# "DRUMLINS RUMBLINS"-JANUARY 2023

WE'RE meeting at the WAYNE COUNTY FIRST FLOOR CONFERENCE ROOM
Wayne County Public Services Building 7227 Rte 31 Lyons NY 14489
WEDNESDAY JANUARY 18th MEETING START 7:30PM

REMEMBER this is a card-keyed entry which a DARC member will have to let you in.

But with all the activity this night the door should be unlocked. Knock on the conference window and we'll get you in the door if locked.









Remember to bring cash for the 50/50 and Tris's home baked scones and or goodies!

#### PRESIDENT'S KORNER

Happy New Year to all of you! We hope 2023 will find us all in good mind and health and we can survive the ups and downs of life as we know happen. That is the meaning of the "73" we always end in a CW QSO. It sure is appropriate. Hi hi. (For you non-CW hams, a "hi" means laughter or to laugh. You better have a sense of humor in life.)

Please pay attention to the <u>change</u> in the <u>DARC meeting room</u> this upcoming Wednesday. Both the rooms in the EMO are being used for fire training, so Abby, the EMO secretary, emailed KD2DNO, Bill, about the use of the <u>first floor conference room</u> at the Public Services building for our meeting. Bill was kind to pass the email on to me and put the change on the Drumlins Google web mail. Thanks, Bill, for the email. Speaking of Bill! Here is a happy Bill with his <u>last</u> DARC meeting as President of DARC:



Thank you, Bill for your many years as President and your willingness to hold on when you would have wished not to. With Bill's move to Monroe County for his QTH, let's face it; travel for Bill is much harder.

<u>Speaking of travel and weather</u>, please, pay attention when father winter kicks up to your emails and announcements on the 685 repeater. Myself included, travel when the weather is even "if-fy," I will be very leery to drive. No DARC meeting is that important. "Dodo Dave" has to get familiar with the Drumlins Google protocol and the nuisances of modern computer technology, so be patient with me. Those who have helped me with computers well know that "dodo" is pretty accurate. Hi hi. I should be a computer tester. If there is anyone who can mess up a computer, when I am told it is impossible, it is me. Believe me, that is no joke.

I have been accused by my XYL of being on the computer to long, so I don't check my email on an overly regular basis. (Part of that email is me keeping track of the XYL's emails too. She seems to forget that. I print off more of her emails than my own. Hi hi.) If there is a need for immediate communication with me, <u>texting</u> is the preferred way to contact me. Tell me to look at an email from you via texting is an example or just to get back to you. (My cell is below.)

There is no one in DARC that has plenty of free time, even us retired members. DARC is a <a href="whole-istic thing">whole-istic thing</a> as any organization. The Presidency is more an informal post to tell everyone to stop talking for a meeting when the time is to start a meeting. The talking is good on its own, however. Meetings are social too. Let's face it DARC and what we do is a "family" thing whereby we all benefit from our collective knowledge toward a common goal of helping the Wayne County EMO and supporting emergency communications for the public. That is why despite all the nearly 300 plus licensed hams in Wayne County, there are just the few club members. Those who are members have kind to basically use their skills beyond just one 's self. We think of helping the public with our skills. Unfortunately, too much of our society because of our technology does not free time and our work culture is overworked. So none of us alone can "be it all" in the club. Even we retired members are busy. (Sometimes we do so much we are just tired. Hi hi.) So members of our club who have taken on responsibility, attend meeting and help with RACES, you are commended. "FB" or fine business as we say in CW. We work together as best as we can.

So, any ideas or something you are thinking about or whatever is on your mind for the benefit of DARC, feel free to contact me. "Talks Too Much" Dave is a good listener as well. Drumlins is only as good as we all think and work collectively.

P.S. My cell: 1-315-871-8767. If you have worked the Pumpkin Patrol, I have all your info contact. Any others, send me an email with all your contact info, please. (My regular "twisted pair" is 1-315-597-4293 and you can leave a message. I may not answer right off or wait for the recording or my "little gray cells" may remember a phone when it is ringing. Hi hi.)

