

The VHF Transmitter



Keystone VHF Club, Inc.

W3HZU

Founded 1955 – York, PA

VOL 60 No 7 CIRCULATION 150 September, 2015

More Shenanigans at the Club Site

By Dick Goodman, WA3USG

A great time was had at the Corn Roast on August 15th. We went through 60 chicken halves (causing the death of 30 chickens) and 120 ears of corn. I believe that we had over 70 folks attend, there were some people who came to chat a bit and then left but I think that the count was fairly accurate. Tim Barefoot, W3TWB ram rodded the chicken grilling ops and other preparations. We did have one minor catastrophe about an hour before serving. Tim was in the club house filling a large glass jar with a combination of hot water and butter. This would be used to dip each ear of corn in as it was handed to the club member. Somehow he managed to drop the full jar of butter & water on to the concrete floor of the club house. I'm really glad that I wasn't in there because I can imagine that there were a few expletives uttered!! We didn't have another glass jar so I called Sandy who was still at home.

Over the Christmas holiday's, my sister gave me a large glass jar of pickled onions ... I loved these as a kid. Well over the last few months, I ate about a third of the jar but by that time, all those pickled onions had my body chemistry so out of wack that I couldn't eat anymore. I told Sandy to dump all of the onions out in the cornfield behind our house and bring the jar to the club. She did this and I thought that our problem was solved. The problem was however that the jar was made out of plastic ... not class. Tim filled it with hot water and butter and it started to "deform" ... yeah ... it was melting! I don't think that anyone noticed.

Quite a group of guys came up to help set up, and plenty of folks hung around to clean up after the event. Thanks to everyone who took part!

What else is going on? We have one of our newest members, Steve Cline, KC3CPL who seems to have a real knack for things mechanical! Now we have quite a few very capable folks in the club who are electronic whiz's. Steve however just looks at something mechanical and immediately rationalizes how it works.





Last Thursday evening at our weekly tech session, we decided to take a look at our satellite antenna array elevation rotor which has not worked for over 2 years. We had one hell of as time splitting the case. Between Jeff, KB3RCT, Steve, and a hammer driven impact wrench, they got the job done. Look at the pictures above. If I would have been doing this, I would have had gears, ball bearings, springs, set screws, and all kinds of stuff with complicated names strewn all over the place. Steve sat there and meticulously figured out how to take this beast apart ... and better yet, he knows how to get it back together! This is a Yaesu rotor and even Yaesu won't repair these things (neither will Norms Rotor repair). The problem turned out to be corrosion in the gear train caused by water ingress into the rotor. The purpose of all of those gears is to reduce the speed of the tiny motor in the rotor in order to get sufficient torque and a slow enough speed to drive the antennas in elevation.... it takes a lot of gears!

If you read our last newsletter, you may also notice that Steve has done some major fabrication work on the foundation of our 14 foot dich



The MS Bike Tour Mason - Dixon Challenge Wrap Up

By Sandy Goodman, N3ECF

On Saturday and Sunday, August 22 & 23, the York ARES with assist from Adams, Franklin, Lancaster, & Blair County operators, worked at the MS Bike Tour - Mason Dixon Challenge. The bike tour does fundraising for the MS Society. On Saturday they had a 25 mile route, plus a 64 and 100 mile routes that were entwined (mostly together, but 7 splits and merges along the way). Sunday there was one 50 mile route. We had 30 radio operators plus 3 non-HAMs support work at Rest Stops and SAGs (support and gear vehicles). 10 worked only 1 day, the other 23 worked both days. We operated from 6 AM until almost 5 PM on Saturday, and from 6 AM until 1 PM on Sunday.

Fortunately the weather was great for riding -- a cool low 80s with low humidity. That helped us avoid heat issues. However, multiple conditions caused us to have a lot of issues with missing signs and cue sheets missing a couple of turns. SAGs had to become the traffic directors until signage could be replaced. A few riders were transported either to the next rest stop or back to the finish for the usual reasons. At NET Control, we also manned the emergency phone line and provided directions to a couple of lost bikers, or dispatched SAGs to those who needed a ride. Our biggest efforts lead to directing lost riders and trying to avoid additional lost riders. It worked out well. Happily there were NO injuries, other than one scratched finger.

