# CQ Chatter

## K8TIH Repeater-Transmitter Move Completed

The WCARC repeaters, operating on 147.18+ MHz and 444.475+ MHz, are back in operation after completion of the long anticipated move of the transmitters from the Administration Building to the same site as the receivers in Offenhauer West.  It was dictated by  the BGSU announcement that the Administration Building is scheduled to be demolished some time in 2020.

The move was accomplished on Friday, May 24, from about 9:30 until mid-afternoon.  Use was made of a new relay rack that had been contributed from Wood County Hospital. The switch from a separate-site set up to having transmitters and receivers at the very same location entails the use of duplexers for both bands.  This equipment had been pre-positioned and tuned several years ago in anticipation of the move.  A number of Technical Committee members participated: Bob-WB8NQW, Phil-W8PSK, Terry-KE8CVA, John-N8MSU, Jim-K8JU, Jim-KD8NJW, and Bob-N1RB.

The next steps in the project will involve recovering the antennas that are still atop the Administration Building before the demolition occurs, and sprucing up the wiring and other connections at the Offenhauer site.  The fact that telephone wire pairs are no longer necessary to connect receivers to transmitters represents a simplification of the system.  The present configuration is merely a replica of the previous arrangement without the telephone connections between the buildings.  This arrangement can be easily condensed by shortening some wires.  Because the audio problem that was experienced with the K8TIH repeater has been corrected, and now that the move is complete, the regular Tuesday night net will once again be conducted on the 147.18/444.475 MHz machine.  Many thanks to Eric-WD8LEI, and the Wood County ARES for the use of their repeater over the past several weeks. ■

## Net Check Ins

**Apr 30 — Traffic: 0**

- N1RB  (NCS)
- WD8ICP
- K8BBK
- KE8CVA
- KG8FH
- KD8NJW
- WB8NQW
- WD8LEI
- W8PSK
- KA8VNG
- K8JU          (11)

**May 7 — Traffic:**

- KD8NJW  (NCS)
- KD8RNO
- KC8EKT
- KE8CVA
- KG8FH
- WD8LEI
- W8PSK
- N8VNT
- WB8NQW
- K8OVO          (10)

**May 14 — Traffic: 0**

- N1RB  (NCS)
- K8BBK
- KC8EKT
- KG8FH
- KE8CVA/P

# Brain Teasers

**1.** What is the purpose of the *notch filter* found on many HF transceivers?

- **a.)** restricts the transmitter voice bandwidth
- **b.)** reduces interference from carriers in the receiver passband
- **c.)** eliminates receiver interference from impulse noise sources
- **d.)** enhances reception at a specific frequency on a crowded band

**2.** What is the resistance of a 10 ohm, a 20 ohm, and a 50 ohm resistor connected in parallel?

- **a.)** 5.9 ohms
- **b.)** 0.17 ohms
- **c.)** 10,000 ohms
- **d.)** 80 ohms

**3.** How does the attenuation of a coaxial cable change as the frequency of the signal increases?

- **a.)** attenuation is independent of frequency
- **b.)** attenuation increases
- **c.)** attenuation decreases
- **d.)** attenuation reaches a maximum at approximately 18 MHz

# June Contests

The contest lineup for the month of June is given below.  Please note that the WARC bands (60, 30, 17 and 12 m) are <u>never</u> open to contesting.

