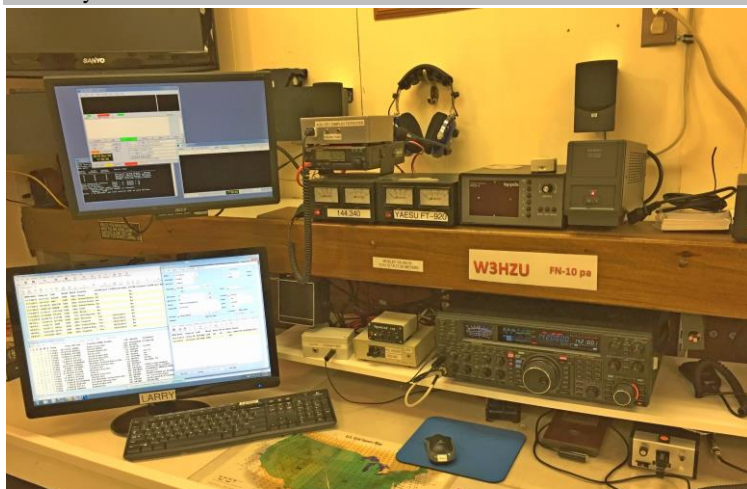
Continued on Page 3

Status of Club Projects

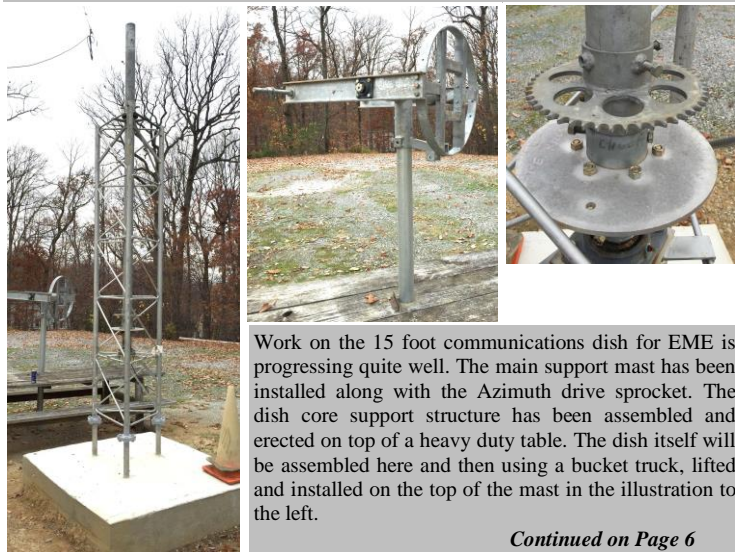
By Dick Goodman, WA3USG



This Yaesu FT-2000D HF - 6M Transceiver was a gift to the club made by an anonymous donor.



The new Yaesu is shown here, replacing our Yaesu FT-920 which has been in service for the last 20 years. This was a total (and wonderful) surprise for the club!



Work on the 15 foot communications dish for EME is progressing quite well. The main support mast has been installed along with the Azimuth drive sprocket. The dish core support structure has been assembled and erected on top of a heavy duty table. The dish itself will be assembled here and then using a bucket truck, lifted and installed on the top of the mast in the illustration to the left.

Continued on Page 6

NEXT MEETING

Thursday, December 3rd at the York County EOC
Located on Davies Drive

Schedule of Keystone VHF Club Sponsored VE Testing for 2015

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 Deininger Road, York, near the Rocky Ridge Park

Testing dates:

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.*

Nov 14

VE exams will be sponsored by Southern Pennsylvania Communications Group (SPCG). These sessions are held 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](mailto:WN3I@wn3i.comcast.net).*

Dec 12

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.

A 6 meter activity night will be held on **Wednesdays starting at 7:30 PM** (meet on 6 meter repeater) and then move to 50.135 MHz USB at 7:45 PM.

The Keystone 75 meter net on **Tuesday at 9 PM** on a frequency to 3820 to 3840 KHz (+ or - the QRM). In the Summer, the net is suspended.

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

What is a Real Ham?

Submitted By Ralph Brandt, K3HQI

Written by Frank Wolfe, NM7R

A "Real Ham"?

A Real Ham is someone who enjoys becoming proficient in a number of radio-related activities, and enjoys sharing their knowledge and time with others of like interest.

Some of the Real Hams in our club belong to our cadre of CW operators that do a yeoman job on Field Day to the tune of better than 1000 QSOs in the 24-hours.

Some of them operate the voice station through the night while watching the clock for a satellite contact or two. One or two operate the VHF

A couple circulate amongst the public to explain patiently what this is all about.

They are the ones who erect the antennas, making sure to include the youngest participants, while explaining patiently what we are doing and why. They haul the batteries, cook the barbecue, take turns coaching at the GOTA station, and even spell some of the other operators. In the afternoon, they offer a VE session on a picnic table.

It's not easy to spot the Real Hams at Field Day, because everyone is having such a good time. It's a little easier to spot the Real Hams during the rest of the year.

A Real Ham is the guy who has the soldering gun, extension cord or coax connector in his car, able to produce it at the exact moment it is in critical need on someone else's project.