We had limited use of the APRS for tracking the SAGs. It got difficult monitoring multiple SAGs on one screen using the AGW software. But we still had SAGs running it on Sunday, which allowed us to help one SAG you got a little lost trying to take a direct route with bad directions. We used the APRS-FI to find that one SAG and provide him with road by

With all the confusion from the missing signs and missing cues, amateur radio communications saved the day. The MS event staff know how valuable our workers are and depend on us. The one staffer said it was a great day just because she didn't have to follow any rider to the hospital.



The items shown here were left at the club site after the Corn Roast on Saturday, August 15th. If they are yours (or no one claims them and you would like them), please contact WA3USG

NEXT MEETING

Thursday, September 3rd, at the Club Site Last meeting at club site this year

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.

Sept 12 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, WN31 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 <u>Monday at 9 PM</u> 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 <u>Tuesday at 8 PM</u> 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 $\underline{\text{Tuesday at 9 PM}}$ 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

At the last two Club meetings there was mention of wanting to do something special for the 60th Anniversary. I was thinking how lots of High School graduating classes like to do something for future classes that will be coming along after them. On Craig's List under RV & Camp, over in Shippensburg there is a Vintage (many of us club members are vintage) 1973 Motorhome. It's a Dodge built on a Superior Chassis (I assume the same Superior that builds school buses). It needs some attention, but how about building a "Keystone VHF Club" mobile communication vehicle with eating, sleeping, restroom as well as radio gear for events, disasters and maybe a sign-out sheet for club members to use for hill topping or just vacationing with radio gear. Just a thought, it's only \$1250 for the unit. http://york.craigslist.org/rvs/5186894721.html "'73" Steve KC3CPL

P.S. Just the Vintage look alone would attract attention and advertise Ham Radio's as well as the club. Restoring vintage can get a little bit expensive, but I know a Millwright that works cheap. LOL

Scheduled Club P.S. Events for 2015

* September 12 - KTA Superhike

POC: Ken Wiggens, N2DYK n2dyk1940@yahoo.com

- * September 12 Harrisburg Bicycle Club Time Trails POC: Micah Neff, KB3TGY
- * September 20 Three Creek Century Bike Tour POC: Sandy Goodman, N3ECF slgoodman1@verizon.net
- * October 18 Hershey Half marathon

POC: Marty Gutekunst, KB3BAA mpgutekunst@comcast.net

- * October TBD Michaux Team Challenge
- POC: Dan Mcglothin, KB3MUN kb3mun@mcglothin.us
- * December 24 Glen Rock Carolers

POC: Stan Walters, AB3EM abacuspc@comcast.net

** On Saturday, August 8th, our York ARES team provided radio communications for the Red Lion Street Fair. Two major cross streets are blocked off for a community fair that provides games, activities, food and music, as well as vendors with a wide range of things for sale. The Red Lion EMC, stated that our support allowed "3 kids and 1 senior citizen to return home safely with their families."

Our radio teams connected quickly with EMS to get medical treatment for a bee sting (the 2nd time in a week for the young lady). We also aided in searching for 3 lost persons. Since young children are easily lost in the expected crowds, we had a protocol established to get radio operators quickly on the streets looking for lost persons, which worked very well.

Via radio we continued to provide updated information gathered from the parent or person looking for someone. We found that as questions continued to be asked, the details of the missing person changed, mostly with improved descriptions to help the search. In the search for the lost senior citizen, 2 of our operators went out to parking lots to check the vehicle in case that was where the gentlemen went. All together it was a successful event with good practice of our skills. We had 24 radio operators, 8 of whom worked most of the long day, and the other 16 worked a halfday.

Sandy Goodman N3ECF, York County ACSO/EC

paNBEMS Summer Exercise Wrap - Up By Jack Dellinger, KC3JD

The paNBEMS Summer Exercise was held Saturday August 29, 2015 and ran from 9am ET to Noon on 7.0725 USB, 1500 Hz waterfall center.

paNBEMS ops were available on 7.0725 USB on Wednesday Aug 26 and Thursday Aug 27 from noon to 5pm ET for any stations who wanted to do some FLDIGI/FLMSG/FLAMP testing.

Backup frequencies for the August 29th exercise were:

60m (channel 2) 5.3465 USB, with the alternative of 60m (channel 4) 5.3715 USB, both at the required 1500 Hz center waterfall frequency.

The goal of the exercise was to practice moving large volumes of Simulated traffic and data files (CSV Spreadsheets and ICS Forms).

