

FEEDBACK

SEPTEMBER 2020

2020: a Computer Odyssey

Many years ago, when I subscribed to what now calls itself “Dr. Dobb's Journal of Software Tools “, it called itself “Dr. Dobb's Journal of Computer Calisthenics and Orthodonia: Running Light with Overbyte.” This comes to mind because I'm “running late” and it has to do with computers.

Feedback readers have sufficient technical experience that little of this will be news, but perhaps a non-technical person's long stumbling path may jog a reminiscence from one of our experienced engineers.

The instant problem is that the desktop machine upon which I've assembled the Feedback over the past six years—my first was September 2014—started stuttering. That is, it locked up to the point that I had to remove power to shut it down. Twice on three consecutive days. I asked Deb whether I had purchased any computer hardware since my Bitcoin mining adventure. She thought not, which means that this machine is at least nine years old.

The machine is doing everything in its power to warn me that catastrophic failure is imminent and, because tin this COVID work-from-home time, this is now a

“work” tool, I had to take replacement or repair seriously.

My first computer experience was with the Computer Assisted Instruction (CAI) project at Bingham Jr. High School, part of the KCMO public school district.



The IBM 1500 instructional system featured an IBM 1130 computer in one room that fed text-based instructional material--math and science enrichment--to fifteen terminals in an adjoining room. I think I remember being told that the 1130 had an unimaginably huge core memory of 32K of random access memory. I don't remember, but read something that leads me to believe that each disk-pack--each the size of a trash can lid--held a megabyte of storage.

In the fall of 1970, several eighth graders were invited--did we stay after school or did we come in Saturdays--to learn APL (A Programming Language) to program the thing. We built calculators and simple games. Two or three of us learned “CourseWriter II”, the language used to build the instructional materials.

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SEPTEMBER MEETINGS

Sep 11 – ZOOM meeting TBA

Sept 25 – ZOOM meeting TBA

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 SOIC ON YJC

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-> FEEDBACK <-

*A publication of the
Johnson County Radio Amateur Club, Inc.*

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PRESIDENT'S CORNER

September is here and I do not think we will easily forget summer 2020. All the public Service events being canceled and the Field Day at home will require a special footnote.

The club zoom meeting and the virtual breakfast net has allowed us the ability to keep in touch. Please thank the members that have stepped up for both of these.



The saga of the 145.29 repeater. As most of you probably know work was done on the tower that hosts our 145.29 repeater. The work done included the entire top on the tower, including our antenna being removed and placed on the ground. The good news was that our antenna was still going to have a home on the top of the cell tower. The bad news was that the coax connector at the top was damaged. This was not discovered until the tower crew left the site not having contacted Bill (WA0CBW). T-mobile was contacted on the following Monday and they sent a local tower crew to repair the connector by Wednesday. T-mobile was very responsive with getting a climbing team to the site. More work is planned at the

Tower site which hopefully will not impact the repeater.

Please let Bill (WA0CBW) know that the club appreciates his many hours keeping watch on the repeaters. He spent hours at the site with the original crew during the hot weather.

Last Club meeting it was decided to postpone the Ensor auction until the spring 2021 due to the uncertainty surrounding COVID-19. I do not believe we could have created a safe environment for the auction.

We are continuing the raffles which will be our only fundraiser this year. There are two drawings left. One on September 25 for \$200 gift certificate at Associated. The last being \$400 on the October 23. Tickets are available on the Club's web site. Our thanks to Vince (KE0CGR) for all his work along with his off zoom assistant.

– Bill Gery – WA2FN

Johnson County Radio Amateurs Club - August 14, 2020

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

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

The Treasurer's report was read and accepted unanimously.