A Real Ham spends his only day off that week driving his own truck two-and-a-half hours each way to a remote mountain top to work on a repeater that he rarely uses, because others do. Or he may be the guy who habitually takes off ten minutes early from work one night a week, and drives home to pick up a one-hour shift on the 20-meter Maritime Mobile Service Net before dinner.

A Real Ham may be the one who spends many tedious hours training and exercising in emergency communications techniques, hoping never to have to use them for real, but wanting to be really ready, silently serving his or her community.

A Real Ham is always trying to interest others in this hobby, knowing that without growth, it could easily just go away. A Real Ham achieves mastery over diverse areas of radio and electronics for the pure joy of doing so, never disparaging the accomplishments or shortcomings of others, because the more one knows about this hobby, the more one understands how much he doesn't know.

Ham Radio is not about equipment. Ham Radio is about people. A Real Ham is anyone who has a license, and is interested in sharing the continuous, never-ending learning process that is part of this hobby.

Scheduled Club P.S. Events for 2015

*** December 24 - Glen Rock Carolers**

POC: Stan Walters, AB3EM abacuspc@comcast.net

In the December issue, we will be listing the dates for next year's events



K3WHC: Is no animal safe??

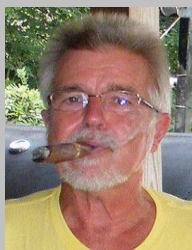
Steve Cruse of Manchester poses with a 44-inch bull moose that he harvested while hunting near Millinocket, Maine, last September. Cruse went on the hunting trip with friend Carroll Master, also of York. The moose weighed over 1,000 pounds. This photo was submitted to the YDR Hunting and Fishing photo gallery on Aug. 21.

SUBMITTED

Trustee's Report



Tim, W3TWB



Dick, WA3USG



Jeff, KB3RCT

We need to hold an Autumn work party to clean up the leaves and downed branches. We also need to do some clean up in the area around the pavilion. This coming Saturday morning, we are meeting at 8 AM to do some maintenance on the 2 meter and 70 cm contest antennas. Last Winter, during an icing event, they became misaligned. We need to do a climb to straighten them out. Call in on the 97 machine before you come up just to make sure that we are there. Matter of fact, if you have a leaf blower or a rake, bring them ... we can start on the Autumn work party!

Hints for new hams ... continued from Page 1

So when using your HT or your mobile rig, don't be afraid to run high power. If you are absolutely sure that you are making the repeater well on low power, then use it. If however, you are going to be moving around, are using a small or less than optimal antenna, and have any doubts at all on how well you are making the repeater, then run as much power as you can. Everyone will appreciate this and everyone will understand what you're saying! People driving their vehicles will especially appreciate not having to copy a scratchy signal over road noise!

When you are using an HT through a repeater, you will generally hear the repeater considerably better than it hears you. Most repeaters are usually transmitting with a power level of about 50 to 100 watts. Your HT is running 5 watts or less into a pretty small antenna. It doesn't take much for that signal to drop out of the repeaters receiver. Walking from outdoors to inside a building can cause a drop out. Simply walking around, if your signal is marginal into the repeater, there will be drop outs and people will have trouble copying you.

If you use your HT with the repeater often, experiment a bit. Make a contact with someone and walk around. Ask them for a signal report at different times when you are doing this. Explain to them what

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you are doing. Hams love to take part in experiments such as these. You will find certain spots where your coverage into the repeater is good. You may find that inside your house, you may have to hold your antenna a certain way to get in well. Find out where those spots are and use them. Better yet, either build or buy an external antenna and it will help enormously (see antenna on last page of this newsletter)!

The absolute bottom line ... on 2 meters or 440 MHz FM ... plenty of power and a good antenna is a winning combination!

For a great example of this, talk to Harold Johnson, KC3FVI. Harold is a new Ham and a new member. He recently installed a dual band J-Pole on his roof in Dallastown. Using his little Yaesu FT-60 HT at 5 watts, he is dead full quieting into my station up in Mechanicsburg, a distance of about 30 miles ... and that was on simplex, not using a repeater. No more rubber ducky from inside his house!

As an epilog to the above article, let me talk a little about receiver sensitivity. Just about any transceiver/receiver built in the last 30 years has plenty of sensitivity on the HF bands. Remember, on HF, especially on 160 - 20 meters, receiver sensitivity is limited by the noise floor caused by Atmospherics. The desired signal must be stronger than this level of noise to be heard. Adding or activating a receiver preamp on these bands offers no advantage at all. You will simply raise the level of the noise floor just as much as the signal you are trying to copy.

On the higher HF bands, such as 17, 15, 12, and 10 meters, the noise floor caused by Atmospherics is less. In this case, adding a receiver preamp (or activating an internal preamp) sometimes will help. One way to tell if your HF receiver has adequate sensitivity is to tune to a spot where there is no activity and then disconnect your antenna. If the background noise level drops significantly off, then your receiver sensitivity is being limited by your noise floor ... not the receiver itself. This is a good thing!

On the higher HF bands, and on VHF & UHF, there is a noise floor but it's not caused by Atmospherics. It is caused by the internal electronics in the receiver itself. Heat generated in the receiver circuits and the simple flow of electrons in these circuits causes noise that manifests itself as a hiss coming from the speaker. Any signal must overcome this noise level to be copied. You will notice that on these bands, disconnecting your antenna will cause very little change in this noise floor. This noise is being generated in the receiver and not propagated in via the antenna.

