

FEEDBACK

MAY 2017

JCRAC Day at WW1USA

The JCRAC took responsibility for putting WW1USA on the air at the National World War I Museum over the April 20-30 weekend, to commemorate the United States' entry into World War I.

April's showers drove the event indoors, where 29 operators from around the KC metro area used Internet connections to control five remote stations from the museum lobby. Additional JCRAC and WW1USA members provided off-air support.

The station logged 1515 contacts with 49 states, 7 Canadian provinces and 37 countries in the course of 20 hours of operation. Band conditions dictated that most communication occurred on 20 meters.

WW1USA operates from the grounds of the National World War I Museum at the Liberty Memorial in Kansas City. It is active, from time to time, to commemorate the centennial of significant events of the war. The station returns to the air in July and October.



Jim Kretzel, KEØGEY (right) and JCRAC member Jim Andera, KØNK were two of the 29 hams who logged 1188 phone, 297 CW and 30 digital contacts from WW1USA. (Photo by NZØF.)



Operating WW1USA from the lobby of the National World War I Museum. (Photo by NØCVW.)

MAY MEETINGS

May 12 -- Fox Hunt - Gther at the church parking lot starting at 6:30 for a 7:00 hunt

May 26 -- Field Day Planning

The Johnson County Radio Amateurs Club normally meets on the 2nd and 4th Fridays of each month at 7:30 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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-> FEEDBACK <-

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Johnson County Radio Amateur Club, Inc.*

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A New Field Day Site

The Johnson County Parks and Recreation District has asked the JCRAC to find a new Field Day site as it effects repairs on the Observation Tower. The district offered a pair of sites on park property. The club selected a site on the north side of 87th Street, just west of the Park entrance off of 87th Street onto Ridgeview Road.

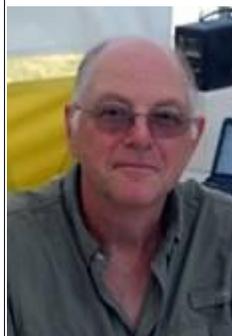
John Raydo, KØIZ, observes that the club typically has problems handling interference between its stations, even when operating on different bands. He proposes bandpass filters.

Raydo's solution is 80, 40 and 20 meter filters for each of three or four Field Day stations. He likes the \$75 filters found at www.arraysolutions.com/filters and has offered to buy a set for one of the club stations if other club members will help purchase filters for the other club stations.



PRESIDENT'S CORNER

The Field Day Team headed up by Jay, WJØX, has locked in our



2017 site. This year we will be still at Shawnee Mission Park, but in the old farm area southeast of the observation tower. Access is just west of the park entrance on

87th street. The area is open, but has some trees for hanging antennas.

The program on May 26 will be a planning for Field Day. In addition to our regular assignment of duties and collection of equipment, our being at a new site requires us to develop a site plan to distribute the various stations about the site, too. Pass the word that we will also have testing on Saturday This is a good time to upgrade

John, KØIZ, will be doing an HF operation clinic lead up to the start of Field Day Saturday. John has offered to share some tips and methods that many operators have found to be useful when trying to build up contacts during special events.

Nominations and elections for clubs officers will also occur at the May 26 meeting.

- Bill Gery - WA2FNK

Johnson County Radio Amateurs Club - April 14, 2017

Meeting Date: Friday April 14, 2017. The meeting Started at 7:30PM.

Attendance: Self introduction with name and call sign. 32 signed the check in sheet. This was followed by the Pledge of Allegiance.

The Minutes from the March 24, 2017 meeting were read and accepted with one opposed vote.

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

Cash on Hand	\$ 80.00	Repeater Operating Reserve	\$ 1,060.65
Checking Account	\$ 286.13	Memorial Fund	\$ 310.00
Savings Account	\$ 11,308.83		
PayPal Account	\$ 100.08	Active Members	151
Total	\$ 11,775.04		

Old Business:

- We welcomed all 1st time visitors to tonight's Club meeting.
- Repeater Update – All are working well.
- Field Day 2017 – After looking at several optional locations to the Observation Tower, this year's Field Day will be at the old Hutton Farm in Shawnee. The entrance to the Farm is located just west of the 87th Street entrance to Shawnee Mission Park.
- Field Day Dinner on that Saturday evening will be catered by Jack Stack BBQ. The estimated cost is usually around \$700 less the donations that are collected.
- It's time to add to, and replace, some of the signage we use for Field Day. We will also need the usual supplies for Field Day therefore a Motion was made for those expenses not to exceed \$1000. The motion passed unanimously.
- WW1USA event will be April 29 – 30 and will be sponsored by our Club. Please sign up before the sign up goes public.