Dear Mother Nature, Having received my free sample of winter, I would like to cancel the remainder of my subscription. Thank you.





**RACES-ARES DECEMBER 2023** 

The winter months are the slow time for RACES and ARES. It is a good thing as prancing around in the winter can be challenging. The Ginna State and FEMA drills were, when I first got into RACES, were in the winter! It could be cold in the Dose van. Believe me, I know. I've done more "jobs" for the drills than anyone including filling in for what were non-RACES jobs volunteered Army style. Pumpkin Patrol? I've sat at every bridge at sometime in all weather conditions and many times two nights in a row. Thank heavens for our good relationship with SIARC and Ontario County RACES helping with the Pumpkin Patrol and whenever we both are needed for communications. By the way, if you look up the number of licensed Ontario County hams and the number of SIARC members the ratio between is not far off our numbers per say in the club, as I mentioned. Therefore, our working together is because of mutual respect and needed help. We're blessed.

Bill, KD2DNO, did a fantastic job of relaying SIARC's need for volunteers for all those good weather events needing our skills of communication. I will have to pay attention more what Tom, KB2NCI, sends in emails to me. (Right, Tom? Hi hi.) More time with emails? Oh oh, the XYL is not going to like that.

Our skills have been recognized by the Department of Defense and Army and Air Force MARS and Homeland Security. In one of the State RACES messages this January, the message body talked about "AUXCOMM" or <a href="mailto:auxiliary communications">auxiliary communications</a>. That is us "hams." I have been talking about our part in COMMEX, <a href="communications">communications</a> exercises, many times like "the sheppard who cried wolf" too many times. I am hoping I will see more cooperation with MARS in this direction for 2023. I will keep you posted.

Lastly, when George Bastedo and John O'Toole are informed by the State and FEMA with times of Ginna drills, I'll send the info out. Of course I encourage DARC members, if able and have time, to volunteer for their RACES commitment and get a RACES badge. Winter is not a good time to plan ahead for training and checking gear. March, April or May is better times when the weather is easier to put with even if it is just rainy, to plan ahead. Due to aging out or health and even "SK" members, our RACES team has gotten smaller. We have new members who have stepped up for RACES. Thank you for doing so. But even our added new volunteers do not equal our lost RACES members. (SK, remember, is a ham now a "Silent Key.") Anyone out there reading this

newsletter, please consider helping with RACES and helping out the Wayne County EMO and the public. (AB2F and his XYL come to my mind. Steve and I got our "Novice" tickets together in the old SEMO bunker days.)

Meanwhile, let's enjoy the "quiet" before we get busy. We are always prepared for emergencies and we hope we are not needed. Our Field Day playing is proof we can take on anything quickly if the times require it. The Roman Legions were known to say, we train for a 1,000 days to fight one day. Whew, luckily we don't have to be that dedicated but you get the idea what I mean.

73 & 88, Dave KB2KBY

#### KB2NCI and the SIARC "HEALTH and WELFARE NET"

Tom, KB2NCI, is still doing the "health and welfare" nets on weekday nights at 8:00pm on the 146.820 repeater in 2023.





Tom is starting out the 2023 year with net #706 on January 2<sup>nd</sup>. Kudos, Tom!

Tom's SIARC health and welfare net is open to all hams that can hit the 146.820 repeater (tone 110.9), either mobile or from your QTH. Just listen to Tom's or the NCS's instructions always given first as the net starts like we all know as hams and used to a SOP. So listen for the SOP at the beginning of the net. Only the third Wednesday of the month, the SIARC meeting night, is there no net.