Results from York County EOC:

KY3ARS in York Co. was only able to copy a few of the stations. We were limited to using a B&K folded dipole for an antenna on HF. We also had a tech/operator problem not long after initial contact. Our laptop at the EOC does not have a good battery and the power cord was accidently disconnected and the system had to be rebooted.

During this time we assume that modes were changed and we could not copy anything even though we were receiving a good signal. Lot of head scratching for about 20 minutes.

NCS finally went back to Olivia and we started coping again. We always had a good copy on KB3FXI and NY3J. We believe it would be a good thing for paNBEMS to create a list of what modes paNBEMS would like to be used for HF and also from VHF/UHF. It should also be noted that Olivia 8/500 and MSFK-32 sound very similar and this was the main crux of our problem.

Creating a standard would bring some clarity and give everyone an idea of what modes to practice with. We have never used the 5xpsk63r or the mfsk32 modes before!!!

Trustee's Report







Tim, W3TWB

Dick, WA3USG

Jeff, KB3RCT

Autumn is right around the corner. While the club site is looking good, we need a work party to get all of our firewood split and ready for the upcoming cold weather. We also need to get some small holes filled in. Over the course of the Summer, as we have been mowing, we have been picking out some of the rocks and larger sticks that have been in the way. It would be highly desirable to go over the property and clean up a lot of this. It would make the job of mowing a lot easier. We also need to move some of the earth that we excavated from the hole that the foundation for the 14 foot communications dish is in.

From Ralph Brandt, K3HQI, who worked at Net Control for the Marine Corps Marathon

For those who have not done an out of area event, one great one is the Marine Corps Marathon (MCM) the <u>last Sunday in October</u>. Sign-up for that is starting. There will be one opening at NCS which is a great spot because I will not be there for the first time in 5 years, I want to do the MTCE in Caledonia this year and they are on the same day every year. There will be a new NCS lead this year and I feel that my being that the last two years might create a problem for the new guy there. He shadowed last year to get acclimated and I am sure he will do fine.

http://www.marinemarathon.com/Register/Volunteer.htm

Above is the web site, click on volunteer registration and then on Ham Radio volunteers on the next screen.

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address for the 199 Maple Lane Newsletter, contact: Mechanicsburg, Pa.

A Request for Capable and Willing Amateur Radio Operators to assist with Communications Duties during the upcoming Papal Visit to Philadelphia.

The 2015 World Meeting of Families will be held in Philadelphia during the week of September 21st through the 27th. This event will have thousands if not millions of visitors coming to Philadelphia especially on the final weekend of September 26th and 27th. Pope Francis will be in Philadelphia for the Papal Visit on that weekend.

The Emergency Management Agencies of the counties surrounding Philadelphia have asked for Amateur Radio support on the 26th and 27th to assist with insuring the safety of all the visitors that will be traveling through their counties on the way to visit Philadelphia during this momentous occasion.

The task will require more operators than the ARRL Amateur Radio Emergency Services (ARES) Teams in those counties can field and for that reason the Eastern Pennsylvania Section is coming to all Amateur Radio Operators in Eastern Pennsylvania. The request is simple and if you can meet the following reqirements the ARES Teams could use your help.

The requirements are:

- Be able to walk and be on your feet for extended periods of time.
- Fairly good physical condition.
- Have your own equipment including an Handie-Talkie (HT), batteries for at least 12 hours, charger, etc. You will be moving so fixed stations are not a requirement.
- Valid Amateur Radio License.
- Be able to travel to the Philadelphia area on September 26th or 27th.
- Identification and other items.
- Be able to work a 12 hour shift either day or both.
- Radio operating experience including tactical operating on crowded frequencies and working with a net control station.

Pluses would include

- · Camping equipment
- · Food for 2 days
- An understanding of the Philadelphia and outlying counties

If you can meet these requirements and are interested in volunteering for what would be a once in a lifetime experience please send an email to the following email address listing your name, call, telephone number, availability, and capabilities.

sec@w3luz.org

The expected duty would be monitoring traffic, rail stations, and other facilities. The essential details will be provided to those that meet the requirements and are selected to participate.

Volunteering does not guarantee you a slot in this operation. We are collecting resources at this time. You will be contacted for a phone interview after your email is received to determine if you are one of those that can help during this great event.





