

Q-FIVER

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



THE MUSIC OF RADIO: TUNING THE TERRESTRIAL MONOCHORD *or Listening to the Harmony of the Earth*

By Justin Patrick Moore, KE8COY

Antennas and monochords have a lot in common. A monochord is an ancient musical and scientific lab instrument made of one long string, similar in that respect to a long single wire antenna, only the string is stretched over a sounding box of equal length. One or more movable bridges are then moved up and down the string to demonstrate the mathematical relationships among the frequencies produced and for measuring musical intervals. Though it was first mentioned in Sumerian clay tablets, many attribute its invention to Pythagoras around 6 BCE. These ancients saw within the monochord a mystic holism in which notes, numbers, ratios and intervals combined with the sense of hearing and mathematical reason. Monochords are related to other instruments such as the Japanese koto, the hurdy-gurdy, and the Scandinavian psalmodikon this last used as an accompaniment to voice in sacred music. In medicine the sonometer, a variation of the monochord, continues to be used to diagnose hearing loss and bone density for those who may be at risk for osteoporosis.

The discovery of the precise relationship between the pitch of a musical note and the length of the string that produces it is also attributed to Pythagoras. If he had been able to put electricity into wire strings it might have been Pythagoras who discovered the principle of resonance that makes an antenna match a frequency. What Pythagoras did propose was the idea of the Music of the Spheres, a philosophical concept that conjectures that the movement of celestial bodies creates a form of heavenly music. This theory has continued to haunt the imagination of the West since it was first proposed. Later Plato described astronomy and music as "twinned" studies of sense recognition that both required knowledge of numerical proportions. Astronomy was for the eyes and music was for the ears. Now millennia later astronomy can be studied with the ears of a radio receiver and number crunching supercomputers.

In 1618 the physician, scientist and mystic Robert Fludd conceived a divine or celestial monochord linking the Ptolemaic conception of the universe to musical intervals, suggesting that the instrument could also be used to demonstrate the harmony of the spheres. In Fludd's picture a divine hand reaches down from out of a cloud to tune the monochord to the celestial frequencies of the planets and the stars. Around two and a half centuries later scientists unknowingly started tuning into the terrestrial frequencies that were unknowingly being picked up by telegraph and telephone lines.

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OH-KY-IN Repeaters

146.670 (-) Clifton

146.625 *(-) Withamsville

146.925 *(-) Colerain

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

** Fusion Repeater*

APRS on 144.390 mHz

K8SCH-10 Edgewood WIDEn

Packet on 145.010 mHz

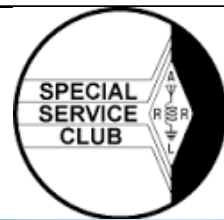
K8SCH-7 Digipeater

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 & call sign 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



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Howard Hunt NG8P

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 Volunteer ExaminersBrian DeYoung K4BRI
 QCEN Representative Pat Maley KD8PAT
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 Education Michael Niehaus KD8ZLB
 Repeater Control Ops Mgr Bruce Vanselow N8BV
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 Tech Talk Net MgrBruce Vanselow N8BV
 K8SCH QSL Mgr Bob Frey WA6EZV
 TV/RFI Dick Arnett WB4SUV
 HamFest Gary Coffey KB8MYC

The Monthly Mobile Foxhunts have been put on hiatus until August due to the upcoming ARDF championships. We will be holding many on-foot ARDF style hunts.

