



The VHF Transmitter



Keystone VHF Club, Inc.

W3HZU

Founded 1955 – York, PA

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CIRCULATION 150

October, 2015

Jake Frederick, N3UAC

A Silent Key



Jake joined the Keystone VHF Club in 1995 and has been a member for over 16 years. He lived with his daughter, Lorna, KB3SST and both of them regularly checked into our Monday night net. I received this notification too late last month to get it into the newsletter but Sandy sent it out to the membership via E-mail.

YORK Jacob W. Frederick Sr., 85, N3UAC entered into the presence of God on Tuesday, September 1, 2015 from the York Hospital. He was the husband of the late Betty Y. (Zink) Frederick. The couple shared over fifty-nine years of marriage. Born on December 9, 1929 in York, he was the son of the late Eleanor R. (Spangler) and Clarence William Frederick. He honorably served his country in the U.S. Army Air Corps and U.S. Air Force. Jacob was a truck driver and a flagger. He belonged to the U.S. Coast Guard Auxiliary, ARRL, Keystone VHF Club, YARS, Fraternal Order of Eagles, American Legion Post 469, Early American Steam & Old Engine Society and Williams Grove Historical Steam Engine Association.

He leaves to cherish his memory, children, Lorna Miller, Jacob Frederick, Jr., Deborah Wallick, Brenda Gardner, Barry Frederick, all of York, Terry Frederick, Cape Coral, Fla.; sixteen grandchildren; thirty-nine great-grandchildren, two on the way. He was preceded in death by wife, Betty; sister Dot L. Green; grandson, William "Bubba" Joseph Frederick. A viewing was on September 4, 2015 from 10 to 11 a.m. at the Gladfelter Funeral Home, Inc., 822 E. Market St., York. Jake's service was held at the Prospect Hill Cemetery with full military rites by the York County Veterans Honor Guard.

VHF/UHF Beacons to be installed at Club

By Dick Goodman, WA3USG

All over the country and actually, all over the world, are spread a system of radio beacons assembled and installed by radio amateurs. These beacons are on a variety of bands and frequencies and are used for several purposes. Some beacons are on frequencies in the HF bands. There are beacons on 20, 17, 15, 12, and 10 meters. They are located in countries everywhere. Their primary purpose is twofold. They can be used to tell if the band "is open" from the receiving station to the area or country where the beacon is located. Another purpose is for research and experimentation into the characteristics of HF propagation

Continued on Page 5

Spotted at a KVHFC Work Party!



We have been told that these two people have moved back into the area! If this is true, then we all hope that they will become active in our wonderful organization again! Do you know who they are? A clue is on page 3



York Public Service Activities

September 2015

Wrap Up

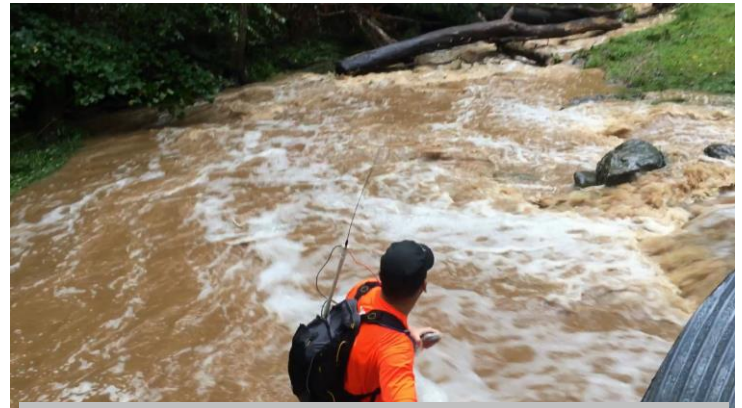
By Sandy Goodman, N3ECF

There were two drills. Sept 15 was a quiet hospital drill. The Net Control station was located at the York County EOC. We handled a total of 4 messages: 1 exchange between Wellspan Rehab and York Township, and 1 exchange between York EOC and Hanover Hospital. 10 operators were on hand at 5 sites for the 3 hour drill.

Sept 19 was an Amateur Radio Working Group (ARWG) regional drill called Frosted Fury. We handled mostly Skywarn weather reports, plus some road closures and requests for shelter radio operators. We ran a local NET in York County, as well as participating in the regional NET with the other counties. 10 York County operators participated in the 3 hour exercise. Other participating operators were from Dauphin, Lebanon, Lancaster, and Adams counties.

KTA Super Hike on Sept 12 -- had 21 operators working during heavy rains (someone told us 4" that day) from 7 AM to 5:30 PM. The hikers are determined folks who continue no matter what, doing either a 25K or 50K hike. We experienced hikers with bee stings, hikers who choose to leave the course early and were led out by a radio sweep, and a hiker with severe leg cramps who was assisted by another HAM who hiked 2 miles to provide her assistance followed by EMS and an ambulance waiting for her at the checkpoint.

