JCRAC members enjoyed theatrical and director's cuts of the club Field Day video at July meetings.

"How many Hams", asks photographer WØCVW, "does it take to turn on a computer?" Tom Wheeler, WØGSG, John Raydo, KØIZ and Jaimie Charlton, ADØAB work to setup the display for the July 26 Field Day. (below)
Here it is August, I’m not sure what happened to July, but July did go by fast. If your are looking for a way to use and learn more about your equipment you still have time. There are still plenty of public service events that could use your help. A few hours on a Saturday or Sunday is not a big commitment. To find out more go to Larry’s List.

Do you know of a person interested in getting started in Amateur Radio? If you do, please point them to the Hamclass.org web site. Next class dates are September 14 and 21. The class will be at the Shawnee Justice Center, 5850 Renner Rd. Shawnee KS. Web site has sign up and other information.

The next big club event is the Ensor auction in October. So mark your calendar with these dates in October, Friday 25 and Saturday the 26. The Auction will be on Saturday morning. Look through your shack for that item that needs a new home. October is also our Club’s time to provide Ensor volunteer tour guides on Saturday and Sunday. We will have a sign up sheet next month.

Please look at your calendar and see if you can help with the Hawk 100 in Lawrence. The event is 36 hours long and takes place on Sept 7th and 8th. The participants take part in one of three distances, 25.2, 50 and 100 miles. We work this event in shifts starting Saturday morning at 6 am. The shifts are 6 AM to 2 PM, 2 PM to 10 PM, 10 PM to 6 AM, and then 6 AM to the end of the event. The event goes on rain or shine. If you would like to work this event please let me know via an email to ka2fnk@gmail.com.

– Bill Gery – WA2FNK
Meeting Date: Friday July 12, 2019. The meeting Started at 7:00PM.

Attendance: Self introduction with name and call sign. 25 signed the check in sheet. This was followed be the Pledge of Allegiance.

The Minutes from the June 14, 2019 meeting were read and accepted with 1 opposed vote.

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

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<td>PayPal Account</td>
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<td><strong>Total</strong></td>
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Old Business:
- We welcomed all 1st time visitors to the meeting.
- Repeater Update – All are working well.
- WW1USA event was held July 6-7. 1,716 contacts were made. 23 operators participated. This event was also active as a “Parks on the Air” for the 1st time. 583 contact qualified for POTA.

New Business:
- Ensor Auction will be October 26th. See Vince Sabia, KE0CGR for Raffle Tickets and if you would like to help him out with the Raffle this year.
- Field Day 2019 – preliminary score is 2,974.

Reports:
- 6 m – NR.
- 10 m SSB Roundtable – 3 participated on July 11.
- 40m SSB Roundtable – 10 participated on July 10.
- Fusion Digital 440 net – 23 Check-ins on July 10 and 12 Check-ins on July 3.
- 2m Wheat Shocker net – 16 Check-ins on July 11 and 11 Check-ins on July 4.
- HF Activity – Slovenia, Croatia, and Bulgaria on 20m CW, Russia on 20m Phone.

Announcements:
- Hamclass.org July 13th and 20th.
- Target date for the New Salvation Army Communication’s Van is Summer 2020.
- IARU Contest is July 13.
- SKCC Weekend Sprintathon July 13-14.
- Past Club Vice President Ryan O’Neil’s KD0EWB father Mike O’Neil KD0BNO became a SK on June 25th.
- See Larry’s List for upcoming Events.

Business meeting adjourned at 7:25 PM.

Program:
- The Program for this evening was a Field Day Debrief and Video.
Meeting Date: Friday July 26, 2019. The meeting Started at 7:00PM.

Attendance: Self introduction with name and call sign. 37 signed the check in sheet. This was followed be the Pledge of Allegiance.

The Minutes from the July 12, 2019 meeting were read and accepted with 1 opposed vote.

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

Cash on Hand $130.00
Repeater Operating Reserve $1,407.83
Checking Account $775.29
Memorial Fund $310.00
Savings Account $12,211.62
Active Members 147
PayPal Account $107.54
Total $13,224.45

Old Business:
- We welcomed all 1st time visitors to the meeting.
- Repeater Update – All are working well. Thanks to all who are keeping their conversations on the Repeater short when the weather is hot!
- Al Rawitch, K0IMP reported the Silent Key plaque that hang inside Associated Radio is up to date with the recent passing of two Club Members.
- Ensor Auction will be October 26th. Dave Schulman, WD0ERU will again serve as our Auctioneer.

New Business:
- With past Club Vice President Ryan O’Neil’s KD0EWB father Mike O’Neil KD0BNO becoming a SK a motion was made to donate $100 to the family. The motion was seconded and it passed unanimously.