In cases such as these, turning on the preamp, or better yet, adding an external receiver preamp will very noticeably help. Modern receiver preamps generate very little noise themselves. Adding one in front of the receiver will boost the level of the desired signals high enough to overcome the noise floor being generated in the receiver itself.

It should further be noted that on VHF & UHF, coax cable has significant loss. If you have a fairly long run of coax between your transceiver & antenna, this loss can weaken a signal to the extent where it falls below the noise floor of the receiver. Adding a preamp up at the antenna, before the coax, can make a very significant improvement in this case. It can boost the level of the signal so that it overcomes the loss in the coax and also is above the noise floor generated by the receiver.

I use an antenna mounted preamp in order to be able to copy weak signals being reflected off the moon to do Moonbounce. Without the preamp, I hear nothing at all, with the preamp on, the signals rise above the level of my noise floor. The improvement is quite dramatic!

The disadvantage of having a preamp at the antenna, or after the antenna connector on a transceiver, is that it needs to be switched out when you transmit. Most modern antenna mounted preamps (also called mast mounted preamps) have special circuits built into them so that they switch the preamp out of the circuit when you transmit. This does add another level of complexity to your RF path between the antenna and transceiver. If this circuit fails, or you run too much power, you can apply your transmitted RF to the preamp and burn it out. The added relays and components to switch the preamp out also add considerably to the cost of the preamp.

I've always found receiver technology to be very interesting. There are many aspects of it to tweak to obtain adequate sensitivity and with some work, almost any receiver system can be improved. You just need to be aware of what's happening!

There are other aspects of receiver technology that are important to the radio amateur ... such as dynamic range, but that is the subject for another day.

Papal Visit 2015 – Philadelphia PA Southern New Jersey ARES Section

By Stan Walters, AB3EM

Introduction

On September 25, 2015 Stan Walters, AB3EM, journeyed to Camden New Jersey in support of the Southern New Jersey (SNJ) ARES section of the ARRL. This action was the result of a request coming from SNJ ARES to EPA ARES for operators willing to travel to Camden and work the Papal Visit 2015. This document offers background information and reporting on the event including planning incites and finally the implementation of the plans.

Background

Long before Pope Francis came to Philadelphia plans were being made to accommodate the potential crowds of people wishing to see and hear him. In June of 2015 Cooper University Hospital located in Camden NJ was tasked with the medical treatment and care of Papal pilgrims traveling through Camden. Original estimates were for 100,000 individuals arriving on buses. As time went on this estimate rose to an astounding 500,000 people. One of the basic premises going forward from the beginning was that cell phones would not be a reliable means of communications. Cooper University Hospital turned to SNJ ARES very early. The hospital worked on its main mission of medical care. At the same time the leadership of SNJ ARES planned, designed and had built an Amateur Radio communications infrastructure that met the mission criteria.

Overall Multi-Agency Camden City Plan

The city of Camden opened up its river-front for bus parking. Philadelphia did not have available facilities for thousands of buses. All approaches to the Benjamin Franklin Bridge (BFB) would be closed to vehicles allowing pedestrian and bicycle traffic only. This included I-676 at Dr. Martin Luther King Blvd, the N 7th Street overpass and NJ RT-30. City, county and state law enforcement agencies along with members of the New Jersey National Guard were tasked with security, traffic control, perimeter control and crowd control. Cooper Street, Market Street and Federal Street were closed to vehicles to allow pedestrians safe passage to the toll plaza security check point on the east side of the BFB. City/county EMS planned for 4 aid stations and a mobile field emergency facility (SMED) within the secure area to facilitate a rapid response to the Papal pilgrims' medical needs. (see map appendix A). Several weeks before the Papal visit, Philadelphia opened up its previously unavailable parking to buses. As a result, bus parking was no longer needed in Camden. The city of Camden opened its river-front parking to individual vehicles for single day parking at approximately \$43 prepaid on the Internet.

SNJ podRUNNER™

Cooper University Hospital and SNJ ARES turned to PodRUNNER (http://thepodrunner.com/recent_builds/cooper/) to build a robust, hardened Amateur Radio station suitable for urban use. The resulting piece of hardware could be transported by any hitch equipped vehicle capable of towing 500 pounds, quickly deployed and have the ability to be secured so the contents of the podRUNNER could be protected from the weather as well as theft. (see pictures appendix B).

Each podRUNNER was equipped with a 1,000 watt power supply, a 2,000 watt inverter and either a generator or solar panels for power. The EMS task force provided site generators so all pods ran on generators for the event. The pods were equipped with one each of a Yaesu FTM-400DR mobile, Alinco DR-235, Yaesu FT-857, Icom ID-5100 and ID-1 radios. In addition two Yaesu FT1DRs were available in case an operator needed to step away from the pod. The pods also included adequate storage draws, lighting for night operation, a white board, a canopy and two chairs. (see pictures in appendix B)

We used 2m C4FM for operations (OPS). 220MHz was used for informal traffic between Aid stations. D-RATS chat and email software was used in conjunction with DSTAR on 70cm for digital data transmissions. D-RATS

had some imbedded forms (ICS-213 and a HICS-260). Besides OP there were additional C4FM voice channels for tactical communications.

