

Q-FIVER

The Official Newsletter of the OH-KY-IN Amateur Radio Society



FOXHUNT

The September foxhunt had 4 teams once again, and there was a new person who wanted to see what we were doing and ended up riding along.

We got set up and were ready to go before 10AM, so when Phil called out and took checkins, we were ready to go. Strong first signal, and the bearing was 130 degrees. We headed down to Central Parkway and onto 75 south, and then to Fort Washington Way. I wanted to get near the I471 bridge to try and determine if he was in Ohio or Kentucky, which is usually hard with that bearing.

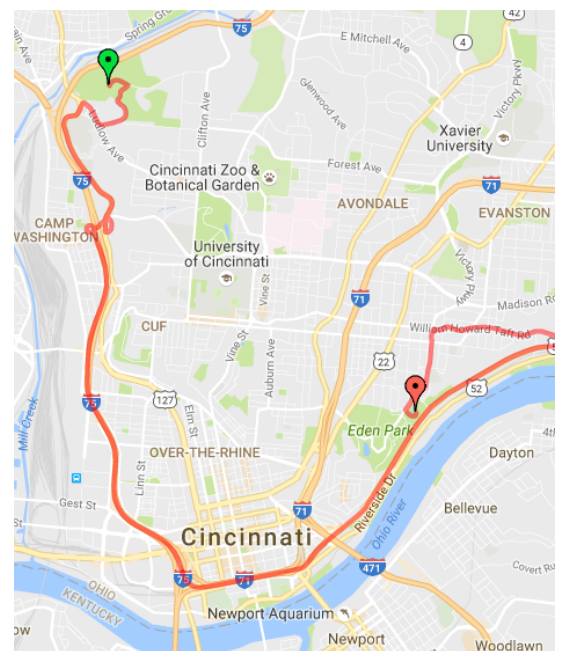
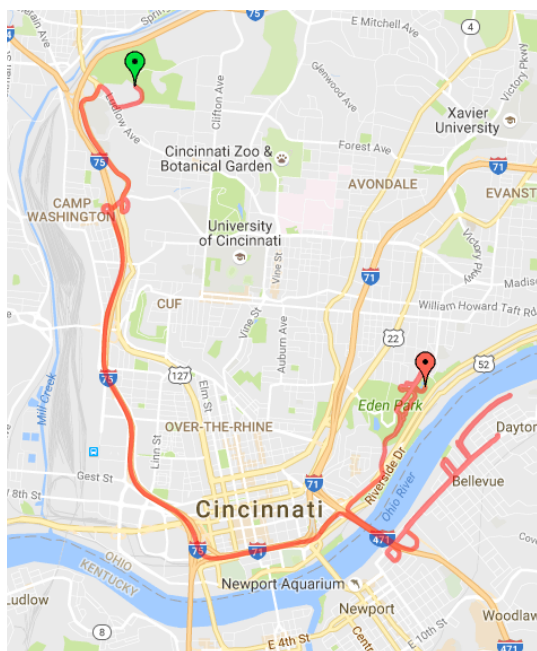
Well he transmitted again and I had a feeling he was in Ohio, so we headed out Columbia Parkway. Not too far out from there, We got an ambiguous reading, and next a reading behind us—so we knew we passed him. That is always valuable information. We angled back up Taft, and wound our way back to Eden Park Drive, and went past the Overlook. We saw a red truck parked there, but it wasn't the kind that Phil drives, but we decided to drive through there anyways. Holy cow—there is Phil setting right by the overlook with his antenna kind of tilted. We were first (again) by quite a bit. Other hunters had various difficulties but they all ended up finding him.

WA6EZV

K4BRI

October hunt will be the third Saturday, not the second. Come out and give it a try!

73—Brian, K4BRI



2016 Board of Directors

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OH-KY-IN Repeaters

146.670 (-) Clifton

146.625 (-) Edgewood, KY

146.925 (-) Colerain Twp

443.7625 (+5) Clifton

A CTCSS (PL) tone of 123.0 Hz is required for access to all OH-KY-IN repeaters. All repeaters also transmit a CTCSS (PL) tone of 123.0 Hz

APRS on 144.390 mHz

K8SCH-10 Edgewood WIDEn

K8SCH-9 Clifton WIDEn

Packet on 145.010 mHz

K8SCH-7 Digipeater

For membership information, please contact Nathan Ciufo KA3MTT, 6323 Cinnamon Ridge Dr, Burlington KY 41005, (859) 586-2435 or Email membership@ohkyin.org. Renewals of Club Memberships are due by the end of March. Permission is hereby granted to any amateur radio group to quote or reprint from this publication, if proper source credit is given, unless permission is otherwise reserved.

THE Q-FIVER is now mailed & e-mailed, it's hoped, a week before the club meeting.

Normally copy deadline is the weekend before that. Please send your submissions for THE Q-FIVER (including notice of upgrades & callsign changes) to Brian K4BRI

These may be: snail-mailed to or dropped off at 6901 Backus Drive, Alexandria KY 41001 or telephoned to (859) 635-3095 any time



Oh-Ky-In Life Members

John Phelps N8JTP

Kenneth E Wolf N8WYC

John W Hughes AI4DA

Karl W Kaucher KJ4KWR

Howard Hunt NG8P

2016 Committee Chairs and Appointments

Newcomers/Elmers Net..... Robert Gulley AK3Q
Technical Committee Brian DeYoung, K4BRI
ARPSC Representative..... Jerry Shipp W1SCR
Volunteer Examiners Brian DeYoung K4BRI
QCEN Representative..... Pat Maley KD8PAT
Membership Nathan Ciufu KA3MTT
Fundraising Bruce Vanselow N8BV
Education Michael Niehaus KD8ZLB
Repeater Control Ops Mgr Bruce Vanselow N8BV
PIO Ted Morris NC8V
Librarian Howard Alban KD8WOY

Q-Fiver Editor Brian DeYoung, K4BRI
Field Day..... Eric Neiheisel N8YC
Historian Dale Vanselow KC8HQS
Special Publications Jo Haltermon KD4PYS
Fox Hunters Dick Arnett WB4SUV
Equipment Mgr Fred Schneider K9OHE
WebMaster Ryan Williamson W1RYN
Silent Key Bruce Vanselow N8BV
Tech Talk Net Mgr Bruce Vanselow N8BV
K8SCH QSL Mgr Gerry Weimer KD8ASL
TV/RFI Dick Arnett WB4SUV

The mobile foxhunt in October has been moved to the third Saturday, instead of the second Saturday. Come on out on Oct 15th to Mt. Storm park and check it out!

