W9JOZ

Volume 7, Issue 8 August 2017

Next Meeting is

August 17, 2017

Fox Hunts

August 20th will be the next one.

Foxhunts are the third Sunday of each month.
Miles and a two-hour time limit
Meet at 1:00 CST at the Sandy Acres Park on the south end of Knox.

Contest season is coming up. It is time to work on antennas and get them ready before winter sets in.

Inside This Issue

STARKE COUNTY AMATEUR RADIO CLUB
WWW.W9JOZ.ORG

Meetings are at the Henry F. Schricker Library on the third Thursday of each month, with the exception of December.

The library is located on west Culver Road, two blocks west of Highway 35.

Are you on the air?

Richard, K9QA is an official ARRL DXCC Card Checker. Contact him at k9qa@arrl.net to have your cards checked.

DX Century Club

August Events

Birthdays

August 5 - Bryan, KE9ML

August 11 - Richard, K9ILU

County Amateur Radio Club Weekly 2 Meter Net

Suspended until Fall

DAY OF WEEK: Saturday 8:00 p.m. Central time
HOST: KN9OX Repeater
FREQUENCY: 145.410 - 600
PL TONE: 131.8

NEW DIGITAL MODE FT8

Submitted by K9QR

FT8 - new digital mode (not a DX prefix in this instance) W8HC, noting email from W0GJ, says the new "JT mode," FT8, looks worthwhile and "It might be a good idea for everyone to get on board." It is in the beta testing stage "and it is very promising." W0GJ says "Typically, JT65 or JT9 takes a minimum of four minutes to make one Q. FT8 is four times faster and I can make Qs about one per minute, which is about the same rate as RTTY, and this is on 'dead' bands!" He says it is extremely easy to set up and use, at least on Flex radios. "The auto sequencing feature is cool! Click on a callsign and the software completes the entire exchange!" FT8 is part of the WSJT-X version 1.8.0 release. Glen says in two days he's worked three countries and 20 states on six meters with 30 watts to poor 6M antennas. He says, "This mode will be perfect for those with indoor or balcony antennas." He is encouraging W8HC and the rest of the 3Y0Z Bouvet team to try it at home and then use it in their January, 2018 expedition, and DXers at home should use it to work 3Y0Z.

Old Ham Friend's ARRL Article

I ran across an old issue of QST that I had saved, January 1978 and when I looked through it, I saw this article. The attached file is from the ARRL archives. When I get a chance I will try to do a better scan from my magazine.

I lost track of Dave after he graduated from high school (they may have moved away before he graduated). I did a search on QRZ and he doesn't show up by callsign or name search. He was an interesting young man.

73',

de Tom, W9QN

My Amateur Radio Demonstration

Though of different generations, Dave Vitkus and Jan Shillington came up with the same idea recently — to show youngsters what amateur radio is all about. Their experiences provide lessons all amateurs can learn.

By David Vitkus*, WB9RXV

It was Tuesday, the 14th of December, and we found ourselves on the Knox Junior High School roof during lunch break. Leonard Maryons (an eighth-grade friend) and I were assembling an end-fed hertz. We had permission from the principal to be on the roof, but the principal hadn't told the teacher who was patrolling the school grounds.

When he saw us, he didn't seem too happy about having two students several feet above the ground, one on the TV tower and the other on the roof. He was proceeding to give us 10 "whacks" each when we met Mr. Slavens, the teacher who had asked us to give the amateur radio demonstration in his seventh-grade classroom the next day. We were excused — this time.

When I got home that day, I disassembled my station (Hammarlund HX-50, Heath HR-10B and Transmatch). Not too practical for a demonstration, but it was all I had.

No CBers Today

The next morning, with all our equipment loaded in the car, we got to the classroom and began to set up. There were about 20 spectators expecting me to turn it on and talk to the local CBers. At noon I tested it out and had an SWR of 12:1. What could be wrong? I normally have a maximum SWR of 1.1:1. Those of you who think it was not grounded are wrong!