Volunteer Arrangements

Volunteer Amateur Radio operators from NJ, CT and PA began arriving at the Rowan University facility on Friday afternoon. Housing was in a conference room turned bunk room. Each operator had their own cot, linens and pillow. Security checkpoints would be active after 2200 hours so arrival before that time was desirable. Parking was provided at the hospital parking garage. Meal tickets good for \$6 toward meals at the hospital cafeteria were also provided.

During check-in each operator was given a credential to be worn at all times, two event t-shirts to be worn over all other clothing and a T-card. The T-card system was used to indicate whether an operator was on or off duty or demobilized and released from the event

Operations

A late night briefing was given to all operators at 2200 Friday night with lights out at 2300. Operations commenced at 0600 Saturday morning, September 26, 2015. Shift one rallied at the Rowan lounge, turned T-cards to green and went to breakfast. The podRUNNERS were supposed to be in place but due to vehicle problems were still in storage. Shift 1 volunteers moved the pods out of storage to the loading area at the hospital and on to the vehicle hitches. Stan was assigned to Aid 2 so along with two other operators we were transported with NJ State Police escort to the assigned location at Cooper and Broadway. On arrival the pod was dismounted but the EMS aid tent was not in place so we waited until the EMS Task Force came and setup the aid tent. The podRUNNER was then deployed.

Pedestrian traffic was non-existent during Saturday morning. Saturday afternoon saw some increase. (see Appendix C) A few large groups (30-40 people) went by, some singing as they walked. Amateur Radio was used to summon EMS for a patient having an allergic reaction at Aid 4. Lunch was brought to us on station. Replacement operators assigned to Shift 2 arrived at 1730 for a briefing and then Shift 2 went to dinner and then some rest and relaxation at the bunk room before turning in. Some aid stations shut down after a few hours due to a lack of activity. Not all Shift 2 operators had to remain on duty all night. Shift 1 reported for duty at 0600 Sunday morning. The streets of Camden remained virtually empty with 2,000 people having walked over the BFB on Saturday. From 1100 to 1300 we saw the most pedestrian traffic of any period to that point. There was one formal item of traffic as command (MCC) requested the number of patient contacts from each aid station. Additionally Amateur Radio was used to dispatch EMS to a patient with a severe nose bleed and to reunite a couple separated by a medical event. Of 8,500 parking spaces available, 500 had been purchased for the day Sunday. Aid 1 was demobilized at 1100 and all CT volunteer operators were demobilized to return home. Aid 2 was demobilized just after 1300 and Stan AB3EM was demobilized to return home to PA.

During the event, Cooper University Hospital personal invited representatives from a variety of served agencies into the command center (MCC). We were told that the Amateur Radio effort was being noted with admiration and much interest and there were already ideas floating around for future deployments based on the capabilities observed during this event.

Conclusions

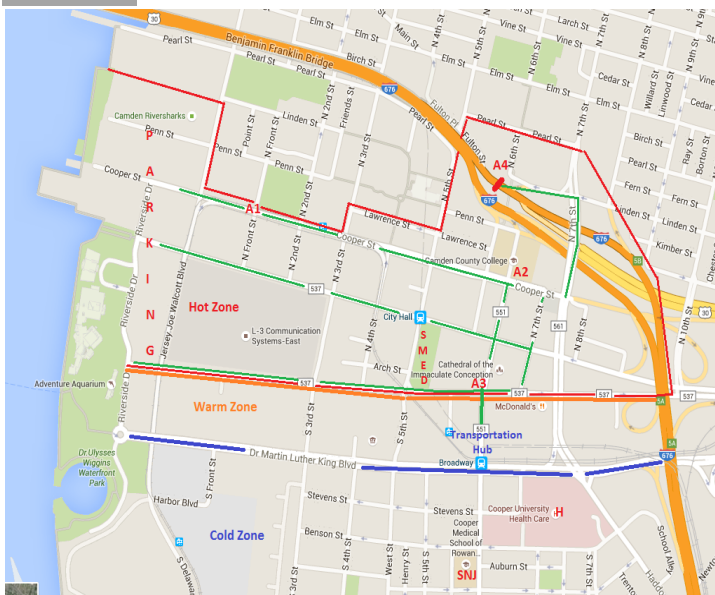
All the Amateur radio operators who undertook this mission did what they do best, they adapted, almost hourly at times. Every situation was handled with a positive outcome. Important people noticed. The podRUNNER stations will be an important asset to Cooper University Hospital and the SNJ ARES section for a long time to come.

In the end, Tony Otlowski, KD2AFY, Assistant SEC SNJ, summed it up this way when he emailed the team and said,

"I want to take this opportunity to thank everyone who was involved in the planning and execution of our operation in Camden for the Papal weekend. It was a pleasure working with everyone in all phases of the operation. Without a doubt we did some good both for the weekend, and to demonstrate the benefits of amateur radio as an AUXCOM asset. The mission was executed with consummate professionalism by all. I hope to work with you all again.

Continued on Page 5

Appendix A



The **Hot** zone is an approximation on the northern side. The southern Cold and Warm zones were observed. Other than the cars being parked at the river-front parking and official event vehicles, no vehicles were allowed in the **Hot** zone.