October Calendar

Sun Oct 2	7:00 PM	Newcomers/Elmers Net, 146.67, Topic: Do I Need a New HT? —NCS Robert AK3Q
Tue Oct 4	7:30 PM	Club Meeting in St Bernard - Chirp radio programming
Wed Oct 5	9:00 PM	Tech Talk, NCS Robert AK3Q
Sat Oct 8	1:00 PM	Brunch Bunch at Price Hill Chili, 4920 Glenway Avenue
Sun Oct 9	7:00 PM	Newcomers/Elmers Net, 146.67, Topic: Mobile Radios: What Should I look For? —NCS Robert AK3Q
Mon Oct 10	7:00 PM	Technician and General Classes—Red Cross Building
Wed Oct 12	9:00 PM	Tech Talk, NCS Brian K4BRI
Sat Oct 15	10:00 AM	Mobile Foxhunt, starting at Mt. Storm park in Clifton—talk in on 146.670
Sun Oct 16	7:00 PM	Newcomers/Elmers Net, 146.67, Topic: VHF to Microwaves —NCS Robert AK3Q
Mon Oct 17	7:00 PM	Technician and General Classes—Red Cross Building
Wed Oct 19	9:00 PM	Tech Talk, NCS Dale, KC8HQS
Sun Oct 23	7:00 PM	Newcomers/Elmers Net, 146.67, Topic: Batteries, Batteries, All About Batteries —NCS Robert AK3Q
Mon Oct 24	7:00 PM	Technician and General Classes—Red Cross Building
Tue Oct 25	7:00 PM	Board of Directors meeting
Wed Oct 26	9:00 PM	Tech Talk Net, NCS George N3VQW
Sun Oct 30	7:00 PM	Newcomers/Elmers Net, 146.67, Topic: All About Power Supplies —NCS Robert AK3Q

Meeting Minutes

OH-KY-IN AMATEUR RADIO SOCIETY MINUTES OF JULY 5, 2016 REGULAR MEETING

The July meeting is traditionally our pitch-in cookout/picnic, and this year it was again held in Ross Park, St. Bernard. John Phelps N8JTP again served as chef and there were plenty of salads, desserts, and finger-foods to go around.

Before the meeting, the Hamfest Committee prepared envelopes for every member, with a letter calling on each member to buy at least one ticket, and a ticket included for them to have in hand. The bottom of the letter was a tear-off order form that members could use to make payment for the enclosed ticket and order more tickets at the same Advance Admission price of \$5.00. A return envelope pre-addressed to Ticket Coordinator Lynn Ernst WD8JAW was also included. Letters were distributed to all members present at the picnic, and will be brought to the August meeting to distribute to members there who did not receive theirs in July. Remaining envelopes will be mailed to the rest of the members.

Respectfully Submitted,

Ted Morris NC8V, Secretary
September 27, 2016

OH-KY-IN AMATEUR RADIO SOCIETY MINUTES OF AUGUST 2, 2016 REGULAR MEETING

The meeting was called to order at 7:36 by President Michael Sein KD8SOH, commencing with the Pledge of Allegiance. Fifty-one folks attended including 5 guests.

Brag Session: Brent Shields KK4HMR upgraded to General. Greg Vicars KA8MQD went to Dayton's Mini-Maker Faire in July. Mark Mohr KC8SGO thanked folks for helping with his antenna tower project. Kitty Hevener W8TDA is redesigning her web page. Justin Moore KE8COY took a notable airplane excursion in Seattle. Bob Frey WA6EZV has been designated an official ARRL QSL Field Checker.

Health & Welfare: Michael KD8SOH will be doing CPAP therapy testing for his sleep apnea. Dale Vanselow KC8HQS is getting married.

Library: Librarian Howard Alban KD8WOY thanked the group for suggested additions to the library, and noted he will be adding some new ARRL-sponsored publications.

Program

Michael KD8SOH then turned the meeting over to Bryan Hoffman KC8EGV, to lead our session on "Go-Boxes." He pointed out that each of us may have a different focus or approach to what we felt was key to the EMCOMM situations we prep for. Given his position as county Emergency Coordinator, he explained that his approach is a "command post" style of operation. This is less portable, or less "grab and go," than other approaches, though

Bryan has gathered materials into various groupings that can be selected for a given circumstance. For example, he has a "milk crate" of equipment documentation and paperwork (including FEMA training completion certificates), in binders. One of his main station assemblies uses a portable "Gatorbox ®," a hard-shell case with removable front and rear panels which expose the controls, connections, accessory pouches, etc., for the radio equipment installed on the interior shelves. In this unit he has included a digital radio with APRS capability, a small TNC and mobile VHF radio combination, and "RigRunner ®" PowerPole distribution module. He is working toward assembling a companion case for power supplies, etc.

He also showed other arrangements that folks use, and how he outfits them. For example, he uses plastic "ammo"-type boxes for gel cell batteries, inverters, and power connections. A third set-up he is planning will be for "workstation" use, including a laptop computer with Winbook, USB connections, and Bluetooth; VHF and UHF multiband HTs; keyboard and mouse; GPS, and HF receiver. Other groupings he showed included several bags, backpacks, and carry-ons for cables, personal supplies, etc.

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Kitty W8TDA explained that by contrast her Go-Box setup has a much smaller approach. She uses a soft case she can carry on one arm that is completely padded into sections for rig, PowerPoles, connection cables, HT, etc. She doesn't have space for antennas in this case, but has several mag-mount antennas she can use. She also has soft-sided cases with wheels for her personal needs and her service dog's needs. It can also hold her Braille computer and related equipment.

Mike Niehaus KD8ZLB noted that he does a lot of public service events, bike rides, etc., so his focus is on 2M/440 capabilities. His collection includes gel cell batteries, a 2M/220/440 mobile rig, a rollup J-pole, a water bottle with cord and wire so he can throw a line up into a tree; these are all in a hard-shell case. A plastic ammo-box contains a small mobile rig affixed to a small plastic cutting board, and a 12V battery. Mike says he usually operates on 6M, 2M, 220MHz, and 440MHz, so he also has a 6M Buddipole antenna available.