June Calendar

| | | |
|------------|--------------------|---|
| Sun Jun 4 | 6:30 PM | Newcomers/Elmers Net, 146.67, Topic: Discovering the Heart of Amateur Radio —NCS Robert AK3Q |
| Tue Jun 6 | 7:30 PM | Club Meeting in St Bernard. Topic—Field Day Preparation |
| Wed Jun 7 | 9:00 PM | Tech Talk, NCS Robert AK3Q |
| Sat Jun 10 | 1:00 PM | Brunch Bunch at Cabana on the River , 7445 Forbes Road, 45233 |
| Sun Jun 11 | 6:30 PM | Newcomers/Elmers Net, 146.67, Topic: Field Day: More Than Just A Contest! —NCS Robert AK3Q |
| Wed Jun 14 | 9:00 PM | Tech Talk, NCS Brian K4BRI |
| Sun Jun 18 | 6:30 PM | Newcomers/Elmers Net, 146.67, Topic: Getting Serious with Dongles - What They can Teach Us —NCS Robert AK3Q |
| Wed Jun 21 | 9:00 PM | Tech Talk, NCS Dale, KC8HQS |
| Fri Jun 23 | 2:00 PM | Field Day Setup Begins—Mitchell Memorial Forest |
| Sat Jun 24 | 2:00 PM | Field Day Operation Begins—Mitchell Memorial Forest |
| Sun Jun 25 | 2:00 PM 6:30 PM | Field Day Teardown Begins—Mitchell Memorial Forest Newcomers/Elmers Net, 146.67, Topic: Moving Into HF and a General License —NCS Robert AK3Q |
| Tue Jun 27 | 7:00 PM | Board of Directors meeting at My Neighbor's place —3150 Harrison Ave. |
| Wed Jun 28 | 9:00 PM | Tech Talk, NCS George N3VQW |

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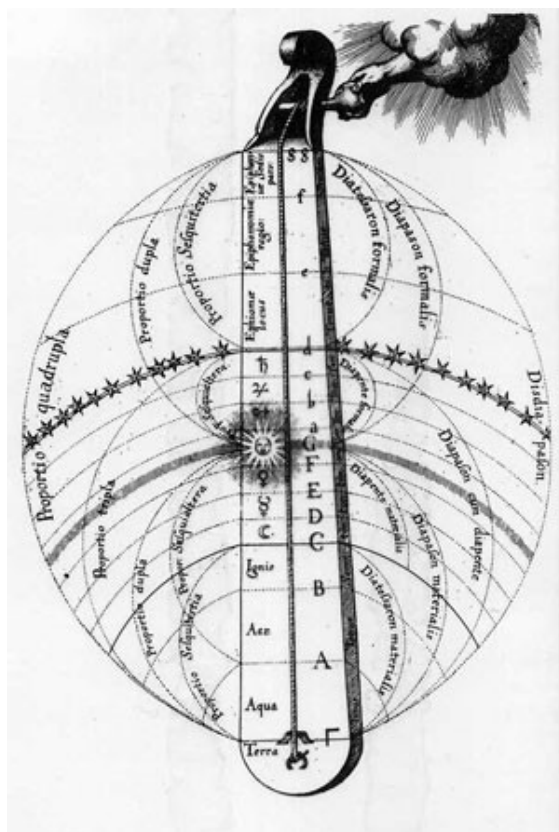
In his masterful book *Earth Sound Earth Signal* Douglas Kahn writes that "radio was heard before it was invented". He goes on to describe how the first person to listen to radio was Alexander Graham Bell's assistant Thomas Watson. He tuned in with a telephone receiver "during the early hours of the night on a long metal line serving as an antenna before antennas were invented." Other telephone users also listened to radio for two decades before Marconi made his first transmission. Watson enjoyed listening to the natural VLF signals given off by the earth, though he did not know its origin or that it was even radio at all. The natural signals were picked up on the telephone line acting as an extremely long wire that was resonant in the VLF range, from around 3 kHz to 30 kHz and corresponding to wavelengths of 100 to 10 kilometers. Watson's own line from the lab stretched a half mile down the street. Since he wasn't transmitting it didn't have to be fully resonant to pick up the VLF signals. I like to think of these long antenna wires as a type of terrestrial monochord that tunes in to the harmony of the Earth.

Watson did not try to do anything about the noises he heard on the line, as they did not interfere with voice communication. In fact he actually enjoyed listening to spherics, whistlers, dawn chorus and other VLF phenomenon he likely picked up, even as he didn't know or understand their cause. I like to listen to this form of natural radio myself. There are a number of live internet streams from people who have set up VLF listening posts, such as those found at <http://abelian.org/vlf/>. I think those sounds are as relaxing as listening to the surf of the ocean or a gentle breeze in the trees. Kahn goes on to write that nature "has always been the biggest broadcaster, bigger than all governments, corporations, militaries, and other purveyors of anthropic signals combined." May it remain so.