#### MEETING PROGRAM

In some of our club programs, KB2KBY has talked of the electronic innovations in WWII that helped bring the war to an end two years earlier if those innovations never happened. The intercepting of HF signals, the breakthrough of tube technology in creating the proximity fuse for examile both which hams played a big part in there development. KB2KBY's son managed to find a good blue-ray copy of the Tom Hanks movie "GRAYHOUND" which is about a Fletcher class destroyer fighting the U-boat menace in WWII in the five year plus long "Battle of the Atlantic." It does a great showing all the inventions talked and shown about in past programs in which the Allies finally got the upper hand. It will

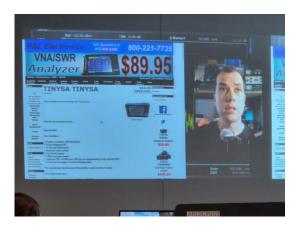
run about 20 minutes. This is the best movie that most accurately depicts this time period which the "Battle of the Atlantic" deserves and has long been ignored. This Battle of the Atlantic is the longest of WWII. This segment being shown we think will be interesting for us electronic nerds. Hi hi.

#### THE FUN DECEMBER MEETING!

The December DARC meeting was a different diversion from the usual monthly meeting. We had a program, yes, but we had some prize drawings beside the usual 50/50 and Tris's scones supplemented with homemade Christmas cookies (Yum!), and finally pizza! Here are a few of the pictures taken.







Look who gets caught getting pizza: KB2FSB. Lloyd, and N0EK, Ed. (The editor kind of coerced them for the picture.)



Doc, AB2F, won the grand prize of a BAOFANG 2/440 HT !!!!! KC2TCM, Jay, had a

couple of utubes on the new analyzer the club purchased for club members may sign out for their use. The editor is always in amazement of those hams that know how to use this "stuff." I am a good "op" turning knobs and a good ear. But I am enthralled when oscilloscopes or any things of "wizardry" used by ham engineer types. Thank heavens they have the knowledge and know-it-all. Our December "party" was a great success with members coming out and I would suggest making this a December-holiday event for DARC in the future. (Hint, hint.)



SOME OF OUR MEMBERS HAD FUN ON HF SINCE THE LAST MEETING

NOEK, Ed, is one of those apartment dwellers as the editor. Getting out on HF, even with CW, is a challenge. One thing us hams have is innovation! Ed is a good example. Ed has been figuring out how to get out with his apartment with antenna restrictions-no outside antennas. Here is on solution he came up with Outback Perth Plus 80-10m antenna. Usually used for mobile HF use but Ed had other ideas.







Yes!

The Perth Plus is just sitting on the floor in the corner of his ground level apartment in a corner and kept straight with a couple of standoffs so it will not fall down. And, it works! Now Ed is a CW man pure and pure! But with this setup Ed has been getting out to FL, ND, Long Island, NY, NJ, etc. Imagine!





Believe!

Good going, Ed! Ed also got an old Ten Tec rig in mint condition. Maybe for next month he can give us pictures of that rig and his success getting out with "antique" transceiver. (Okay, Ed?)

TEXT FROM NOEK 0430 JAN 16: Ed sent me this info on QSLs with his Outback Perth Plus: Canada stations 2: Ontario Prov and Montreal Quebec. STATES: NY, NJ, PA, DE, IL, OH, IN, VA, KY, NC, SC, GA, CT, MO, and MN. Most contacts on 40mb with some on the 80mb. Ed said most of the contacts on the General and Tech allotted bands as Ed is an Extra "ticket" but he has the skill to slow down and speed up depending on the "fist" he is copying. For a ham that can do 60 wpm and

slow down and still keep good "copy" is not an easy thing to do. The Extras speedy guys I mostly know are copying words and not letters and find slowing down too hard to copy accurately. My Army MARS former signal corp CW guy has this special ability. Believe me, Ed has this gift and it is a gift. Plus you have to remember any vertical antenna has terrible QRN. Ed has the right mechanical audio filters, good noise reduction and CW filters to help. Ed also has a 10-40 m loop or MLA as well. The loop takes up a lot of space and is on his coffee table which Ed says "...makes a very poor conversation piece." Hi hi.

Thanks, Ed, for the added information.