Andy Krew ND8D carries a switching power supply--with filtering in both leads to kill harmonics—and IC-7000 (160M-70cm), an AT-100 auto tuner, digital interface, mike, and power cables in his main Go-Box unit. He carries antennas separately depending on the particular situational needs.

Ryan Williamson W1RYN posed a question about concealed carry weapons and how their presence would impact, or be affected by, go-kit emergency communications planning. He also asked about setups to establish MESH networks. Bryan KC8EGV has experimented with Mesh networking but only to the point of demonstrating features. Regarding concealed carry, he suggested following local regulations but also checking with ECs/ARES coordinators for the event.

Paul Goslin K9PLG uses a Yaesu FT-1000, power supply, auto tuner, "Hear It ®" external speaker housed in a large Gaterbox. He also includes a Heil headset with footswitch for PTT, and an off-center fed dipole low power antenna. He used this setup successfully at the last Field Day.

Ed Frames K8EAF pointed folks to his station pictures and description on QRZ.com.

Another questions bounced around concerned MREs (meals ready-to-eat). The consensus was that while they are very high in sodium and fat, they do well for the job they're designed for.

After applauding all our exhibitors we broke for refreshments, etc., until 8:40.

Business Meeting

Minutes: Several errors in callsigns were identified in the June minutes by Bruce Vanselow N8BV and others; the minutes were approved pending appropriate revision.

Membership: Currently stands at 129.

Treasurer: Treasurer Brian DeYoung K4BRI distributed copies of the latest report; there were no unusual transactions to note.

Silent Keys: Bruce N8BV had no SKs to report.

Brunch Bunch: This month we will meet at 1:00 PM on August 13th, our usual date and time; the restaurant is Drew's On The River.

Technical Committee: Chair Brian K4BRI talked about plans to move our 146.625 machine to Withamsville. We have been having some trouble finding a suitable commercial climber and Brian may have to consider proceeding himself. Any antenna adjustments on the 146.670 site *must* have a commercial climber.

The 146.670 machine appears to have experienced lightning-induced damage, and Brian has moved the 440 machine to the .67 site and has it running as .67 for now.

The 146.925 machine is now fully in System Fusion Analog/Digital modes. The analog mode uses a traditional controller. One of the Yaesu System Fusion repeaters we bought was DOA and is being exchanged; the one at .67 which experienced lightning damage is going back to Yaesu for repairs.

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Hamfest: Chair Gary Coffey KB8MYC announced the next Hamfest meeting is 7:00 at 8/11 at Aiken High School. He encouraged us to tell all our friends to buy lots of tickets for the Hamfest on 9/17 at Aiken.

Education: Chair Michael Niehaus KD8ZLB announced our One-Day Tech Class, to be held at the EMA Regional Operations Center on Saturday, September 10th, starting at 8:00 AM. Students should read the entire study guide beforehand, so time can be spent on review of problem topics.

This Fall we will offer the Tech Class and General Class license sessions beginning Monday, October 10th at 7:00 PM. The Tech and general sessions will both run for 5 weeks, skipping Halloween. Testing will be November 19th in the lower level of the St. Bernard City Hall, next door to our meeting space. There will be no Extra Class license sessions this Fall; the regular instructors have unavoidable conflicts. Anyone interested in helping teach any of our licensing classes should contact Mike KD8ZLB.

Fox Hunting: Brian K4BRI reported on July's fox hunt, where several new folks came to check out how it's done. They came from Dayton and Warren County. The next hunt is August 13th, the second Saturday of the month, in Mt. Storm Park. Talk-in is 146.670- (123.0). Hunters will take off promptly at 10:00 AM. If you'd like to visit or ride along, setup begins at 9:30 AM. It would help if you called Brian ahead of time to let him know you're planning to attend.

Tech Talk: Bruce Vanselow N8BV listed Robert Gulley AK3Q as NCS for the August 3rd session, and Kitty W8TDA as NCS on the 17th.

Newcomers and Elmers Net: Robert AK3Q reported the net having 30-35 check-ins for each Sunday night, 7:00 PM, sessions on 146.670.

Website: Webmaster Ryan Williamson W1RYN said the website is still a work in progress, but we do need to move off our old host system. The new "Public" mailing list works well. He's in the process of moving the Photo Gallery over from the old host. Ryan stressed the need for us to send him content.

George Gardei N3VQW, assisting with web management, can be reached directly at webmaster2@ohkyin.org; using webteam@ohkyin.org automatically routes your email to both he and Ryan.

Digital Interest Group: Convener Jerry Shipp W1SCR reported they are working on DMR. The group meets every 4th Tuesday at 7:00 PM in the lower level of St. Barnard's City Hall.

QCEN: Pat Maley KD8PAT shared that QCEN's 75th Anniversary was July 1st. Among the celebrations were a special event callsign and nets. Bob Garfield W8MRG, President of QCEN, is among our guests tonight.

Steve Lewis N8TFD needs two NCS operators for the MS Bike Ride, August 6-7, at Miami University in Oxford.

ARES/HCPH Amateur Radio Group: Hamilton County EC Bryan Hoffman KC3EGV said that last month, between the NAACP Annual Convention in Cincinnati and the GOP National Convention, ARES was very busy. ARES held statewide nets, with links to the Ohio Emergency Operations Center. Also, since there have recently been several nationally reported violence incidents, alerts were raised for ARES.

There will be POD exercises this month, via radio only and by county region. This Saturday, August 13th, there will be a POD practice exercise, where we have a good opportunity to see an actual POD in operation. We can also serve as "walk-through" patients for the exercise. Contact Pat Maley KD8PAT to RSVP and learn the POD location.

On Tuesday, August 16th, there will be an All-ARES, All-Health Department group meeting at the Regional Operations Center. All folks interested in emergency communications may attend.

Old Business

Red, White and Blue Ash: Bruce N8BV recapped the event. The rain quit by 5:30 PM, leaving plenty of time for folks to visit our concession beer booth. We received \$884.41 from the concessionaire, and \$322 in tips, for a total donation to the club of \$1,206.41.

Harvest Home Fair: Bruce reported that this event, held in Cheviot the weekend of September 9-11, needs our help at the admission gate. Bruce and Michael KD8SOH will meet soon with the organizers to firm up plans for how we can help them.