The final radio sweeps accompanied the 2 last hikers and had to cross 2 to 3 foot high creek waters, which are normally just stepping stones across about 5 feet of water no more than a foot deep. During the course of the day, the creeks swelled to 30 to 50 feet wide! The current was strong, full of debris, and muddy.



Dan Melato, KB3JSV one of the two sweep hikers near the end of the day. At this point, Dan was wading through 2 to 3 feet of very fast moving muddy water trying to find the most safe possible way to get across.

At Net Control we were under a carport cover, but our feet still got wet because the rain couldn't soak into the ground fast enough and the NCS area flooded out.

Continued on Page 3

NEXT MEETING

Thursday, October 1st 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.*

Oct 10 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

Possible 2 Meter Band opening later this week

Later this week it appears that Tropical Storm Joaquin might position itself to provide two meter tropo all the way down the coast to Florida. I have experienced tropical storms and hurricanes fitting themselves into this position in the past, where the outflow from the storm creates a widespread temperature inversion up and down the coast.

On past occasions storms in this position have made it possible for me to work 2meter tropo all the way to the Florida Keys. Bears watching.

73, Fred, K3ZO

Scheduled Club P.S. Events for 2015

* October 18 - Hershey Half marathon ??

POC: Marty Gutekunst, KB3BAA mpgutekunst@comcast.net

* October TBD - Michaux Team Challenge

POC: Dan Mcglothlin, KB3MUN kb3mun@mcglothlin.us

* December 24 - Glen Rock Carolers

POC: Stan Walters, AB3EM abacuspc@comcast.net

The KTA Super Hike Summary

By Dick Goodman, WA3USG

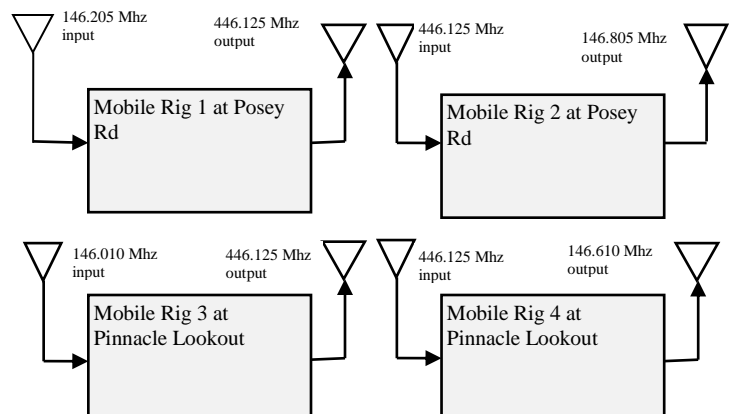
The KTA Super Hike has always been an arduous, 30 mile trudge usually in hot, humid, and many times stormy weather. This year was the worst that I can remember. We had approximately 4 inches of rain caused by two storms that went through over the course of the day. The first, during the late morning, dumped about an inch over the course of about an hour. The weather in the late afternoon however "did it to us". Most of the hikers had completed the course by this time, but there were still quite a few out that had to contend with it.

Our part in this event was to provide communications between the Net Control Station at the finish line at Otter Creek Campground and seven (7) other hiker check points along the 30 mile route. We also provided three sweep hikers who hiked behind the last event hiker. This enabled us to ensure no hiker had become lost, injured, or became too tired to make it to a check point.

Sandy Goodman, N3ECF coordinated everything between us and the event organizers and remained at Net Control for most of the day. **Jack Dellinger, KC3JD** and **Mark Vreeland, KB3NCJ** worked Net Control for the entire day.

The first check point was at Pinnacle Overlook, about 8 miles from the start. **Ralph Brandt, K3HQP** and one of our newest members, **Charlie Kuhn, KC3DRS** worked this checkpoint.

In past years, we have used the Rollinsville repeater on 145.310 MHz. It works well but there are many places on the 30 mile hiker route where the repeater coverage is shadowed by mountains & low lying areas. This year, Ralph, K3HQP set up two repeaters for us using standard mobile dual band rigs. Ralph's system worked extremely well!



All four rigs are placed in "Crossband Repeat Mode". Anyone transmitting on 146.205 MHz will be received on Rig 1 and will be repeated out on 446.125 MHz. Rig 2 will receive that person on 446.125 and repeat it out on 146.805 MHz. This creates a regular repeater. Notice that Rig 4 up on Pinnacle Lookout also has an input on 446.125 MHz. It will receive the output of Rig 1 at Posey Rd and repeat it out on 146.610 MHz.

