

SHORT CIRCUITS

Newsletter of the Kent County Amateur Radio Club

July 2023

Officers		Repeaters
President	Paul Tuley N3BUH	146.970 (-) 77hz pl Dover
Vice-President	Jim Moore KC3BTV	146.910 (-) 77hz pl Camden
Secretary	Tim Reisinger KC3OO	147.300 (+) 77 hz pl N3YMS
Treasurer	Tom Libertore N3ARX	444.550 (+) 77hz pl Dover (down)
		442.450 (+) 127.3 hz pl Harrington
		449.775 (-) 114.8 hz pl N3IOC Felton

Happy Fourth of July

Happenings

	Independence Day
July 4	
July 11	Membership Meeting, Kent County EOC, 19:00
July 13	AUXCOMM Meeting, 19:30
July 31	Emcomm Meeting, EOC, 19:00
August 8	Membership Meeting, Kent County EOC, 19:00
August 10	AUXCOMM Meeting, 19:30
August 28	Emcomm Meeting, EOC, 19:00
September 9	VE Testing, Wyoming Methodist Church, 09:00
September 9	Swap Meet, at K3TKJ QTH, Laurel
September 12	Membership Meeting, Kent County EOC, 19:00
September 14	AUXCOMM Meeting, 19:30
September 25	Emcomm Meeting, EOC, 19:00
October 10	Membership Meeting, Kent County EOC, 19:00
October 12	AUXCOMM Meeting, 19:30
October 30	Emcomm Meeting, EOC, 19:00
November 4	Swap Meet, at K3TKJ QTH, Laurel
November 9	AUXCOMM Meeting, 19:30
November 14	Membership Meeting, Kent County EOC, 19:00
November 27	Emcomm Meeting, EOC, 19:00
December 9	VE Testing, Wyoming Methodist Church, 09:00

Hamfests

July 01	Firecracker Hamfest Harrisburg Radio Amateurs Club Harrisburg Postal Employees Picnic Grounds, 1500 Roberts Valley Road, Harrisburg, PA Contact: Terry Snyder , WB3BKN, PO Box 355 Halifax, PA 17032 Phone: 717-979-9515 Talk-In: 147.075 (123) Email: wb3bkn1@gmail.com
July 29	CVARC 2023 Hamfest, ARRL Pennsylvania State Convention Cumberland Valley Amateur Radio Club CVAEMA Show grounds, 1501 Criders Church Road, Chambersburg, PA 17201 Contact: Jim Stephens , KB3ICU, 183 N. 4th St. Chambersburg, PA 17201-1625 Phone: 717-504-7684 Talk-In: 147.120 + 100hz Email: cvarcw3ach@gmail.com
August 13	Valley Forge Hamfest Mid-Atlantic Amateur Radio Club (MARC) Kimberton Fire Company Fairgrounds, 762 Pike Springs Rd., Phoenixville, PA 19460 Contact: Bob Palin , N3JIZ, PO Box 557 Eagleville, PA 19408 Phone: 610-420-1535 Talk-In: 145.130- / 147.060+ (PL 131.8) Email: hamfest@marc-radio.org

- September 9 **Delmarva Swapmeet**
Delmarva Amateur Radio Club
 Al Waller's QTH, 34087 Old Hickory Rd, Laurel, DE 19956
Contact: Jim Jester, KCITR, 443-366-5677
 or Arthur Parks, N3EAK, amparks6@gmail.com **Talk-In:** 146.82 (-) 156.7 PL
 Hours: 10 AM – 2 PM
- September 10 **ARRL Southern New Jersey Section Convention and Hamfest**
Gloucester County ARC
 Gloucester County 4H Fairgrounds, 235 Bridgeton Pike (Rt 77), Mullica Hill, NJ 08062
Contact: Sheldon Parker , K2MEN, 643 Betty Rose Ave. Gibbstown, NJ 08027
 Phone: 609-417-7802 **Talk-In:** 147.180 PL 131.8 **Email:** sheldonparker@comcast.net
- October 01 **CARA Fest**
Columbia Amateur Radio Association
 Howard County Fairgrounds, 2210 Fairgrounds Road, West Friendship, MD 21794
Contact: Michael Olson , K3RMO, PO Box 911 Columbia, MD 21044
 Phone: 410-497-4125 **Talk-In:** 147.390 MHz/R+ 156.7 Hz
Email: k3rmo@columbiaara.org
- November 4 **Delmarva Swapmeet**
Delmarva Amateur Radio Club
 Al Waller's QTH, 34087 Old Hickory Rd, Laurel, DE 19956
Contact: Jim Jester, KCITR, 443-366-5677
 or Arthur Parks, N3EAK, amparks6@gmail.com **Talk-In:** 146.82 (-) 156.7 PL
 Hours: 10 AM – 2 PM