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St. Bernard 4th of July celebration: Jerry W1SCR reported that several members of the City administration noted our volunteers' participation. Jerry reminded us that the City gives us time in our meeting room, and we donated toward the new motorized projection screen used in our meeting room, so we have an important rapport with them.

Kitty Hevener W8TDA pointed out that without our having a microphone setup for the room's PA system, the amount and volume of cross-conversations makes it difficult to follow the person who is supposed to be speaking. Michael KD8SOH is following up.

New Business

Michael KD8SOH noted elections are coming up in November, and we need to assemble a Nominating Committee. Also, we have a lot of events going on where we need members to volunteer:

On August 27th, we have two operating events on the same date, the Ohio QSO Party and the CFF Bike Ride. The latter event will be at Lunken Playfield as in the past, and 12 volunteers are needed. They should be on site by 7:00 AM. For the Ohio QSO party, we will operate from Ross Park. Chef John Phelps N8JTP will again do the grilling honors.

September 10th brings the Ohio State Parks On The Air (OSPOTA). We are considering *not* operating from a state park, but setting up in St. Bernard's Ross Park, giving contacts to other OSPOTA activations.

The Museum Center's 1940's themed event will be quite abridged this year, since the Center is being renovated. They are getting information out late than usual, and based on the change in thrust of the event this year and the timing, the Board has chosen to pass on participating this time. We definitely want to participate next year, when the event will be back in their renovated space.

Paddlefest is this Saturday, August 13th. Chris Thomas KD8YVF needs volunteers including an NCS to start at 6:00 AM. His phone number was given for those who might want to participate.

Repeater Etiquette: Michael then related that members have complained about problems with inappropriate operating practices on our repeaters. We have had talkovers, bad language, and strongly voiced opinions on politics and religion, and sexual content. The Board is looking at putting our Code of Conduct on the website as one measure to address this. If we hear violators (especially deliberate interference), we should call Brian K4BRI, Bruce N8BV, or any board member.

For **Preparedness Expo**, September 15-16, Ryan W1RYN announced we will again staff a space promoting amateur radio and the club. Last year's show drew 600+ attendees, and our efforts led to four new members. We will have an operating station set up if we can get the location we want and can run coax outside.

Ryan also reminded us that the September meeting will be on "Home Brewing," and we should bring examples of our own projects to share with the group.

Other New Business: Cincinnati's Mini Maker Faire will be Saturday and Sunday, October 8th and 9th, at the Hamilton County Fairgrounds. Space reservations are due by September 1st.

Bob Frey WA6EZV pointed out that every week, some county, state or other entity is having some kind of contest, a good way to gain practice.

Also, Bob was concerned that the ARRL website does not currently include OH-KY-IN among its Special Service Clubs. Michael KD8SOH said we have all the paperwork in and approved; ARRL must be behind in updating the website listing. This will be checked on.

Bob also put out a first call for help with the IARU Region 2, US National Amateur Radio Direction Finding (ARDF) Championships, which will be held in Greater Cincinnati in August, 2017. OH-KY-IN is co-hosting the event.

Split the Pot: With \$184 collected, Marty Newhall KE8CEI won \$92.

The meeting was adjourned at 9:41 PM.

Respectfully submitted,

Ted Morris NC8V, Secretary
September 2, 2016

MINUTES OF SEPTEMBER 6, 2016, REGULAR MEETING

President Michael Sein KD8SOH called the meeting to order at 7:30 PM, commencing with the Pledge of Allegiance followed by welcoming guests.

Brag Session: John Major KD8MMY upgraded to Extra Class, using the new question pool exam. Dale Vanselow KC8HQS was married August 8th; on their honeymoon he operated W1AW at the ARRL headquarters in Newington, CT.

Librarian: Howard Alban KD8WOY, noting he had to leave early--at the end of the break--urged folks to be sure to pick up items they want from the collection by then. Also, he has some giveaway items with the collection.

Program

Michael KD8SOH then turned the meeting over to Vice President Ryan Williamson W1RYN, to open the evening's program on "Home-Brewing." Ryan proposed a round-table presentation and discussion about the projects folks had brought.

Mark Mohr KC8SGO has added a mag-mount antenna on his mobility scooter for mobiling.

George Gardei N3VQW showed his Raspberry Pi 2 Home Security Camera system. He uses Logitech webcams, and now has three of them running. He showed us live video from his house. His system captures periodic JPGs from the cameras until it detects movement in the video feed; at that point it stores more frequent JPGs and finally converts the batch of JPGs to an AVI file format. George noted that the Raspberry Pi doesn't have much power at its USB ports, so he's powering the accessories separately.

George's system generates about 8 GB per day of video; he eventually deletes the single JPGs and keeps only the AVI files for archiving. His system currently runs under the RASPIAN distribution of Linux for Raspberry Pi, and he hopes to move to the Raspberry Pi 3 architecture in the future.

Brian DeYoung K4BRI spent about \$10 total to make small 2M Yagis using lengths of tape measure material and PVC pipes. This compact beam let one move through trees excellently while on a fox hunt, since the tape measure strips "give" as they strike branches. One can use 1" PVC thin wall or Schedule 40 pipe. He has plans for this his website. He also showed a Raspberry Pi Plate, an add-on circuit card. He uses a cell phone battery charger to power it.

John KD8MMY uses 19' pieces of steel measuring tape, and a ferrous base plate to mount radials for a 2M vertical antenna. The tape pieces are fastened to the corners of the base plate and can be bent at a 45-degree angle, if desired, to better match with 50-ohm coax transmission line. The base plate is affixed to a vertical tube serving as a mast; that in turn is attached to a wooden base with hardware used to attach pipes to flat surfaces. This project is derived from a June *QST* article. By sticking a mag-mount antenna onto the top of the base plate, he has an elevated mount 2M

Howard KD8WOY noted that he has two giveaway copies of that issue of *QST* available.

Dick Arnett WB4SUV has years of experience with Dayton Hamvention foxhunts. He has lots of foxhunting transmitters, and showed two examples, a 10mW unit and a 20mW version. He uses "dead-bug" construction and places the circuit boards in little wooden boxes he might have at hand or have scrounged from hamfest flea markets.