Appendix B



podRUNNER delivered to Aid station waiting to be deployed



podRUNNER opened up and ready to communicate



The Bunk Room

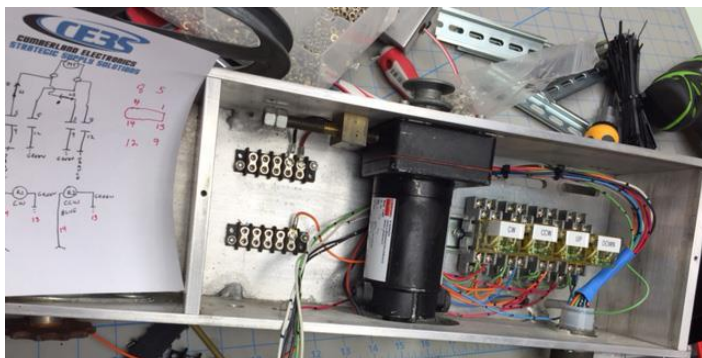
Appendix C Aid 3 and deserted street



I spent two days over the weekend teaching a class at Cumberland County 911 Center. A big thank you to Justin from 911 who helped set up the class and the SMRA VE team that gave up Sunday afternoon to do the testing and to Ed who was there for the whole time as support. Eight students completed the course, eight passed. These people will be granted a Technician Class Amateur Radio License in a couple days. Many people think Ham Radio died in the 1970's. It is alive and well with more hams now than ever, over 700,000 in the US. Hams have fun with the hobby. They also support public service and disaster preparedness.

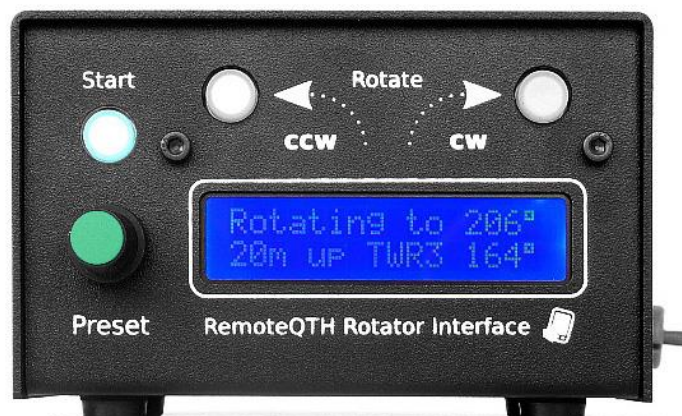
Ralph, K3HQI

While most of the effort so far has been dedicated to getting the dish structure assembled, we have given thought to how we are going to drive the system in azimuth & elevation.



The above unit is the azimuth drive assembly. As shown it contains the DC gear motor and four (4) relays. Two of the relays will command the gear motor to run either CW or CCW. The gear motor shaft extends out of the top of the unit and is terminated with a belt pulley. A belt will connect this small pulley to the large diameter pulley (partially seen behind the paper on the left). This will further reduce the gear ratio. The large pulley is connected to an axle assembly that runs through the assembly and is terminated on the other end to a small diameter chain sprocket (partially seen on bottom left). This even further reduces the gear ratio. A chain from this sprocket will connect to the azimuth sprocket assembly mounted on the main support mast shown on page 1.

Underneath the main support mast azimuth sprocket assembly is the lower main bearing that the mast will rotate in azimuth on. Underneath this is a bracket holding a potentiometer that is coupled to the mast itself. As the mast turns, it turns the shaft of the potentiometer. One side of the potentiometer is connected to 5VDC, the other end to ground. As the mast turns, a voltage directly proportional to the mast position is picked off the potentiometer wiper arm and routed via an alpha cable to the dish control point.



At the dish control point is an Arduino micro-controller. The voltage from the azimuth position potentiometer is input to this unit. This is converted via an ADC (analog to digital converter) to a binary number that is ultimately converted in a reading of degrees on the front panel display. Azimuth control may be implemented manually with the CCW & CW buttons on the front panel. These simply energize the CCW or CW relays in the azimuth drive assembly. As the dish is manually driven, its position may be read out on the display. Alternately, a desired target (in degrees) may be dialed in using the "Preset" knob. Firmware in the Arduino will drive the dish to that position via the shortest way (CCW or CW). Digital comparators in software perform this function.

We intend to control the elevation of the dish in much the same way. The linear dish positioning arm will physically move the dish up or down. The positioning arm contains either an encoder or a cam operated switch that opens & closes a switch in proportion to a set amount of movement. This results in a count proportional to the dish elevation. While dish elevation can be computed using this with the Arduino, it is not a direct proportional readout and if the base count is lost, dish position is unknown. Therefore, we will most likely use a potentiometer for elevation position determination also.

The Keystone VHF Club Website

By Dick Goodman, WA3USG

For all of you new members & new hams out there. Don't forget about the club website <http://www.w3hzu.com>. The site is as old as the hills and it has an extremely antiquated GUI but there's a lot of good stuff in it.

Click on "Club Brochure" or "Welcome Msg" to get a lot of basic info about the club along with some pictures of various activities. Click on "Membership" and you can get an updated list of club members either in Last Name or Callsign sequence. Got questions about certain aspects of Ham radio? Click on "Contacts" to see who's the resident expert for that subject at the club. Want to know how to get to the meetings? Click on "Meetings" for a map & times. Are you running the net & need a copy of the net calling list or the net script? Click on "Nets" to get them and find out the status of our other nets. Want to upgrade your license & need to know when & where local VE testing is taking place? Click on "VE Testing" to find out.