Reports:
- 6 m – NR.
- 10 m SSB Roundtable – 5 participated on July 25.
- 40m SSB Roundtable – 4 participated (s from out of town) on July 24.
- Fusion Digital 440 net – 12 Check-ins on July 24 and 13 Check-ins on July 17.
- 2m Wheat Shocker net – 16 Check-ins on July 25 and 21 Check-ins on July 18.
- HF Activity – Gibraltar Special Event Station ZB2IG19, World Bank Special Event Station 4U1WB.

Announcements:
- Campfire at Ensor July 27
- Herb Fiddick, NZ0F gave an update on the progress of the new SATUREN Communication Van.
- Summer Breeze Bike Event August 25. See Herb Fiddick, NZ0F
- MS Bike Event September 28-29. See Herb Fiddick, NZ0F
- See Larry’s List for upcoming Events.

Business meeting adjourned at 7:33 PM.

Program:
- The Program for this evening was the “Director’s Cut” of the 2019 Field Day Video.
Hot. Summer hot. Sun burning the back of your neck and leaving dark blobs on your shirt hot. Days hitting nearly 100 degrees in the shade. Not those wimpy ‘feels like’ degrees but real hard-core Fahrenheit degrees. Degrees that suppress your spirit and sap your strength in ways that even enjoying a tall, cool one, or two, or three can’t replace. Ten degrees less at night, maybe.

The weather says it’s the middle of Summer, the calendar says it’s the middle of Summer yet, the summer class that Hambone is attending is already coming to an end.

‘Frat’s Amateur Radio Transmitting Station’ is the sign on the hamshack door inside the building known as the Engineering Fraternity of which Hambone is a brother. But, on the other side of that door there is no transmitting going on and no summer coolers being enjoyed. Hambone and others are busy working on their final projects and cramming for the looming final exam.

“I still can’t think of anything to do for a final project,” mumbled one of the boys.

“Me neither,” groaned another.

“Shut up you guys,” said Hambone. “I’m trying to study for the final. It’s worth more points than your stupid projects.”

“So, Hammy, what’s your project?” asked the first boy.

“I don’t have one, yet.”

Over in a far corner of the hamshack sit Dude, Hambone’s younger brother and his pal, Joey. Neither boy is a member of the fraternity and Hambone isn’t thrilled with having his little brother and Joey tagging along. But other members like them, so, they’re allowed to stay.

Dude and Joey are listening to ‘Conspiratorial Radio’ on one of the many transceivers in the ham shack. Conspiratorial Radio is a program that normally discusses flying saucers, ghosts and similar fringe science subjects of great interest to college boys. But today, it’s all about fish.

“Hey,” shouted Dude turning up the volume, “Listen to this. This guy says that radio waves from AM broadcast stations actually penetrate water and fish are listening to them. He says that’s why you find more fish near the coast than far out at sea. The fish are attracted to the radio programs.”

“I don’t know about the fish, but radio waves don’t go under water,” scoffed one of the boys.

“So, do. Otherwise how would submarines communicate?” countered another frat boy joining the argument as a welcome break from studying.

“The same way SCUBA divers communicate, underwater walkie talkies,” added another.

“That’s stupid! SCUBA divers’ communication devices work by modulating and transmitting ultrasonic sound,” responded the first frat boy now raising the audio level in the ham shack another notch.

“You can stop arguing,” said Dude in a slightly raised voice. “Radios do not work in water. I dropped my phone in the toilet and I can tell you it didn’t work.”

“Dude, try to keep up! We’re not talking about radios working in water, we’re talking about radio waves penetrating water, duh!” sneered Hambone.

“Hey!” shouted another frat boy. “Why don’t we make this radio waves in water thing a group class project?”

“Great idea!” cheered Hambone. “The old Prof will love our original research. Everybody’s into undersea tech.”

So far, Joey had been pretty quiet but then he piped up, “I don’t mean to throw cold water on your undersea project, but we’re in Kansas. Do you see an ocean around here?”

“Road trip!” Shouted Hambone apparently fully engaged in the project, but maybe more interested in using it as an excuse for some summer fun. “We can go down to Florida and visit my cousin Finn. I’ve never met him, but I think he lives right on the beach.”

see HAMBONE on page 6
“Wait, wait, before we go anywhere, maybe we should figure out how we will actually test the radio waves,” suggested one of the quieter frat boys. “I was thinking we could seal a really small radio in a jar and submerge it in a bucket of water. If we can still hear the radio, then we know that radio waves penetrate at least a few inches of water.”

Someone shouted “let’s do it” and the boys sprang into action. Before long a large bucket full of water, a salsa jar and a very small radio were all assembled on the frat house deck. The boys first tried submerging the empty jar to see that it was watertight. At this point they discovered two problems.