Old Business:

- We welcomed all 1st time visitors to the meeting - Terry Clevenger KE0VFI.
- Repeater Update – Bill Brinker, WA0CBW reported all working except the 145.290 MHz Repeater. Tower is back up but repeater did not work. During the take-down process the coax connector was apparently damaged. As of today the connector is of an unknown type and source for replacement. Also the Antenna is up but leaning about 15 degrees. Will be checking further with working crew to address these issues. The Back-up repeater on 145.210 MHz with same tone. Thanks again for keep traffic on the 145.29 MHz Repeater low to keep it from overheating during these hot summer days.
- Ensor Auction - Oct 24th. Olathe is willing to let club do the auction at Ensor. Bill will be talking with David Schulman about various ideas for having the auction. Club will do a survey to gauge possible attendance.
- Ensor Auction – Raffle tickets are available to purchase off the website or from Vince Sabia, KE0CGR. Vince reported that sales going well. 20% of members have brought tickets so far. Next drawing is at next meeting for \$200. Final drawing in Oct for \$400.

New Business:

- Field Day additional club awards for operation with less than 150 watts.
 - Total points – Herb Fiddick, NZ0F - 1280 points
 - Total QSO's – Herb Fiddick, NZ0F - 514
 - Total Sections: Ted Knapp, N0TEK - 67
- Larry Woodworth Manager of the Ensor Museum is retiring after many years of service. The Club plans to recognize him. More details to come. Our club and Santa Fe club plan to continue to provide volunteers. Finally, the Boy Scouts built benches around the fire pit.
- Overland Park Emergency Management sent very nice letter of thanks for use of our Fusion repeater during July search for elderly lady.
- KS QSO Party – The club voted to again provide \$200 support. Santa Fe club will operate KSØKS and are looking for CW operators. Contact Joe Krout, KR0UT.

Reports:

- 6 m – NR.
- 10 m SSB Roundtable – 4 participated on August 13.
- 40m SSB Roundtable – Numerous participants from all over including Canada, PA, TX, CO on August 12.
- Fusion Digital 440 net – 20 Check-ins on August 12 and 20 Check-ins on August 5.
- 2m Wheat Shocker net – 21 Check-ins on August 13 and No net was held on August 6.
- HF Activity – South Korea on 17 meters. Bands are better recently.

Announcements:

- Kansas QSO Party August 29-30.
- See Larry's List for upcoming Events.

Business meeting adjourned at 7:22 PM.

Program:

The Program for this evening was presentation on the recent real life Search and Rescue in Overland Park, KS, resulting from a Silver Alert by Herb Fiddick, NZ0F.

Notes taken by John Raydo, K0IZ

Submitted by Ted Knapp, N0TEK, Secretary

Johnson County Radio Amateurs Club - August 28, 2020

Meeting Date: Friday August 28, 2020. The meeting Started at 7:00 PM.

Attendance: Due to COVID-19 restrictions, this Meeting took place online using Zoom Video Conferencing. 31 were present.

The Minutes from the August 14, 2020 were read and accepted unanimously.

The Treasurer's report was read and accepted unanimously.

Old Business:

- We welcomed all 1st time visitors to the meeting.
- Repeater Update – Bill Brinker, WA0CBW reported all working well including the 145.290 MHz Repeater. Many thanks to Bill Gery, KA2FNK for contacting T-Mobile and getting the necessary crew out to the tower site to fix the issues created during the recent Cell Phone antenna change over. Bill, WA0CBW also reported that we are not quite “out of the woods” yet as far as how this Repeater antenna is mounted. It is currently missing some of the anchor U bolts and is leaning at about 15 degrees. Bill, KA2FNK plans to follow up with T-Mobile to get this issue corrected.
- Larry Woodworth Manager of the Ensor Museum is retiring after many years of service. The Club plans to recognize him with a Certificate from the Club. The City of Olathe also plans to recognize him.
- Ensor Auction - The Auction committee met to discuss the results of the recent Survey asking about level of participation. The Survey results indicated that both the donations and attendance would be low this year. These results were communicated to the members present. After a short discussion a motion was made and seconded to Postpone the Ensor Auction to sometime in the Spring. A vote was taken and Passed unanimously
- Ensor Auction – Raffle tickets are available to purchase off the website or from Vince Sabia, KE0CGR. The next drawing will be on September 25 for \$200. Final drawing in Oct for \$400.