We tested the transmitter again the following day — and didn't make a single contact before school. I still didn't make a contact after the first class arrived, although the SWR did improve to 7:1. The students were sitting there yawning, listening to me saying "Hello CQ CQ CQ 40," over and over. Finally, I gave up and played a recording of a couple of my old contacts. One special tape was the conversation I had with a young YL, WA1YJF, in New England. This proved there are younger — and female — hams. I also played a recording of a contact with WA5SWT in Texas because he came in so clearly — better than most CBers a mile away!

The second hour was not the least bit better. I did discover that when I gave the SWR meter a good "whap" the meter would indicate 1:1, so I started investigating. The third hour of the disaster, I mean demonstration, arrived. I took the cables apart and found that the coaxial cable from the SWR meter to the transmatch was shorted, so I removed the SWR meter completely. I fired her up, tuned for dip and started: "Hello, CQ — CQ." Everybody stared and listened.

Like Music to His Ears

Then I heard it! "WB9RXV/9 Whiskey Bravo . . ." It was like music to my ears! I QSO'd and let a couple of students say hello. They seemed quite excited, and so was I!

Fourth hour was terrible. I had planned for weeks, made lists, received supplies. But there was one thing I had overlooked — the nearly 500 fluorescent lights in the school. They put a nice 20-dB S9 signal into my rig with the automatic noise limiter on. (Anyone who contacted WB9RXV on December 16, 1976, and was told that you were difficult to copy, it wasn't your signal that was failing. For me to even have heard you, you would have needed a nice S9 signal!)

Fifth hour was not bad at all, because there wasn't any class.

The next hour was about the best. The students didn't stop asking questions long enough for me to make a contact until I finally did break in and made one. I asked someone to say hello to the OM I was

Having recently upgraded to General, Dave enjoys operating Schwinn mobile.

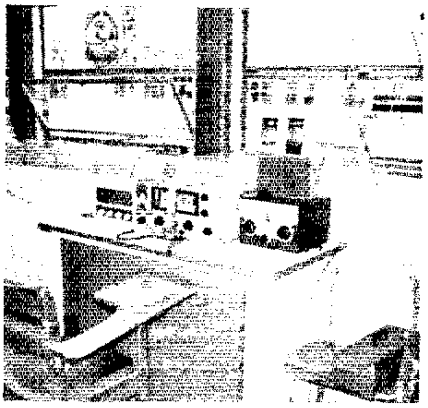
*8066 Wicker, St. John, IN 46373

QSOing with, and 90 percent of the class got up. There were at least 25 "hellos." Seventh hour was the last class; everybody was waiting to go home and I was waiting to fall into bed and go to sleep! The bell rang and the school day was over.

Mr. Slavens Gave a Test

It was quite tiring putting on a demonstration for 200 students in the seventh grade at Knox Junior High, but quite a challenge too. The science teacher, Mr. Slavens, really helped out. The day before the demonstration he had each class read through PR material on amateur radio and even gave a test on the difference between amateur radio and CB. The demonstration was presented as a portion of their study of electronics.

It was very rewarding, for both amateur radio and myself. Each student now knows there is a difference between amateur radio and CB, and that there is a form of radiocommunication that can operate through satellites, use TV, Morse code and teleprinter — and bring conversations from all over the world to their doorstep. QST



The station I brought to Knox Junior High. It's not fancy, but then again you don't want to give the impression that amateur radio is for millionaires only! *(WB9RXV photo)*

One of the eighth graders in Mr. Slavens' science class tries his hand at the mic. That's Mr. Slavens at the rear. *(WB9RXV photo)*

Want to Do What They Did?

It doesn't take much to bring your hobby to a group of appreciative school children (or scouts, Y groups, or whatever). A little advanced planning will go a long way toward making your demonstration a memorable one.

1) If you're in school yourself, make sure you're caught up or even ahead in your homework.

2) Let the ARRL Club and Training Department know about your demonstration a few weeks in advance. They'll be glad to send you posters, lists of nearby Novice classes, address pads to be used to send for further information and introductory material. It's free for the asking.

3) Beforehand, help the teacher learn something about amateur radio.

4) Bring along tools and extra cable.

5) Invite the local newspaper reporter to stop by.

6) Set up the station the day before so you can test it and make sure you have the bugs out of it for portable operation.

