

OLE VIRGINIA TIMES

October 2020

Next Meeting: October 20, 2020 online, details below.

PRESIDENT'S LETTER:

Greetings Everyone,

Well the weather is turning colder and my yard is covered in leaves; that means for a brief moment we don't have to worry about it being too hot before it starts getting cold. But at least when it's too cold to stay outside, you can stay in and enjoy the slightly less quiet atmosphere on the bands.

I'd like to thank everyone that came out for the Serve Our Willing Warriors bike ride on Sept. 26th. Other than some slight drizzle and overcast conditions, the weather played nice for the event. This was quite a large course and proved to have some communications challenges. I'm glad OVH was able to get out there and help make the ride run smoothly in these unusual times. A big thanks to Andy/KJ4MTP for acting as liaison between OVH and the Willing Warriors organization.

The OVH Hamfest committee had it's first virtual meeting on October 8th on our virtual platform. It's been scheduled for June 12, 2021 at the Manassas Park Community Center. While it's unsure what will happen between now and then, I'm sure we're all ready to have it if able. A big thanks to Don/WA2SWX for taking charge of the Hamfest again this year.

One thing that is going to happen is the OVH Holiday Party. It is once again being organized by Theresa/KG4TVM and will happen Sunday December 6th at Yorkshire Restaurant. I'm sure we'll all be anxiously awaiting further details. It will be good to see everyone again.

Our upcoming regular October meeting, still another virtual one, will

Cont'd on Page 3



Ole Virginia Hams Amateur Radio Club, Inc.

Post Office Box 1255
Manassas, Virginia 20108

OFFICERS

President:	Jay Moore	NQ4T	571-316-4738
Vice Pres:	Jeff Fuller	WB6UIE	791-5916
Secretary:	John Heartney	KG4NXT	257-3566
Treasurer:	Don Meyerhoff	WA2SWX	597-3211

DIRECTORS

Don (Butch) Blasdell	W4HJL	369-2877
Arthur Whittum	W1CRO	791-4330
Charlie Dale	WA4YGI	361-3091
Bob Zaepfel	K4HJF	282-2451

WEEKLY FM REPEATER NET COORDINATOR

Thurs - 8:00 PM Local Time	JOHN / KG4NXT	257-3566
----------------------------	---------------	----------

HAMFEST 2020 - Chairman

Don	WA2SWX	597-3211
-----	--------	----------

FIELD DAY 2020

Byron	AK4XR	222-2095
-------	-------	----------

CLUB ROSTER / DATABASE

Arthur	W1CRO	791-4330
--------	-------	----------

EDUCATION

Mark	WA4KFZ	818-8033
------	--------	----------

CLUB EMERGENCY COORDINATOR

Open

ARES - EMERGENCY COORDINATOR

David Lane	KG4GIY	703-628-3868
------------	--------	--------------

email: KG4GIY@ARRL.NET

Prince William County ARES website <http://pwcares.org>

FINANCE

Arthur	W1CRO	791-4330
Mark	WA4KFZ	818-8033
Don	WA2SWX	597-3211

GENERATORS

Steve	N4OGR	361-0008
Al	KB4BHB	368-4794

HISTORIAN

Theresa	KG4TVM	257-3566
---------	--------	----------

WEB COMMITTEE — W4OVH.NET

Kevin	KX4KU	540-445-5183
Andy	KJ4MTP	786-4651
John	KG4NXT	257-3566
Ken	KN4DD	622-2638

EMAIL REFLECTOR — w4ovh@googlegroups.com

David Lane	KG4GIY	628-3868
------------	--------	----------

JOTA - 2020

John	KG4NXT	257-3566
------	--------	----------

LEGAL

Bob	K4HJF	282-2451
-----	-------	----------

MEMBERSHIP CHAIRMAN

Luther	WA3FMO	361-4885
--------	--------	----------

NEWSLETTER

Paul	W4ZB	754-0910
------	------	----------

NEWSLINE FOR THE WEEKLY NET

John.	KG4NXT	257-3566
-------	--------	----------

PROGRAMS

Jeff	WB6UIE	791-5916
------	--------	----------

QUARTERMASTER

Steve	N4OGR	361-0008
-------	-------	----------

REPEATER CONTROLLERS

John	KG4NXT	257-3566
Ken	KE2N	753-8587
George	K4GVT	791-5956
Arthur	W1CRO	791-4330
Butch	W4HJL	369-2877
Steve	N4OGR	361-0008
David	KG4GIY	361-3042
Cat	KM4PBD	571-213-2179