Bob Frey WA6EZV has partnered with Dick WB4SUV for a long time. He showed an "antique" piece of Yaesu equipment, which has a great tight front-end he could take advantage of. Bob hooked up an S-meter to it (one with a big scale and 100mA movement), and an attenuator. The wide swinging motion of the S-meter needle is easier to catch than the change in audio amplitude used in most direction-finding systems. The entire setup Bob showed represented only about a \$35 investment.

Bob also described a close-spacing 2M 4-element quad that he built for about \$10.00. Although he didn't bring it tonight, he related that it is very easy to fasten to one's car door for mobile fox-hunting. Finally, Bob noted that Brian DeYoung K4BRI has given him a Raspberry Pi based circuit that will make a Raspberry Pi show a polar plot of signals one is picking up. He's going to hook this to his Yaesu FT-857 mobile/portable HF rig.

Fred Schneider K9OHE showed a small physically but full-size quarter-wave vertical for 440MHz. The elements are mounted directly to a female chassis N-connector, which yields lower loss than an SO-239 connector. Fred also showed several kits he has been working on: a direct conversion 40M receiver kit, a 40M MFJ Cub kit, and a YouKit EK1A 40/20M QRP transceiver.

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Robert Gulley AK3Q talked about how he uses an LC meter to test capacitors, especially helpful when picking out junkbox parts for a project. He also brought an inexpensive “EASY DIGI” digital mode interface that does multiple digital modes and features a thru-hole mount circuit board; Robert intends to use it for JT65. He showed his TenTec 1253 Regenerative Receiver kit—an older technology but still useful. This circuit employs positive feedback, amplifying the received signal until *just* before oscillation. He noted one has to go slowly, testing in stages as they are built, but says his works well now that he’s got the hang of using the regeneration control.

Ryan Williamson W1RYN described an X-feed radio system incorporated into a home security system. The system originally used an Arduino, but now he is using a version that interfaces directly to his motion detectors. The circuit card it uses is about 1” square. He uses ZoneMinder, an open-source capture software system. He found that his video capture was so sensitive it gave false hits on the presence of smoke or steam in the air, so he set up separate motion detectors to serve as controls against false triggering.

Harry Davis WA8LOJ showed a 5V/12V power supply by repurposing an old computer power supply. After rewiring and addition of a few components, he gets up to 15V at 20A. The idea for this conversion came from an old QST article, where they dubbed the project the “St. Louis Switcher.”

Chip O’Byran KC8RPT showed his in-process “eggbeater” antenna designs for 2M, 220MHz and 440MHz. He is using heavier wire than in some plans he’s seen, to get better bandwidth coverage. It’s a bit big for fox hunting, but he’s thinking about how it could be used for that.

Ryan W1RYN then showed “C.H.I.P.,” a \$9 microcomputer being developed through Kickstarter funding. The latest version he has received has added Bluetooth. He uses this with a dongle to a Raspberry Pi and listens to Aircraft Band signals. He has also used one as a webserver.

While Ryan had the floor, he reminded us that next month’s program will discuss the CHIRP software program, which is used to up- and download a radio’s stored frequency memory data and to facilitate editing those data. Those interested should bring their own radios to be programmed as part of the presentation and follow-up.

President Michael Sein KD8SOH then called for a planned break until 8:35 PM, so folks could mingle with this evening’s exhibitors.

Business Meeting

Michael called the meeting back into session at 8:38 PM.

Minutes: No meeting minutes were submitted to the Q-Fiver for publication, so there was no discussion of minutes. Secretary Ted Morris NC8V is running behind on presenting minutes for publication.

Membership: Michael reported that as of Chair Nathan Ciufo KA3MTT’s September 6th report, we had 137 members.

Treasury: Treasurer Brian DeYoung K4BRI presented his August report. There were no questions.

Silent Keys: Bruce Vanselow N8BV had no reports to present. While he had the floor, he noted that he still has equipment to sell off—items from John Bennet WD8NMV’s station liquidation which he is managing. Remaining items will be sold at the Ham-fest.

Brunch Bunch: Bruce announced that our Brunch Bunch event, held as usual on the 2nd Saturday of the month, will be held September 10th at 1:00 PM at “McCoy’s Place,” 6008 Springdale Rd. Howard Hunt NG9P has a significant anniversary to celebrate, which will be revealed at the luncheon.

Technical: Committee chair Brian DeYoung K4BRI reported that the 440 repeater system is still off the air, since parts of that system have been moved to the 146.670 repeater to keep it operating. He does now have the 440 replacement unit from Yaesu at hand, and hopes to put it up in a week or so.

Plans are moving forward on getting a climber for the 146.625 site, but this is being mediated through K2. At the 146.925 site, “unknown persons” seem to have gotten into the site. Brian is not sure there was any disturbance, but secured the site. He later returned to tweak deviation levels and redid a lot of cables at ground level; signal levels may be up slightly.

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Hamfest: Chair Gary Coffey KB8MYC shared that we have about 30 indoor tables presold, with an additional 5 tables reserved for club promotions. We have received some donor prizes and giveaways and Ted NC8V is still working the vendor list to get additional donations. We need 5-6 volunteers to help organize and manage parking and Flea Market operations. The committee is planning to meet next on September 8th, as usual at 7:00 PM at Aiken High School. Volunteer helpers are needed for the room setup on Friday before vendors begin arriving at 5:00 PM. Saturday morning volunteers need to arrive around 6:30-7:00 AM Saturday. There will be a planning meeting at 7:00 PM this Thursday, September 8th, at the school.

The Licensing Exam session will be administered under the ARRL VEC, Gary confirmed in answer to a question.

Webmaster Ryan Williamson W1RYN reported we have 29K “likes” on our Facebook page, and Nathan KA3MTT is pushing it on Twitter.

Education: Chair Mike Niehaus KD8ZLB reminded us of the 1-day Technician Class license course that will be held this Saturday, September 10th, at the EMA Regional Operations Center (ROC). Folks wanting to take the course should read the entire study guide *before* the session.

For this Fall, we are looking for alternative sites to hold classes since there are some conflicts with other organizations for our usual space and time in the lower level of the St. Bernard City Hall. Mike confirmed that the General Class course will begin Monday, October 10th, and continue for four more Monday sessions but skipping October 31st, Halloween night. Testing will be Saturday, November 19th, as usual in that same City Hall location.