Fludd's image of the celestial monochord was made famous in 1952 when it came to adorn the cover of *The Anthology of American Folk* music compiled by Harry Everett Smith and released by Smithsonian Folkways. I think some divine inspiration was passed on to Harry Smith, from the same hand that tunes the instrument, and from him it passed on to all the lives his massive compilation touched. The six-album set brought new levels of cultural awareness to musicians such as Blind Lemon Jefferson, the Carter Family and Mississippi John Hurt and went on to kick start the folk music revival of the 50's and 60's. It had a strong influence on Joan Baez and Bob Dylan, who are acknowledged as disciples of the anthology. It continues to touch new generations of musicians today.

Avant-garde composer and father of minimalism La Monte Young found early inspiration from another type of electrical monochord. He recalled as a child listening to the droning sound of the power plant next to his Uncle's gas station. He became fascinated by the 60-cycle hum of electricity as it moved along the lines. This inspired such pieces of music as "the Second Dream of the High Tension Line Stepdown Transformer". John Cale and the late Tony Conrad are among the many influenced by Young's work. Both were involved in Young's Theatre of Eternal Music. Cale went on to a long and varied career and is notable for being a founding member of the Velvet Underground. During rehearsals with Young, Cale and Conrad would tune their instruments to the 60-cycle electrical hum, what Young called the "underlying drone of the city".

In the late 70's composer Alvin Lucier started working with physicist John Trefny on a musical acoustics course they were teaching at Wesleyan University. They had set up a monochord and placed an electromagnet over one end while an audio oscillator drove the wire. This created an interaction between the flux field of the



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magnet and the frequency and loudness of the oscillator, causing the stretched wire to be observed vibrating by the naked eye. This demonstration captivated Alvin's imagination and he started thinking about building a monochord to be used on the concert stage or in galleries. After getting some metal piano wire, clamps and a horseshoe magnet he had a built a portable version whose length could be varied depending on the size of the space. This became his classic piece *Music on a Long Thin Wire*. What he did was extend the wire across a room, clamping it to tables at either end. The ends of the wire were connected to the speaker terminals and a power amplifier placed under the table. The amplifier in turn had a sine wave oscillator connected to it, and a magnet straddled the wire at one end. Wooden bridges with embedded contact mics were put under the wire at both ends, and these were routed to a stereo systems. This electrified monochord is played by varying the frequency and loudness of the oscillator to create slides, frequency shifts, audible beat frequencies and other sonic effects. Lucier eventually discovered that the instrument could be left to play itself by carefully tuning the oscillator. Air currents, human proximity to the wire, heat or coolness and other shifts in the environment all caused new and amazing sounds to be heard, sometimes spontaneously erupting into triadic harmonies. This electric monochord is an instrument that can play itself just as the long thin wires of the early telephone and telegraph system tuned into the terrestrial harmonies continuously being broadcast by Mother Earth.

Sources:

<https://en.wikipedia.org/wiki/Monochord>

Earth Sound Earth Signal: Energies and Magnitude in the Arts by Douglas Kahn

The Hum of the City: La Monte Young and the Birth of NYC Drone by Alan Licht

The Anthology of American Folk Music compiled by Harry Everett Smith

Alvin Lucier, *Music on a Long Thin Wire*, Lovely Music LCD 1011

From The President

I just wanted to take a couple minutes to share a couple big THANK YOU's. The first goes to Michael, KD8SOH and Ryan, W1RYN. As everyone knows they have stepped down for their officer positions with our Club. I want to thank them for pouring their heart and soul into this organization during their tenure. They worked hard and it shows. We look forward to still seeing them around. Second, I want to thank our membership. Our club has become the largest and most active group in the region. This is only accomplished through our members stepping up and being active. This is how we grow.

As I am sure you know by now, I was asked to complete the 2017 term as club President. It is an honor to do this. Robert, AK2Q will be serving as Vice President and Eric, N8YC is filling one of the director positions. We still have a position open for Director for the remaining 2017 year. If you are interested please let me know.