W4OVH — TRUSTEE

Wayne	N7QLK	571-237-0520
-------	-------	--------------

W4PVA — TRUSTEE

Arthur	W1CRO	791-4330
--------	-------	----------

SCHOLARSHIP

Sandy Knight	KM4JUS	901-4664
--------------	--------	----------

SUNSHINE

Theresa	KG4TVM	257-3566
---------	--------	----------

TECHNICAL COMMITTEE

Ken	KE2N	753-8587
Andy	KJ4MTP	786-4651
George	K4GVT	791-5956
Arthur	W1CRO	791-4330
Butch	W4HJL	369-2877
Bob	K4HJF	335-1939
David	KG4GIY	628-3868

TWITTER & FACEBOOK ACCOUNT MODERATOR

Jeff	KM4FTK	830-4155
------	--------	----------

All telephone numbers listed above are for Area Code 703 unless otherwise noted. This is the official monthly publication of the Ole Virginia Hams Amateur Radio Club, Inc., a §501(c)(3) organization, dedicated to the promotion and enhancement of Amateur Radio. Copyright © 2020 by the Ole Virginia Hams which holds its regular monthly meeting is at 7:30 p.m. every third Tuesday at the Buckhall Volunteer Fire Department Station, 7190 Yates Ford Road, Manassas, Virginia. Members, prospective members and other interested persons are invited to attend without obligation. Local information can also be obtained through the OVH's FM repeaters on 146.970-, 224.660-, 442.200+ and 443.500+ MHz. Up to date information about OVH activities and its meetings is also available during the OVH's nets on its FM Repeater each Thursday night at 8:00 p.m. or through the OVH's web site at <http://w4ovh.net>. Articles in this newsletter may be reprinted if credit is given to the OVH ARC and other source(s) noted. Proposed materials for publication, classified ads, notes about specific errors, complaints or the like are solicited. Forward such items to the Newsletter Editor: PAUL@W4ZB.COM. Approx. Circ.: 170. Last Rev: 20200310

take place on Tuesday October 20, 2020 at 7:30 PM local at <https://ovh.nq4t.com/meeting>
That meeting will include a joint presentation by John/KG4NXT and myself on John's Phaser II kit; a small 4-watt SSB transceiver for digital modes like FT8. John has recently assembled it and has had some fun with it. I will be running it here at my shack showing it off on camera while John speaks about it.

I hope to see those of you that can make it on Tuesday night. Also, don't forget about our weekly net every Thursday at 8pm.

73 Jay NQ4T

Sunshine Corner

Happy birthday to our club members celebrating another year this October: to Doc . W1IMX, Ray / KM4EKR, and Phil / AC4PL

JOTA – Jamboree on the Air, with the Boy Scouts will be this Saturday, October 17th. Club members will be set up at Camp Snyder most of the day working with the scouts.

Save the Date – Sunday, December 6, 2020 for the OVH Holiday Party. The location, again at the Yorkshire Restaurant, the same as in recent years, beginning at 6:00 . More details to follow on the OVH's closed email reflector and on the Thursday night VHF/FM net.

On Saturday, October 10, 2020, the local ham radio club in Culpepper held it "ham radio junk in the trunk" event. The weather was not great but there was a good variety of ham radio stuff at available there.

Condolences to Wayne / AG4ZZ on the passing of his mom in September at the age of 92. The Kline family has posted a video of family photos on Pierce Funeral Homes's web site at piercefh.com An amazing lady whose family has had a large imprint on the local area.

Best wishes to our club members that have been dealing with health issues, hope you all are up and running at full speed soon.

The Manassas Hamfest 2021 planning meetings have already started. Please contact Don / WA2SWX and let him know how you can help make this a successful event. So far the planning meeting have been online - thanks again to Jay / NQ4T for use of his server for the meetings.