If someone transmits on 145.010 MHz, it will be received by Rig 3 and repeated out on 446.125 MHz. It will then be received by Rig 4 on 446.125 MHz and repeated out on 146.610 MHz. Another regular repeater. Notice that Rig 2 at Posey Rd will also receive this on 446.125 MHz and repeat it out on 146.805 MHz.

Ralph had created 2 linked repeaters for use by us. An input on either would be repeated by both. Very cool! **Continued on page 4**

Trustee's Report



Tim, W3TWB



Dick, WA3USG



Jeff, KB3RCT

Autumn is here! Last Thursday we had a great work party at the club. Thierry Mathieu, KB3TPX brought over his log splitter and we split enough firewood for at least 2 - 3 years. We ended up having about a dozen people showing up to help. Not only did we get firewood split but Larry, N3LED pulled at least 2 stumps that will make mowing the club property a lot easier. **We also got a fantastic surprise ... Diane Lanasa, N3GPF and her OM Jimmy Lanasa, AA3ID have moved back! They still keep a residence at the Outer Banks but they will now be spending Winters up here. Both were very active members before they moved away over 16 years ago. Welcome home!!**



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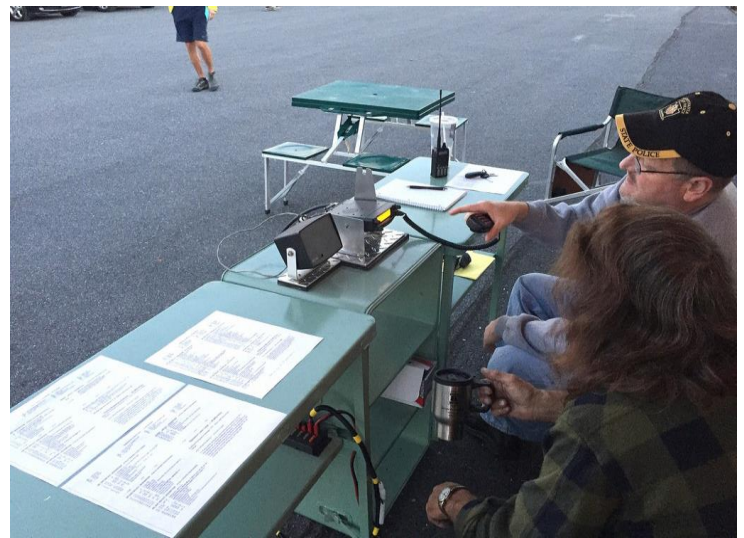
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We plan to work with that event sponsor to establish some better emergency procedures for better safety on creek crossings during heavy rains. We've had rainy weather (thunder storms mostly) at least 3 years of this event. Two of our radio operators were hiking along the course, each doing about 10 - 15 miles of hiking, plus the 4 miles covered by the rescue operator. We have a few hardy folks working EmComm.

The Three Creek Century Bike Tour on Sept 20th was our final big event. It took place mostly in Cumberland County. This was a quiet event even though there were 501 bikers. The participants are experienced road bikers doing 25, or 50, or 75, or 100 mile bike rides, built from 3 separate courses (a 50 mile, and two 25 mile courses). Our work mostly consisted of reporting needs at the rest stops, delivering some food to rest stops, patrolling the course to watch for anyone needing aid (SAGs), and a final sweep of the courses to advise the event directors and rest stops of the location of the last rider.



Steve, KC3CPL set up an incredible Net Control station for this event. I believe that he has been working on rebuilding this RV for over a year. He fabricated a custom tripod and clamps on the roof to get his J-Pole up nice and high where it belongs. It works extremely well and I could copy the NCS ANYWHERE on the bicycle route on simplex ... heck, we could have run this event without a repeater! For our SAGs and Rest Stops to hear each other we needed a repeater however. Steve found a medical table set on E-Bay to use at his operating position. It allowed all the maps and event documentation to be laid out perfectly. I want to find one of these! He also fabricated a really cool mount for his radio and speaker. While he managed to get power from the pavilion he was parked by, Steve also has an on board generator and two (2) deep cycle batteries. He was wired up an umbilical using Anderson Power Poles that allows him to bring the power outside so in nice weather like we were having, he can run the NCS from the comfort of his awning. Last but not least was the guard dog that protects everything! in the picture above. *Thanks to Steve & his YL Jody for your support at this event!!*

KTA Superhike Summary ... continued from Page 2

Ralph's linked repeater system is the perfect example of why we shine! Ralph got on site prior to 6 AM to set this system up ... two radios with power supplies and 2 dual band antennas at each location. Ralph along with Charlie, KC3DRS then manned the Pinnacle Overlook check point until the last hiker came through

Rich Reese, KR3EE volunteered to ensure that there would be someone monitoring the repeater components at Posey Rd. He arrived on site by 5:30 AM and stayed until other Amateurs arrived. Those other Amateurs were **Tom Graybill, KB3ETG** and **Jim Fry, KC3EWN**. Rich then moved on to the Net Control where he worked for the remainder of the day. *It should be noted that Tom Graybill was the "Rescue Hiker of the Day". About a mile before reaching Tom's checkpoint, a female hiker experienced severe leg cramps and couldn't go any further. Tom hiked back to her and administered First Aid enabling her to walk to the checkpoint after which she left the hike.*

Dave Olsen, W3EO, Paul Long, KC3DHK, and Betty Long, KC3EWO manned the Holtwood recreational Area Checkpoint.