New Business:

- We recently lost one of our Yaesu Fusion Wires-X nodes with Jay Burgherr, NØFB moving out of town. Jay was hosting the node with his own equipment. Bob Porter KØGBW has offered to host a Wires-X node. In order to avoid the situation that occurred with Jay moving out of town, "Van" Van Daveer, KØHCV made a motion that the club purchase a Yaesu FTM-100DR for \$300 and a Yaesu HRI-200 for \$120 for a total not to exceed \$500. The motion passed unanimously. As an FYI Bob will be providing the computer for the Wires-X node.
- A suggestion was made to inventory all the equipment the club owns. The equipment is currently being stored at a few different club member's homes. If you have club equipment please send an email list to the Club Secretary Ted Knapp, NØTEK.
- A suggestion made that a committee be formed to check on older Club Members that are absent for an extended period of time. Please let us know if you are interested.
- There is a Lease sign out in front of the church. According to the OPCC Receptionist they are right-sizing the building to rent out the west side.

Reports:

- 10 m SSB Roundtable – 6 participated on April 13.
- 40m SSB Roundtable – 6 participated on April 12.
- 440 Wheat Shocker net – 12 Check-ins on April 12 and 15 Check-ins on April 5.
- 2m Wheat Shocker net – 19 Check-ins on April 13 and 18 Check-ins on April 6.
- HF Activity – Europe 20m, Caribbean, Japan, Australia, Venezuela on 40m.

Announcements:

- Olathe/Garmin marathon and the MS Walk on April 22. See Herb Fiddick, NZØF.
- Watch Larry's List for upcoming events.

Business meeting adjourned at 8:27 PM

Program -- The Program for this evening was a Mobile Radio Show and Tell.

Johnson County Radio Amateurs Club - April 28, 2017

Meeting Date: Friday April 28, 2017. The meeting Started at 7:30PM.

Attendance: Self introduction with name and call sign. 32 signed the check in sheet. This was followed by the Pledge of Allegiance.

The Minutes from the April 14, 2017 meeting were read and accepted with one opposed vote.

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

Cash on Hand	\$ 128.00	Repeater Operating Reserve	\$ 1,066.65
Checking Account	\$ 243.26	Memorial Fund	\$ 310.00
Savings Account	\$ 11,308.83	Active Members	151
PayPal Account	\$ 46.00		
Total	\$ 11,726.09		

Old Business:

- We welcomed all 1st time visitors to tonight's Club meeting.
- Repeater Update – All are working well.
- Field Day 2017 – will be at the old Hutton Farm in Shawnee. The entrance to the Farm is located just west of the 87th Street entrance to Shawnee Mission Park.
- The Club is responsible for providing Ensor Museum volunteers for the month of May. The link to the online Sign-up is on the Homepage of the Club's website.

New Business:

- Barb McKinney KEØEGG obtained a new Burn Permit for campfires at the Ensor Museum. The Permit is good until the end of the year.

Reports:

- 6 m - NR
- 10 m SSB Roundtable – 7 participated on April 27.
- 40m SSB Roundtable – 6 participated on April 26.
- 440 Wheat Shocker net – 16 Check-ins on April 26 and 16 Check-ins on April 19.
- 2m Wheat Shocker net – 26 Check-ins on April 27 and 18 Check-ins on April 20.
- HF Activity – Australia and Botswana.

Announcements:

- Ham Radio Special Event Station – Saturday May 20 – 21, 2017. They are commemorating the founding of the Santa Fe Trail by William Becknell. Go to www.wb0sft.org
- Watch Larry's List for upcoming events.

Business meeting adjourned at 7:55 PM

Program:

- The Program for this evening was Dan Harlow from Associated Radio.

Submitted by Ted Knapp, NØTEK, Secretary.

Hambone and the Ghostly Voices

"Did you hear that? There it is again, sort of a soft muffled voice coming from, someplace, I think," asked Joey. "Oh, now it's gone. It just sort of comes and goes. The Director told me to get rid of it. It's gotta be gone for good by opening night which is tonight."



"Who's this director-guy and why's he telling you to fix some sort of weird problem?" asked Dude as he and his friend sat on the edge of the stage of the Shawnee Theater in the Dark on a sunny Friday afternoon just before Field Day.

"The Director is the big guy in charge of the whole show. It's a big deal," replied Joey as he snapped off another piece of Dude's Kit-Kat bar.

"So, what's that got to do with you?"

"I'm his Assistant Sound Tech?" announced Joey somewhat hesitantly.

"Are you kidding me!" exclaimed Dude, "You don't know s**t about sound systems! Do you?"