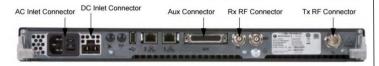
Next Generation Repeater (Gen2) **SLR5700**

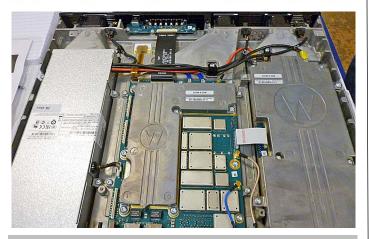
No longer two mobiles in a box!

- Improved specs and performance over Gen 1
 - > Space Saving 1U Footprint > Rugged, Advanced PA
- > Low Thermal Footprint and Improved Thermal Management
 - Continuous Duty
 - > 1-50 watts full adjustable VHF/UHF 1
 - > 3A Battery Charger Built In
 - > 40% lower power consumption on standby
- > Modular design with pre-tuned Field Replaceable Units (FRU's)
- > Chassis ID allows FRU units to automatically assume feature sets
 - > 10x more processing power than Gen 1
 - > 15x more memory than Gen 1 125x more data storage than Gen 1

PRE-ORDERS ARE BEING ACCEPTED NOW – SHIP DATE IS JUNE 1
Courtesy of: Ken Bryant, K1DMR | 706-896-0000 | www.twowaydigitalradio.com







The Motorola SLR-5700 mixed mode repeater will run both conventional FM analog and DMR digital modes. FM analog can be either 5 KHz ir 2.5 KHz deviation. In DMR digital you get two (2) talk groups and can run two completely separate QSO's on the repeater at the same time. Power levels are 1 50 watts with a 100% duty cycle. The repeater has field replaceable modules. Available in VHF or UHF. Cost would be \$2,000 to \$2,500.

144/430 MHz Dual Band C4FM/FM Digital Repeater DR-1



YAESU DR-1 is a digital/conventional FM dual mode repeater that covers the VHF and UHF amateur radio bands It was developed for use with System Fusion. Replacing your conventional analog FM repeater with the DR-1 will provide continued use of conventional FM communication while integrating the use of digital communication functions through its unique AMS capability.

144/430 MHz DUAL BAND C4FM/FM DIGITAL REPEATER





- Modulation Mode: 25 kHz FM, 12.5 kHz C4FM Digital (V/D Mode, VFR Mode, DFR Mode)
- Output Power: 50 W/25 W/10 W
- Equipped with large-size heat-sink and cooling fan to ensure a stable transmission output.
- Emergency Operation: Supports operation on an emergency battery
- · AMS (Automatic Mode Select) function automatically recognizes whether the signal is a C4FM digital or conventional FM signal, and transmits using the set communication method.
- . Built-in large-size monitor speaker with volume control for checking the reception state during setup. The speaker can also be used to constantly monitor the reception state.
- A microphone terminal is provided on the front panel for use in repeater transmitter tests and to enable use as a

User Friendly Set-up

output and AMS function. The display can be switched off after configuring the settings to prevent accidental operation. Simply turn the display switch ON and use the touch panel screen to confirm or change settings.

The transmit and receive frequencies, CTCSS frequency and other functions are configured by the touch panel screen.

CTCSS can be set for Tu/Rx (Same frequency) or Rx only.

Easy Migration

The repeater controller, receiver and transmitter are all packaged into a 19" standard mount cabinet for simple replacement of the existing repeater peripheral devices such as the duplexer and amplifier, etc., can continue to be used as-is



At the May meeting, the acquisition of a Yaesu DR-1X VHF repeater was discussed. At the time Yaesu was offering a special club price of \$500 if the application for ownership was submitted by a closing date which at the time was the end of April. I did some checking on the Yaesu website and found that this date was in fact the last day of April (we were too late). I sent an e-mail to Chris Wilson, the Yaesu National Sales Manager asking him if the offer was going to be extended but did not hear back to him for nearly a month. By that time, the offer was extended to the end of June. In the interim, the Civil Air Patrol (CAP) donated a TMK-750 VHF repeater to us. Tim Barefoot, W3TWB had this repeater retuned to our frequency of 146.97 by Triangle communication and this has turned out to be an excellent repeater.

About a month ago, we had problems with the PA stage in our MSF-5000 that put it off the air. I made a drive to the club and within 5 minutes we were switched over to the Kenwood. Even though the Kenwood only runs 20 watts, most people had no problems accessing it. Within a week, Kevin KA0JQO had the PA repaired and we were back in service. Since then, another Kenwood TMK-750 was donated to us by the CAP. This repeater even came with a 100 watt PA!