Dan Boone, KB3ZMB and **Jack Reed, N3BBC** manned the Checkpoint at old Lock 12 on the remains of the Pennsylvania Canal. Hikers coming into here are fairly beat from hiking the rough route from the previous check point. They had also just finished the walk over the entire length of the Wrightsville Bridge.

As for the sweep hikers ... We had a brand new Radio Sweep this year. **Evan Rosser, KC3EEK** strutted his stuff by hiking 8 miles from the start to the Pinnacle Overlook (a very difficult hike). **Dick Goodman, WA3USG** didn't make it that far (about 6 miles) because he stayed with two hikers who needed to be pulled from the hike due to physical problems (they were exhausted). Dick led them to a side trail where **Tony McMonagle, KC3EED** met them and drove them to their car. Tony then drove Dick to the Pinnacle Overlook where he met Evan hiking behind the next last (and extremely slow) hiker. By the time Evan & the last hikers arrived at the Pinnacle the next hikers were many miles ahead and most had arrived at the next Check Point which was lock 12.

Dan Melato, KB3JSV was the sweep hiker from Lock 12 to the end, a distance of 14 miles. Since Dick only hiked 6 miles and then had been shuttled to the Net Control, toward the end of the day he asked to be shuttled to the Posey Road checkpoint. **Rich Reese, KR3EE** shuttled him there where Rich & Dick took down the repeater that Ralph had put up earlier. Rich took the repeater and a hiker who wanted to drop out back to the finish. Dick stayed and decided to hike with Dan back to the finish ... it got extremely wet!

Dan arrived at the Posey Road checkpoint at approximately 2:30 PM. He was following the last hiker who was moving very slowly. After about a 5 minute break, Dan and Dick started on the last 6 mile leg of the journey. They were about 2 miles behind the next hikers. About 5 minutes after they left the rains came. I would say in the next 90 minutes, we received 2 to 3 inches of rain. We couldn't look up ... it was raining so hard. Posey Road had about 2 inches of fast flowing water we were walking through. We were looking down and laughing about our dire situation. After a mile or 2, a car pulled up behind us. The back door flew open and two hikers popped out. The driver rolled his window down about an inch and said "These two hikers were lost and they want to finish the hike". The couple consisted a small oriental girl who was in good shape and a male who looked to me that he didn't belong on a hike like this.

Okay ... we were about 3 miles from the end. We tried to stay back and let the hikers "Hike their own hike" but every time we would come to a muddy/slippy spot, the guy would start slipping & flailing all around. Then the girl would grab hold of him and haul him back up. I'm not trying to be a wise guy or anything but you do need to have a degree of experience to attempt a hike such as this and that guy should not have been out in the woods in the conditions we were experiencing.

At the speed we were travelling, it became obvious that it was going to take us at least 2 hours to go the last 2 or 3 miles. Little 5 foot wide creeks swelled to over 40 feet in width (see Sandy's write up & picture on first page). We had no choice but to cross those which turned out not to be quite as hard as we thought it would be. We finished the hike well over an hour behind the last hikers ... and we didn't do the last 6 miles.

Even at the net control station things were bad. Rick Reese's HT

got so wet that his transmitter keyed. He fortunately figured out what was going on within a couple of minutes. All in all, we provide an incredible amount of "value added" to that hike.

Every one of our folks did a superb job at this event. Ralph's repeaters gave us communications coverage that we've never had in previous years. Tony, KC3EED wasn't even working at this event and he shuttled hikers who were having problems. Tom, KB3ETG hiked over 2 miles getting someone first aid. We did our best to get EMS out to a person who was having reactions to multiple Bee stings but that person didn't remain where he was and the EMS folks couldn't find him. I believe that Dan, KB3JSV has ended up sweeping hikers in down pours of almost biblical proportions three years in a row. I suspect next year, he will make it number 4!

Thanks everyone!