(There are more of you DARC members that are working on projects or doing things. N2MKT I know you were working on a 40 mb MLA antenna project.



#### **Looking to Ditch Twitter? Morse Code Is Back**

Reviving a 200-year-old system, enthusiasts are putting the digit back in digital communication By Larry Kahaner (Larry is an American journalist and author who resides in Bethesda, Maryland.)



Steve Galchutt shows off the custom-made low-wattage transmitter he uses on his treks.

For almost 20 years, Steve Galchutt, a retired graphic designer, has trekked up Colorado mountains accompanied by his pack of goats to contact strangers around the world using a language that is almost two centuries old, and that many people have given up for dead. On his climbs, Galchutt and his herd have scared away a bear grazing on raspberries, escaped from fast-moving forest fires, camped in subfreezing temperatures and teetered across a rickety cable bridge over a swift-moving river where one of his goats, Peanut, fell into the drink and then swam ashore and shook himself dry like a dog. "I know it sounds crazy, risking my life and my goats' lives, but it gets in your blood," he tells me by phone from his home in the town of Monument, Colorado. Sending Morse code from a mountaintop—altitude offers ham radios greater range—"is like being a clandestine spy and having your own secret language."

Worldwide, Galchutt is one of fewer than three million amateur radio operators, called "hams," who have government-issued licenses allowing them to transmit radio signals on specifically allocated frequencies. While most hams have moved on to more advanced communications modes, like digital messages, a hard-core group is sticking with Morse code, a telecommunications language that dates back to the early 1800s—and that offers a distinct pleasure and even relief to modern devotees.

Strangely enough, while the number of ham operators is declining globally, it's growing in the United States, as is Morse code, by all accounts. <u>ARRL</u> (formerly the American Radio Relay League), based in Newington, Connecticut, the largest membership association of amateur radio enthusiasts in the world, reports that a recent worldwide ham radio contest—wherein hams garner points based on how many conversations they complete over the airwaves within a tight time frame—showed Morse code participants up 10 percent in 2021 over the year before.

This jump is remarkable, given that in the early 1990s, the Federal Communications Commission, which licenses all U.S. hams, dropped its requirement that beginner operators be proficient in Morse code; it's also no longer regularly employed by military and maritime users, who had relied on Morse code as their main communications method since the very beginning of radio. Equipment sellers have noticed this trend, too. "The majority of our sales are [equipment for] Morse code," says Scott Robbins, owner of ham radio equipment maker Vibroplex, founded in 1905, which touts itself as the oldest continuously operating business in amateur radio. "In 2021, we had the best year we've ever had ... and I can't see how the interest in Morse code tails off."

Amos E. Dolbear patented this telegraph sounder and speaking telephone in 1879. While versatile, it did not become a household fixture.

Practitioners say they're attracted by the simplicity of Morse code—it's just dots and dashes, and it recalls a low-tech era when conversations moved more slowly. For hams like Thomas Witherspoon of North Carolina, using Morse code transmissions—sometimes abbreviated as CW, for "continuous wave"—offers a rare opportunity to accomplish tasks without high-tech help, like learning a foreign language instead of using a smartphone translator. "A lot of people now look only to tools. They want to purchase their way out of a situation."

Morse code, on the other hand, requires you to use "the filter between your ears," Witherspoon says. "I think a lot of people these days value that." Indeed, some hams say that sending and receiving Morse code builds up neural connections that may not have existed before, much in the way that math or music exercises do. A 2017 study led by researchers from Ruhr University in Bochum, Germany, and from University Medical Center Utrecht in the Netherlands supports the notion that studying Morse code and languages alike boosts neuroplasticity in similar ways.

Morse code emerged during a time of tinkering, at the start of the electrical age. In the 1830s, Samuel F.B. Morse, who had made a national name for himself as a painter with portraits of such luminaries as John Adams and the Marquis de Lafayette, began working with colleagues, including the inventor Alfred Vail, to experiment with how an electrical impulse initiated in one place and transmitted over a distance through wires could activate an electromagnet somewhere else. Operators would push down on a button attached to a small slab of brass that made an electrical connection between two wires. The connection sent electricity through these wires to a remote electromagnet, which then attracted a metal strip that made a clicking sound.