| | | |
|---|---|---|
| **Jun  1-2** | *0000 to 2359 Z* | 10 m |
| **10-10 Int'l PSK 'test** | | **PSK** |
| **Jun  1-2** | *1400 to 0200 Z* | 160 m to 10 m |
| **Kentucky QSO Party** | | **all modes** |
| **Jun  8-9** | *0600 to 0600 Z* | 80 m to 10 m |
| **VK (Australia) Shires 'test** | | **SSB/CW** |
| **Jun  8-9** | *1200 to 1200 Z* | 80 m to 10 m |
| **Portugal Day 'test** | | **SSB/CW** |
| **Jun  8-10** | *1800 to 0259 Z* | 6 m on up |
| **ARRL June VHF 'test** | | **all modes** |
| **Jun  15-16** | *0000 to 2359 Z* | 160 m to10 m |
| **10-10 Int'l Spring 'test** | | **CW** |
| **Jun  15-16** | *1200 to 1159 Z* | 160 m to 10 m |
| **All Asian DX 'test** | | **CW** |
| **Jun  15-16** | *1200 to 1159 Z* | 80 m to 10 m |
| **Ukraine DX RTTY 'test** | | **RTTY** |
| **Jun  15-16** | *1600 to 0400 Z* | 80 m to 10 m |
| **West Virginia QSO Party** | | **all modes** |
| **Jun  15** | *1800 to 2359 Z* | 80 m to 10 m |
| **ARRL Kids Day** | | **SSB** |
| **Jun  22-23** | *1800 to 2100 Z* | 160 m to 10 m |
| **King of Spain 'test** | | **SSB** |
| <span style="color:red">**Jun  22-23**</span> | *1800 to 2100 Z* | 160 m on up |
| <span style="color:red">**ARRL Field Day**</span> | | **all modes** |

# *Another Hamvention in the Books*

The third presentation of the Hamvention at the Greene County Fairgrounds in Xenia was held from May 17 through May 19. This year, the rains held off and the event was blessed with warmth and sunshine. In fact, on the day that the XYL and I decided to attend, on Saturday, May 18, the temperature was in the upper 80's by afternoon.

We always enjoy thoroughly covering the new equipment vendors' booths just to see what the latest developments are. This job takes at least 3 to 4 hours if you count the necessity of standing in line for the free goodies such as the Yaesu ball caps, or for discussing a particular problem you might have with a piece of equipment.

There was a very large flea market occupying the racetrack infield and spilling out well beyond. As mentioned above, there was no problem with muddy shoes or wet areas this year. My guesstimate is that the crowds were quite a bit larger this year than in the past two years, but we need to wait for the official attendance report before making any claims—at least it seemed to me that there were more people there.

A group of WCARC members, including WB8NQW, W8PSK, KE8CVA, KE8CUZ, N1LB and Yours Truly, N1RB, joined up for lunch at a little past noon. The one area where the new Xenia location beats the pants off of Hara Arena is in the wide variety and the quality of the food available from vendors. Everything from steak sandwiches to gyros and pizzas are available (just imagine what you can get at the Wood County Fair).

It seemed that everyone was enjoying their time at the Hamvention, and some even made some purchases. It appears that the Hamvention sponsors have launched the event on an upward trajectory, so it should only get bigger and better. I strongly recommend attending the Hamvention at least once if you want to experience the true camaraderie of ham radio. ∎

# *Morse Code Is 175 Years Old*

**by Eddie King (**Eddie King **is a Ph.D. student in EE at the** University of South Carolina**. This article is republished from** The Conversation **under a *Creative Commons* license).**

The first message sent by Morse code's dots and dashes across a long distance traveled from Washington, D.C., to Baltimore on Friday, May 24, 1844– 175 years ago. It signaled the first time in human history that complex thoughts could be communicated at long distances almost instantaneously. Until then, people had to have face-to-face conversations; send coded messages through drums, smoke signals and semaphore systems; or read printed words.

Thanks to Samuel F. B. Morse, communication changed rapidly, and has been changing ever faster since. He invented the electric telegraph in 1832. It took six more years for him to standardize a code for communicating over tele-

4

## WCARC Weekly Net

Tuesdays at 2100 all year

147.18 MHz 67 Hz PL

### Net Control Roster

| | | |
|---|---|---|
| Jun | 4 | KD8VWU |
| Jun | 11 | KD8NJW |
| Jun | 18 | K8OVO |
| Jun | 25 | WB8NQW |
| Jul | 2 | N1RB |
| Jul | 9 | KD8VWU |

## NEXT MEETING

### Business Meeting

Monday
June 10

TIME: 7:30/7:00 PM EB

PLACE:

Sheriff's Training Room
Dunbridge Rd. &
E. Gypsy Lane Rd.
Bowling Green, OH

## 10 meter Net

informal group

meets

Sunday

@ 20:30

on 28.335 MHz

## Fusion Net

Thursday

@ 19:30

on 442.125 MHz

67 Hz PL on FM

discussion of all

things digital

*Morse—from p. 4*

graph wires. In 1843, Congress gave him $30,000 to string wires between the nation's capital and nearby Baltimore. When the line was completed, he conducted a public demonstration of long distance communication. Morse wasn't the only one working to develop a means of communicating over the telegraph, but his is the one that has survived.  The wires, magnets and keys used in the initial demonstration have given way to smartphones' on-screen keyboards, but Morse code has remained fundamentally the same, and is still—perhaps surprisingly—relevant in the 21st century.  Although I have learned and relearned it many times as a Boy Scout, an amateur radio operator and a pilot, I continue to admire it and strive to master it.

**Easy sending**

   Morse's key insight in constructing the code was considering how frequently each letter is used in English. The most commonly used letters have shorter symbols: "E," which appears most often, is signified by a single "dot."  By contrast, "Z," the least used letter in English, was signified by the much longer and more complex "dot-dot-dot (pause) dot."

   In 1865, the International Telecommunications Union changed the code to account for different character frequencies in other languages.  There have been other tweaks since, but "E" is still "dot," though "Z" is now "dash-dash-dot-dot."

   The reference to letter frequency makes for extremely efficient communications:  Simple words with common letters can be transmitted very quickly. Longer words can still be sent, but they take more time.

**Going wireless**

   The communications system that Morse code was designed for—analog connections over metal wires that carried a lot of interference and needed a clear on-off type signal to be heard—has evolved significantly.  The first big change came just a few decades after Morse's demonstration.  In the late 19th century, Guglielmo Marconi invented radio-telegraph equipment, which could

# June Hamfests

**June 1 Fulton County ARC. Annual Hamfest.** Roth Family Woodlot, Wauseon, OH. **web:** **http://k8bxq.org/hamfest**

**June 2 Chelsea ARC. Annual Hamfest.** Chelsea Fairgrounds, Chelsea, MI. **web:** **http://wd8iel.com**

**June 16 Monroe County RCA. Annual Hamfest.** Monroe County Fairgrounds, Monroe, MI . **web:** **http://www.mcrca.org**K8BBK

## Amateur Radio Alerts Ohio Town to Tornado

*Ohio SEC Stan Broadway, N8BHL*

A handful of Ohio **SKYWARN** weather spotters on April 14 forwarded reports to National Weather Service (NWS) Cleveland of a possible tornado near Shelby. As a result, NWS Cleveland was able to issue a tornado warning before the storm struck the town.

No lives were lost, but six were injured. The tornado was rated as an EF-2 storm, but it was on the ground for 17 miles and covered a swath of 1/2 miles.

Immediately after receiving word of the strike, coordinating through the county emergency management agency (EMA), District Emergency Coordinator Danny Baily, W8DLB, and others headed immediately to Shelby, where they met with law enforcement.   Because all of District 6 was activated, it was decided to activate two counties to the north and three counties to the south of Richland.  DMR Ohio Talk Group 3139 was used to coordinate

resources.   While no telecommunications were knocked out of service, hams were assigned to walk the perimeter to keep an eye open for any problems.  ∎

*Morse—from p. 6*

send Morse code over radio waves, rather than wires.  The shipping industry loved this new way to communicate with ships at sea, either from ship to ship or to shore-based stations.  By 1910, U.S. law required many passenger ships in U.S. waters to carry wireless sets for sending and receiving messages.

After the Titanic sank in 1912, an international agreement required some ships to assign a person to listen for radio distress signals at all times.   That same agreement designated "SOS"—"dot-dot-dot dash-dash-dash dot-dot-dot"—as the international distress signal, not as an abbreviation for anything but because it was a simple pattern that was easy to remember and transmit.  The Coast Guard discontinued monitoring in 1995.   The requirement that ships monitor for distress signals

was removed in 1999, though the U.S. Navy still teaches at least some sailors to read, send and receive Morse code.