"Not really," continued Joey.

"Then, why did whoever's-in-charge here hire you? You are being paid, right?" queried Dude, suddenly taking more than a passing interest in Joey's situation.

"The Sound Director hired me. I met him when I dropped off my girl friend for a rehearsal. She's in the cast.

He saw my car's cool custom stereo and thought I put it in. He was

really impressed. I didn't say you put it in. He said he needed an assistant sound tech and thought I'd be good for the job."

"Didn't you tell him, no?"

"I sorta did. I said I'd never had anything to do

with a stage show before. But he said my main duties would be things like putting batteries in the wireless mics and seeing that stuff was plugged in and turned on. I knew I could do that. Besides, my girl friend really wanted me to be part of the show."

"There you go again, Joey, thinking with the wrong head."

"He said that he'd run the show and all the high tech stuff, I'd just be his helper.

A week later he quit. Now I'm the *only* sound guy and the big boss doesn't know that I don't know squat about this stuff. He's after me to fix some sort of problem with voices I'm not sure are even there. I don't want to screw up his show, but I don't know what to do."

"Hey! What happened to the big know-it-all Joey? Aren't you the guy who always said, 'pretend until you are'? You pretended to be a sound tech and now you are one. Or, at least half of one," said Dude unable to pass up this great opportunity to one-up Joey. "Let's see if we can find out what's going on. What do you know about these so-called voices?"

"Not much. I'm not even sure I've heard them or if they're real. But the boss thinks they are and that's what counts.

There's a singer in the show, I think his name is Chap. He claims that the voices are ghosts of ancestral Shawnee Indians that lived here hundreds of years ago. He says that because the show is based on the Disney production of 'Pocahontas', his music is calling forth their spirits. I don't believe him. After all, he's a lawyer or something."

"Joey, before we start busting ghosts, I'd like to hear these voices. Where do they seem to be the strongest?"

"I think they've been reported out where the audience sits. Other actors say they've never heard them while on stage."

"That's strange," mused Dude. "If they were ghosts, you'd think the actors would hear the voices best."

"That's why I think it's some sort of electronic problem."

"I don't get it," said Dude.

"Before he left, the Sound Director gave me a tour of the equipment. It's pretty fancy. He was especially proud of the speaker setup. Notice that there are several tiers of speakers and they are all pretty high up and point at different parts of the audience.

see HAMBONE on page 6

from HAMBONE on page 5

He said that these speakers are very directional and are phased so that the audience gets the illusion of sound coming from the stage and not the speakers. The phasing also has the effect of canceling out most of the sound reaching back to the stage. That way there's no feedback through the mics."

"Shhh..." said Dude, "I think I heard a voice. Was that a ghost?"

"Naw, that's some guys painting the set on stage. But, wait, did you hear that? That might be a ghost."

"I, I think I did," stuttered Dude. "But ghosts don't come out in the daytime, do they?"

"No, I don't think so. But I've never seen a ghost so I'm not sure.

Oh, oh, here comes Chap, he's a great guy, but he's convinced the play has riled up ghosts."

"Hi Joey, how are you doing? Have you found those ghosts, yet?" greeted Chap.

"Not yet, Chap, but my friend, Dude, here and I are working on it."

"Nice to meet you, Dude. Are you a ghost buster?"

"Nice to meet you, Chap. No, I'm just a friend of Joey. Why do you think there are ghosts here?"

"Well," replied Chap, getting serious for a moment. "This play is about Pocahontas, an Indian girl and I play her father, Powhatan. We are performing here in Shawnee that, historically, is Indian land. That alone should raise the possibility of ghosts. But the real proof is that when I sing the play's title song, the weird voices seem to appear."

"Can you show us? Asked Joey.

"We haven't really heard the voices ourselves."

"Sure, give me a minute to get on the stage," replied Chap as he headed for the stage entrance.

"Joey, that guy is weird, do you like him?"

"Dude, everybody likes Chap. He's not like some of the other actors who seem to be getting nervous and nasty as opening night nears, Chap's always smiling, cordial and calm and he even wears a bow tie."

"Are you guys ready?" came Chap's voice from the stage. "Here I go!"

"Wow! He sure can sing," exclaimed Dude.

"Yeah, he's a hard act to follow, both on stage and off," added Joey.

"Wait, hear that?"

It's a voice, I think."

"I hear it, but I can't quite tell what's it's saying. Where's it coming from?" asked Dude, as he scrambled around trying to locate the source.

"Did you hear the ghost voice?" asked Chap from the stage. "Or, should I sing some more?"

"We heard it, but we can't tell where it's coming from," hollered Joey back.