Encourage the New

Submitted by W.T. Jones, WN3LIF EPA Section EC

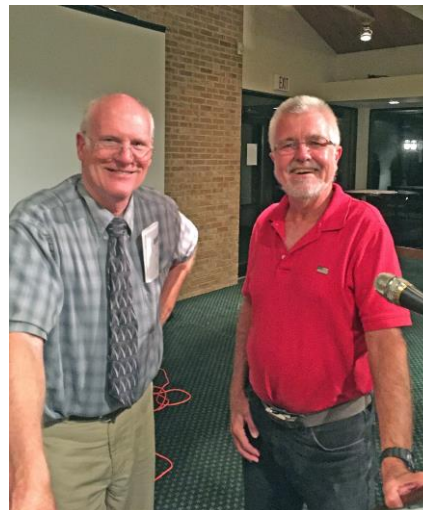
It is 2015, and in a very few short months it will be 2016. It isn't the 1950's anymore. Our new ARES members need to bring modern ideas to the table and those of us who are long in the tooth in Amateur Radio need to start listening a bit to them.

What worked the best in 60's, 70's, 80's and even the 90's doesn't play as well as it did back then. Yes, some of the basics still work and work well but there are new things out there and some of us are so hide bound that we don't want to listen to anything new because "we didn't do it that way back in the day!" Its not "back in the day" anymore. It is today and some of the new guys just might have a good idea or two.

Events of the past 4 month have been a learning experience for me and not all the lessons have been pleasant. Our ARES was created in the previous century. It is a product of that century. There may be changes coming in the future to accommodate this new century. Those good ideas of the young folks are worth listening to and if nothing else it makes the new guys feel included in the group.

Remember, we old guys are not going to be doing this forever. That is a hard fact of life. It may be about time to give the new guys a briefing on how we "did" it, listen to them for some suggestions on how they might "do" it, and see if together it might be "done" a better way. Don't shun the new ideas. Gather the old "Good" with some of the new "Good" and make things happen. Who knows. It might be fun too.

Bob Bruninga, WB4APR - Presentation in Harrisburg



Bob Bruninga, WB4APR gave an incredible talk at the Blue Ridge Country Club in Harrisburg on Thursday, September 17. I think that the greatest thing about this hobby is the people you meet. Bob is the creator and father of the Automatic Position Reporting System (APRS). This system is used all over the world to allow any licensed amateur to report their location anywhere in the world. It also provides messaging to any other APRS user ... anywhere on the surface of the planet... and I believe limited to the International Space Station (ISS) ... at least for now!

Bob gave an absolutely insightful talk on the state of the art in Photovoltaic power generation and many aspects of other methods of power production and distribution. Bob made me realize that within 20 years, we will probably be getting over 50% of our power from these alternate energy sources. To me, Bob's talk was nothing less than revolutionary. Major kudo's also go to Gary Blacksmith, WA3CPO & the CPRA for getting us the privilege of hearing Bob's outlook on this technology. A great evening.

Beacons ... Continued from Page 1

Anyone with an HF receiver (or transceiver) and an antenna can receive and copy these beacons. The beacons are all CW.

Call	Location	14.100	18.110	21.150	24.930	28.200	Operator	Status
4U1UN	United Nations	20M 00:00	17M 00:10	15M 00:20	12M 00:30	10M 00:40	UNRC	OK
VE8AT	Canada	00:10	00:20	00:30	00:40	00:50	RAC/NARC	OK
W6WX	United States	00:20	00:30	00:40	00:50	01:00	NCDXF	OK
KH6RS	Hawaii	00:30	00:40	00:50	01:00	01:10	Mauui ARC	OFF ⁴
ZL6B	New Zealand	00:40	00:50	01:00	01:10	01:20	NZART	OK
VK6RBP	Australia	00:50	01:00	01:10	01:20	01:30	WIA	OFF ⁴
JA2IGY	Japan	01:00	01:10	01:20	01:30	01:40	JARL	OK
RR9O	Russia	01:10	01:20	01:30	01:40	01:50	SRR	OK
VR2B	Hong Kong	01:20	01:30	01:40	01:50	02:00	HARTS	OK
4S7B	Sri Lanka	01:30	01:40	01:50	02:00	02:10	RSSL	OK
ZS6DN	South Africa	01:40	01:50	02:00	02:10	02:20	ZS6DN	OK
5Z4B	Kenya	01:50	02:00	02:10	02:20	02:30	ARSK	OK
4X6TU	Israel	02:00	02:10	02:20	02:30	02:40	IARC	OK
OH2B	Finland	02:10	02:20	02:30	02:40	02:50	SRAL	OK
CS3B	Madeira	02:20	02:30	02:40	02:50	00:00	ARRM	OFF ⁴
LU4AA	Argentina	02:30	02:40	02:50	00:00	00:10	RCA	OK
OA4B	Peru	02:40	02:50	00:00	00:10	00:20	RCP	OK
YV5B	Venezuela	02:50	00:00	00:10	00:20	00:30	RCV	OK

Give the beacons in the above chart a try. The exact frequencies of the beacon is listed at the top. These are probably the "zero beat" frequencies so you may have to tune off of them a few hundred Hz in order to hear anything

How you will copy these beacons will depend on several factors. Is your antenna tuned for that frequency? How sensitive is your receiver? What time of the day is it? 20 meters will probably be best in the daytime but may be open all night. As you go higher in frequency, you will find 17 meters will be best during the day but will probably close down starting at dusk. The higher bands like 15 and 12 meters will be somewhat less dependable during the day and will totally shut down at night. 10 meters won't be open even during the day unless we have an active sun. Then it can be open to the whole world with excellent propagation ... even at night. Experiment, experiment, experiment!