The first was that the top did not fit the jar and it leaked. Close examination revealed that the top was for one brand of salsa and the jar was for a different brand. Searching the trash, they found the correct top which sealed perfectly. The second problem was that the jar kept floating up to the surface. A couple of bricks for weight solved that problem, but another revealed itself. The jar was nearly soundproof.

With the jar out of the water the boys could barely hear the radio through the glass. With the jar in the water, it was worse. The boys took turns pressing their ears to the sides of the bucket. Some thought they heard the radio, others weren’t sure.

Fortunately, Joey came up with a great idea, he built a listening tube. He took a three-foot shop vac extension tube and sealed one end with a rubber membrane which he retrieved from his wallet. He put that end in the water next to the jar and the other end to his ear. Now he could clearly hear the radio playing.

“I can hear the radio! Road trip back on!” he shouted.

Several other boys confirmed his finding and it was carefully noted in their lab notes that signals from 980 AM easily penetrated four inches of water, a plastic bucket and a glass salsa jar.

With a good salsa jar and radio and their road trip back on, the only decision was whose car to take. It was a given that they would drive straight through stopping only for gas and burgers. One guy had a relatively new SUV that was in pretty good shape and another had a slightly larger minivan that was in slightly worse condition. After arguing the plusses and minuses of each vehicle as engineers are wont to do, they settled on the minivan because it had a six-speaker 500 watt stereo and the SUV only had four speakers and 200 watts.

Twenty-some hours later, six boys, swim suits and sleeping bags piled out of the minivan and into cousin Finn’s beach house. Cousin Finn was a gracious host, but it quickly became evident that he had no interest in radio or anything having to do with swimming or water. This seemed odd since Finn’s house was right on Pass-A-Grille beach, one of the finest beaches in all of Florida.

Anxious to get on with their project, the boys grabbed their stuff and headed for the clear blue water of the Gulf of Mexico. But they got side-tracked.

The siren call of the Hurricane Lounge, which was located almost next door to cousin Finn’s place, proved irresistible and the boys took a short detour to its beach bar. All the frat boys were old enough to enjoy summer coolers, but Joey and Dude had to make do with lemonade. As things generally go at beach bars, you just can’t stand on one leg in the hot Florida sun, so they all had another round. That was probably not the best idea.

Since it was getting late in the day, the boys decided to get on with their project. They walked across the street to the water only to discover that they no longer had the radio. Each said he thought the other had it. A quick retrace of their steps revealed that it was still on their table at the Hurricane. While Hambone ran back to get it, the others continued to the water’s edge and reverified that the top made a watertight seal on the bottle. Hambone returned with the radio and attempted to put it in the jar but missed the opening and the radio landed in the sand. But, his second attempt worked and Dude sealed up the jar.

Then Dude opened the jar, removed the radio, turned it on, put it back in the jar and replaced the top. The water was about 80 degrees as the boys waded in. Hambone repeated cousin Finn’s warning to slide their feet on the bottom to scare off any sleeping stingrays. The thought of stingrays terrified one of the frat boys so much that he decided that the sand was a better place for him. The others continued on until the water was about five feet deep.
from HAMBONE on page 6

Hambone was the first to dive. He held the jar to his ear and dove as far under water as he could, head down and feet kicking in the air. He swam and stroked but never touched the bottom. Coughing and sputtering he surfaced only to learn that he was hardly under water at all. No one would call Hambone really fat, but a few too many burgers and fries had made him a bit too buoyant.

Another boy tried, but with the same result. Finally, they got the skinniest guy, Joey, to hold the jar to his ear while the others pushed him down. The best depth they could get was only about three feet because boys and salsa jars are amazingly buoyant in seawater. Upon surfacing Joey said he could still hear the radio so that was the end of the experiment. They carefully documented the test and headed back to the Hurricane.

After a couple of more days on the Florida beaches the boys – sunburned and broke – said goodbye to cousin Finn and headed home.

Two days later in the frat ham shack we find the boys completing their project.

“I think we have all our data here in the project and we have our conclusions,” said Hambone.

“What are our conclusions?” asked one of the frat boys.

“We concluded that AM broadcast radio waves do penetrate fresh water to a depth of at least four inches and seawater to a depth of at least three feet. We also verified that there are fish at that depth in seawater because we saw two brown fish, one gray fish and a

starfish. We could not tell if the fish could actually hear the radio signals,” said Hambone.

“Okay,” said Dude. “Let’s say that a fish can listen to radio stations, how would he pick out one station from another?”

“That’s easy,” replied Joey. “He would swim around until he found a tuna.