

FEEDBACK

JUNE 2020



Field Day Announcement

The Club's Field Day Leadership Team has cancelled all Field Day activities at the Hutton Farm.

The club's Field Day leadership encourages everyone to participate in this year's Field Day event from home. In order to make the 'At Home 2020' Field Day more interesting, we plan to award prizes and certificates to members that are best in yet-to-be-determined categories.

In addition, we plan to hold some information and educational Zoom Meetings regarding the aspects of Field Day. Also there will be opportunities to interact with each other during that actual Field Day event June 27 and 28. Plans and Ideas are being formulated and will be announced as they become available.

JCRAC Re-elects Officers

At the May 22 meeting, President Gery yielded the video conferencing microphone to Herb Fiddick, and asked him to conduct club elections. The membership quickly and enthusiastically nominated and re-elected Bill Gery, WA2FNK, (upper left) to be President, Jaimie Charlton, ADØAB (center left) to be Vice President, Ted Knapp, NØTEK (below) to be Secretary and Cal Lewandowski, KCØCL (lower left) to be Treasurer for the 2020-21 year.



JUNE MEETINGS

June 12 – ZOOM

June 26 – ZOOM

June 27-28 – Field Day

The Johnson County Radio Amateurs Club normally meets on the 2nd and 4th Fridays of each month at 7:00 PM at the Overland Park Christian Church (north entrance), 7600 West 75th Street (75th and Conser), west of the Fire Station.

Much of the membership travels to the Pizza Shoppe at 8915 Santa Fe Drive for pizza buffet and an informal continuation/criticism/clarification of the topics raised at the meeting ... or anything else.

LEAVE THE CHURCH, TURN RIGHT (WEST) ON 75TH. TURN LEFT (SOUTH) ON ANTIOCH. TURN RIGHT (WEST) ON SANTA FE. PIZZA SHOPPE IS JUST PAST THE SONIC ON YOUR LEFT.

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story by Jaimie Charlton,
ADØAB

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Johnson County Radio Amateur Club, Inc.*

Bill Gery, KA2FNK, President

Jaimie Charlton, ADØAB, Vice President

Ted Knapp, NØTEK, Secretary

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Radio in Captivity

Shelter in place recommendations cause thoughts to consider the plight of others who have been in somewhat less pleasant isolation. In particular, your editor remembered a trip to the WWII museum in New Orleans. There are, of course, exhibits about all sorts of things that would interest all sorts of people. JCRAC members may have enjoyed an exhibit of the suitcase and food container radios of resistance fighters and radio receivers Allied prisoners of war used to collect news of the outside world.

And you thought your homeowners association was tough.

Dan Maloney, N7DPM, who frequently writes on radio topics for hackaday.com surveyed the receivers in a 2016 article.

<https://hackaday.com/2016/04/21/hacking-when-it-counts-pow-canteen-radios/>

As times change, different materials become available. Billy Cheung became concerned with credit card waste and built a crystal radio receiver out of the smart chip on a credit card.

https://www.youtube.com/watch?v=_z3KmFqtPXQ

PRESIDENT'S CORNER

Field Day 2020 it going to be interesting given the modified Field Day rules ARRL has put in place due to COVID-19. Entries from clubs will not be accepted this year. All contacts will be made using individual calls. The operator can indicate a club when submitting their log to ARRL



The Club does have the permit for the park for Field Day, but will be checking with the park to see if there are any changes.

Please respond to the survey about Field Day participation.

The Church has informed us that we still will not be able to hold club meeting there in June. As a result we planning on continue to use Zoom. Our thanks to Tom (N0GSG) for setting these Zoom meeting up.

- Bill Gery - WA2FNK

Johnson County Radio Amateurs Club - May 8, 2020

Meeting Date: Friday May 8, 2020. The meeting Started at 7:00 PM.

Attendance: Due to COVID-19 restrictions, this Meeting took place online using Zoom Video Conferencing. 25 were present.

The Minutes from the April 24, 2020 meeting were read and accepted unanimously.

The Treasurer's report, as follows, was read and accepted unanimously.

Old Business:

- Repeater Update – All are working well.
- Field Day 2020 – Bill Gery, KA2FNK will set up a meeting with the Station Captains to formulate potential plans.
- Ensor Auction – Let's plan on starting the Raffle portion of this in the next couple of weeks.

New Business:

- The Overland Park Christian Church will not be available for us to meet in person until the first meeting in July.