More hamfests listed at www.arrl.org/hamfests. Check at the web site, or call the contact person, before going to any hamfest to make sure it has not canceled, as many are and have been.

Editor's Comments

There have been rumors flowing around at the April Hamfest in Georgetown (which was fantastic, by the way) that there were grumblings about our ARRL leadership being involved with AUXCOMM. This was discussed with me from a number of different people, and all expressed a concern that ARRL organizations would be swallowed up and that all organizations should be separate and distinct.

In the ARES Letter for the 21st of June was an article by two fellows in Colorado, under the heading "Colorado AUXCOMM Supports Southwest Incident Management Team Wildfire Exercise" by Steve K1OKY and Emit W0UAW. At the end of the article was "Conclusions and Lessons Learned" in which Steve wrote; "The exercise provided an exceptional training opportunity, and we feel that we are now better prepared to work as a team in support of the Colorado Division of Homeland Security and Emergency Management should a disaster arise." Colorado AUXCOMM is a specialized incident and disaster response public safety communications unit comprised of volunteers whose primary mission is to support the Colorado DHSEM. Colorado AUXCOMM may also support local jurisdictions and agencies through the state resource mobilization process. In addition to providing emergency communications, Colorado AUXCOMM works with our emergency communications agencies, such as the Amateur Radio Emergency Service, the American Red Cross, and the Colorado National Guard, to develop interoperability solutions and cooperative agreements.

Now this article outlines what is happening in Colorado and you may ask, "what does that have to do with Delaware?" It seems as if officials in Colorado have seen what can happen and have determined that combining forces can be beneficial. But only by those who have taken the proper training. They saw that AUXCOMM is actually "auxiliary communications by a group of volunteers that work under the Incident Command System" and not an organization in and of itself. Thus ARES, RACES, REACT, ALERT, CAP, and CERT can all work under ICS when a situation arises, and be better at the task at hand.

Field Day has come and gone. The weather forecast leading up to the weekend was for rain, and it turned out to be clear, sunny and HOT! Got really humid on Saturday for set up, and wasn't much cooler on Sunday, but stations got set up and contacts were made. Field Day is a time for people to learn and practice new skills while operating. Some listen to "experienced" operators and learn, some don't and keep making the same mistakes, and some don't even try to operate, and some have forgotten basic skills needed for efficient communication. Most of Kent County's most experienced contesters did not come out for the KCARC Field Day, which really deprived new people, and some of the older people, a chance to see a good communicator in action. A shame! Wonder how we get those who consider themselves good, or great, contesters to come show us their skills?

President's Column

Silence from the top.

Vice-President's Column

I must admit, I like playing with antennas. While my primary HF antenna is a 105 ft long doublet that started life as a G5RV (I extended the window line all the way to the tuner at the transceiver to give 80-10 capability), I have also put up 2 different loops and numerous wire antennas. I took down the loops because I didn't like the close proximity to my neighbor. Another antenna experiment was an inverted vee that was supposed to be directional with gain for 20m. To me it didn't live up to the hype. Another experiment was a snake antenna that was literally lying in the grass. It was supposed to be a low noise antenna but again, the antenna, for me at least, wasn't up to the hype. I have played with a magnetic loop antenna but I would consider it a last resort reserved for an apartment or HOA community. I put together a simple 40/20 m dipole which I can roll up and put in my HF go kit to use with my Xiegu G90 on low power. It had a SWR of less than 2 across both bands which the G90 tuner can easily handle.