The bottom line is that right now, we probably do not need to purchase another repeater. The MSF-5000 is probably going to last us several years yet but it will eventually need to be replaced. It is over 20 years old. The Yaesu DR-1X is still a contender for selection ... also take a look at Motorola's candidate. The Southern Pennsylvania Communications Group (SPCG) in Shrewsbury procured one of the Yaesu units and has it in service on 146.700. So far it seems to be working well. I have also been in contact with a club in Maryland who has had problems with theirs. Right now we have a good repeater and two back up's that we can get on line within minutes. We have time to make a decision.

Three Creek Century Bike Tour

The last major event of the year
**** Help Needed ****

The Harrisburg Bicycle Club is pleased to present our 2015 annual "century" bicycle ride, the Three Creek Century on Sunday, September 20, 2015.

The Juvenile Diabetes Research Foundation (JDRF) is using the Three Creek Century as their fundraising ride. The JDRF welcomes all cyclists who want to support their mission to cure type 1 diabetes.

This is not a race but rather a leisurely ride through the scenic Cumberland Valley of central Pennsylvania. Ride on lightly traveled roads along and over the Conodoguinet, Yellow Breeches and Big Spring creeks which feed the Susquehanna River. Cue sheets, sag wagons and rest stops are provided for all routes as well as markings on the road to guide the riders on the routes. This event is well known for its homemade cookies, soup and other great food.

Most of the routes offer gentle terrain, although one of the 25 mile routes contains some challenging hills. Routes of 100, 75,50, and 25-mile lengths are available.

The 2015 Three Creek Century will be held at the Penn Township Fire Department complex at 1730 Pine Road in Newville. This new location offers better restrooms, parking and picnic facilities, and great access to the quiet rural roads that wind through beautiful western Cumberland County.

NEW! Cumberland Valley Rail Trail Route: A ride along the beautiful Cumberland Valley Rail Trail is being offered as an option for riders looking for a quiet no-traffic ride. The trail is a crushed limestone surface suitable for most types of bikes. Ride from Newville to Shippensburg Township Park and back for a total of 18 miles. Start at the Newville trailhead at 23 McFarland Street.

At this time we have the following locations where we need to provide communicators:

SAG Vehicle #1 - Ralph Brandt, K3HQI

SAG Vehicle #2 - Sandy Goodman, N3ECF

SAG Vehicle #3 - Dick Goodman, WA3USG

NCS at Penn Twp Firehall - Steve Cline, KC3CPL

- Dan Shortencarrier, N3EEI

Trine Park in Mt. Holly - Donna Lee Hoover, N3VPJ & TBD Opossum Lake near Carlisle - TBD

TBD

CV Trailhead in the Newville area - TBD

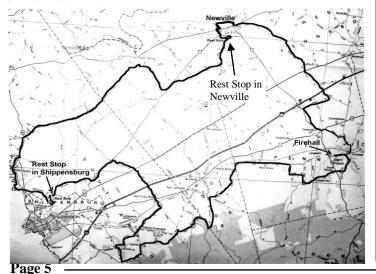
- TBD

CV Trailhead in Shippensburg Park - TBD

- TBD

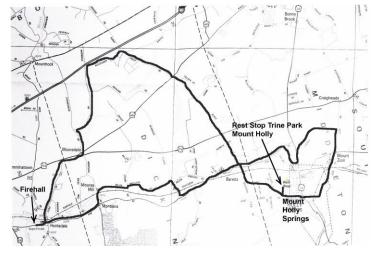
This year there will be three loops:

A 50 mile loop (marked with blue) starts at the Penn Twp Firehall then loops up through Newville, Shippensburg, Walnut Bottom, then back to the firehall. Rest Stops at CV Trailhead in Shippensburg and CV Trailhead in Newville.

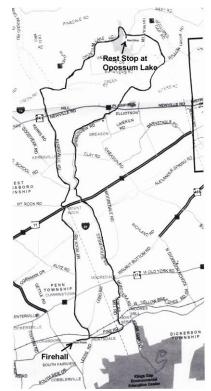


A 25 mile loop (marked in yellow) that will start at the firehall, loop down through Mount Holly Springs, then up north, and back to the firehall.

Rest Stop at Trine Park in Mount Holly Springs.



An additional 25 mile loop (marked in orange) that will run from the firehall to Opossum Lake and back. Rest Stop at Opossum Lake.