"I have to get going. If you need me again, I will be back at 4:45 this afternoon," shouted Chap as he disappeared behind the set.

"Wait," whispered Dude, I think I heard it again when you shouted.

"Me, too," said Joey. "But the voice seems just to be floating in air. Not really coming from anywhere."

"Chap may be a nice guy and a great singer, but I don't believe in his ghosts or their voices. Let's look for something down to earth – like a problem with the sound system," said Dude as he stood up and ate the last stick of his Kit-Kat bar.

The boys got right to it. First they checked all the wireless mics to see if any were left on and providing some kind of feedback. But Joey had done his duties well and every mic had good batteries and was turned off and properly stored in its case.

Then they checked the wired mics. They especially looked for loose plugs and damaged sliders on the mixers. Painstakingly, they spoke into each mic to be sure it didn't make any odd noises and sounded clear. Every mic was perfect.

"Joey, everything seems fine. Is there anything else to check?"

"Just the speakers, but each one has its own built-in amp so they can't all be screwing up at the same time. I'm beginning to think that there really are ghosts."

"Not so fast, Joey, I'm still not buying that ghost thing. I'm calling my uncle Elmer. He's just on the other side of the park setting up for Field Day. He'll find the problem."

see HAMBONE on page 7

from HAMBONE on page 6

“Hi boys,” shouted Elmer as he rolled up on his Harley. “What’s this about ghosts?”

“Hi Unck. Something’s weird about this theater. Strange voices seem to appear mysteriously when the lead singer sings. He thinks its ghosts, I’m not sure.”

“I don’t hear anything now,” said Elmer. Why don’t you just have the show’s sound guy find the problem?”

“I am the sound guy,” replied Joey. “Oh, how did that happen?”

It’s a long story,” replied Dude. “We’ll tell you later, but right now Joey’s got to find those voices and he needs our help.”

“Yeah,” continued Joey. “We’ve both heard the voices, but we can’t find them. We’ve checked every microphone, CD player, special effect generator mixer slider and connection and nothing seems to be broken. In fact, everything works great. We don’t know what to do.”

“It’s going to be hard to find ghostly voices if we can’t hear them,” said Elmer. “Is there any way you can get them to come out and play?”

“I don’t know,” replied Dude. “We heard them when Chap, that’s the lead singer, sang, but he’s not here right now.”

“Joey,” said Elmer, “Could you go on stage and try singing that same song?” Maybe you can call out the ghosts.”

“Oh, I can’t sing,” moaned Joey.

“Go ahead,” urged Dude. “You’re the only one we’ve got.”

“Well, okay. But I don’t know all the words. Don’t laugh now,” said Joey as he ran towards the stage.

“Start whenever you’re ready!” shouted Dude.

At that point Joey’s golden tones burst forth through the fancy PA system and filled the entire open air theatre.

“Hey, Unck, did you hear that? I thought I heard the voice again.”

“Yeah, I think I heard something, but it’s gone now.”

“Yeow!” exclaimed Elmer. “That sounds like a cat fight! But I think I hear the voices. I do! Tell him to keep singing, I want to check the sound board.”

Elmer carefully examined each connection and slider as Joey howled his way through all the show’s songs and was already knocking his twenty-seventh bottle of beer off the wall when Elmer shouted, “I’ve found the voice and it’s not a ghost!

“Dude, use my bike’s transceiver and tell Hambone to get over here, *now*. He’s just over that hill setting up at the Field Day site.”

As all three boys gathered at the theatre’s sound booth, Elmer began his explanation.

“First off, there are no ghosts involved. This whole thing looks like a practical joke. I’ve found a device that causes a recorded voice to play through the PA system.”

“If that’s true,” asked Joey, “why doesn’t the voice seem to come from a speaker?”

“That’s because it’s coming from all the speakers and their special phasing keeps them from sounding like PA speakers.”

“How’s that possible?” asked Dude. “All the mixer sliders are at zero.”

“Here’s how. Somebody has attached a fairly large coil to the under side of the table just below the soundboard. That coil is connected to the output of this homemade amplifier that is driven by this little digital recorder. A sound-operated switch turns the whole thing on and off.

When the singer sings, the recorder’s sound is amplified and applied to the coil. The magnetic field of the coil induces the sound into every channel of the mixer board. When the singing stops, the switch turns off the recording so the voice stops.”

“Isn’t the board shielded?” asked Dude.

“It is, but the coil’s field is so strong and it is so close to the board that some signal leaks through. That is your ghostly voice.”

“Who did it?” asked Joey, now looking for revenge.

“Hambone!” announced Elmer.