For field day I am experimenting with a 80/40 NVIS antenna system with the antenna legs serving as guys holding the center pole upright. I have to play with it at field day since I don't have enough room at home to erect it. I also have a Hustler 4BTV vertical with the 30m modification.

One of the good things about ham radio is the freedom to try new things. Go out and try something new!

73,
Kim KC3BTV
VP KCARC

From the Section Manager's Shack

Sections Managers Column July 2023

A quote from Yogi Berra, "it ain't over 'til it's over", can readily be applied to Field Day. It's what happens after 1400 on Sunday that is as important as what happened before 1400 on Saturday. Orderly packing of the equipment, notes made of what needs repair or replacement, logs collected and compiled, and the report sent off. Last, but certainly not least, a group review of what went well and what didn't. A "hot wash" if you will. An informal, immediate, after action discussion of the event. Notes should be taken. Having the participants follow up with their written comments is also a good practice. Now if you can find those notes and write-ups as next year's planning starts that should be a big help. And, by the way, since this is an annual event, planning should actually start for next year now!

For my first Field Day as Section Manager, it was quite interesting to travel the state to observe the six groups and their operations. My first impression was that people were having fun, excited about the event, and enjoying the camaraderie of working together. That will go a long way towards building strong clubs. Several sites had visitors from the general public, and uninvolved local hams. Again a good thing. First impressions are important if you are trying to make a point, be it with the public, elected officials, and other hams, whatever. If the site was neat, clean and organized, the impression would be that this was a well-planned and managed event. If there was something that immediately jumped out at you as

questionable that would not be good. An attractive, organized, display of printed material related to amateur radio would be a plus. Across the groups visited that ranged from excellent to non-existent. Antenna safety and compliance with the new RF exposure ruling was something new this year. Although efforts were made by all, compliance could have been better.

Talking about antennas, every group had at least one "end fed" HF antenna deployed, from homebrew to manufactured, and contacts were being made. The advent of this technology and its impact on portable operation should be explored further. It works and it's expedient!

So, get ready for next year now!

Later, 73
John K3PFW

The Emcomm Corner

Hurricane season is upon us so we need to be prepared. First, we need to be prepared to look after our personal safety and the safety of our families. Make sure you have an adequate supply of freshwater and non-perishable supplies. It might be a good time to try out that alternate method of cooking when it's not a crisis. Do you have a non-electric can opener? Do you have a battery powered weather radio? Do you have flashlights that work along with spare batteries? Do you have a pre-planned evacuation destination if needed? Do you have a personal radio go kit so you can set up basic communications anywhere?

Once your family is taken care of, you can consider being available to help with emergency communication for Kent County (or someplace else if called upon). Family is always first before emcomm.

Jim KC3BTW
Kent County EC

AUXCOMM News

Field Day 2023 – AUXCOMM Style

Field Day 2023 has come and gone. At Sussex County AUXCOMM, we again partnered with the Sussex Amateur Radio Association (SARA) to conduct a joint operation located at the newly renamed Sussex County Emergency Operations Complex. SARA members set up stations outdoors on the airport side of the building. In true Field Day unplugged fashion their stations were powered with the use of generators and solar-charged batteries. The SARA operation included a POTA demonstration complete with barbecue grill mounted antenna by Pete Carpenter KC3MVS. Both Pete and Butch Wlaschin WA0CIE seemed to keep busy all day with Field Day contacts.

In addition to the traditional on-the-air Field Day activities, it was also our goal to engage the public and use the event to provide exposure for Amateur Radio. To that end we had excellent support and promotion from radio station WGMD and local print media. We were not disappointed with the results and experienced an encouraging mix of visitors. Not a huge crowd, which turned out to be a good thing in that we had limited personnel to interface with them, but a steady flow. These included a family with two young children and a nearby worker who spotted our activity and was interested in what we were doing. Several SARA members who had never been to the EOC, or not in a while, stopped by to get introduced.

One of the best aspects of the visitor traffic was that more than a few hams who were either newly licensed, new to the area, or had been licensed for a while but inactive in the hobby for some time. The Field Day 2023 publicity was effective in getting them to stop in and see what it was all about. The outdoor Field Day operations and an indoor tour of the AUXCOMM facilities were well received by our visitors. Several got into lengthy discussions and "Q&A" sessions that demonstrated to us the need for hams, especially newer hams, to have help in taking those steps from newly minted license to comfortably operating within the hobby.