Fox Hunting: Brian K4BRI reported that the August hunt included four teams. They had great signals at the start, and all four teams found the fox within one minute of each other. Three teams took essentially the same route, while one took another route.

This month’s Fox Hunt will be as usual on the 2nd Saturday, which is September 10th. The hunt starts promptly at 10:00 AM, with setup at 9:30 AM, in Mt. Storm Park. There is always room for folks to ride along; if they contact Brian in advance, equipment loans can be arranged. Talk-in is on ‘.67, and Brian reminded us that showing up at 10:01 is *too late*.

Nets: Tech Talk: Bruce N8BV said that Robert Gulley AK3Q will be NCS for tomorrow night’s (September 7) session.

Michael KD8SOH noted that the Newcomers and Elmers Net, hosted by Robert, has been steadily receiving about 35 check-ins per session. This net meets every Sunday evening at 7:00 PM, on the ‘.67 repeater. Folks can check the club website for information from past net sessions.

Website: Webmaster Ryan W1RYN reported that our “Public” list is now hosted separately, to save on charges and congestion. The website is fully on its new server. He is starting to build individual-directed content pages we can populate ourselves. Ryan noted that George Gardei N3VQW is working out well as co-webmaster. Ryan acknowledges they are behind on mounting content. Interested persons with WordPress experiences are encouraged to help out.

Digital Interest Group: Convener Jerry Shipp W1SCR said that at the last session, they “beat up on DMR,” finding that there seem to be almost as many code plugs as there are hams working DRM modes. They have managed to massage some code plugs into working.

QCEN: Pat Maley, KD8PAT, announced that their next meeting will be Friday, September 16th, at 8:30 PM at the Red Cross headquarters. The radio room opens around 5:30-6:00 PM for folks to visit, make some on-air contacts, etc.

ARES/HCPH ARG: Hamilton County Emergency Coordinator Bryan Hoffman KC8EGV recounted how ARES was put on standby to help at Riverfest, and the ROC was activated. He had some success talking to counterparts on the Kentucky side of the river on DMR. We may need to be ready on standby if needed to help at Octoberfest, September 17th; this is also our Hamfest date.

There will be an All ARES/HCPH ARG meeting at the Health Department on Taft Rd. on Tuesday, September 20th, at 7:00 PM.

Old Business

President Michael Sein KD8SOH reported on several items of old business.

Microphone/PA: Michael says that he’s still trying to work on the problem with using the wireless microphone and the room’s PA system, but since he’s been ill recently he hasn’t had much time to devote to it.

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CFF Bike Race: The Cystic Fibrosis Foundation Cycle for Life event August 27th went well, and he asked volunteers to please send him an after-action report, to help smooth next years' planning.

Ohio QSO Party: This turned into a weather event more than an operating event; there was a poor turnout of operators, but a great lunch.

Harvest Home Fair: We still need Saturday and Sunday volunteers to staff the admission booths. Michael will put out another detailed email soon.

Ohio State Parks On The Air (OSPOTA): We probably can't pull this together this year because of conflicting events we're working with.

Winter Field Day: Michael is working on getting information on this year's event. W1RYN hasn't yet received any statistics from 2016's event to post on the website.

New Business

Nominating Committee: Three committee members are needed by October 1st, to present a slate of nominees for officers and one director at the October meeting. There are four offices (1 year terms) and one director slot (3 year terms) due for consideration. Officer's duties are listed in the club Constitution By-Laws. Directors serve in an advisory capacity.

QSL Manager: A volunteer is needed to manage QSLing duties for K8SCH, particularly responding to requests for QSL confirmation cards. Gerry Weimer KD8ASL has done a great job with this, but his health isn't up to it anymore, and is withdrawing from QSL manager as well as his QSL card-checking services. We must have a QSL manager as part of our ARRL Special Service Club responsibilities.

Rick Halterman KD4PYR does QSL-checking for Logbook of the World (LOTW) contacts. Bob Frey WA6EZV was recently certified for QSL checking for all but 160 meter contacts.

PIO: Ted Morris NC8V noted that the balloon launch that Bryan Hoffman KC8EGV was recently recruiting chasers for was successfully completed. This was a Loveland-area Cub Scouts and Dads project and the organizers had determined that no other communications service would meet their needs like Amateur Radio. They were pleased with the operation of their transponder and the communications support they received for the chase and recovery. Ted will work on a potential public relations release about the event, with Bryan and the organizers, to promote Scouting, the hobby and the club.

Meetings: October's meeting program will feature CHIRP, a software package to organize data about scanner listening favorites and ham repeaters to facilitate downloading these data to scanners, handheld, and other radios for memory storage.

November's Meeting will cover Winter Field Day, January 28-29, 2017. November is also the month the Nominating Committee presents its slate of officers and director, and additional nominations can be taken from the floor.

December's meeting is our annual holiday party, and the time we vote on candidates from November's meeting.

Split the Pot: Of the \$141 collected, Francis Smith N8PEE won \$70.50.

Before closing the meeting, Walt Knauber NA8R offered some giveaway stationery materials he obtained from Staples. Ryan W1RYN and Michael KD8SOH asked that we suggest idea for future meeting programs and workshops.

The meeting adjourned at 9:18 PM.

Respectfully Submitted,

Ted Morris NC8V, Secretary
September 27, 2016

Brunch Bunch

The next Brunch Bunch will be held **Saturday, October 8th**, at 1pm. The location for October is Price Hill Chili. Price Hill Chili is located at 4920 Glenway Avenue, 45238, in Price Hill, near the intersection of Glenway Avenue, Cleves Warsaw Pike and Guerly Road. The Brunch Bunch has visited Price Hill Chili many times and we always get a good turnout there.

Price Hill Chili is a family owned and operated restaurant on the western side of Cincinnati. It is a popular and well known establishment to anyone who was raised or resides on the west side. It's fame and popularity has also spread well beyond the boundaries of the west side and it has become a Cincinnati legend.

For a look at the menu or for directions to the restaurant go to:
www.pricehillchili.com

Remember that the Brunch Bunch always meets the second Saturday of every month at 1pm at a location to be announced each month. If you can't join us this month, maybe you'll be available to join us in the months ahead.

I'm always looking for suggestions on what restaurant you think might be a good place for the Brunch Bunch to visit soon.