There are also beacons on VHF, UHF, and the microwave bands. Now these are not meant for reception outside of the continental USA (although many amateurs are hoping to receive Europe and the Hawaiian Islands). These beacons allow operators on these bands to check the propagation between themselves and the beacon, but more importantly, it allows them to test the sensitivity and performance of their receiving systems.

On the HF bands, your receiver sensitivity does not play as much of an important part in determining how weak a signal you can receive as it does on VHF, UHF, and the microwave bands. This is because on HF, the noise floor on the bands is generally much higher than on VHF and above. The most sensitive receiver in the world won't allow you to copy a signal if it is below the level of the noise floor.

Beacons on VHF and above allow the operator to check the actual sensitivity of the receiver independent of the noise floor on the air. All receivers also have a noise floor, on HF, the receiver noise floor is insignificant because it is covered up by the noise floor off the air. While you can't do anything about the noise floor off the air, you can make modifications to your receiver system to minimize the noise floor generated by the receiver itself. All electronic components and especially amplifiers generate "electronic noise". The noise comes from the flow of current through the transistors, diodes, and resistors that make up the receiving circuit. Again, you never hear this on HF because the band noise over rides the noise generated in the receiver.

Having a weak signal on VHF and above, like from a beacon, allows the operator to make enhancements to improve his or her receive system. The best and easiest way to do this is to add a Low Noise preamplifier between the antenna and the receiver or to improve the antenna system itself. This improves the desired signal strength and theoretically allows it to rise above the noise generated in the receiver. This is a major reason for using a beacon on VHF and above.

There are also times when propagation conditions are enhanced (nowhere near to the extent as on HF) and the beacon will tell you if conditions to that area are improved at that point in time.

144.276	W2RTB	FN12ar	NY	Victor
144.278	N2GHR	FN30lu	NY	Long Island
144.279	N3FTI	FN20aj	PA	Reading
144.280	N4MW	FM17kn	VA	New Kent
144.280	VE3ZAP	EN94vc	ON	Shelburne
144.283	VE3LPL	EN92kx	ON	London
144.283	W3CCX	FM29jw	PA	Philadelphia
144.284	N8LGL	EM89lc	OH	Lake White
144.285	WA1ZMS	FM07fm	VA	Bedford
144.286	WD4GSM	EM86qv	VA	Wise
144.288	N3ZRX	FN20dn	PA	Downington
144.290	K2DLL	FN23xc	NY	Providence
144.295	W1JHR	FN42em	MA	Harvard
144.295	W3APL	FM19ne	MD	Laurel
144.300	WA3TTS	EN90xn	PA	Pittsburgh

Here are a few beacons that you can try on 2 meters. You need a receiver that can copy SSB or CW in order to receive them, your FM rig will not work. In this area, the WA1ZMS beacon is extremely strong (highlighted). If you cannot receive that you will probably not be able to receive the other beacons in this list.

The Keystone VHF Club of York will host a beacon at the 100 foot level on their principal tower at their Club north of York, PA . The beacon was provided by the Microwave Luncheon Group (MWL). The beacon will sequentially transmit on three (3) bands:

- 144 MHz
- 222 MHz
- 432 MHz

*** (Note: Exact frequencies TBD)*

This agreement will also support a 10 GHz and a 24 GHz beacon when desired at a later time.

The function of a beacon is to provide a weak signal in all directions to permit VHF,UHF, and microwave hams to test receiving equipment and antennas on bands that are often unoccupied for most hours in a day. The CW mode is consistent with this purpose.

The transceiver used for the beacon is a CW based frequency agile unit called the Radio Shield RS-UV3 by HobbyPCB.com in the US. It will be programmed to spend approximately 20 seconds on each band sending carrier then call letters of "W3HZU" and the grid square, FN10pa.

An integral part of the beacon is an Arduino or Raspberry Pi computer which will be programmed to send and/or receive beacon messages. The power output will be 200 mw.

The antennas will be horizontally polarized omni- directional loops types using a triplexor by Comet Model CFX-324b to feed each antenna. The beacon will be built into a hinged waterproof box and mounted on the tower. It will be fed from the station by 120 ft of CAT 5 Waterproof cable. 117 VAC or 12 VDC is available at the beacon location on the tower.