Reports:

- 6 m – NR.
- 10 m SSB Roundtable – 8 participated on May 7.
- 40m SSB Roundtable – 6 participated on May 6.
- Fusion Digital 440 net – 18 Check-ins on May 6 and 23 Check-ins on April 29.
- 2m Wheat Shocker net – 20 Check-ins on May 7 and 18 Check-ins on April 30.
- HF Activity – Macedonia 20m SSB.
- Breakfast Club net that takes place Monday thru Friday averages over 20 check-ins.

Announcements:

- Everything Canceled.
- WW1USA May 9-10 Canceled However a few will conduct the event from home.
- See Larry's List for upcoming Events.

Business meeting adjourned at 7:49 PM.

Program:

- The Program for this evening were Biographies of the Club's Leadership.

Johnson County Radio Amateurs Club - May 22, 2020

Meeting Date: Friday May 22, 2020. The meeting Started at 7:00 PM.

Attendance: Due to COVID-19 restrictions, this Meeting took place online using Zoom Video Conferencing. 32 were present.

The Minutes from the May 8, 2020 meeting were read and accepted unanimously.

The Treasurer's report, as follows, was read and accepted unanimously.

Cash on Hand	\$ 90.00	Repeater Operating Reserve	\$ 1,638.83
Checking Account	\$ 831.35	Memorial Fund	\$ 310.00
Savings Account	\$ 13,311.62	Active Members	153
PayPal Account	\$ 77.08		
Total	\$ 14,310.05		

Old Business:

- We welcomed all 1st time visitors to the meeting.
- Repeater Update – All are working well. The Group Monitor Fusion Radio test that took place on May 18th went very well. Many things were learned.
- Field Day 2020 – Bill Gery, KA2FNK will set up a meeting with the Station Captains to formulate potential plans.
- Ensor Auction – Vince Sabia, KE0CGR has plans underway for this year's Raffle. If you would like to help him, please let him know.

New Business:

- Ensor Museum Volunteers - The Museum will open its door this weekend May 23. Look for a volunteer Sign-up list for next weekend.
- Annual Elections were held. Because the current president can't run this portion of the meeting, Herb Fiddick, NZ0F was volunteered to do so. A nomination was made to retain the current slate of elected officers. This motion received a second. A vote was taken, and all nominated positions received unanimous approval.
- JCRAC Elected Officers are: Bill Gery KA2FNK – President, Jaimie Charlton AD0AB – Vice President, Cal Lewandowski – KC0CL, and Ted Knapp N0TEK – Secretary. Elected officers will take office on August 1.
- WW1USA Event took place on May 9th. Approximately 1000 contacts were made.

Reports:

- 6 m – NR.
- 10 m SSB Roundtable – 5 participated on May 21.
- 40m SSB Roundtable – 3 participated on May 20.
- Fusion Digital 440 net – 22 Check-ins on May 20 and 21 Check-ins on May 13.
- 2m Wheat Shocker net – 22 Check-ins on May 21 and 19 Check-ins on May 14.
- HF Activity – NR.
- Breakfast Club net that takes place Monday thru Friday averages over 20 check-ins.

Announcements:

- Everything Canceled.
- See Larry's List for upcoming Events.

Business meeting adjourned at 7:42 PM.

Program:

- The Program for this evening was "Ham Radio" Jeopardy put together by Tom Wheeler, N0GSG.

Hambone Helps the History Guy

The final exams are over at Hambone's engineering school and many, but not all the students have gone home. Some, like Hambone, are still hanging around the engineering frat house. While not the brightest light in the school's intellectual chandelier, Hambone has managed to hold his own for another year and is now enjoying the fruits of his labor.

So, why hasn't he gone home to a summer job like so many other students, you ask?

Well, he is home. Hambone lives with his parents and his younger brother, Dude, in an earth-tone frame midwestern house next door to his Uncle Elmer just about a mile from the school. You can identify Elmer's house by the uncut lawn and a conspicuous Tribander on a 100-foot tower in the back yard.

Although Hambone could hang out at home and enjoy all the comforts, he chooses to do his hanging at the frat house where we find him stretched out on one of the many thread-bare couches in the party/meeting/ study/ great room.

Don't misunderstand. There is nothing wrong with Hambone's home. Not that all is sweetness and light but, everybody gets along with everybody. Except for one thing. Hambone's dad.

Every day before he goes to work, Hambone's dad thinks of things for Hambone to do now that he's on vacation. None of these 'suggestions' includes lounging on a couch and chatting with his

buddies. So, Hambone spends most of his time at his frat house.



“Hey, Hammy, it looks like we've got a visitor,” said one of the layabouts. “I don't recognize him, but he's coming up the walk. It's your turn to answer the door.” Those last words were drowned out by the motion detector chimes announcing the visitor's presence.