All of this interaction and tour guide activity did, however, keep the AUXCOMM radio room out of the running for any Field Day points as we did not have any additional personnel available to run the stations. So, from a points perspective it was a shutout with zero points earned for contacts by AUXCOMM. However, the chance to show what we do and where we do it for folks with a genuine interest was well worth the time and sacrifice of contest points and, I trust, will have a more lasting impact. Hopefully, in the future we will have the needed volunteers to accomplish both.

Looking forward to a happy and safe 4th for all! 73's
Bill, N3ID

Club Happenings

Field Day is Over

Many are celebrating that it is all over for another year, most are recovering! The preliminary results are in and we had 24 people that came out and took part in the activities. Operation, for those of you that missed it, was a 3A the an external CW tent and a GOTA station. Final tabulations are in the process and may be available at the meeting on the 11th. Not being in the trailer at all, or overseeing the GOTA, I can only attest to the CW station which made 661 contacts, last count.

Thanks goes to all who set up, tore down, operated, and to Hunter and family for taking care of the food, along with those who chipped in and assisted, including the delivery person! I'm sure Jim, KC3BTV, will be able to give an account from the last Emcomm meeting and the hotwash.

13 Colonies Special Event July 1 – 7

The 13 Colonies Special Event will take place from July 1 through July 7. The idea behind this Special Event is to work designated stations in each of the original 13 Colonies. If you skipped history class, like some of the people I've talked to, Delaware was number one!

All modes will be used, from CW through "the dark side" (FT8) and most of the amateur bands will be available, including VHF at times, however most activity will be on HF bands from 160 to 10. All classes of license can get on 40 meters, including Technicians, using CW and work all of the stateside stations in the event. And all classes can work all stations on 10 meters using all modes available. So get on the air and participate in the Special Event. No HF station? Make arrangements with a club officer to come to the EOC and make some contacts from there.

IARU World Radio Contest July 8-9

The IARU contest comes up next weekend. It is a 24 hour contest using phone and CW modes. You can work CW only or phone only or do a mixed mode, a combination of both. You can also be part of a multi team. It is a fun contest and you can really get some more of those DX contacts. Think about taking part in it.

Mini 1300 Antenna Analyzer -WOW! – W2PB

First let's start out with the bad news! Unless you purchase this device from a USA stocking dealer, at a much higher price, expect up to a two-month delivery time!

The good news is this is multifunctional device that functions as a vector network analyzer, a single frequency SWR indicator, a single band antenna SWR sweep, a multi-band SWR sweep, an audible SWR indicator, frequency counter, TDR for finding cable faults, Smith Charts, RF frequency generator, L/C meter, and more. I just tried mine on my Yaesu ATAS-120A screwdriver antenna, Outbacker Perth multi-band tape vertical mobile antenna, and my Maldol HMC-6 multi band mobile antenna. Good news! The Mini 1300 (good to 1300 MHz) graphical showed me what I had already measured with my MFJ-259D antenna analyzer which was misplaced during our last move. Based on this "replacement", I have already attached an Apple Air Tag to the Mini 1300. It is nice to see antenna measurements across a given ham band. Of course I could do the same thing with my NanoVNA.

The Mini 1300 has an SMA output connector for the VNA function, and a female N connector for the SWR measurements. So I added a N male to SO-239 adapter to a small foam cutout I made in the box's packing material. The Mini 1300 also comes with an "short", "open", "50 ohm load" for calibrating the VNA side of the

device. BUT, does not include any SMA cables for connecting filters, etc, for thru loss measurements. I will borrow those cables from my nano VNA if needed.

Beware the underside edges are semi sharp. I have added some thin Perma-Flex weather stripping to the under edges. That way I don't have to carry more bandaids in my wallet.

The one "interesting" function of the Mini 1300 is it has a WSPR, FT4, FT8, and JT65short message generator! Hmmmm! Output is on S2 Port. Time date setting is set table for transmission periods. Reportedly, output depends on the band, but it has been reported at 26 mW on 20 M and 500 mW on 2 M. Frequencies vs mode are stored per band and easily selected. Currently there is no decode function.