New Business:

- Ensor Auction Raffle – The Second \$200 Gift Certificate drawing to Associated Radio was conducted. Barb McKinney, KE0EGG was the winner.

Reports:

- 6 m – NR.
- 10 m SSB Roundtable – 4 participated on August 27.
- 40m SSB Roundtable – NR.
- Fusion Digital 440 net – 21 Check-ins on August 26 and 16 Check-ins on August 19.
- 2m Wheat Shocker net – 18 Check-ins on August 27 and 16 Check-ins on August 20.
- HF Activity – FT8 Perth, Australia on 40m at Sunrise and Sunset.

Announcements:

- HamClass.org in September has been canceled.
- Campfire Saturday August 29.
- Kansas QSO Party August 29-30.
- Virtual Technician Class in January conducted by the Santa Fe Trail Amateur Radio Club.
- WW1 Museum will not be hosting the WW1USA Special Event on October 31. Instead it will be conducted virtually. More details to come.
- See Larry's List for upcoming Events.

Business meeting adjourned at 8:02 PM.

Program:

The Program for this evening was tour of Claude Chafin, N0FMO's Antique Radio collection.

Submitted by Ted Knapp, N0TEK, Secretary.

A Hambone Story - Jaimie Charlton, ADØAB

Hambone and the Binary Blues – Part 2

When we left, the boys, Hambone, his younger brother Dude and their friend Tim were in Uncle Elmer's house. Hambone was stretched out on his Uncle's couch recovering from excessive partying the previous evening.

Besides his physical pain, Hambone just learned that he lost fifty dollars playing a bar game. The group is mulling over possible ways to get Hammy's money back with a little revenge thrown in.

"How about if I get my friends Bubba and Bubba from my school's wrestling team to go find that jerk and shake the money out of him? These twin brothers are the size of refrigerators. It'd be fun to watch them work," suggested Dude.

"Yeah! that would be epic. But it might make people feel sorry for him," said Hambone. "It might be better to embarrass and discredit him in public so no one will ever play his game again."

"You know," mused Tim. "I wonder what that guy is really doing. He seems to hang out in the student lounge, always sitting at that same table playing that game. I've never seen him socialize or talk to anybody except to play. Why don't we watch him for a few days to see what's going on. Then we can plan our attack."

The boys all agreed to that plan and left Elmer's house. All except Hambone who simply made himself comfortable on his uncle's recovery couch.



* * *

A week later we find the boys gathered again in Elmer's shack. Hambone is fully recovered and eager for revenge.

Tim speaks first. "That was a bust. I didn't see anything weird. I guess that guy is just an anti-social, game playing jerk."

"I didn't see anything either except he does a pretty good business. Maybe we should drop all our classes and start a casino in the student lounge," said Hambone. "Seriously though, I'd really like to get my fifty bucks back plus a little revenge cash."

"You guys might consider doing nothing. After all, Hammy, you lost your money fair and square. Revenge is never a reason to do anything, it usually backfires," said Elmer to apparently, six deaf ears.

"How about if I wander into the lounge and pretend to take an interest in his game and ask him to teach me?" suggested Dude. "He doesn't know me. I'm not even a student so he's never seen me in any class or school event. He shouldn't be suspicious."

"And what will you do then?" asked Tim.

"I'll beat him at his own game and get Bro's money back."

"You could try," said Elmer, "But I doubt that you'll beat him. It sounds like he's very good. Even if you manage to play a perfect game,

you'll only break even. No real gain there."

In an unusual display of aggressiveness, Hambone announced, "It's me, I've got to beat him," "It's not revenge if Dude beats the jerk. Nope, it's gotta be me and here's a plan I worked out last week."