Mark your calendar for Winter Field Day 2021 to be held on January 30th and 31st, 2021. Contact Don / WA2SWX, John / KG4NXT or Theresa / KG4TVM for information on this event.

Remember to check in at 8 PM on the OVH's Thursday night VHF/UHF repeater net - details are on the OVH's web site: W4OVH.NET. Continue to send news or other items to me, email at kg4tvm@hotmail.com or telephone: 703-257-3566. !

Happy Halloween!

73 Theresa KG4TVM

Minutes of the Ole Virginia Hams Amateur Radio Club Meeting held on September 15, 2020 Online:

The OVH regular meeting for September 2020 was held over the Internet using the Jitsi platform hosted by Jay / NQ4T at [https:// ovh.nq4t.com/meeting](https://ovh.nq4t.com/meeting) The meeting began at 7:30 PM on September 15th and the Jitsi attendee counter counted 19 attendees. Because the meeting was being held virtually, OVH President Jay / NQ4T dispensed with the pledge and individual attendees saying their call signs.

OVH President Jay / NQ4T ran the meeting.

The minutes of the August meeting were approved.

Treasurer's report:-no report.

Luther / WA3FMO gave the membership report. There were four new read-in membership applications for: 1. Steve Elmore / KO4GQR; 2. Douglas Linden / KO4GMA; 3. Bill Bonilla / AF4LL and 4. Andrea Cumberland / KI4SXM. These new applicants will be voted upon at the next meeting.

Greg / KM4CCG gave the ARES report. There will be a meeting September 19th during which members will be using OVH repeaters to practice sending traffic from the Prince William EOC. On September 26th there will be the Serve Our Willing Warriors bike ride.

Ken / KE2N, gave the Repeater Report. The 220 repeater is down and repair has been delayed while separately dealing with a Raspberry Pi problem on the 146.970 machine that affects loading of the news bulletin for the Thursday night, weekly net and linking.

Training report. No report.

Hamfest report. No report.

Kevin / KX4KU gave the web committee report. Everything is working. There was a discussion about the need for regular updates for the OVH's Facebook and Twitter accounts which have not been updated in sometime, even if just to re-point them to the OVH's web site at W4OVH.net which is being kept up to date continuously. .

Sunshine report. No report.

There were four new business items.

1. Jay / NQ4T and John / KG4NXT discussed the upcoming Winter Field Day event to be held at Shenandoah River State park on January 30-31, 2021.

2. JOTA to be held at Camp Snyder in Haymarket, Virginia on October 17 is looking for volunteers. Prospective volunteer please contact John / KG4NXT at kg4nxt@arrl.net or Rob / W4FSK.

3. Serve Our Willing Warriors bike ride on September 16th could use some more volunteers. Volunteer please contact Andy /KG4MTP.

4. Bruce KN4TS spoke about USA Science and Engineering Festival. He has created a virtual booth and need volunteers to field questions September 26th to October 3rd. Volunteers, please contact Bruce at email bruce@thematthews.net

The meeting was adjourned.

Reminders about some upcoming events / calendar dates:

HAMFEST TYPE EVENTS:

The COVID pandemic, unfortunately, has killed off all nearby live hamfests for this summer season. Nothing scheduled nearby.

HAM RADIO OPERATING / CONTEST EVENTS:

The ARRL has a Contest web page at its web site, but a much more comprehensive, up-to-date, and long range planning contesting calendar with links to the rules for the various events is maintained at <http://www.hornucopia.com/contestcal> by WA7BNM. If you get the radio contesting bug or just want to find out what and how much is going on, that is a good place to look!

PUBLIC SERVICE / ARES EVENTS

October 17, 2020 (Saturday) - Boy Scout JOTA event at nearby Camp Snyder. COVID rules will be applied, but ham radio operators are needed for the ham radio station there. The OVH has supported this in the past. Contact OVH member Scout Leader, Rob / W4FSK or John / KG4NXT for more info.

Check the online Calendar on the OVH web site, W4OVH.NET for information about upcoming events.