73,Bruce, N8BV



The Elmer's Corner : A Little Planning Goes a Long Way (Part 1)

By Robert Gulley AK3Q



In this edition of The Elmers Corner I want to talk about how to prepare for and listen to the radio, regardless of the mode. I believe listening to the radio should be an event—not an occurrence. Successful listening takes planning, preparation, and intent. Anyone can turn on a radio, twist the dial a few times and land on a station that sounds interesting, but that is not *listening* to radio. So how does one go about turning an evening with the radio into an event?

Some Questions First

In order for an evening with the radio to be richly rewarding one must do a little planning. (I am not suggesting nothing good can come from snatching moments of radio time as they present themselves in our hectic world, but here we are talking about *intentional listening*.) The first question we might ask ourselves is “What am I wanting to hear?”

This may seem like a deceptively simple question, but the answer will determine both the equipment needed and the reception expectations. Listening to amateur radio bands will involve one set of skills, while listening to shortwave another. Copying digital signals, chasing utility, military, aircraft, or public service frequencies all require different listening techniques, radio/antenna equipment, and listener participation.

For example, 99% of all shortwave listening happens on AM, with only a few stations operating on one of the sidebands. This means radio choices are plentiful, and it is likely a typical radio enthusiast will have several radios capable of capturing AM shortwave signals. There are a number of other factors which go into quality shortwave listening time, and the following is just a quick list of possible considerations:

1. Strong vs. weak signals – this can affect antenna choices, radio choices, and even choosing between speakers or headphones for audio.
2. Portable vs. fixed location – where will the radio be used?
3. Antenna choices – based on the radio chosen and location, a built-in antenna or a random wire antenna may be desired, or a fixed indoor/outdoor antenna may be required.
4. Scheduled or unscheduled listening – this can be as simple as listening to one’s favorite station(s) or it can be more focused by following specific schedules published seasonally by various stations.

For an evening of public service listening there would be considerations such as:

1. Digital, analog, or both?
2. Targeted stations or random catches?
3. Casual listening or tracking/identifying transmissions?
4. Single or multiple radio listening?

For Utility/Military/Civilian listening there would be considerations such as:

1. Time of day/time of year – like shortwave stations, military and civilian aircraft and marine stations follow propagation paths as needed both daily and seasonally.
2. Mode capability – some utility stations use only AM modulation, while others use digital modes, sidebands, or CW.
3. Recording/Logging – many utility listeners enjoy logging catches or recording the audio as many of the transmissions are intermittent.
4. Computer connectivity – depending on the modes being tracked there is software available to demodulate many different signals such as MT63, PSK, FSK, RTTY, ALE, CW and others.

How do I want to listen? Relaxed in an armchair or actively twisting dials and turning knobs? Do I want to be a relatively passive listener or an active one? Listening is as much a state of mind as it is hardware capability.

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Some days I am not in the mood to listen to static crashes, digital signals, or repetition of transmissions. On those days I listen to strong shortwave signals or amateur radio stations, perhaps following specific programming broadcasts or listening in to amateur radio nets.

On other days, weak stations or intermittent transmissions are exactly what I want to hear so I can catch pilot-to-base transmissions, numbers stations, or ship-to-shore comms. Recently I listened to a coast guard frequency and heard only two transmissions in a half-hour, but I came away quite happy (I am weird, I know!), since it was the first time I had listened on that particular frequency. The frequency in question was one used for HC-130 air operations out of North Carolina, the Coast Guard version of the venerable C-130 airplane. I was lucky to hear anything at all since much of the Coast Guard communication now happens over satellite phone.

Last but in no way least, is the question "How much time do I have to devote to listening today?" While this may seem an obvious question, the time available may eliminate some of the possible listening choices due to the effort involved in getting equipment together (preparation), or with regard to maximizing a small window of opportunity. If I only have a half-hour to listen to radio, I usually do not want to spend a lot of time searching for weak or distant stations, or spend part of that time getting software/hardware set up for demodulating digital signals.

If I have an hour or two, and the proper inclination for such, I may devote the time to working harder-to-find stations, intermittent stations, or simply listen to some of the excellent shortwave programs produced by various stations. I found a new favorite just recently on Thursday evenings (01:30 UTC Fridays) produced by Blues International Radio on WRMI out of Florida.

A BBC Primer on Listening

I ran across this 1930 pamphlet recently posted on several radio sites around the web, from the archives of the BBC no doubt. The SWLing Post is where I first saw the posting, and found it intriguing to say the least:

GOOD LISTENING

Make sure that your set is working properly before you settle down to listen.

Choose your programmes as carefully as you choose which theatre to go to. It is just as important to you to enjoy yourself at home as at the theatre.

Listen as carefully at home as you do in a theatre or concert hall. You can't get the best out of a programme if your mind is wandering, or if you are playing bridge or reading. Give it your full attention. Try turning out the lights so that your eye is not caught by familiar objects in the room. Your imagination will be twice as vivid.

If you only listen with half an ear you haven't a quarter of a right to criticise.

Think of your favourite occupation. Don't you like a change sometimes? Give the wireless a rest now and then.

Not bad advice, even all these years later!
73, Robert AK3Q

The Music of Radio: Lev Theremin and the Vibrations of the Ether

By Justin Patrick Moore, KE8COY

The sound of the theremin has become synonymous with the spectral and spooky sci-fi horror flicks of the 1940's and '50's. Its trilling oscillations conjure up images of flying saucers made from hub caps and fishing line. When most folks hear and see the theremin they tend to think of it as little more than a novelty or scientific amusement. While it may have fallen out of favor in horror movie soundtracks it has remained a mainstay within the field of electronic music. It is distinguished among all musical instruments by being the only one that is played without touching the instrument itself. To the radio and electronics buff the theremin is worth exploring as a way of learning about electromagnetic fields and the creative use of the heterodyning effect for artistic purposes. Whether or not the quivering sounds the instrument pulls out of the ether are appealing to a listener is a matter of individual preference.