Want to read any newsletter ever published by the club since its beginning in 1955? Click on "Newsletter" and then select the issue that you want to read. Want to know the status of any of our repeaters? Click on "Club Repeater". Want to know what coverage many of the local repeaters have? Click on "Area Repeaters". Want to see some of the dumb things we've done in the past? Click on "Club Videos". Want to learn a little about the history of the Club? Click on "Photo gallery" or "Club History".

Want to learn about Emergency Communications? Click on "YARS".



QCWA News & Happenings

By Ray Shaub, W3AXC

The next QCWA Chapter meeting will be held on Saturday of next week. Saturday the 14th. at Hoss's on White Street in York. This is our regular place but we will be meeting in the dining room instead of the side room where we had in the past. Our group has become too small to have a room reserved for us.

This will be the first of our new schedule of semi annual meetings. As I reported back in August we will try 2 meetings per year because the majority of our members don't want to attend meetings. We must have at least 1 meeting per year to remain an active chapter.

The frequency of chapter meetings varies among the chapters here in the states from annual to daily. There are two chapters in Florida that meet daily and 9 chapters around the country that meet monthly. Many other chapters meet monthly or weekly on the air. There are 39 chapters that meet on 2 meters, 44 that meet on 75 meters, 4 that meet on 40 meters, 1 each that meet on 6 meters and 160 meters. In Canada there 2 chapters that meet on 20 meters.

We stopped our weekly "on the air" meetings because we were down to 2 regular "call ins". If there were enough interested we could resume our weekly "on the air" meetings.

Florida has the highest number of active chapters at 12. Here in Pennsylvania we have the next highest number of active chapters at 7 Pittsburgh, Altoona, Allentown/ Bethlehem, Reading, Wilkes-Barre and York. There is one that is listed as located in the endless mountains of Pennsylvania, New York and Newark and the address is New York.

If you have been reading the "Journal" on the QCWA web page you would know that we have a new general manager and the new QCWA headquarters is in Florida. It seems like things are picking up and getting straightened out and back to normal. Our scholarship program is alive and well. We handed out 16 scholarships for this year at a cost of \$21,500. The Journal has pictures and a short story of each recipient.

If you would like to know more and what we have been doing here at the local chapter come to the meeting next week and join in the decision making. Best Regards, hope to see you there.

Continued on Page 7



Parks on the Air

Find a comfy rock and join us!

Parks on the Air (POTA) was founded Sept. 15, 2010, to encourage amateur-radio operators who enjoy the outdoors -- but who may not be interested in or able to take long hikes or make steep climbs -- to blend their interests by operating from municipal, county, state, provincial, and national parks around the world.

Hike in if you like. Drive in if you don't. It doesn't matter. What does matter is that you find ways to tickle the ionosphere from the Great Outdoors.

Hundreds of parks await their initial activation, which entitles them to a designation number for later exchanges as the group's awards program takes shape.

The rules for activating are simple:

- A minimum of five contacts on any amateur-radio band, using any mode (if using FM on VHF or UHF, simplex only), made since Sept. 15, 2010.
- Use any power level allowed within the terms of your license.
- Contacts can be made over several visits to a park, although experience shows that you often can make enough contacts between lunch and dinner to meet the five-contact minimum.

To stay up to date on upcoming activations or to read accounts of past activations, feel free to join our Yahoo group. You can sign up here.

Come join the fun! We look forward to your activations!

73,

Fred, VE3FAL
Kyle, N4NSS
Pete, W1PNS

Last updated 09/26/2011 07:04:35 UTC

Solar-Terrestrial Data
10 Nov 2015 1342 GMT
SFI: 107 SN: 67
H-Index: 26
K-Index: 5
X-Ray: B4.5
3048: 142.99 SEM
Calculated Conditions
Band Day Night
80m-40m: Poor Poor
30m-20m: Poor Poor
17m-15m: Fair Fair
12m-10m: Fair Fair
Signal Noise: S4-S6
Click to Install Solar
Data On your Web Site
Copyright Paul L. Harrison 2011

Coming Activations

(Dates and times subject to last-minute change)

Sept. 10

Ohio State Parks on the Air -
1600-2359 UTC

Indiana State Parks on the
Air - 1600-2359 UTC

Index of POTA Parks*

- Asia
- Africa
- Europe
- Oceania
- North America
- South America

*These pages are under construction. Links will go live as pages are added. Until then, for a roster of parks and their activations, visit the organization's Yahoo group. You will need software that can read Excel files to open the rosters.

Other links to ham-radio outdoor sites

Summits on the Air
Islands on the Air
Adventure Radio Society
Indiana Parks on the Air
Ohio State Parks on the Air

Riley Hollingsworth, K4ZDH, will be speaking at the Colonial Golf and Tennis Club, 4901 Linglestown Road, Harrisburg, Pa on **Thursday, Nov 19th at 7 PM**. The September meeting was held at the Blue Ridge Golf and Tennis Club. Please don't go to the wrong venue. You do not need to be a member of any of the amateur clubs in the area to attend. There is no entrance fee. No reservations are required. Consuming food or drink is not required. If you do want to eat and/or meet Riley at meal time, please arrive at 5:30 PM. There is no buffet. All food is from the menu:

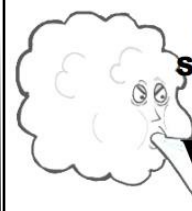
http://media.wix.com/ugd/ae9e97_426a1188cd0145e6941cada870b7cb23.pdf

A full bar is available.