June is Field Day. Let's get out there and play some radio!!

May 2nd 2017 Meeting minutes

In the absence of the President and the Vice-President, Secretary Fred Schneider, K9OHE, opened the meeting with the Pledge of Allegiance.

Fred then told the group that Robert's Rules of Order directed that in the absence of the President and Vice-President the assembly needed to elect a Chairman Pro Tem for this meeting only. Gary Coffee, KB8MYC, was nominated. There being no further nominations, a motion was made and seconded to close nominations and instruct the Secretary to cast a unanimous ballot to elect Gary as Chairman Pro Tem.

Gary took over the meeting and introduced our two guest speakers from the Cystic Fibrosis Foundation Christi McAllister and Rich Lindner. Their presentation was about the annual bike ride fundraiser, this year to be held on Saturday September 23, beginning and ending at Lunken Field. There were questions and answers, also suggestions and requests.

The assembly recessed at 8:00 PM for a break.

The assembly reconvened at 8:15 PM.

There was one guest, KD8DDE.

Upgrades – Rocky, KE8DZS, upgraded to General. There were 18 exams given and 17 passed.

40 people gave self-introductions.

Brag Session – Dale announced that his wife was expecting a baby in December. There was loud applause!

The Minutes of the April meeting were considered. There were no corrections. There was a motion to approve them as printed in the Q-Fiver. The motion was seconded and passed.

The Treasurer's Report was presented. Noted were the new accounts for the ARDF competition at the end of July and the beginning of August. The Report was filed for audit.

There were no Silent Keys.

The next Brunch Bunch will be at Price Hill Chili on Saturday May 14, starting at 1 PM.

Technical Committee – The 146.670 repeater is operating reasonably well at 20 watts. The 440 repeater is also operating reasonably well with little activity. The 146.625 repeater is currently off the air, caused by the storms of last Friday and/or Saturday. No Technical Meeting is planned this month. K-2, the tower company on whose tower the 146.925 repeater is located, is giving up their ground lease for that site. Their lease ends on May 31 and they have 90 days after that to remove the tower and building. The Technical Committee will be vigilant to remove our equipment in a timely manner, and hopefully be able to obtain our antennas from the site.

Education Committee – Looking to Fall classes.

Fox Hunt and ARDF – Dick, WB8SUV reported that the Fox was at Parky's Farm in Winton Woods. Dick won the hunt. Brian, K4BRI reported that about 50 Chinese students have signed up for the contest, also parents. The dinner hall is reserved. A web site for helpers to sign up will be on the air soon. The contest is July 31 through Aug 6, with the big events on July 31 and Aug 1. There will be ARDF practice in Mt. Airy Forest this Saturday unless heavy rain. The regular Fox Hunt will be Sat. May 13. 11 measuring tape antennas were built, costs covered; 3 kits remain.

NVIS – very interesting propagation and only Ted, NC8V, made a contact. [Ted contacted K3S in Baltimore, a special event station

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commemorating National Marconi Day. K9OHE]

The Digital Group continues to meet the 4th Tuesday of each month in the basement of Centennial Hall. WinLink probably again. Meet at 7 PM.

Ohio Parks on the Air will probably be at East Fork Lake Park. George, N3VQW, is in charge. Shelter reservations are in the 80 -90 dollar range.

QCEN meets this month on May 12 at the Red Cross Building. Come at 5:30 PM to play with the radios. Meeting begins at 7:30 PM.

ARES – There was a mass casualty event practice earlier today. Much was learned. The Flying Pig Marathon is this weekend. The club Hamfest is in September. For Taste of Cincinnati ARES will be on standby in the Cincinnati Communications Center.

Old Business – Log information is needed for Winter Field Day to provide QSL cards to contacts. Made. George, N3VQW, announced that he was now the Webmaster and that Rocky, KE8DZS, is now the assistant Webmaster.

Split-the-Pot - \$98 was collected before tickets ran out. \$49 was won by Dennis, KD8ILY.

An USB dongle capable of receiving radio frequencies was won by John, N8JTP.