Though British inventors William Cooke and Charles Wheatstone had used an electromagnet to create the first telegraph receiver, patented in 1837, Morse's chief innovation was the simplicity of his code: A short press made a short click, or a dot, and a longer press, three times the length of a dot, made a dash; various combinations form the 26 letters of the alphabet. Within a few years, the utility of Morse's new language became clear to governments and businesses around the globe. Morse formalized this language as American Morse code in 1838, and in 1851 countries standardized it into international Morse code, which has remained largely unchanged since.



In 1844, Samuel F.B. Morse inaugurated the first U.S. telegraph line with a verse from Numbers, recommended by a friend's young daughter: "What hath God wrought?"

After Guglielmo Marconi sent the first intercontinental Morse message by radio in 1901—a simple "S," from England to Newfoundland—Morse code became the de facto method for critical telecommunications and maintained that standing for nearly a century, despite the emergence of voice communication, because it offered clearer and more reliable communication for the military and maritime users.

That dominance broke in the mid-20th century, when digital data sent over satellites and fiber-optic cables took hold. Most historians agree that the death knell for Morse came in 1999 when the Global Maritime Distress and Safety System, which generates an automated digital emergency signal for ships in danger, replaced Morse code's SOS—the familiar dot-dot-dot / dash-dash-dash / dot-dot-dot. Military use disappeared except in extremely rare instances, other ship use became almost nonexistent and the last holdout users were hams who were still required to learn code for their licenses. That changed in the early to mid-2000s, when most countries no longer required hams to be proficient in Morse.



Capt. Roy F. Morse (no relation to Samuel), center, teaches Morse code to Black Air Corps cadets in Tuskegee, Alabama, in 1942.

National Archives Although Morse remains the purview of hams, its presence still seeps into wider culture. The new Apple Watch can silently buzz out the time in Morse when you put two fingers on the face. Since its opening in 1956, the Capitol Records building in Los Angeles, shaped like a stack of vinyl records, has sported a light on the roof blinking the word "Hollywood" in Morse code.

One of the main shortcomings of Morse code identified nowadays is its slow pace in an age of instant messaging. The average English speaker talks at about 150 words per minute, while most experienced

hams send and receive at only 12 to 25 words per minute (although some high-speed operators can hit 35 or 55 words), says Howard Bernstein, who teaches Morse code at the Long Island CW Club. Another drawback is the difficulty in learning the code—tantamount to learning a foreign language. It can take months or years of hard work to become proficient in a skill that offers diminishing returns for anyone but an avid hobbyist.

Part of Morse code's enduring appeal for hams isn't going away soon: Its simplicity and easy detection on airwaves make it more reliable than voice communication—and allow a ham to break through atmospheric noise and other weather conditions, even at extremely low transmitting power. "When you can't get through with your own voice, Morse code gets you through," says Bob Inderbitzen, director of marketing and innovation at ARRL.

Radios that send and receive Morse code are lightweight and technically simple, and they need only small batteries. These advantages have spurred several sub-hobbies within the ham community. Thousands of hams worldwide participate in programs such as Parks on the Air and Summits on the Air, in which operators take their rigs into parks or mountaintops to see how many contacts they can make and how far they can reach.

An 1877 print from *Knight's American Mechanical Dictionary* offers a simple guide for sending letters and numbers in Morse code. Library of Congress

Adam Kimmerly of Ramona, California, is a regular at these events. "This is an ideal combination of my favorite hobbies: rock climbing, mountaineering, hiking and amateur radio." And while some might imagine Morse code to be less intimate than actually hearing someone's voice, veteran hams can often recognize one another based on their "fist," or the rhythm and pacing of a strip of code. "You may think of dots and dashes as not having the same personality or character as voice communication, but they actually do," Kimmerly says. "One of the really cool things I never expected is that people have their own inflections." One Morse code enthusiast, Anne Fanelli, even saved a fellow ham's life when she noticed his "fist" was off; after he stopped responding entirely, she called 911, and he was taken to the hospital, where he spent three days recuperating from an adverse drug reaction.