I used the Mini 1300 today to also test my new compact, 100W, auto antenna matcher (ATU). It is an assembled ATU-100 with an internal rechargeable battery. The worse match I obtained was 1.3:1 on 15 meters. But the antenna by itself has a low SWR on that band without the ATU.

I suggest if you have a need, and application, check out the Mini 1300 antenna analyzer online. There are plenty of reviews on www. YouTube.com, eham.com and elsewhere. But beware of some kits! People have reported some kits are low quality, and people have had problems loading firmware. That is why I bought my assembled. Additionally, some units have an "Auto" button and a "Bypass" button. But mine goes into Bypass if I turn it off.

73 de W2PB, Paul

Useless Facts on the Month

There are more stars in the universe than words ever uttered by all the humans who ever lived. (They've never heard Emily Compagno talk!!)

Arthur Guinness, founder of Guinness Brewery, had 21 children with just one wife. (She was busy!!!)

Shakespeare invented about 1,700 words that we use today. (Just about the number of words per minute Emily Compagno can talk!!)

For every person on earth, there are roughly 170 million insects. (And half of them must be ants at a picnic!!)

In France, you can legally marry a dead person. (And in Pennsylvania you can elect one to office!!) Forrest Mars originally created M&M's in 1941 exclusively for U.S. service members deployed overseas during World War II. Mars drew inspiration for the candy after observing soldiers consume chocolate pellets enclosed in a protective hard shell during the Spanish Civil War. The idea behind the hard shell was to prevent the chocolate from melting while soldiers carried the candy in warm tropical weather. Initially reserved exclusively for the military during World War II, M&M's became available to the general public as wartime quotas were lifted.

Tidbit of Information of the Month Department

Legislation to Remove Private Land Use Restrictions on Amateur Radio Introduced in Congress

Congressman Bill Johnson (OH-06) and Joe Courtney (CT-02) reintroduced a bill in the US House of Representatives on June 12 – H.R.4006 to remove private land use restrictions that prohibit, restrict, or impair the ability of Amateur Radio operators from operating and installing reasonable antennas on property that they own or control. Similar legislation, H.R. 9670, was introduced by Congressman Johnson in 2022. "I reintroduced the Amateur Radio Emergency Preparedness Act to remove barriers to disaster and emergency communications and training, and to promote education in STEM subjects related to critically needed wireless technology,"

Congressman Johnson said in a release. "Passage of this bill will promote developing and sustaining our nation's wireless future and facilitate and encourage amateur radio operations as a public benefit."

"As their actions during recent natural disasters such as Hurricane Sandy proved, amateur radio operators in Connecticut can be a critical component of disaster response and emergency management. It is in our communities' best interest that we give them the capabilities to operate at the highest level, and with the re-introduction of this bill, we've taken a strong step in that direction," said Congressman Courtney.

The exponential growth of communities bound by private land use restrictions that prohibit both the operation of Amateur Radio and the installation of amateur station antennas has significantly restricted the growth of the Amateur Radio Service. ARRL The National Association for Amateur Radio® continues its multi-year efforts to eliminate private land use restrictions that prevent Amateur Radio operations and has pledged to strongly support Congressman Johnson and Congressman Courtney in their efforts on behalf of Amateur Radio.

Rick Roderick, K5UR, President of ARRL, on behalf its Members and America's Amateur Radio community extended his thanks and appreciation for the leadership of Congressman Johnson and Congressman Courtney in their tireless efforts to support and protect the rights of all Amateur Radio Operators and to further STEM education and the advancement of American expertise in wireless technology.

Thanks to the ARRL Letter

Automakers to Congress: Don't Make Us Keep AM Radio

(TNS) — In an era when companies are building driverless cars and 30-inch infotainment screens, the auto industry found itself in Congress on Tuesday fighting over technology that's a little more old school: AM radio. Bipartisan lawmakers are considering requiring automakers to keep AM radio in all new vehicles as some companies — including Tesla Inc., Volkswagen AG, Volvo Cars and BMW AG — are eliminating the frequency from electric vehicles because battery motors interfere with signals. During a House Energy and Commerce subcommittee hearing, the lobbying arm of the U.S. auto industry asked lawmakers not to do that, saying that plenty of technology is available to transmit safety messages, and that mandates could hamper future innovation.