The cyclists may choose to ride all 3 loops for a total of 100 miles or they may ride any combination of them. If they are riding more than 1 loop, then they must ride the 50 mile loop first. They need to get that out of the way first. At the end of the day, it is better that they are finishing a 25 mile loop rather than the 50 miler.

The 50 mile loop has two Rest Stops. Each 25 mile loop only has one. If possible, I would like to put at least 2 communicators at each Rest stop.

At the time of this writing, I still need communicators at three of the four Rest Stops. I have no doubt that we will get the sites manned but we may not have two folks at each.

So far there are over 300 cyclists registered to ride. There will also be a lot of riders who show up on the day of the event. Normal turnout for this ride is 400 to 600 riders. We get this many because the cost to ride in this event is low ... I believe that it is \$20.00. The bottom line is that this may be our biggest cycling event of the year. **HELP!**

In the past, this event started and ended at LeTorte Park in Carlisle. There was parking for about 600 and things got congested. The ride also had to pass through Carlisle which is fairly "bike unfriendly". This year, the Start/End location is at the Penn Township Volunteer Firehall. It is located in a rural area and has parking for **thousands**. The ride will not pass through Carlisle or any other large town. Facilities at the firehall are also an order of magnitude larger then LeTorte Park. There is seating at picnic tables under the pavilion for several hundred people.

Steve Cline, KC3CPL has offered the use of his RV for Net Control at the Firehall. The event folks are also really glad to have us there. This will be our third year helping at this ride.

We will be using the South Mountain Radio Amateurs (SMRA) repeater located near Mount Holly Springs for this event. This is on a frequency of 145.43 MHz with a tone of 67 Hz. We are also hoping to have a back up repeater.



Alianza DxB Thanks to Stan Yates, W3FRA for sending this to me!

"We are proud to introduce the Alianza DxB which is the latest device created by the Northern New Jersey, family owned technology company, BriCom Solutions.

The Alianza DxB is a portable rugged two-way radio docking case with an additional battery that turns your smartphone into a fully functional multiband two-way radio. The DxB is able to communicate and work with all major two-way radio venders.

The patented Alianza DxB is a simple solution to today's communication needs by combining smartphone data with RF on a single device. This allows you to merge a smartphone and two-way radio into one device with the added benefit of a protective rugged case for your smartphone and eliminating the need for you to carry multiple devices. The multi-band feature enables the two-way radio to communicate across all frequency bands(VHF, UHF, 800Mhz) for seamless interoperability. It also uses your existing smartphones data to extend the communication distance from 25 miles to anywhere in the world using the Radio-Over-IP repeater/gateway feature while supporting all LTE networks. The case provides a waterproof, shock proof, and crush proof casing for your smartphone which will be available for iPhone, iPod Touch, Android, and Blackberry.

The Alianza DxB is a great solution for both individuals and industries looking to carry just one device without sacrificing your two-way communication and data needs. The possibilities are endless to how this divide can be put to use:

Ham operators can enjoy the hobby from one device.

EMS personnel can dock their iPhone with the DXB and be able to capture patient information on a ePCR while communicating with other rescue personnel all from the same device.

A police officer can communicate with headquarters while running a DMV check on a secured VPN connection from his Android Nexus 4 docked with the Alianza DXB.

A field worker can check in with his dispatcher while scaning his deliveries.

How does it work?

The Alianza DXB uses basic RF and encryption concepts to make up its multi-band functions. What makes the DXB different is how we have integrated RF bands with cellular voice and data to create a unified communication device. At the heart of the DXB is its patented components and software, which merges the DXB's analog RF bands with your smartphones voice and data.

Docking your smartphone to the Alianza DXB and installing the programming app on your smartphone allows you to control the RF Bands. Using the simple User Interface, users can input their operating band, frequency, and scanning options. Once your frequencies are inputted you



are ready to start communicating. All voice communications is carried via the RF bands like a traditional walkie-talkie. The DXB software sits silently and doesn't interrupt your day-to-day smartphone operation. Open it only when you need to make changes or change operating modes. This feature is what makes the DXB unique. For example a hiker can communicate with fellow hikers via walkie-talkie while snapping pictures all from the same device. A security guard can communicate to Headquarters via walkie-talkie while using his phone to capture incident information.