Proper attire: collared shirts, turtlenecks, knit sweaters, golf shirts, banded collar shirts, crew-neck and designer shirts must be worn. Denim blue jeans are permitted.

You are encouraged to bring a friend.

http://www.southgatearc.org/news/july2008/riley_retires.htm



W3UU - Harrisburg Radio Amateurs' Club - WinterFest

Saturday JANUARY 23rd 2016

(Snow date 30th)

WINTERFEST

"A Harrisburg Pa. Hamfest"

Cooper Student Union, South Hall

1 HACC Drive

Harrisburg, PA 17110

N 40.29623 W 76.88805 (parking lot)

(HACC Campus - Follow Signs)

8:00 am to Noon

TALK-IN 146.76 (PL 100 hz)

This will be our last time at this location. Check www.W3UU.org for next year's location

- ♦ Admission, \$3.00 per person.
- ♦ First table free. Additional tables \$3.00 each!
- ♦ Food and drinks available
- ♦ DXCC/WAS/VUCC QSL Card checking on site
- ♦ Please, be courteous to your fellow hams by using reasonable table space. If you can use 1/2 table, please do so. (based on demand)



No reserved table space
Unloading can be done at the main doors, and then move vehicle to the parking area

General Admission: 8:00 AM
Web Site: www.w3uu.org

For further information or questions contact:
Tim Lehman
717-982-8550
kb3oza@arrl.net

PA National Fire Museum Reaches Out to the World for Its 20th Birthday

Contact: Richard E. Lenker (KB3YRC) (717) 236-1864

As part of its 20th anniversary celebration, the Pennsylvania National Fire Museum, in conjunction with the Harrisburg Radio Amateurs' Club Inc., will hold a Special Event Station the weekend of Nov. 14-15. The event will be held at the museum at 1820 North 4th Street, Harrisburg. Amateur (ham) radio operators will operate the Special Station on Saturday, Nov. 14, from 8 a.m. to 4 p.m., and on Sunday, Nov. 15, from noon to 4 p.m.

Special Event Stations are used by hams to help commemorate historical occasions or other special events. Members of the Harrisburg Radio Amateurs' Club will use their radios to talk across the state, country and even around the world to spread the word about central Pennsylvania's first-class fire museum.

The Pennsylvania National Fire Museum opened on November 17, 1995. Housed in an 1899 Victorian firehouse of the former Reily Hose Company No. 10, the all-volunteer museum features an outstanding collection of artifacts from the hand-drawn equipment of yesterday to the modern fire apparatus and equipment of today. Nearly every aspect of firefighting, from the smallest hand tools to large, horse-drawn steam pumps, is on display.

For further information about the Special Event Station, contact Richard E. Lenker (KB3YRC) at (717) 236-1864 or Rich3784@comcast.net. Information about the Pennsylvania National Fire Museum and the Harrisburg Radio Amateurs' Club can be found at www.pnfm.org and www.w3uu.org.

QCWA ... Continued from Page 6

The QCWA Board of Directors is pleased to announce the approval of 15 scholarship awards in the amount of \$21,500 for issuance in 2016 to qualified scholarship applicants.

Since 1978, some 488 recipients have received over \$471,850 in scholarship awards through the QCWA Scholarship Award Program.

For more information on the QCWA Scholarship Program, visit <http://www.qcwa.org/scholarship-program.htm>

The QCWA Scholarship Program is administered by Foundation for Amateur Radio (FAR), and all applications for scholarship awards must be sent to them. Visit <http://www.farweb.org/contact> for contact information.

73, Ken Oelke, VE6AFO President, QWCWA, Inc



Keystone VHF Club General Meeting Minutes of October 1, 2015 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 19:04. There were 33 members present, 2 visitors (Bill, W8BLR, digital operator from Carroll County, MD, and Dave, KC3EVU), 1 visitor who applied for membership (Eric, KB3CNH), and 2 returnees rejoining our ranks (Jim, AA3ID, and Dianne, N3GPF).

TECHNICAL HAPPENINGS:

Dick, WA3USG, described his visit to the NS Savannah (a nuclear powered merchant ship) with Fred Merker, K3TAZ, from BART. They did some ATV testing from the ship docked in Baltimore.

SECRETARY REPORT: Sandy, N3ECF. Steve, WB3EFA, moved to accept the September minutes as published, second from Jack, K8UYC. Motion carried.

TREASURER REPORT: Dan, KB3JSV, reported for September : Income: \$1,092.46; Expenses: \$858.39; Balances: Club CD \$7,641.42; Checking Acct \$2,229.36; Trustee Acct \$693.98; Total \$10,564.76.

Tim, KC3BWP, moved to accept the report; Don, N3OSO seconded the motion. by Motion carried. Dan advised that he will be stepping down as Treasurer. He has too much work at home and the office to handle his Treasurer duties.

COMMITTEE REPORTS:

TRUSTEE REPORT –

A great work party was held. Lots of logs were split and are ready for burning. Tim and Mike cleaned the club house. Tim has a group of model aviators coming up to the club for a visit. Several of them will be studying to get their license.