That argument was met with united skepticism from both Democrats and Republicans: Lawmakers argued that AM radio is a crucial source for local news and public safety messages in remote areas. "When hurricanes, tornadoes or other natural disasters strike, AM radio remains steadfast, providing vital information to those in affected areas when other communication channels fail," said subcommittee chair Rep. Bob Latta, R-Ohio. Subcommittee ranking member Rep. Doris Matsui, D-California, said "we know AM radio is more than just a lifeline during an emergency. For many, it represents an irreplaceable connection with their community."

The electrical components in electric vehicle batteries generate static that makes it harder to receive clear AM radio signals. Some automakers have aimed to minimize that interference, the committee said, while several automakers have opted to eliminate AM radio from new Evs. AM radio frequencies generally have poorer sound quality and are more susceptible to interference than FM radio, but AM can be heard further away from a transmitter than FM.

On Tuesday, a representative for automakers said the industry takes "the safety of consumers and the public seriously" but that there is a federal system (the Integrated Public Alert and Warning System, or IPAWS) that provides multiple alert options that will ensure people can get emergency information. "The federal government and industry must work together to modernize IPAWS and continue to incorporate new technologies," said Scott Schmidt, vice president for safety policy at the Alliance for Automotive Innovation. "Doing so will ensure we collectively provide the best, most capable and resilient technologies to the public, also strengthening public safety." He added that there is declining listenership for AM radio: "We are technology agnostic in the sense that we are looking to deliver alerts to our customers as efficiently as possible, as broadly as possible, in the most efficient manner and in a manner that's not going to decline in the future."

Michigan Rep. Debbie Dingell, D-Michigan, said she's spoken with federal officials about IPAWS' abilities and believes "we are not adequately prepared to reach all Americans in the event of a disaster." The

president of a network of radio stations in Indiana and Ohio and an officer from the New Jersey State Police spoke in favor of keeping AM radio. They said AM is the most consistent, dependable platform in case of emergencies.

Multiple members raised concerns that automakers may start charging customers for access to AM and FM radio. "The fact that AM is free is something that should cause all of us to sit up and take notice," said Michigan Rep. Tim Walberg, R-Michigan. "This is how people in rural areas like my district get their news. They connect with their religion, they raise money for local causes, they take part in diverse conversations that they might not otherwise have access to." Schmidt said he can only speak to the industry's safety commitment, that automakers will ensure drivers have access to free public alerts and safety warnings.

The congressional uproar over AM radio began last month when Latta and 103 other members of Congress sent a letter to automakers that planned to eliminate AM radio, raising concerns about public access to emergency information, particularly in rural areas where internet and cell service is more sparse. Two days later, a bipartisan group of lawmakers led by Rep. Josh Gottheimer, D-New Jersey, introduced the "AM for Every Vehicle Act," which would require the National Highway Traffic Safety Administration to mandate that new vehicles come with AM radio at no additional cost. Sens. Ed Markey, D-Massachusetts, and Sen. Ted Cruz, R-Texas, introduced similar legislation in the Senate. Then Ford Motor Co. CEO Jim Farley announced that the company would reverse its April decision to eliminate AM radio in new models beginning next year "after speaking with policy leaders about the importance of AM broadcast radio as a part of the emergency alert system." Latta thanked Ford for that reversal during the hearing Tuesday. Energy and Commerce Chair Rep. Cathy McMorris Rodgers, R-Washington, asked why Ford was able to keep AM radio "with the flip of a switch" while other car companies can't. Schmidt said Ford just disabled the software that receives AM radio as it worked to remove the hardware, so it was able to quickly reverse its plan.

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Thanks to Government Technology online

Greg Lane Tapped to Be Delaware CIO, Jason Clarke to Depart

Delaware Gov. John Carney has nominated Greg Lane to serve as chief information officer (CIO) for the state's Department of Technology and Information (DTI), officials have announced. Lane has served as chief technology officer for DTI since 2017. Prior to that role, he acquired a variety of private-sector experience, including serving as CIO of the Chemours Company, CIO at E.I. DuPont de Nemours & Company, and CIO for DuPont Crop Protection.