7) Try to find a youngster in the school who is an experienced ham (or bring along a photo of one) to show the students that we all aren't, literally, Old Men!

8) Fluorescent lights and venetian blinds will often play havoc with incoming ham signals in a classroom. Avoid metal buildings, too, unless you can somehow get your antenna above it.

9) Bring along a key and oscillator. The kids will remember pounding out their names in code for a long time.

10) Invite the ones who show the most interest to your shack.

11) Odds are the teacher will be as impressed as the kids. Try to set up a follow-up demonstration, perhaps using OSCAR. Write the ARRL for details. — *WB9RXV and WA1STO*

We have several **new** pieces of equipment for sale on our For Sale Page
http://www.w9joz.org/forsale.htm
Please check it out.

Free: 3 Motorola-type Mobile Radios - one is set up to work cross-band 2-6 others are in the 2 meter or 440 meter band. Will not ship.

2 spools of RG 6 cable (approx: 1900 feet). Email John at mailto:w3ml@w3ml.com. Will not ship. $20.00 for both

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Ham Researcher to Investigate Effects of Solar Eclipse

By Dan Romanchik, KB6NU

August 21 is a once-in-a-lifetime opportunity for many in the U.S. to see a total eclipse. It's also an opportunity for a team of Virginia Tech researchers to study the effects of the eclipse on changes in the upper atmosphere that have an impact on HF propagation and the global positioning system (GPS). Backed by research funding from NASA and the National Science foundation, the team is headed by Dr. Greg Earle, W4GDE.

The Virginia Tech team plans to gather data from a variety of sources, including radar systems, transceivers, satellites, ham radio, and GPS receivers, in order to analyze the effects of the solar eclipse on the conductive region of the atmosphere.

"Whether military radar, or consumer GPS signals, the eclipse is going to have effects on the medium that we would like to understand better, so that we can either mitigate them or use them to our advantage," said Earle.

Here are a couple of links to news stories on the research team and the experiments:

- Virginia Tech team prepares for special project during total solar eclipse
- Virginia Tech expert to study August solar eclipse effects on radar, ham radio,GPS

Let's party!

In conjunction with the eclipse, the HamSCI and the ARRL are sponsoring the Solar Eclipse QSO Party. (SEQP). According to an article in the August 2017 issue of *QST*, the goal of the SEQP is to "flood the airwaves with contacts, all measured by the automated receiver networks of the Reverse Beacon Network, PSKReporter, and WSPRNet." Once all the logs are in, researchers will analyze the data to see what effect the eclipse had on radio propagation.

A YouTube video of a presentation at Dayton on the SEQP can be found at https://youtu.be/3EviY2Cuxpo?list=PLihPo8xWmo8-xDYAtpP9BWX9QnhUoT7k4

The SEQP will run from 1400Z - 2200Z on Monday, August 21. This is well before the eclipse is due to begin on the West Coast. The reason it starts before the eclipse is to establish a baseline for radio propagation conditions.

SEQP organizers urge you to make as many contacts as you can on as many bands as you can operate. Like nearly every contest, contacts are not allowed on 60m, 30m, 17m, and 12m. CW, RTTY, and PSK31 are the preferred modes because automated receivers can record those contacts, but phone and other digital modes count, too.

An interesting twist to this contest is that, like Field Day, you can earn a number of bonus points, including:

- Operating outdoors (100 points)
- Operating in a public place (100 points)
- Operating a wide-band automated receiver at your station (100 points)

Hams have had a long history of supporting scientific research. They provided communications for some of the early polar explorations and listened for Sputnik as it flew overhead. The Solar Eclipse QSO Party continues this tradition, and it's going to be a lot of fun as well. Visit the HamSCI website for more information.

Dan Romanchik, KB6NU, blogs about amateur radio at KB6NU.Com, and is the author of the "No Nonsense" amateur radio license study guides and the CW Geek's Guide to Having Fun With Morse Code." You can reach him by emailing cwgeek@kb6nu.com.

If you have something for the newsletter, please send it to me before the 20th of the month.

See you at a meeting.

73
John, W3ML