At first, nobody moved. “Hammy, it's your turn!” the voice urged.

Rolling feet first off the couch, Hammy straightened himself to his full vertical height and without looking at the video monitor or through the peep hole opened the door.

Before him stood a moderately tall, gray-haired, sixtyish gentleman. From his over-sized wire-rim glasses to his tan corduroy jacket complete with elbow patches, to his slightly baggy khaki trousers to his tan Hushpuppies, he looked like everyone's image of an ivy-covered professor. Which he was.

“Hello,” greeted the visitor. His slight British accent completing his academic image. “I wonder if you might tell me where I could find a Mister Hambone? I was told he occasionally resides here.”

“I'm Hambone, but that's my first name. What's yours?”

“Oh, good morning, er, Hambone. I'm Halyard Tiller, Professor Halyard Plimsoll Tiller, actually. I

wonder if I might chat with you for a few minutes and get some advice?”

“Sure, c'mon in and have a seat,” said Hambone indicating the couch he had occupied a few minutes before.

Hesitantly, the professor settled into the least sagging part of the couch and positioned himself as far as possible from the empty pizza boxes that remained on the floor from the night before and spoke, “I just obtained my ham license a few weeks ago at that hamfest in the city and bought a used transceiver while I was there.”

“Congratulations, Halyard and welcome to ham radio. Can we call you Hal for short?”

“Thank you and you can call me Professor Tiller, if you don't mind. I'm a Professor of Naval History at the central campus.”

“That's why you look familiar,” said one of the boys. “I was thinking about taking a history class as an elective, but there was too much old stuff and dates. I dropped it after the second session.”

“That's unfortunate for you, but probably good for us. But as I was saying, after I passed the tests, I went looking for something to start my station. I remember, as a kid, my father was a ham and he had a rather large transmitter and receiver. I remember the glow of the tubes that he called his 'shack warmers'. He said that's what it took to run high power like 100 watts.

see HAMBONE on page 6

from HAMBONE on page 5

When I went to the swap-meet part of the hamfest, I didn't find anything that looked as I remember my father's devices. Instead, nearly everyone was selling what they called 'transceivers'. Apparently, nowadays, transceivers have both the transmitter and the receiver in the same box. And, they don't have any tubes!

Finally, I purchased a transceiver from a fellow who explained how it worked and assured me that, even though it was over ten years old, it worked perfectly and would make an excellent mobile rig.

But, when I got it home and connected it to some light bulbs for a dummy load and an automobile battery for power, nothing happened. Try as I might, I could not make it transmit into the dummy load. It clicked and seemed to want to transmit, but just couldn't do it. It was sort of like trying to start one of those old diesel dinghies on a cold day. You'd crank and crank but it just wouldn't catch."

"What's a dinghy?" asked one of the boys.

"Never mind. I called my friend Professor Flask to ask for help. It turns out he is taking his summer break in the Bahamas so, he referred me to you."

"Yeah, I heard Early, er, Professor Flask was spending the summer someplace far away," answered Hambone. "So, what can we help you with?"

"Well, he said you might help me diagnose my transceiver and make it operational."

"We are pretty busy right now. Maybe next semester."

"I can see that you are," replied Professor Tiller scanning the room and noticing the number of idle bodies draped over the various pieces of furniture. But I believe that I can pay you what I've been told is your customary fee, a cold twelve-pack of summer coolers, which I happen to have right outside in my automobile along with the errant transceiver."

"Well, that's different. I think we'd better have a look at that transceiver before the coolers get warm," said Hambone.

With that, the room sprang to life and in no time the boys were helping Professor Tiller set up his radio and Hambone was popping the tops off the frosty cans.

"Best let me make those connections, young man. I want everything to be ship shape and Bristol fashion," said the professor. But after a few attempts, it was clear that the professor was not familiar with the complexities of connecting wires to terminals or using a screwdriver.

"I'm glad the school hires history professors," whispered one of the boys. "It's fun to watch them work."

Nevertheless, the professor muddled on and finally managed to connect the red power lead to the positive battery terminal and the black lead to the negative. Using one of the frat's voltmeters, he verified that the battery voltage was a bit over 12 volts.

He then hooked his dummy load - two 150 watt incandescent bulbs wired in parallel - to the transceiver's antenna jack and turned on the radio. The professor selected a phone frequency in the

"See," he said, "nothing happens. I hooked everything up and when I press the Push-to-Talk, the transmitter clicks, but no signal comes out."