Aviators also use Morse code to identify automated navigational aids. These are radio beacons that help pilots follow routes, traveling from one transmitter to the next on aeronautical charts. They transmit their identifiers—such as "BAL" for Baltimore—in Morse code. Pilots often learn to recognize familiar-sounding patterns of beacons in areas they fly frequently. There is a thriving community of amateur radio operators who treasure Morse code, too. Among amateur radio operators, Morse code is a cherished tradition tracing back to the earliest days of radio. Some of them may have begun in the Boy Scouts, which has made learning Morse variably optional or required over the years. The Federal Communications Commission used to require all licensed amateur radio operators to demonstrate proficiency in Morse code, but that ended in 2007. The FCC does still issue commercial licenses that require Morse proficiency, but no jobs require it anymore.

## Blinking Morse

Because its signals are so simple—on or off, long or short—Morse code can also be used by flashing lights. Many navies around the world use blinker lights to communicate from ship to ship when they don't want to use radios or when radio equipment breaks down. The U.S. Navy is actually testing a system that would let a user type words and convert it to blinker light. A receiver would read the flashes and convert it back to text. Skills learned in the military helped an injured man communicate with his wife across a rocky beach using only his flashlight in 2017.

## Other Morse messages

Perhaps the most notable modern use of Morse code was by Navy pilot Jeremiah Denton, while he was a prisoner of war in Vietnam. In 1966, about one year into a nearly eight-year imprisonment, Denton was forced by his North Vietnamese captors to participate in a video interview about his treatment. While the camera focused on his face, he blinked the Morse code symbols for "torture," confirming for the first time U.S. fears about the treatment of service members held captive in North Vietnam. Blinking Morse code is slow, but has also helped people with medical conditions that prevent them from speaking or communicating in other ways. A number of devices—including iPhones and Android smartphones—can be set up to accept Morse code input from people with limited motor skills.

There are still many ways people can learn Morse code, and practice using it, even online. In emergency situations, it can be the only mode of communications that will get through. Beyond that, there is an art to Morse code, a rhythmic, musical fluidity to the sound. Sending and receiving it can have a soothing or meditative feeling, too, as the person focuses on the flow of individual characters, words and sentences. Overall, sometimes the simplest tool is all that's needed to accomplish the task. ∎

## Views of the Hamvention at Xenia


Flea Market


Yaesu Forum


Yaesu booth

*photos courtesy of Phil, W8PSK*


Inside one of the bldgs

# Recipe Corner
### *Swedish Meatballs (Köttbullar)*
*from Scandinavian Society of Greater Lansing Cookbook*

| | |
|---|---|
| 1 1/2-lbs | ground beef |
| 1/4-lb | pork shoulder, ground |
| 1/4-lb | ground veal |
| 3 slices | toasted bread |
| 1/8-cup | cream or evaporated milk |
| 2 | eggs |
| 1 | small onion, minced |
| 1-tsp | salt |
| 1/4-tsp | pepper |
| 1/4-tsp | nutmeg |

Direct butcher to grind meats together three times. Soak toast in cream or evaporated milk. Drain through sieve, pressing out all liquid. Combine meat, bread, eggs, onion and spices and mix well. Shape into small balls, not more than one inch in diameter, dusting the hands with flour while shaping. Fry slowly in butter over low heat. When meatballs are brown, cover pan and steam for 30 minutes. Serve hot—serves 6. ∎

DX engineering booth



Inside 2nd of 3 bldgs



**ICOM Prize Drawing-*photo by Terry, KE8CVA***

# MONROE HAMFEST

and Computer Show

Only 4 weeks to go

Father's Day - June 16, 2019

7:30 am to 1 pm

Presented by:

The Monroe County Radio Comm. Assoc.

Monroe County Fairgrounds

M-50 at Raisinville Rd (2 miles west of Monroe)

Free Parking

Indoor Facilities / Trunk Sales

Computers and Equipment

Distributors / Hot Food

Overnight Camping available

Talk-in 146.72

For more information and

Table, Trunk and Ticket orders

Go to: http://www.mcrca.org

Click on Hamfest in the top ribbon

or email Fred KA8EBI at ka8ebi@yahoo.com

This is an ARRL approved Hamfest.

Please do not reply to this email instead,

Use Email : ka8ebi@yahoo.com

**WOOD COUNTY ARC**
**P.O.BOX 534**
**BOWLING GREEN, OH**
**43402**