Lane will be taking on the role from Jason Clarke, who has served as CIO since January 2021. Clarke had previously served as acting CIO in the wake of CIO James Collins' 2020 departure. Clarke's departure results from a decision to take a role in the private sector. During his time as CIO, Clarke worked to modernize digital services with a single sign-on experience and helped lead broadband expansion efforts. He has been with DTI for 16 years in various roles. "[Clarke] has been integral to expanding broadband across our state, implementing technologies that allowed us to navigate the pandemic, from remote work to state services being available online," said Carney in the announcement. "I am confident Greg [Lane] will continue the important technology initiatives going on in the department."

The nomination was made in an announcement including several other leadership positions: Josette Manning as secretary of the Department of Health and Social Services, Steve Yeatman as secretary of the Department of Services for Children, Youth and Their Families, and Robert Coupe as marijuana commissioner. The Delaware Senate will need to confirm these nominations.

"I want to thank all the nominees for stepping up and agreeing to serve, and I look forward to the Senate considering their nominations," Carney stated.

Thanks to Government Technology online

NWS Urges 'Turn Around, Don't Drown' Philosophy at Event

The National Weather Service (NWS) emphasized its "turn around, don't drown" philosophy at a training event this week in Frederick Md., where attendees learned how different types of floods occur and how to forecast them. The Skywarn Storm Spotter program from NWS trains volunteers nationwide to be spotters

during weather events, including thunderstorms, tornadoes and lightning. Spotters provide critical weather information that the NWS uses to develop forecasts and warnings.

The Skywarn Flood event at the Frederick County Public Safety Training Facility attracted young people interested in learning more about meteorology, as well as amateur radio operators and local hydrologists, who know the area is “overdue” for a big one. “Flooding is getting worse. It might not happen as often, but when it does, it’s really bad,” Jeremy Geiger, senior service hydrologist with the NWS’ Baltimore/Washington forecast office, told the Frederick News-Post. Geiger’s office serves more than 10 million people in the area. “The last time we had a major flood in the Potomac was in 1996, so we’re way overdue,” he said.

It was Geiger who emphasized the NWS’ “turn around, don’t drown” philosophy to attendees. He explained that if a person encounters a flood in a vehicle, the best course of action is to avoid it because just a few inches of water can pick up a car or person. That can lead to drowning.

Russ Main is a local resident and also an amateur radio operator. Amateur radio operators are eager to help in emergencies and help report information about floods and other severe weather if phone lines are down. Main said it was important to understand hydrology and flooding. “We wanted to try to help out and their goal was to try to save lives and property, so that’s kind of why I got involved,” he said.

Riddhi Sadhanala is a junior at a local high school and attended the event because she is an aspiring meteorologist and has an interest in volunteering as a weather spotter, providing information about local floods to the NWS. “I want to use this opportunity to become certified and able to take action whenever a severe weather event occurs, just like they’re training us to do here, but also to have this general knowledge they’re providing us to apply to higher education,” she told the News-Post.

Thanks to Government Technology on line

First mission to ‘touch’ the sun catches the solar wind

CNN

A solar mission that has been spiraling closer to the sun to unravel its secrets has flown near enough to our star’s surface to make a key discovery. Data from the Parker Solar Probe has uncovered the source of solar wind, a stream of energized particles that flow from the corona, or the sun’s hot outer atmosphere, toward Earth. One of the key motivations behind the mission, named for the late astrophysicist Eugene Parker and launched in 2018, was to determine what the wind looks like as it forms near the sun and how it escapes the star’s gravity.

As the probe came within about 13 million miles (20.9 million kilometers) of the sun, its instruments detected fine structures of the solar wind where it generates near the photosphere, or the solar surface, and captured ephemeral details that disappear once the wind is blasted from the corona. The spacecraft was specially designed to eventually fly within 4 million miles (6.4 million kilometers) above the solar surface, and in late 2021, it became the first mission to “touch” the sun. A study detailing the solar findings was published Wednesday in the journal Nature.