Doug Tombaugh, a history re-enactor from Kansas City, Missouri (he plays a mid-19th-century woodcutter), is president of the <u>Straight Key Century Club</u>, whose thousands of members use simple up-and-down keys like those used by the first Morse code operators, instead of modern keys that form dots and dashes electromechanically, or those that employ computer software.

"I just like the mechanicalness of using a brass key," Tombaugh says. "It's real. It's authentic. It's tactile."



## **Amateur Radio Operations at the US Military Academies**

01/06/2023 ARRL

The Service Academies Radio Group (SARG) was recently formed for alumni and amateur radio operators who are interested in the five U.S military academies.

William Curry, W5CQ, founder and net control operator for the SARG Net, said two months ago there was a new interest in forming a group and net. He noticed that only one military academy, West Point, W2KGY, was still operating a club station. At one time, every military academy had an operating club station.

"The club stations at the U.S. Military Academy, U.S. Naval Academy, U.S. Air Force Academy, U.S. Coast Guard Academy, and the U.S. Maritime Academy all have been off the air for some time," said Curry. "But we now have 50 new members, all who are interested in promoting amateur radio at all of the academies."

The SARG net meets every Thursday at 2200 UTC on 7.280 MHz, and every Saturday at 1600 UTC on 14.338 MHz. All amateur radio operators, whether they are veterans, or just have an interest in the military or history of the academies, are invited.

Curry has been licensed since 1950 and holds an Amateur Extra-class license. He is also an ARRL Life Member.

For additional information about the SARG Net, contact Curry at w5cq@arrl.net.



I don't mean to brag, but...
I just put a puzzle together in 1 day and the box said 2-4 years.

# More Amateur Radio Astronauts Head for the International Space Station

The four crew members that comprise the SpaceX Crew-6 mission pose for a photo during a training session on the crew access arm at the Kennedy Space Center's Launch Pad 39A in Florida. From left are, Mission Specialist Andrey Fedyaev, Pilot Warren "Woody" Hoburg, Mission Specialist Sultan Al Nedayi, and Commander Stephen Bowen. Photo Courtesy of SpaceX.

Three of the four new astronauts on February's planned launch of the SpaceX Crew-6 mission to the International Space Station (ISS) are amateur radio operators.

Pilot Warren "Woody" Hoburg, KB3HTZ; Commander Stephen Bowen, KI5BKB, and Mission Specialist Sultan Al Neyadi, KI5VTV, will join Mission Specialist Andrey Fedyaev on board the SpaceX Dragon spacecraft, Endeavour.

The spacecraft will be atop a Falcon 9 rocket and, while a launch date has not been selected, the earliest date would be mid-February 2023.

All crew members have learned about <u>Amateur Radio on the International Space Station</u> (ARISS), received guidance on studying and testing, and learned how to operate the ARISS radios and the basics of on-the-air protocol from ARISS team members at NASA's Johnson Space Center.

The crew will be able to participate in ARISS, using the ham radio station on the ISS to contact schools and other educational institutions.

ARISS is a cooperative venture of international amateur radio societies and the space agencies that support the ISS. In the US, participating organizations include NASA, the ISS National Lab, <u>ARRL</u> The National Association for Amateur Radio<sup>®</sup>, and AMSAT.

## Hurry up and get ready for the Linc Cundall Memorial CW & AM event!

It is almost time to fire up your pre - 1950 gear for the AWA Linc Cundall Memorial CW & AM Event. This event honors Linc Cundall - W1LC (SK) who co-founded the AWA back in 1952.