It should be noted that the Keystone VHF Club has voted to purchase two (2) loop antennas for this project. An antenna for the 70cm band (432 MHz) and an antenna for the 2 meter band. Both of these antennas were ordered and have been received. The antenna for the 222 MHz beacon has been provided by MWL group.

Since we are a "VHF Club" it is a feather in our cap to be part of this project. The beacon will use our club of "W3HZU" and will become part of the national VHF/UHF beacon system.

**DON'T WAIT. COMMUNICATE.
MAKE YOUR EMERGENCY PLAN TODAY.**



SEPTEMBER IS NATIONAL PREPAREDNESS MONTH!



AMERICA'S
PrepareAthon!



N.S. Savannah



A Visit to the world's only Nuclear Powered Merchant Freighter! *By Dick, WA3USG*

A few months ago, I received a call from an old ATV buddy, Fred Merker, K3TAZ from down in Baltimore. We chatted for a while, and then he mentioned that his club, the Baltimore Radio Amateur Television Society (BRATS) was taking part in the Boy/Cub Scout Jamboree on the Air (JOTA). They hoped to be operating from the deck of the NS Savannah, the world's only nuclear powered freighter. They had made arrangements with the Savannah to go aboard for a site survey on Tuesday, Sept 29 to see if they could access the Baltimore ATV repeater. I told Freddie that I wished that I could join him and he told me to "Come on down!"



Here we were unloading the car, antenna supports, coax, masts, things that we were taking to the upper decks to set up to see what ATV coverage would be.



After we went through about 30 minutes of training in one of the conference rooms, we were each deemed "qualified" to have full run of the ship without an escort. They even gave each of us a badge with an embedded RF tag that would open up any of the locked doors. Here we are at the ships bridge, Cliff, shown here, is a member of the ships amateur radio club. While we were allowed to go anywhere we wanted to, we sure didn't know our way around. Cliff stayed with us most of the day. Since he was also a crew member of the ship, he had other duties. He gave me a Motorola, digital DMR HT that I could use to contact him if we needed any help. I cannot say enough about the ship and it's crew's attitude toward us.



Okay ... where should we go next? Why the radio room of course. Everything was there !!! I don't believe that a single transistor was in sight ... it was all good old vacuum tubes! 1961 technology.



Even the old hand cranked "Gibson Girl" emergency lifeboat transmitter was attached to the wall. Ready to be taken out and put in a life boat on short notice.



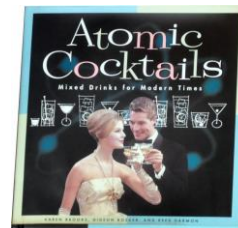
An old Collins receiver with an early Weather FAX unit



The ships call sign: KSAV



As well as being a freighter, there were about 40 staterooms for passengers. This is the bar in the passenger dining hall. There was also a swimming pool and a shuffleboard court. The colorful lights in the back are actually bottle holders.



We spent about 4 hours on the ship. We were able to access the Baltimore ATV repeater and made contact with K3UQQ, Ken near Ellicott City. We also made several 2 meter simplex contacts.



**Keystone VHF Club
General Meeting Minutes of
September 3, 2015**
By Sandy Goodman, N3ECF – Secretary

The General Club Meeting held at Keystone VHF Club was called to order by Pres. Mike, N3VQH, at 19:00. There were 39 members present, 1 prospective member, and 1 guest. Our guest, Brad, W1YX, is here for a couple of months working at the power plant. He has been an amateur for 22-23 years.

Jake Frederick, N3UAC, is a Silent Key. He passed away on Sept 1, 2015.

TECHNICAL HAPPENINGS:

Craig, WA1HEW, is catching up on the 17 meter challenge, with help from Mike and Brad). Kip, WB3AFL, did a show and tell of his faraday cages/bags to protect equipment against EMP.

SECRETARY REPORT: Sandy, N3ECF. It was noted that the location of the meeting was wrong in the emailed minutes. That has been wrong since April, except for the month that Kathy took minutes. Jeff, KB3RCT, moved to accept the August minutes as published in the newsletter, 2nd by Jack, K8UYC. Motion carried.

TREASURER REPORT: Linda, KB3EBV, reported for August: Regular Checking - Income: \$913.40 and Expenses: \$761.67; Trustee Account – Credits \$400.00 and Expenses: 393.65; much of the expenses were for the Corn Roast.

Balances: Club CD \$7,640.45; Checking Acct \$1,955.29; Trustee Acct \$448.88; Total \$10,084.62.

Steve, WB3EFA, moved to accept the report; 2nd by Jim, N3QZS. Motion carried.