Untangling solar wind

Solar wind is a continuous outflow of plasma, which contains charged particles like protons and electrons. The far-reaching phenomenon also includes part of the solar magnetic field and extends well beyond the corona, interacting with planets and the interstellar medium. There are two types of this wind. The faster solar wind streams from holes in the corona at the sun’s poles at a peak speed of 497 miles per second (800 kilometers per second). The slower solar wind, located in the same plane of the solar system as Earth, flows at a calmer 249 miles per second (400 kilometers per second).

The fast solar wind doesn’t usually impact Earth. But during the maximum of the solar cycle, an 11-year period over which the sun’s activity gradually increases, the sun’s magnetic field flips. This flip causes the coronal holes to appear across the sun’s surface and release bursts of solar wind directly toward Earth. Understanding the source of the solar wind can help scientists better predict space weather and solar storms that can affect Earth.

Although they can cause beautiful auroras, the solar storms can also impact satellites and Earth’s electrical grids. “Winds carry lots of information from the sun to Earth, so understanding the mechanism behind the

sun's wind is important for practical reasons on Earth," said study coauthor James Drake, distinguished professor of physics at the University of Maryland, College Park, in a statement. "That's going to affect our ability to understand how the sun releases energy and drives geomagnetic storms, which are a threat to our communication networks." The spacecraft's data revealed that the coronal holes act like showerheads, where jets appear on the sun's surface in the form of bright spots, marking where the magnetic field passes in and out of the photosphere. As magnetic fields pass each other, moving in opposite directions within these funnels on the solar surface, they break and reconnect, which sends charged particles flying out of the sun.

"The photosphere is covered by convection cells, like in a boiling pot of water, and the larger scale convection flow is called supergranulation," said lead study author Stuart D. Bale, a professor of physics at the University of California, Berkeley, in a statement. "Where these supergranulation cells meet and go downward, they drag the magnetic field in their path into this downward kind of funnel. The magnetic field becomes very intensified there because it's just jammed. It's kind of a scoop of magnetic field going down into a drain. And the spatial separation of those little drains, those funnels, is what we're seeing now with solar probe data."

Parker Solar Probe detected highly energetic particles traveling between 10 and 100 times faster than the solar wind, leading the researchers to believe that the fast solar wind is created by the reconnection of magnetic fields. "The big conclusion is that it's magnetic reconnection within these funnel structures that's providing the energy source of the fast solar wind," Bale said. "It doesn't just come from everywhere in a coronal hole, it's substructured within coronal holes to these supergranulation cells. It comes from these little bundles of magnetic energy that are associated with the convection flows. Our results, we think, are strong evidence that it's reconnection that's doing that."

The solar cycle

The sun is expected to reach solar maximum in July 2025, which is why there have been increasing reports of solar flares and the northern and southern lights being visible in unexpected places. Fortunately, Parker Solar Probe and a separate mission, Solar Orbiter, are perfectly poised to observe the sun's powerful, dynamic forces at play. But scientists are grateful that Parker Solar Probe launched ahead of the sun's increasing dramatics during the quieter solar minimum, when chaotic activity didn't have a chance of obscuring observations. "There was some consternation at the beginning of the solar probe mission that we're going to launch this thing right into the quietest, most dull part of the solar cycle," Bale said. "But I think without that, we would never have understood this. It would have been just too messy. I think we're lucky that we launched it in the solar minimum."

Thanks to the SKCC Group page

Joke of the Month

From one of the greatest Presidents we have ever had, Ronald Reagan, comes this joke;

Fidel Castro was making a speech to a large assembly. He was going on a great length and then a voice out in the crowd said, "peanuts, popcorn, crackerjack"!

He went on speaking, and again the voice said, "peanuts, popcorn, crackerjack"!

About the fourth time this happened, he stopped in his regular speech and he said, "the next time he says that, I'm going to find out who is and kick him all the way to Miami".

And everyone in the crowd said, "peanuts, popcorn, crackerjack"!

Quote of the Month

“The Constitution is not an instrument for the government to restrain the people, it is an instrument for the people to restrain the government – lest it come to dominate our lives and interests.”

Patrick Henry