The meeting was adjourned at 8:55 PM

Respectfully submitted, Fred Schneider K9OHE Secretary.

April 26th 2017 Board Meeting Minutes

The President called the meeting to order. There was a quorum.

The Minutes of the March meeting were approved.

The Treasurer presented a Preliminary Report for April.

Committee Reports

Technical Committee

Brian, K4BRI, reported that all repeaters were on the air. 146.670 is running at 20 watts, as the amplifier is not working. There was discussion of 146.925. K-2 is not renewing its ground lease and must vacate the premises at the end of its lease.

Hamfest

Gary, KB8MYC, reported on the progress made towards another successful Hamfest.

Website

George, N3VQW, reported that he could not find the Repeater Usage Policy. Fred, K9OHE, said that he would send it to him again.

Programs

The May meeting program is about the CFF Bike Ride.

The June program is Field Day.

The July meeting is the Summer Picnic.

New Business

Bruce, N8BV, reported about his phone conversations with his contact at K-2. They have not yet contracted for removal of the tower or building. Bruce will make regular contact and his contact told him that as soon as the work was contracted, he would notify Bruce of the projected date for the work.

There was more discussion of the ARDF contest.

Reminder post cards will be mailed to last year's members who have not yet renewed their membership.

The meeting adjourned.

Fred Schneider K9OHE Secretary

Brunch Bunch

For June, it's off to the river.

The next Brunch Bunch will be held Saturday, June 10th, at 1pm. The location for June is Cabana on the River in Sayler Park. The Cabana on the River is located at 7445 Forbes Road, 45233, just across the railroad tracks from US 50 River Road.

The Brunch Bunch has visited the Cabana on the River many times previously and we always get a great turn out when we visit there. "If you enjoy eating outdoors in a casual, fun, friendly atmosphere, The Cabana on the River is the place for you. Once a local secret, it has become a westside hotspot. Come enjoy our stunning view of the river along with a refreshing beverage while your food is made to order."

For a look at the Cabana on the River menu as well as a map and directions go to:

www.cabanaontheriver.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

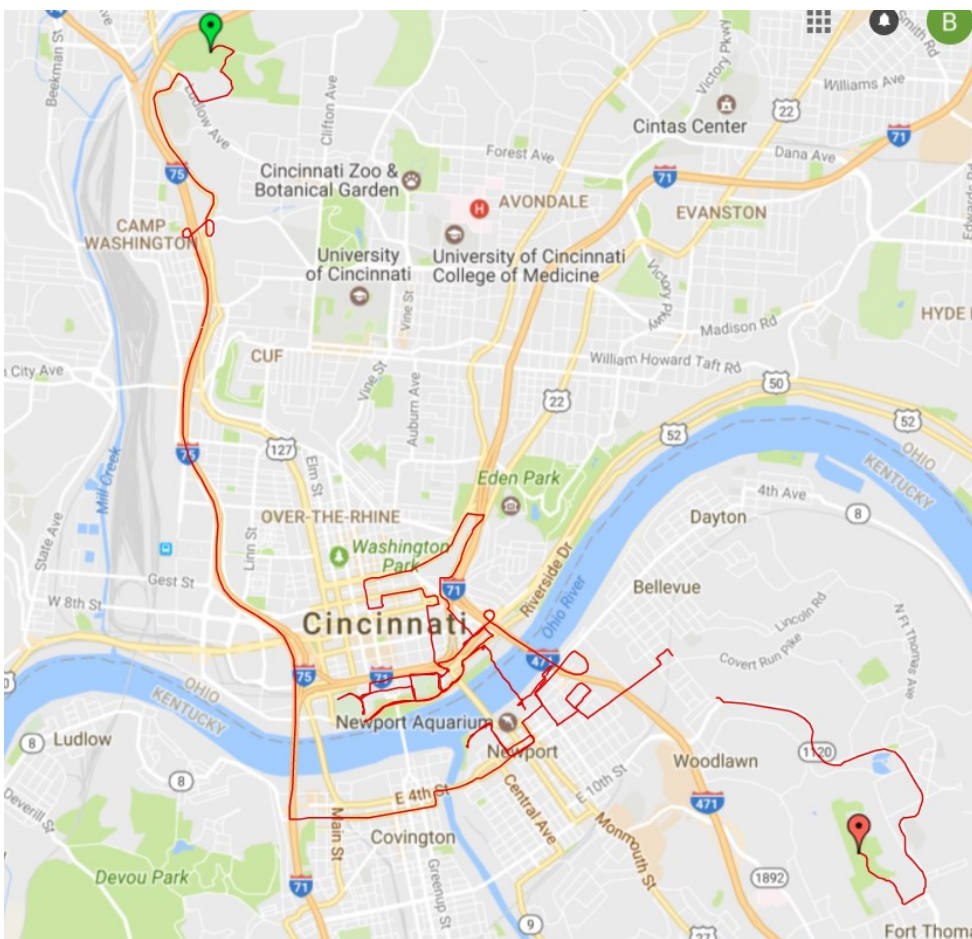


Foxhunting

The May Mobile Foxhunt had the 3 regular teams show up—Dick, Bob, and Marji & me.

Of course, I wanted to ‘play’ so I put my Doppler towards the back of the car and kept the beam to the front, hoping that would minimize the interaction between the two—NOOOOOOO!

Our first bearing was 190 degrees so we headed south going towards the I75 bridge, thinking that would be a good decision point. When we got near the river, all heck broke loose. There were no consistent bearings, and we would jump from point to point and getting nowhere. At one point I jumped out of the car with a tape measure beam and walked across the Purple People Bridge. Nope. Drove around in some more circles—nothing. When Phil calls you asking if everything is ok, you know you are having a really bad day. I get a clue from him and head right to Highland Hill Park—I know that place well.



Lesson—It is great to get new toys and experiment—but don't do that on hunt days—experiment on your own and use what works for the ‘real’ hunts.

We are taking a break from mobile hunts until after the ARDF championships—stay tuned!

| Team Name | 1st | 2nd | 3rd |
|---------------------------------------|----------|----------|----------|
| Brian, K4BRI and Marji, KJ4ZKC | 1 | 2 | 1 |
| Dick, WB4SUV and Janie, KJ4VCW | 3 | 1 | |
| Bob, WA6EZV | | 1 | 2 |
| Bill, KA8TWB | | | |

The Elmer's Corner : Radio Monitoring Part 2

Robert AK3Q



Last time around we looked at Radio Monitoring during WWII from the British side of things. This time we will look at some of the contributions made by America, which were by no means insignificant!

Benson House and Chopmist Hill

In the United States communication gathering during the war was intense and secretive, just as in the United Kingdom. Two sites whose roles only came to light long after their war-time use was *Benson House* in New York and *Chopmist Hill* in Rhode Island.

On a plaque honoring the work done at Benson House, it states:

From January 1942 to June 1945 FBI agents and radio technicians secretly living and working at Benson house broadcasted radio messages to the Germans in Hamburg who believed they were communicating with their espionage agents in the United States.

Working closely with military deception planners, the FBI send hundreds of accurate and fictitious reports designed to confuse and mislead the Nazi leadership regarding allied military plans and intentions. Among Benson House's most significant World War II contributions was the receipt of a German message in April 1942 instructing its spies to obtain information about American atomic bomb development; an order that helped influence President Franklin D Roosevelt's decision to pursue an atomic weapon. Messages transmitted from Benson House helped deceive the German High Command about the timing and location of the June 6, 1944 Allied invasion at Normandy while others mislead Japanese forces about U.S. advances in the Pacific Theater of operations

Using German double-agents the FBI was able to convince the Nazis that they were getting information from their spies about the Allied forces and plans. This was known as *Operation Ostrich*, which was part of a larger Allied program called *Operation Bodyguard*.

The British had begun something called the Double Cross System to send misinformation, and the FBI adopted this program after the attack on Pearl Harbor. MI5 placed an assortment of genuine and imaginary double agents, each with distinct backgrounds and personalities, near important military sites throughout England, Scotland and Wales.