COMMITTEE REPORTS:

TRUSTEE REPORT –

Wood needs to be split. A work party is scheduled for September 24. The trustees will look for holes around the place and will with gravel and dirt. The air conditioner is draining inside and needs checked out. For now, leave the A/C off.

TECHNICAL COMMITTEE REPORT -

Steve, K3WHC, said it's been too hot to work on the 14 foot dish. He talked about the antenna that was needed for the beacon that had been approved. Chip, W3JFD, moved to spend about \$200 to buy an antenna, seconded by Steve, K3WHC. Motion was approved. Steve will do a training session for the use of the beacon once it's up. More discussion was held about lightening protection.

On September 11, Rich Diem, W3OKU, will climb to straighten some antennas.

The operating desk now has digital capability on HF.

The elevation rotor needed fixed. Steve Cline, KC3CPL, worked on the rust that had corroded the gears to get it operational. His work saved us about \$400 for a replacement.

EMCOMM/PUBLIC SERVICE NEWS –

Sandy, N3ECF reported that we worked two public service events in August: Red Lion Street Fair and the MS Bike Tour. Details are in the newsletter. Coming up are the KTA Hike and King's Gap Time Trials on September 12, and the Three Creek Century Bike on September 20. For EmCOMM, we also have two events coming up: a hospital drill on September 15, and ARWG exercise on September 19.

VE/ED REPORT -

Steve, WB3EFA, advised that at least 3 are signed up for testing on September 19, 2 have signed up for the November testing. Since no interest was shown for the Technician License Class, Nate cancelled the planned class. If someone is studying for that license, Nate, Walt, or Steve can help as needed. There may be a General License Class in the spring.

CONTEST REPORT -

September 12 & 13 is the VHF Contest

September 26-27 is a RTTY contest

October 10-11 is the PA QSO Party

Craig, W1HEW, invites anyone to participate with the Red Lion Club.

NEWSLETTER/WEBSITE –

Dick, WA3USG, barely got the newsletter out on time.

OLD BUSINESS:

The scouts JOTA will be held on October 17 from 9 am to 5 pm. Jeff, KB3RCT, and Brian, KC3CFW, are planning it and need volunteers. Jeff is also looking for the banners from last year.

Second readings were done for Phil Smith, KC3FGE, Laurie Short, KC3DVF, and Scott Short, KC3FAN. All were voted into membership.

Holiday Party planning continues. The date was set for January 16, with January 30 as a back-up. The committee is looking at the Victory Athletic Club. Cost is expected to be about \$20 per person.

The Harrisburg CPRA club has Bob Bruninga, WB4APR, scheduled to speak on September 17. He's the developer for APRS.

NEW BUSINESS:

The Nomination Committee for 2016 Officers was formed: Larry, N3LED, and Mike, WS3C.

Dick and Kevin discussed the 440 repeater. Kevin has offered to loan one of his machines, which is already programmed. If it works well, Kevin will offer it at a reasonable price. Steve, K3WHC, moved to approve the loan. Steve, WB3EFA, seconded the motion. Motion was approved.

Dick, WA3USG, talked about an idea from Steve, KC3CPL, to procure an RV as a communications van. Those interested were to get together with Dick and Steve.

GOOD OF THE CLUB –

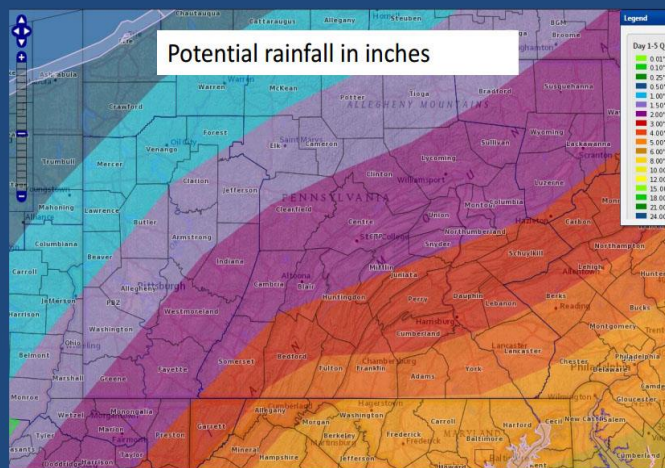
Ray Shaub, W3AXC, has an antique Hallicrafters radio that he'd like to give away.

SPCG is now operating a new Fusion repeater on 2 meters. Nate provided a description of its capabilities and talked about SPCG's experience with it.

50-50 Steve, WB3EFA, won \$23.

Adjourned.

...Potential Prolonged Rain Event Fri-Sun...



Rain could arrive Friday and may be heavy Saturday

Rain Possible again Sunday

Recent rain and additional rain could increase flood risk. The actual circulation of Hurricane Joaquin will likely pass well to our east

Stand By for Adventure!

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
\$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: _____