“Not me!” said Hambone trying to back away from the group.

“You’ve got no proof!”

“Oh yes we do,” continued Elmer as he pulled back a small tarp revealing the pieces he removed.

“First we have this amp built using the dead bug construction technique. That’s your favorite method of construction, isn’t it Hammy boy?”

see HAMBONE on page 8

from HAMBONE on page 7

“That’s not mine, a lot of people build things that way.”

“Our second piece of evidence is the digital recorder.”

“That’s not mine, either!”

“Oh, but it is. Notice that it has your call letters painted on it and this little tag saying ‘please return to Hambone’ with your return address,” continued Elmer in true ‘Perry Mason’ style.

“Okay, Okay, I confess. I want a lawyer,” said Hambone. “Where’s that singer?”

Ignoring Hambone’s remarks, Elmer continued, “The only question left is why did you do it?”

“I did it because I was afraid that people wouldn’t know about our new Field Day site and we wouldn’t get any visitors.”

“Why didn’t you just ask the theater manager or somebody to make an announcement or something like that?” pressed Elmer.

“I did and he said, no. He said that he could only do that for official patrons or sponsors of the theater or something like that.”

“So, you went ahead anyway.”

“Yes. I knew that with Chap singing, this show would get a huge audience. I thought that if I could sneak some subliminal sound messages into the performance, it might encourage people to come over and visit our Field Day site. I’m really sorry I screwed you guys up. I’ll take all the stuff out.”

“Messing around with a big production like this one is definitely a bad idea,” pontificated Elmer.

“You should have at least told the club president what you wanted to do to see if he approved.”

“I did mention it to the club vice president, but he was busy writing a story for the club’s newsletter and seemed more interested in how I was going to sneak the recorder into the sound booth than what it was going to do. I took his disinterest as approval.”

“That was wrong. But you are right, Field Day is the most significant day of the year for amateur radio and public visibility is very important,” continued Elmer.

“So, what are you guys waiting for? Let’s get busy tweaking Hambone’s setup so it sounds a little clearer and the switch works smoother. We’ll never have this big an audience again!”

>> JCRAC FEEDBACK <<

April's New Faces



Jeff Gardner, KCØJFF



Ray Erlichman, KØRSE

Attenuator Apprehension

Dill saw a really good deal on RF power attenuators at the Shriner's hamfest. He needed one to cut the power of his 100 watt HF rig down to 10 watts or less so that he could participate in QRP contests without buying another radio, and found a fellow selling them for just \$30 at one of the tables - - what a deal!

A power attenuator is an anonymous-looking brick with two RF connectors, one for the input, and the other for the output, like the unit shown above. When choosing an attenuator, the three important ratings are the input power level (the one above is rated for 100 watts - perfect for Dill's radio), the attenuation amount (Dill's unit was rated at 10 dB, which means a 10X reduction in power - - 100 watts input gives 10 watts output, 10 watts in gives 1 watt out, and so forth), and the system impedance (usually 50 ohms).

Since Dill didn't have a radio in hand to test the attenuator, and he



didn't know the seller, he was a little hesitant to make the purchase. He thought about it a minute, and from his pocket he produced an ohmmeter. (Some people think that Dill is just glad to see them.) Dill had an idea!

Dill measured the DC resistance between the center pin of one of the RF connectors and ground; it read out as shown below.



Dill's meter read 61.3 ohms. Dill was quite satisfied with that and purchased the "brick" from the seller.

Questions for Hams:

Technicians:

1. If Dill's radio puts 100 watts into the attenuator, and 10 watts goes out into his antenna, how much power in the form of heat will be dissipated by the attenuator?

Generals:

2. Hambone asked Dill if the device could be used as a dummy load, as it looks a lot like one. If the input resistance reading Dill obtained at the hamfest is close to the value seen at radio frequencies (and it will be at HF and VHF), what SWR will result when the attenuator is simply connected to a transmitter with no load at its output connector?

Extras:

3. How did Dill guess that the attenuator was probably working fine by just measuring the DC resistance on one of its ports?

April Programs

On April 14, members demonstrated mobile installations. On April 28, Dan Harlow, KFØRS came to show what was new at Associated Radio. (All photos by Charlie Van Way, NØCVW.)



Bill Gery, KA2FNK



Gary and Frances Adams,
WAØBTM + KCØTFR



Herb Fiddick, NZØF



Cal Lewandowski, KCØCL



Yaesu FT-65 dual-band digital HT



Keith and Barbara McKinney,
KEØAEP + KEØEGG



John Capra, KDØEVM



Lynn Kuluva, KØIMI



Tom Wheeler, NØGSG