They then transmitted phony intelligence reports about everything from shipping figures, troop configurations and movements to wartime alliance issues. The intercepted communiqués designated Ultra enabled MI5 to track the flow of these messages through the German communications system. This in turn allowed them to assess how such information was being accepted or rejected. Benson house and Chopmist Hill made good use of this technique, and in no small way shortened the war significantly, as well as saving thousands of lives.

According to Dr. Raymond Batvinis, a retired FBI agent and FBI historian, "A cover story was developed that Johnson [supposed owner of Benson House] suffered from tuberculosis and was, therefore, deferred from military service. The house was outfitted by FBI technicians with several large shortwave radios and sup-

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porting equipment. Antennas were hidden in nearby trees and intruders were discouraged by Clifford, the agent's large German shepherd."

The radio equipment drew enormous amounts of electricity according to Batvinis, and not wanting to attract undue attention from the local utility companies, the agents powered their equipment using the engine from a Buick which they bolted to the basement floor.

At Chopmist Hill in Rhode Island, similar work was being done by the intelligence division of the FCC, particularly with regard to monitoring German communications, right down to tank-to-tank communications taking place in North Africa. Very little of this work was known to the general public until recently, but the success of the installation was incredible. It was part of a series of 13 listening posts across the country, but its location seemed to have just the right mix of altitude and propagation.

One of the most significant services provided by the Chopmist Hill listening post was the ability to pinpoint signals within minutes almost anywhere. This was due in no small part to the miles of antenna wire stretched across the property. According to Tom Mooney, a *Providence Journal* reporter, a 40-member team of FCC agents worked at the station monitoring over 400 known transmission sites, including capturing signals meant to be disguised by stronger commercial broadcasts. His excellent article may be found here. (<http://www.providencejournal.com/article/20150808/NEWS/150809367>)

In a report only recently declassified by the CIA there were a number of listening stations and direction-finding efforts used in South America to monitor and locate German communications during WWII which may be found in a report here. (https://www.nsa.gov/public_info/_files/cryptologic_histories/german_clandestine_activities.pdf)

Acoustic Listening Stations

While not directly on topic, I have always been fascinated by some of the acoustic listening stations which were set up along the southern coast of England to listen for approaching aircraft before the invention of radar. These parabolic receivers were designed to be monitored as an early warning device, but experimentation stopped when chain radar was developed. From the image below it can be seen that different shapes were being tested, and the construction of such concrete reflectors must have been quite challenging.



"Denge acoustic mirrors - March2005" by Paul Russon

While never actually put into service, one of their most significant contributions to future radar use was the idea of using interconnected stations to pinpoint the location of an enemy. This greatly helped the effective use of radar in WWII.

Modern Relevance

The modern relevance of the WWII-era monitoring to me is the recognition of the fact there is still a place for such monitoring since radio-to-radio communication is still one of the most effective means of getting information across great distances with little or no interference.

We as radio enthusiasts and civilians have the opportunity to monitor the airwaves just as was done by thousands of volunteers around the world during WWII. Do I believe I will capture some significant clandestine transmission which might thwart an attack against my country? No, at least I deem it highly unlikely. I do however believe there is nothing wrong with being aware of the possibility, and even just having the concept/possibility back in the recesses of my brain may alert me to a potential situation I might otherwise dismiss.

With the proliferation of digital modes, the ability to capture and decrypt said modes, and the ability to record large portions of spectrum at any given time, who knows what we might find?! There are certainly groups both official and unofficial who monitor frequencies, and even a casual scan of the HF bands at various times will likely land one on a "numbers" transmission from Cuba or Russia. These are repeated sets of numbers given verbally as well as digitally, which are likely coded messages to operatives around the globe.

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Humans being human means some of the same mistakes made by the German operators which allowed for the breaking of both Enigma and Lorenz ciphers could one day allow for the breaking of the numbers code. After 9/11 there was certainly a push to involve civilians with language skills to monitor communications of all kinds for possible future attacks, and any heightened state of awareness for any kind of attack could produce radio traffic which could prove invaluable if intercepted.

While I am hardly a conspiratorialist in any sense of the word, I do believe some of the old tried-and-true methods of information gathering warrants attention. As radio enthusiasts with sophisticated hardware and software at our disposal, we could be at the forefront of civilian participation should the need arise.