"How can you tell? There's no power meter connected," asked Hambone.

"It's obvious, the lights don't light."

"Maybe the lightbulbs aren't a good impedance match for the radio," Hambone continued.

"They are pretty close to 50 ohms by my calculation," said the professor.

"He's right," said Dude, Hambone's younger brother. "Two 150-watt bulbs in parallel comes out to almost exactly 50 ohms. Let's try a different band."

The boys tried 20 meters, but the results were the same. They switched microphones, but the results were the same.

"See," said the professor. "It's like we've set the jib and jigger, but something's holding us back."

"Did he just swear at us?" asked one of the boys.

"No, that's boat talk," came a reply.

At this point, the heretofore orderly testing procedure broke down as each boy twisted a knob or pushed a button trying to get the recalcitrant radio to make the dummy loads lights light.

"S**t (expletive deleted)," exclaimed one of the boys. "I spilled my beer!"

"Wait, did you see that?" shouted Hambone. "I think the lights just flashed. Spill some more beer."

The boy did, but nothing happened.

see HAMBONE on page 7

from HAMBONE on page 6

“Okay, who did something? I’m sure I saw the lights flash,” said Hambone.

“I just pressed the mic button,” said one of the boys. “But that didn’t make the lights flash before.”

“Do it again and this time shout,” ordered Hambone.

The boy did and the dummy load lamps flashed.

“That’s it!” said Professor Tiller in an uncharacteristic display of exuberance. “One has to spill beer and swear to make the transmitter transmit!”

“That’s right!” Exclaimed a new voice. It was that of Hambone’s uncle Elmer.

“Halyard, it’s good to see you again! How are you? It’s been a long time.”

“Elmer, you old dog. I’m fine. How’d you know I am here?”

“Oh, that 1967 green Anglia parked in front gave you away. I think you have the only one in town, maybe the only one still in existence.”

“Yes, it is a bit of a classic. It was made in England, you know.”

“I know. That’s why I’m surprised it runs,” countered Elmer. “What brings you here?”

“I thought I’d dabble a bit in ham radio, sort of like my father did. But all the equipment seems so different now. The transmitter and receiver are both in the same box and they don’t even have ‘shack-warmer tubes’.”

“Well, things have progressed over the last fifty or so years.”

“They have. But Elmer, one thing I don’t understand is why this device requires spilling beer and cursing for it to send power to the dummy load lamps. I clearly remember my father’s transmitter transmitted as soon as he pressed his microphone button. The lamps would flicker when he talked, but they always stayed on. My father was a sailor, but I never heard him curse.”

“Halyard, this is not your father’s AM transmitter. This is a single sideband transmitter.

Back in your father’s day, AM or *amplitude modulation* was the most popular way to send voice over radio. The transmitter generated a radio frequency signal called the *carrier* the strength of which was increased or decreased by the voice signal. In other words, the voice modulated the *amplitude* of the carrier. The effect was that the carrier was always present whether there was audio or not. The thinking at the time was that the carrier wave actually carried the voice. It turned out that wasn’t true.”

“That’s news to me,” said one of the frat boys.

Elmer continued, “I’ll spare you the math because I know you history nerds are numerically challenged, but suffice it to say that although AM sounds really good, two-thirds of the transmitter power is wasted. It’s sort of like those big old square-rigged ships you love. Their fat hulls were comfortable, but it took a lot of sail power to push them through the water.”

The professor was not smiling as Elmer continued. “Anyway, some clever guys figured out that instead of generating a carrier wave, all you

had to do was shift the voice frequencies—a range of about 300 Hertz to 3000 Hertz – up to the radio frequencies and you didn’t need a carrier. It is easier said than done, but that’s what your transmitter is doing.

That’s why there is only output when you talk. The entire signal is just your voice shifted up in frequency. If you don’t talk, there is no signal. Which also means the louder you talk, the stronger your signal, up to the limit of your transmitter, of course.”

“Wow! I never know that,” said one of the boys.

“You should have,” replied another. “Or maybe you cut that class. That’s why your grades suck.”

“Cool it, guys!” snapped Elmer. “So, there is really nothing wrong with your transceiver at all. It’s just a matter of understanding how it works.”

“I think that’s why I like history,” added professor Tiller. “Once it’s done, it’s pretty much done. You technology geeks are always changing things. First there was code, then AM and now single side band. Who knows what’s next?”

“Oh Halyard, there’s much more than that. But first things first. Just put that radio in your Anglia and start making contacts, like your father did. That is if that pipsqueak of a car engine can supply enough power.”

>> JCRAC FEEDBACK <<