"Do tell," mocked Dude.

Hambone continued, "I noticed that he only plays two or three games and then takes a break. I think all that mental arithmetic wears him out. So, I'll keep challenging him to another game and another game until he's worn out and starts making mistakes. Then I'll beat him."

"Nice, Bro, but how are you gonna keep him for kicking your butt, again?"

"That's where you guys come in," said Hambone. "You're going to watch and hear the game through this wi-fi video pen I'll have in my pocket. You'll play the same game using Unck's algorithm on a laptop and prompt me on how many chips to remove from which pile."

"That's fine, but how will we tell you what to do?" asked Tim.

"By this," said Hambone with great fanfare as he rolled up his left pant leg revealing a small lump duct taped just above his ankle. "My leg radio!"

This is the receiver from a tiny drone like Tim was flying around the frat house last Christmas. I bought one, took out the receiver

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from HAMBONE on page 5

and taped it and one of its motors to my leg. Now, when you push any button on the controller I feel the motor vibrate. You can send me my moves in Morse code.”

“That’s awesome!” said Dude.

“That’s crazy!” said Tim. “It won’t work. It’ll run out of power. My drone always crashed after a few minutes of flying.”

“It does work,” countered Hambone. “I’m using a much bigger battery. The thing will run for at least an hour. More than enough time to wear the jerk down and beat him.”

“I still think you guys should forget about revenge. That sort of thing never works out well,” said Elmer trying to take the high ground. But once again, the voice of reason was lost in the excitement of the moment.

“I think it will be fun, let’s go to the student lounge,” said Dude grabbing his uncle’s laptop and heading for the door closely followed by Tim.

“Unck, can you loan me fifty bucks?” asked Hambone.

* * *

Dude and Tim entered the lounge first. There were a few students scattered around the room and the jerk was holed up in his usual spot in the corner. Nobody even looked up from their phones or took notice of the entrance. A few minutes later, Hambone wandered in.

“Hey Hambone,” shouted the jerk from across the room. “Thanks for paying for the beer at the party! All us physicists thank you. How about a rematch? Maybe get your money back?”

Not trying to appear anxious, Hambone looked at the jerk, said nothing and continued walking toward the vending machines.

“Afraid to play?” taunted the jerk. I guess it’s true, physicists rule while engineers drool.

With that, Hambone pivoted and headed for the jerk’s table, sat himself down and said, “Game on!”

Hambone slapped down a fiver and took the lead by arranging the chips in three piles he knew would give the jerk an advantage. In less than a minute, the game was over and Hammy’s fiver was in the jerk’s pocket.

“Oh, I’m sorry. I guess that was too fast for a little engineer to follow. Want to try again? I’ll go slower,” said the jerk in a voice intended to be heard throughout the room.

With all eyes shifted from their phones to Hambone and the jerk, no one noticed Tim and Dude in the far corner tap two quick dots on their transmitter signaling Hambone that yes, now the game was really on.

Without saying a word, Hambone put down another five-dollar bill that was quickly matched by the jerk. Having won one, the jerk generously allowed Hambone to arrange the piles and go first. That was a mistake.

Hambone fumbled with the chips further confirming his ineptness, but ended up with the piles arranged in the order telegraphed to him via his leg radio. Of course, since he went first and both players played a perfect game, Hambone won and retrieved his five dollars. The jerk broke their silence.

“Congrats, Hammy, you just proved one of the basic laws of statistics.”

“What’s that?”

“Even a blind pig gets an ear of corn once in a while!” shouted the jerk. A hushed snicker passed through room and the spectators’ eyes all jumped back to their phones. Embarrassed, Hambone felt a heat wave pass over him as his slightly too white geek pallor flashed a lovely shade of pink. Hambone felt himself starting to sweat.

“Let’s see how much corn you can actually get,” sneered the jerk laying another five dollars on the table.