Check the online Calendar by David / KG4GIY at <http://pwcared.org> for the latest PWC ARES updates. David maintains a comprehensive calendar for upcoming events at that web site. Complete direct contact information for David appears on page 2 of this Newsletter.

A few Images from the Culpeper "Junk In The Trunk" - October 10, 2020



VP's Corner

Jeff Fuller
WB6UIE



Cooler temperatures of fall will soon be here and, along with them, the beginning of the holiday season. I'm sure your family, like mine, has some holiday traditions which have been passed down over the years. We carry them on, not necessarily for practical reasons, but as a means of bonding and connecting with past generations.

Learning to communicate using Morse code or "CW" is one such tradition in the amateur radio community. I'm happy to see several of our new hams

accepting the challenge. Here are some interesting Morse factoids to encourage you in your studies.

Q. Why do hams call it CW?

A. CW stands for Continuous Wave, meaning a sine wave produced by an electronic oscillator. The first radio signals from spark transmitters were known as "damped waves" and occupied lots of spectrum.

Q. What is a "bug"?

A. No mosquitoes from last summer. "Bug" is slang for a mechanical speed key in which dots are made by an oscillating arm and dashes are sent manually with the thumb. Bugs sped up message flow by increasing sending speeds from 25 wpm max typical with a straight key to over 40 wpm. Today's electronic keyers automate both dots and dashes.

Q. What do the terms "fist" and "swing" have to do with CW?

A1. Please, no fighting in the shack. "Fist" refers to an individual operator's sending style. After working a CW net for a while, you'll often be able to recognize fellow operators from their fists even before you've heard their callsigns.

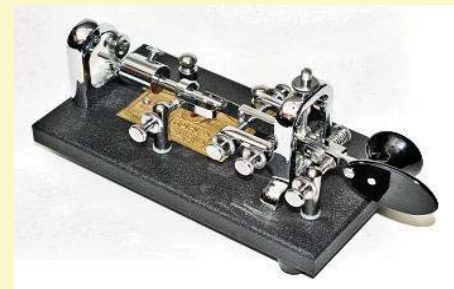
A2. "Swing" refers to a sending style usually associated with a bug in which the dashes are drawn out. Said to have originated with depression era merchant marine operators, it's sometimes known as the "banana boat swing".



The military J-38 straight key is an old friend. Once popular on the surplus market, they are getting hard to find.



My personal favorite - the Navy Flame Proof Key



A mechanical speed key or "bug".

Q. What is high speed CW?

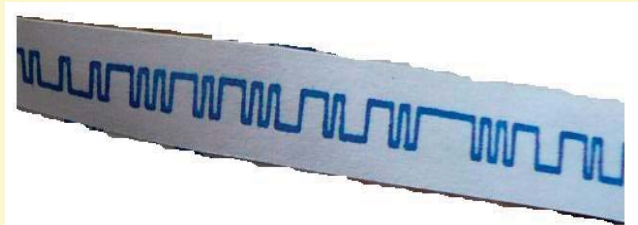
A. There are some ham radio contests in which a select few operators have been able to copy speeds over 100 wpm. Aside from the novelty factor, such speeds did have an important application. CW can provide reliable communications with simple low power equipment under the worst conditions. But in military applications, its slow speed and increased on air time make it vulnerable to direction finding.

Imagine yourself an agent or Special Forces operator behind the lines during the Cold War. There are no laptop computers or sound card modems. CW is all you have. How can you reduce your on air time? The answer - record your message on tape and play it through your transmitter as a high speed burst at 300 wpm. The receiving station then copied it by slowing down its own recording or reading directly from an inked paper tape. The AN/GRA-71 encoder (below) was used to encode tapes for transmission. It remained in service from the Cold War through Vietnam.



<https://www.cryptomuseum.com/burst/gra71/img/300653/023/full.jpg>

The transmitting operator used the AN/GRA-71 to encode a message to tape for high speed burst transmission.



<http://www.navy-radio.com/morse/inker-tape-1409.JPG>

At the receiving end, the message could be read from an inked paper tape.