Op's can be found operating this event using both AM and CW on Wednesday January 25, 2023 @ 2300 GMT to Thursday January 26, 2023 @ 2300 GMT and Saturday January 28, 2023 @ 2300 GMT to Sunday January 29, 2023 @ 2300 GMT.

This event focuses on operating gear either home-brewed or manufactured prior to 1950. Bands of operation are 160, 80, 40 and 20 Meters. Contact the greatest number of stations using your pre 1950 gear. If your not a CW op, have some fun by operating AM. When calling CQ, use "AWA AWA de "W1GIG" for example.

In scoring, both equipment and power multipliers are offered. Your biggest advantage is to use a receiver along with a low power transmitter that was manufactured prior to 1950. Home built gear is encouraged as long as the design was available prior to 1950.

If you do not have any gear prior to 1950, you can still operate and have fun but will have a reduced multiplier. Remember to still send in that log!

Lets make our event coordinator Steve - WA8UEG work real hard by sending in your log sheet. Please send it your log regardless of how many stations you work. Special thanks go to Steve for being the event coordinator for the Linc Cundall Memorial CW & AM event.

For all the details for this event, please see the AWA website at:

https://www.antiquewireless.org/homepage/lc-cw-contest-details/

Joe - W3GMS

Chairman - AWA Operating Events

A SURPRISE AT THE A.W.A.

The Antique Wireless Association in East Bloomfield every Tuesday has a work day for volunteers at the museum. There SIARC, DARC, RaRa and RRRA members who help out the AWA. I have breakfast with retired and working Harris Radio hams Saturday morning at the West Wayne Restaurant just east of the hamlet of Macedon. They could be members of these and any other ham club. I know many of them work the Tuesday as well. This past Tuesday the 12<sup>th</sup> was one of those work days. KD2PER, Pat, of SIARC is one of those volunteers this day. This couple happened to walk into the closed but "...the door was opened..." work day. (That is what she told her when I saw her Saturday. Hi hi.)



This is KB2KBY's nephew and YL. KD2PER sends me this text with the picture saying, "I think you know these two." Hi hi. I sure do. The "two" have wanted to see the AWA but they said it was always closed when they drove by. Well, the door was open with the work day, so they stopped in. Hi hi. The YL mentioned they have an uncle who was a ham and did they know him. Bingo, Dave Taylor was mentioned and many said, oh, we know him. Hi hi.

Anyway, they had a nice tour of the AWA museum and were happy the workers were very cordial and happy to show everything. These pictures were sent by KD2PER showing the new "ham shack" room that was just added on and the group were setting up various ham stations.



To you "older" and/or longer members of DARC, this picture shows a setup you will remember: console, 6' rack, and printer. Yes, it is the old communication setup from the SEMO underground atomic bunker in Newark near the NYS DOT buildings. I always loved seeing the gear. Massive, impressive and beautiful to us ham types. My Harris Radio hams at breakfast spit out the specific nomenclature but it went in one ear and out the other. Sorry. Hi hi.





Love it.



I can't wait for the room to be finished and open for public view. The nephew and YL liked their tour and were impressed too.

EMAIL from K2OEQ, Duncan, on Sunday to me with some corrections to my article on the AWA: Since there are a lot of people working there on Tuesdays, the Museum is officially open for visitors on Tuesdays, from 1000L to 1500L. And the Teletype Corporation Model 28, next to the TMC SEMO station, actually came from the Buffalo SEMO site. Duncan is one of those retired Harris Radio guys. Thanks, Duncan for the added and corrected information.

Duncan was sorry not to be there to meet the nephew and YL. Welcome back from FL-land EL79. Only a ham would be that specific where you vacationed. Hi hi.

#### **FINAL NOTES**







My son asked why
I speak so softly in
the house. I said I
was afraid the NSA
was listening. He
laughed, I laughed,
Alexa laughed.



You sure you trust this guy for president?

(Hi hi, maybe I shouldn't be told?)

That is all for this month. Remember you got anything you think interesting for the DARC newsletter, email it to me, please. Pictures always welcomed.