Buoyed by his win, Hambone covered the bet. This time the jerk arranged the piles such that the first player wins if everyone plays a perfect game. The jerk moved first.

Hambone removed some chips per the messages he was receiving on his leg radio. The jerk took his turn but, in his haste to further embarrass Hambone, erroneously took one too many chips. Seizing on that mistake, Hambone took all but one of the remaining chips and scooped up the money.

“I’m beginning to like this corn,” said Hambone. “Let’s play again!”

“I, I, really can’t. I’ve got to get going someplace,” muttered the jerk as he picked up his chips and stood to leave. “Maybe some other time.”

“I guess you’re right,” said Hambone. “Engineers rule while physicists drool. One loss and you’re afraid to play your own game.”

While Hambone taunted the jerk, his team was messaging him to back off, to take the money and

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from HAMBONE on page 6

stop while he was ahead. But Hambone was on a roll to get even. "I guess you're too chicken to play a real game," shouted Hambone as he slapped his uncle's fifty bucks down on the table. "Put up or shut up!"

By now all the room's occupants had stopped feigning interest in their phones and gathered around the game table. Bowing to the pressure of the moment, the jerk sat back down and placed his chips on the table along with a fifty-dollar bill.

As his adrenaline level soared to new highs, Hambone's sweaty hands seemed to act on their own arranging the chips according to numbers received from the patch on his leg that was beginning to itch. He set them as follows:

Pile A: 6 chips; Pile B: 5 chips and Pile C: 3 Chips.

As he waited for the jerk to make his move, Hambone used his right foot to scratch that annoying itch.

The jerk moved first. Flustered by all the attention, he made several tentative moves. He took one chip from pile C, but quickly replaced it and took one from pile A. While appearing to study the board but really waiting for his team's instruction, Hambone's itch was becoming more intense. Wriggling around and scratching it with his right foot no longer was enough. Finally, he received his instructions.

"I think I'll take all of pile C," said Hambone scooping away all three chips. "That leaves five in in pile A and five in pile B," he said to no one in particular as he squirmed to alleviate the itch that had now turned into pain.

"What's wrong with you? Afraid of losing again, eh?" said the jerk.

"Lots of mosquito bites," said Hambone reaching down to his left leg. "I can't seem to scratch them all."

Returning his attention to the game and realizing that he cannot win unless Hambone makes a mistake, the jerk says, "I think I'll take all from pile A." He slowly scoops those five chips and then looks up expecting to see Hambone in a victory dance. But Hambone is nowhere to be seen.

"What the ..." said the jerk.

"Where'd he go? It looks like he wants to forfeit the game."

With Hambone nowhere in sight, the jerk takes his chips and money and leaves.

Meanwhile, Hambone had run to the men's room where Dude and Tim found him ripping the duct tape off his leg revealing a fist-sized first-degree burn.

"It looks like your sweat got into that radio and started a leakage path. Your super battery kept it going and it got hotter and hotter," said Tim.

"Yeah, you're right," said Hambone. "I can fix that and get a rematch. I've got ninety dollars to get back now."

"I don't think so. You're out the money," said Tim. "That jerk was bragging in the frat house how he has finished all his credits and is ready to graduate. He's leaving tomorrow for his new job. We'll never see him again."

Dude added, "I guess engineers do drool."

>> JCRAC FEEDBACK <<

From AMATEUR on page 1

(I met Ken Iverson, the IBM engineer who wrote APL, in college. His daughter, Janet, spent her Junior year as an exchange student at Williams. Dr. Iverson visited one evening and Janet invited a group of us to have dinner together in the Wood House dining room.)

At college, I took a Winter Study (1978-79, I think) course learning about the KIM-I microcomputer. The Keyboard Input Monitor (KIM) had a 20(?)-key numeric keypad for input, six seven-segment LEDs (think "calculator display") and speaker (beep beep) for output. The 1 MHz 6502 microprocessor was the same that would be used in early Apple computers. It had, as I recall, both a kilobyte of RAM and a kilobyte of ROM. Long term storage was done via cassette tape.