The DXB has its own built-in speaker and mic separate from the docked smartphones. This allows for the best voice quality. DXB also has a removable rechargeable battery used to power your Alianza DXB and provides additional recharge power to your smartphone. The DXB also runs in IP mode, which turns your smartphone into an IP "Push-to-Talk" a.k.a RoIP device. Using your phones data service, you can communicate to other smartphones, straight from the DXB. This is where DXB takes this feature a step further towards a complete interoperable device. The DXB has an internal RoIP gateway, which can listen on both RF bands and your smartphone voice/data. Converting the IP packets to RF transmissions. Allowing your communications via your cellular 3G/4G IP voice to be retransmitted through the RF band. Enabling users on their walkie-talkie to be able to communicate to a user on their smartphone and vice versa. All controlled and routed by Alianza DXB and its components.

Features

Multi-Band

Operating on the following Frequencies:

VHF UHF

700MHz

800MHz

Operating in modes:

Conventional Analog & Digital (Narrowband)

Trunking

P25 (Public safety, Gov't, Utility Models)

IP Push-To-Talk for when you are out of your LMR network coverage LTE

Encryption

Available in:

Public Safety Version

Amateur Radio Version

Commercial Version

Rugged Casing

Its unique docking sleeve design not only converts your smartphone into a two-way radio but also adds protection and an extra battery source.

The rugged "bumper" type case gives your phone added protection against dirt, dust, and water. It also provides a slip resistant case material.

The DxB is also equipped with its own detachable battery. Giving your smartphone the extra power it needs.

Watch the video! https://youtu.be/iJTy9yA0d_U



Keystone VHF Club General Meeting Minutes of June 4, 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 38 members present and 3 new applicants.

Mike mentioned the passing of Carey Green, K3IIB. Carey and his wife Barb, N3RMI, were previously active members in the Keystone Club and the Red Lion Hilltoppers.

TECHNICAL HAPPENINGS: Dick, WA3USG, is up to 153 QSOs on 17 meters. Craig, WA1HEW, got a rigblaster at the Hamfest, so he will be on digital soon.

MONTHLY TEST QUESTIONS: Mike initiated a new activity for our meetings. He will be asking questions from the amateur license tests. This month's questions were:

- 1. What must you do if you are operating on the 23 cm band and learn that you are interfering with a radio location station outside the United States?
- 2. Why should you not set your transmit frequency to be exactly at the edge of an amateur band or sub-band?

SECRETARY REPORT: Sandy, N3ECF. Rich, KR3EE, found 2 errors in the report sent by email. Those were corrected prior to the publication in the newsletter. Jack, K8UYC, moved to accept the July minutes as published in the newsletter, 2nd by Don, N3OSO. Motion carried.

TREASURER REPORT:

Dan, KB3JSV, reported for July: Income: \$630.03; Expenses: \$464.08; Balances: Club CD \$7,639.47; Checking Acct \$1,843.56; Trustee Acct \$442.53; Total \$9,925.56.

Al, WB3GRN, moved to accept the report; 2nd by Ed, KB3WQI. Motion carried

Dan reminded everyone that the dues have been increased to \$25 per year. Family membership will remain at \$5. Dan or Linda will start collecting dues for 2016 at the upcoming meetings.

COMMITTEE REPORTS:

TRUSTEE REPORT – Lawn mowing continues. The parking lot will be sprayed again.

TECHNICAL COMMITTEE REPORT - Per Tim, W3TWB, the 440 repeater is down, due to problems with a transistor and exciter. Steve, K3WHC, reported on the dish project. The mast needs to be put in. Lots of pieces need to be put together. Thye need a brake mechanism. See the newsletter for details.

EMCOMM/PUBLIC SERVICE NEWS – Sandy, N3ECF, reported on several public service events coming up: August 8 is the Red Lion Street Fair; August 22-23 will be the MS Bike Tour; September 12 will be split between the KTA Hike and the King's Gap Bike Time Trials; September 20 is the Three Creek Century. Watch emails for volunteer requests. We also have an EMCOMM drill coming up. The ARWG Fall Exercise is scheduled for September 19. We will have operators at York County EOC, with some acting as other agencies.

VE/ED REPORT - The September VE testing will occur on September 19^{th} vice the usual 2^{nd} Saturday due to the KTA Hike. Nate, WN3I, reported that they have plans to run a Technician License Class starting September 15, to run through the second week of December. So far no has registered. If you know of anyone interested, have them call Nate at 717-253-0273.