Q. What is a good source of on the air code practice?

A. ARRL has a regular code practice schedule at speeds of 5 wpm and up. Here's a link: <http://www.arrl.org/code-transmissions>

Again, congratulations to those of you who've taken up the Morse challenge. And, when you greet our new members, try to recruit some of them into the fold. Tell them to think of it as the original texting.

Some Possibly Interesting or Useful Information

Several weeks ago, the IEEE (Institute of Electrical and Electronic Engineers) announced it would be holding an online event for several hours about the life of Claude Shannon (1916 - 2003) earlier this week. I knew I would not have time to attend all of it, but I had met Shannon briefly, one time, in 1968 and knew I wanted to attend at least part of it. I was somewhat excited, and mentioned the upcoming event separately to two business colleagues. Each responded, "Who is Claude Shannon, never heard of him?" My two colleagues are not engineers or computer people so I could understand why each might not recognize or remember his name even though each had almost certainly heard it before. Shannon is universally recognized and acknowledged to be the father of modern "information theory" which underlies all modern digital communications. That includes the sophisticated digital modes now used by radio amateurs and those that are still being tweaked and improved for ham radio and other uses.

Cont'd on page 8

I was able to attend the first part of the IEEE event along with more than 300 other attendees; that part included the showing of a 90 minute documentary video (film) titled “The Bit Player” which I had not heard of before. I enjoyed watching and seeing familiar places and several former professors from long ago in the film. That video can be found and watched on Amazon Prime. It could be worth viewing if you have interest in the history of modern digital communications technology or in learning more about Shannon. See, https://en.wikipedia.org/wiki/Claude_Shannon for more basic information about him. See also, <https://www.bell-labs.com/claude-shannon>

Shannon’s most famous paper published in 1948 (in the Bell System Technical Journal) was titled “A Mathematical Theory of Communication.” A (1949) corrected version of it can be found online at: <http://people.math.harvard.edu/~ctm/home/text/others/shannon/entropy/entropy.pdf> The mathematical explanations presented in the paper were not overly daunting, but what was most surprising for those who studied Shannon’s work was the simple and clear framework for analysis of digital communications systems that Shannon presented - which had not previously been clearly recognized or understood by anyone.

To keep Shannon’s 1948 paper in context, remember the idea of digital communications was hardly new: telegraph systems had been around for a hundred years and were still in use, including over wired as well as radio channels; likewise, teletype systems had been in use for nearly 50 years, including over radio circuits. Further, the idea of digitizing signals from analog sources was not new. The theoretical bases for digitizing continuously varying analog signals (e.g., digitizing voice signals) so that analog signals could be reconstructed to arbitrary fidelity from the digitized signals had already been known since the late 1920s, and had been demonstrated in special applications even though practical (small, low cost) hardware implementations lagged far behind the theory.

Shannon’s innovations went back further to more fundamental questions: just what is information and how should information be communicated (i.e., transferred from one point to another, i.e., from an information source to an information sink)? His frameworks addressed and distinguished using encoders of sources of information and using channel encoders to address the problem of communicating information over a noisy communication channel to a sink (ultimate user) for the information within the capacity of the channel. Optimal methods for encoding a source of information reduce redundancy in the information; optimum encoding methods completely eliminate any redundancy in the representation of the information from the source but does not result in the loss of any of the information content. For the transmission of information, Shannon showed that each noisy communication channel had an ultimate channel capacity which could only be achieved for error free transmission if an optimum channel encoding (and decoding) scheme were used; anything less than an optimum scheme would either result in errors or would require that the system be operated at a rate less its ultimate capacity to avoid errors.

Somewhat simple sounding statements but with very profound implications for the future development of digital systems and communications: Shannon laid out these basic principles but without showing (because he did not know the answers) how one could actually instrument an optimum source encoder for an arbitrary information source or an optimum channel encoder (and decoder) for an arbitrary communication channel. The “how to do it more and more optimally” is still a work in progress.

If you want to learn more about Shannon’s work, you might sign up for some free tutorials such as at <https://www.khanacademy.org/computing/computer-science/informationtheory#moderninfotheory> I have never taken a kahnacademy course (all are “free”) but I know kahnacademy has a good reputation and attempts to present its material in an understandable manner.