The first microcomputer I purchased was an Ohio Scientific Superboard II. It had a typewriter keyboard for input. You could buy an adapter to send output to a black and white television. It had 4 kilobytes of RAM and an 8 kilobyte Basic-in-Rom from a couple of guys on the west coast who called themselves "Microsoft". Cassette tape continued to be the mass storage solution. (The machine embarrassed me at chess. That would not do. I went on a chess buying and reading binge tht lasted until I finally beat the machine. I've not played the game since.)

see AMATEUR on page 8

from AMATEUR on page 7

With the income of my first legal job, I bought a Heathkit H100 computer kit. I soldered all those capacitors and IC sockets and (after a visit to a Heath service center) had a working MS-DOS machine with 192K RAM and a FLOPPY DISK DRIVE for mass storage. Its 8088 processor--like that of the new IBM PC--was fast, having a clock speed of 5 MHz. I saved up and, about a thousand dollars and year later, added a 15 MEGabyte hard disk drive, which was 50% more storage than in the common IBM PC-XT.

The kids got our parents into PCs. I remember Mom telling me how grateful she was that we got her into computers. She--a biology teacher at Johnson County Community College--came to know more about them then did either younger faculty or the students. At the dawn of the Internet, she was roaming around feeding her curiosity with all manner of things.

For maybe twenty-five years, I was always upgrading something-or-other in what Deb called my "Frankensteins". If you know what you are doing, you can save a ton of money by building your own box. So I did. Repeatedly.

The kids grew up with four PCs and a Linux fileserver in a hard-wired ethernet basement computer lab. (I'm not sure how the KC Star found out about us, but they sent someone out to interview us.) For many years, Simon's birthday party consisted of a bunch of guys coming over to play "bzflag", which had each person in a tank, maneuvering around, hiding behind barriers, and shooting one another in a game of capture the flag.

I last built a machine from scratch in 2011. I remember that because the technical specifications necessary for a bitcoin mining machine differed from what I needed for a general purpose workstation.

This suggests that I built my principal desktop workstation BEFORE 2011. It was pretty close to state of the art at the time and, because my computing needs are modest (I'm not into graphic-intensive gaming), it has served me well. Over the past week, however, the machine has been stuttering. I've had a series of freezes that I could only fix by unplugging power. Because, in the COVID era, I was using this machine as a part of my livelihood, I can't risk a total shutdown and loss of things in local storage.

Having more money, less time, and being less technically-up-to-date than I was thirty years ago, I opted to run over to MicroCenter and to let them sell me something. I explained my history to a salesman who led me straight to the PowerSpec line, which is the MicroCenter house brand. He figured that I'd be comfortable with something that didn't say Dell or HP on it and that I would appreciate the ability to open up the box and substitute components from time to time. (He also figured--rightly--that a guy who built his own machines might not be interested in purchasing an extended warranty.)

So now I have 8GB RAM, 8 processors running at 2.9 GHz, a terabyte of solid state storage and 4 video outputs, for which--even ignoring inflation--I paid

considerably less than I did for the original Heathkit and hard disk drive.

But that doesn't explain why the Feedback is late.

The problem is that the Feedback templates are all on the old no-longer-functioning machine. So I open the old box to remove a half-terabyte solid-state drive, open the new box to move things around.

Given my professed experience with such things, I am not going to admit how long it took me crack the thing open, find the relevant connectors, find the requisite screws from my cache of miscellaneous hardware to fasten the new drive and to get the thing functioning.

And then, of course, MS Windows wanted to protect me from the files of unknown origin on this foreign disk drive. And insists that I want to use its browser and its software, as opposed to the tools I have been using.

In the end, however, it all got done and--as is evidenced by this your seeing this--it seems to handle Feedback production just fine.

Next month will be easy.

>> JCRAC FEEDBACK <<