CONTEST REPORT - VHF Contest is September 12-14. Contact Mike Stackpoole is interested in participating in contests. Craig invited anyone to join Red Lion for the August 15 North America QSO Party. It looks like Red Lion got $2^{\rm nd}$ in the US for the IARU multi-signal.

NEWSLETTER/WEBSITE – Dick, WA3USG, said the website is fairly up to date. It may be an antiquated format, but it still works and he can keep it up. The newsletter will now return to monthly publication.

OLD BUSINESS:

We had second readings for Harold Johnson, no call yet, Charlie Kuhn, KC3DRS, and Ron Martin, KB3PHR. All were approved for membership.

The Corn Roast will be held August 15. We'll start eating at 1 PM. We need help to set-up and clean-up. Prep work starts at 8 AM. The club supplies the drinks, corn, and paper products. Sandy is taking orders and payments for the barbeque chicken (\$5 per half-chicken). Bring a covered dish to share. The grill will be available if you wish to bring hamburgers or hot dogs to cook for yourself.

The Holiday Party planners are looking at other fire companies with halls, or the Viking Club.

Reminder that the JOTA for October will be October 16 & 17, starting Friday night. We need to make plans for that.

NEW BUSINESS:

First readings were done for Phil Smith, KC3FGE (interested in tower climbing), Laurie Short, KC3DVF, and Scott Short, KC3FAN.

Steve, K3WHC, talked about beacons. There is a local group of HAMs who are weak signal operators (Steve, Phil Theis, K3TUF, John Jaminet, W3HMS). They are requesting permission to install a 3 band beacon on our tower using the W3HZU call. The beacon is used to check radios for a weak-signal. Tim advised that we have an antenna coming down, and this beacon antenna would be light and could go up instead. The only cost to the club would be about 12v, 500 microwatts, to power the beacon. Steve made the motion to approve the request. Charlie, KC3DRS, seconded the motion. Motion was approved.

A fall work party needs to be planned for splitting wood, clean-up, clean leaves. Thursday, September 24 is planned for splitting wood and some clean-up.

Tim, W3TWB, mentioned a service with DX maps that shows when bands are open. The service is looking for donations to support what they provide. Tim moved to donate \$20, second from Steve, K3WHC. Motion was approved.

GOOD OF THE CLUB -

Chip, W3FJD, is building a whisper net unit for 40/20/30/17/12 meters, running on 3/8 watt.

Jack, KC3JD, attended a Task Force Communication & Technical Committee meeting where they discussed the upcoming Papal visit. They expect 2 million visitors. Philadelphia is being sectioned in to 2 zones, with no vehicle traffic allowed. Ben Franklin bridge will be closed to foot traffic only. Stan Walters, AB3EM, has volunteered to work for the SNJ ARES team at the hospital complex in Camden, NJ. Jack recommends avoiding Philadelphia that last weekend in September.

Lancaster just put up a new 911 system. It's being interfered with from a radio station that just increased their power.

50-50 - Donna Lee, N3VPJ, won \$31

Adourned at 20:05



How's this for a sizable beam? This is the Hilltoppers new 40 Meter beam at their clubsite in Red Lion. It is a monster! It sits atop a 70 foot crank up tower. In the background is the club house with a smaller 50 foot tower with a triband beam and a 6 meter Yagi. This was taken last Tuesday at a normal monthly meeting of the Hilltoppers Transmitting Association.

KEYSTONE WHF CLUB OF YORK, PA







Membership Application

Name:		Phone:	<u> </u>	
Address:		Callsign:	Expires:	
City:	State:	Zip:	Lic Class:	
Occupation:		E-Mail:		
Full — Fu	Members Club Privileges annually & one time		Are you a	
	9.	7.5	ARRL	Y-N
Pri	onsoring members call: _ vileges same as Full men .00 annually & a one time	nbership	ARES	Y-N
			RACES	Y-N
Associate → Re \$20	peater Support 0.00 annually & a one tin	ne \$5.00 Applica	tion fee OCWA	Y-N
Spe	ecial Areas of I	Interest (ci	rcle all that apply)	
DX FM HF Q	ding ATV Contesting RP Satellites SSB S VHF Astronomy Ph	SSTV SWL T	Tower climbing LF	DSP
Appl	ication & Due	s Mailing	Address:	
Make checks p	payable to: Keystone VH	F Club Inc. Ma	ail to: PO Box 20143	
Date voted IN-OUT	FOR CLUB USE ONLY Second Rea Date Dues (ding Date:		2-0140