I think of those radio hobbyists experimenting with LF communications, seemingly such a small niche of operators, but their experimentation has provided us with a much better understanding of what is capable on LF ranges, which might someday come in handy during emergency situations.

Technological advancements are always a two-way street: what can be a benefit for us is also something which can be used against us. This might be one of the best reasons to keep as current as possible with all advances on the radio front. A well-equipped station might just allow us to hear that unusual flutter and whine of a covert digital signal which our software can decode—how exciting would that be! Perhaps such monitoring is all just good fun in these times, but who knows? I for one plan on keeping at least an occasion-

ARDF Practice Results

| <i>Name</i> | <i>Time</i> | <i>Transmitters</i> |
|-----------------|----------------|---------------------|
| Brent | 110? | ? |
| Bob | 116 min 28 sec | 1,4,3,5,2 |
| Cesi & Julianna | 119 min | 1,4 |
| Pat | 131 min | 1,3 |
| Marji | 46 min | 1,3,4 |
| Brian | 109 min 50 sec | 1,3,5,2,4 |

OH-KY-IN is hosting the 2017 ARDF championships, and this looks to be another great event in the Cincinnati area. The schedule is as follows

| | | |
|-----------|----------|---|
| Monday | July 31 | 2 meter practice at Diamond Oaks in Green Township |
| Tuesday | August 1 | 80 meter practice at Pyramid Hill in Hamilton OH |
| Wednesday | August 2 | FoxOr and 80 meter Sprint practice at Harbin Park in Fairfield OH |
| Thursday | August 3 | FoxOr competition at England-Idlewild park in Burlington KY |
| Friday | August 4 | 80 meter Sprint competition at Mitchell Memorial Forest |
| Saturday | August 5 | 2 meter classic competition at Miami Whitewater Forest |
| Sunday | August 6 | 80 meter classic competition at Miami Whitewater Forest |

Registration is still open, until June 30th. Anyone of any skill level is encouraged to compete—you do not even need to be a ham. There will be lots of practice events between now and then. Register at ARDFUSA.COM—we will help you in any way we can.

But, what we really need at this point is ***VOLUNTEERS.***

We need lots of people to help make this a successful event.

On Mon, Tue and Wed we just need a couple of people for general help.

Thu and Fri we need people for Starts (4), Finish (4), and General (4).

Sat and Sun will be the busiest with the most competitors, and the most volunteers needed. We need Starts (4), Finish (4), Transportation (2), Directions and Roads (4) and General (4).

Volunteers will be given free admission to the dinner banquet on Saturday August 5th. Sat and Sun volunteers will also be included in the boxed lunches.

If you would like to volunteer, or would like more information on what we need, contact Brian K4BRI.

k4bri@arrl.net
(859) 635-3095

It would not hurt to have a cheering section also, so come out and help make this a great event.

73—Brian, K4BRI

June 2017 DX Spots de KA3MTT

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|---|-----|--|---|---|---|--|
| | | | | 1 HB0 - Liechtenstein Thru 6-6  | 2 | 3 |
| 4 FR - Reunion thru 6-16  | 5 | 6 | 7 | 8 | 9 T8CW - Palau thru 6-18  | 10 ZA - Albania thru 6-20  |
| 11 TX5EG - Fr. Polynesia Thru 6-19  | 12 | 13 OY - Faroe Is thru 6-26  | 14 PJ7 - Saint Maarten Thru 6-28  | 15 5B - Cyprus thru 6-25  | 16 T8 - Palau thru 6-23  | 17 |
| 18 4O7GD - Montenegro Thru 6-28  | 19 | 20 | 21 | 22 | 23 | 24 VK9AA - Christmas I Thru 7-1  |
| 25 | 26 | 27 | 28 T88TJ - Palau thru 7-2  | 29 TX5EG - Fr Polynesia Thru 7-17  | 30 | |

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, June 6th at 7:30 PM

The Topic of the June meeting:

Field Day Preparations!

OH-KY-IN Amateur Radio Society

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