The inventor of the theremin, or etherphone as it was first dubbed, was Lev Teremen. He was born in Russia in 1896 a few years before Marconi achieved wireless telegraphy. As a young boy he spent his time reading the family encyclopedia and was fascinated by physics and electricity. At five he had started playing piano, and by nine had taken up the cello, an instrument that has an important influence on the way theremins are played. After showing promise in class he was asked to do independent research with electricity at the school physics lab. There he began an earnest study of high-frequency currents and magnetic fields, alongside optics and astronomy. It was around this time Lev met Abram Ioffe, a rising physicist whom he would work under in a variety of capacities. Yet his studies in atomic theory and music were overshadowed by the outbreak of WWI. In 1916 he was summoned by the draft and moved to Petrograd where his electrical experience saved him from the front lines. He was placed in a military engineering school where he landed in the Radio Technical Department to do work on transmitters and oversee the construction of a powerful and strategic radio station. In the course of the war the station had to be disassembled and Lev oversaw the blowing up of a 120 meter antenna mast. Another war time duty was as a teacher instructing other students to become radio specialists.

As Lev's reputation grew among engineers and academic scientists he was eventually asked to go and work with Ioffe Abram at the Physico-Technical Institute where he became the supervisor of a high-frequency oscillations laboratory. Lev's first assignment was to study the crystal structure of various objects using X-Rays. At this time he was also experimenting with hypnosis and Ioffe suggested he take his findings on trance-induced subjects to psychologist Ivan Pavlov. Though Lev resented radio work in preference for his love of exploration of atomic structures, Ioffe pushed him to work more systematically with radio technology. Now in the early 1920's Lev busied himself thinking of novel uses for the audion tube.

His first project involved the exploration of the human body's natural electrical capacitance to set up a simple burglar alarm circuit that he called the "radio watchman". The device was made by using an audion as a transmitter at a specific high frequency directed to an antenna. This antenna only radiated a small field of about sixteen feet. The circuits were calibrated so that when a person walked into the radiation pattern it would change the capacitance, cause a contact switch to close, and set off an audible signal. He was next asked to create a tool for measuring the dielectric constant of gases in a variety of conditions. For this he made a circuit and placed a gas between two plates of a capacitor. Changes in temperature were measured by a needle on a meter. This device was so sensitive it could be set off by the slightest movement of the hand. This device was refined by adding an audion oscillator and tuned circuit. The harmonics generated by the oscillator were filtered out to leave a single frequency that could be listened to on headphones.

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As Lev played with this tool he noticed again how the presence of his movements near the circuitry were registered as variations in the density of the gas, and now measured by a change in the pitch. Closer to the capacitor the pitch became higher, while further away it became lower. Shaking his hand created vibrato. His musical self, long dormant under the influence of communism, came alive and he started to use this instrument to tease out the fragments he loved from his classical repertoire. Word quickly traveled around the institute that Theremin was playing music on a voltmeter. Ioffe encouraged Lev to refine what he had discovered -the capacitance of the body interacting with a circuit to change its frequency- into an instrument. To increase the range and have greater control of the pitch he employed the heterodyning principle. He used two high-frequency oscillators to generate the same note in the range of 300 khz :-beyond human hearing. One frequency was fixed, the other variable and could move out of sync with the first. He attached the variable circuit to a vertical antenna on the right hand side of the instrument. This served as one plate of the capacitor while the human hand formed another. The capacitance rose or fell depending on where the hand was in relation to the antenna. The two frequencies were then mixed into a beat frequency within audible range. To play a song the hand is moved at various distances from the antenna creating a series beat frequency notes.

To refine his etherphone further he designed a horizontal loop antenna that came out of the box at a right angle. Connected to carefully adjusted amplifier tubes and circuits this antenna was used by the other hand to control volume. The new born instrument had a range of four octaves and was played in a similar manner to the cello, as far as the motions of the two hands were concerned. After playing the instrument for his mentor, he performed a concert in November of 1920 to an audience of spellbound physics students. In 1921 he filed for a Russian patent on the device.

Keep your aerials up and circuits tuned! In next month's Q-Fiver I'll explore Lev's espionage work as well as how to make a theremin out of three AM radios. Happy Halloween & 73's!

Sources: *Theremin: Ether Music and Espionage* by Albert Glinsky, 2000, University of Illinois



October 2016 DX Spots de KA3MTT

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1 VK9L - Lord Howe Isl thru 10-2 
2 8Q7MD - Maldives thru 10-12 	3	4 T2J - Tuvalu thru 10-10 ----- T31T - Central Kiribati thru 10-30	5	6	7	8 H40GC - Temotu I Thru 10-17 
9 V31TT - Belize thru 10-16 ----- KH6 - Hawaii thru 10-23	10 FO - Fr.Polynesia Thru 11-2 	11 3D2GG - Fiji thru 10-13 	12	13	14	15 7P8AO - Lesotho Thru 10-29 
16	17	18 H44GC - Solomon Is thru 10-21 ----- ZD7VDE - StHelena Thru 10-30	19 9G5AM - Ghana Thru 10-26 	20 3W2 - Vietnam thru 11-5 ----- 5H3DX - Tanzania Thru 11-12	21 3D2YA - Fiji thru 10-25 	22
23	24	25 H44COW-Solomon Is thru 11-26 	26 ZL7G - Chatham I Thru 11-9 	27	28	29 FM - Martinique Thru 11-4 
30	31 					

OH-KY-IN Amateur Radio Society

Regular monthly meetings are held the first Tuesday of each month at 7:30PM local time at the St Bernard Recreation Hall, 120 Washington Avenue (corner Washington & Tower Aves) in St Bernard, just east of Vine St. Please come in the doors at street level, facing the high school. Visitors are ALWAYS welcome!

The next meeting of the Oh-Ky-In Amateur Radio Society will be Tuesday, October 4th at 7:30 PM

Silent Auction

At the August and September meetings, your Board of Directors discussed what to do with older high frequency radios and accessories owned by the club. Some of the equipment still works but is not up to date in performance capabilities. Other equipment may not be in good or working condition. The decision was made that we should dispose of most of it, keeping one working rig, power supply, microphone, and perhaps other accessories, but the rest should be sold. It was decided that during the December club meeting, our usual Christmas meeting, we will have a silent auction of the remaining equipment. All the equipment will be tested, and its condition will be disclosed for each piece or "set." A minimum starting price will be set, and all attendees may peruse the equipment on sale. Each attendee may bid on the equipment, and others may bid by raising the purchase price. At the end of the meeting the winning bids will be announced and arrangements for payment will be made. Additional information will be provided prior to the December meeting.

Fred Schneider, K9OHE, Equipment Manager and Board Member

OH-KY-IN Amateur Radio Society

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