TECHNICAL COMMITTEE REPORT -

Dan, KB3JSV, set up an ARPS Rx Igate, using RaspPi, with a sound modem and APRX2.8. It receives signals on 144.39, demods it, and sends it to RaspPi. He is looking for a couple of radios for receive.

Tim, Dick, Mike, and Steve talked about the ongoing work for the dish and satellite.

Dick advised the 440 machine is back on the air. There is some wide band noise.

EMCOMM/PUBLIC SERVICE NEWS –

Sandy, N3ECF, mentioned that we had 2 drills and 2 public service events in September. They were documented in the newsletter.

Jack, KC3JD, talked about the work that Stan, AB3EM, did at Camden, NJ, for mutual aid support during the Papal Visit.

VE/ED REPORT -

The last testing session resulted in 3 new Technicians, 1 General, and 1 Extra. There will be two of the weekend Technician classes coming up at the end of October: Oct 24-25 in Carlisle and Oct 31-Nov 1 in Lancaster.

CONTEST REPORT -

The September VHF Contest conditions were not good. Mike, W3SC, and Tim, W3TWB, reported on their accomplishments. Craig, WA1HEW, did RTTY on digital.

Coming up: Oct 10-11 PA QSO Party, Oct 24-25 CQ Worldwide.

NEWSLETTER/WEBSITE –

Newsletter was out on time. Dick needs to update the Silent Key list on the website.

OLD BUSINESS:

Holiday Party update – Scheduled for January 16, with January 30 as backup (in case of snow). It will be held at the Victory Club. Cost is

expected to be about \$20 per person. The menu includes ham and turkey, corn, mashed potatoes, salad and dressing, and dinner rolls. The committee will check availability of wine/bar service.

The Wizard Safari been rescheduled to October 23-25.

JOTA is being held on October 17. We need operators to help the scouts make contacts.

The Nomination Committee (Larry, N3LED, and Mike, WS3C) reported that most officers will return except for Dan, KB3JSV, and Linda, KB3EBV. New candidates are: Anne Zarlenge, KB3ZLJ, for Treasurer, and Tim Snook, KB3WZX, for Assistant Treasurer. Jeff, KB3RCT, will take another turn as Trustee. We will open the floor for any additional nominations at the November meeting.

NEW BUSINESS:

First reading was done for Eric Smyder, KB3CNH.

We have so much wood, we will be selling some of our excess.

GOOD OF THE CLUB –

Jack, KC3JD, talked about a meeting he attended with the SCTF Communications Committee.

Dan, KB3JSV, mentioned that he will reconfigure our website, and rehost it to Double Dog.

Steve, K3WHC, had the 3-band beacon available for anyone to look at.

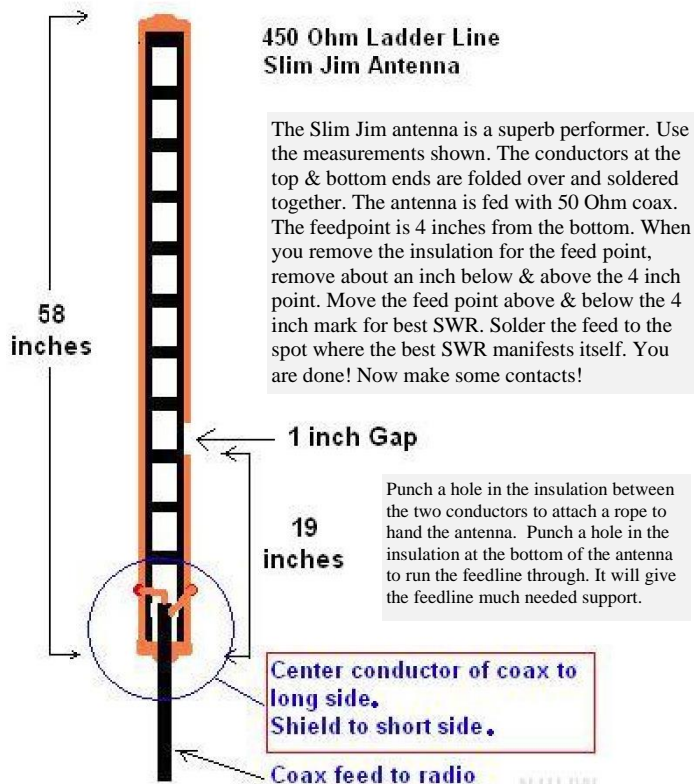
Kevin, KA0JQU, mentioned that CPRA will host Riley Hollingsworth.

Tim, W3TWB, told us about on-the-air conversation with Kay Craigie, N3KN, and Carter, N3AO, during his drive in Tennessee. Kay is the ARRL President.

50-50 -- Steve, WB3EFA, won \$38.50 Adjourned at 19:55.

2015 SKYWARN Recognition Day December 5, 2015, from 0000z to 2400z

SKYWARN™ Recognition Day was developed in 1999 by the National Weather Service and the American Radio Relay League. It celebrates the contributions that volunteer SKYWARN™ radio operators make to the National Weather Service. During the day SKYWARN™ operators visit NWS offices and contact other radio operators across the world.



KEYSTONE VHF CLUB OF YORK, PA



W3HZU



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
\$5.00 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: _____