

OLE VIRGINIA TIMES

April 2019

Next Meeting: Tuesday, April 16, 2019

PRESIDENT'S LETTER:

I am writing this at my father's dining room table in Colorado Springs – so this is a bit of a road trip report. I am still on my semi-annual trip to help with the move from his winter house in Tucson to his summer house in Colorado and while visiting help out with any repairs at both houses.

While in Arizona I got to do some ham radio FT8 ops using the giant HF discone antenna at the Titan Missile Museum near Tucson. Along with the tools I packed for working at my father's houses, I packed my ICOM 7100 which I use with my laptop for FT8. I felt sorry for the people behind me at the TSA security line on the outbound flight to Arizona. I even warned them that I had a lot of stuff. Eight trays later and I think they got the picture. Before I went I read up on the large antenna at the museum which is available to visiting hams so when I arrived there I would know exactly what to do and what I would need. It was pretty simple, go inside to the visitor's desk and ask for the log book, sign it and then head over to the antenna site, park by the picnic table and open the weatherproof box and roll out the coax and connect the PL259 to my rig. Afterwards roll up the coax and put it back in the weatherproof box, go back to the visitors' desk and sign out. Sounds easy right?

Well, it mostly is and was, however, it would have been easier if they had included in their instructions to make sure you bring EVERYTHING you might need with you. I forgot a few things, like a microphone (I left it at my father's Arizona house) and the long USB cable (a micro USB which I left in Virginia). Luckily for me I had a separate disk drive for my laptop which had a micro USB cable and a USB extension cable in my computer bag. So phone operation was not possible - no mike, but at least I could operate FT8. The funny thing is I usually make checklists for everything I do but I didn't this one time.



Cont'd on Page 3

Ole Virginia Hams Amateur Radio Club, Inc.

Post Office Box 1255
Manassas, Virginia 20108

OFFICERS

President:	Byron Dillon	AK4XR	222-2095
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 2019 - Chairman

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

FIELD DAY 2019

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	540-439-3289
Andy	KJ4MTP	786-4651
John	KG4NXT	257-3566

TWITTER & FACEBOOK ACCOUNT MODERATOR

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

EMAIL REFLECTOR — w4ovh@googlegroups.com

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

JOTA - 2018

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

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

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 © 2019 by the Ole Virginia Hams.

The OVH ARC 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. The OVH's two D-Star repeaters on 146.865- and 442.5125+ MHz are temporarily operating with limited D-Star capabilities. 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 on 80 meters (3710 KHz) LSB each Sunday night at 7:00 p.m. (8:00 pm in Summer) or through the OVH's web site at <http://w4ovh.net>

Articles and quotations in the OVH Times newsletter may be reprinted if credit is given to the OVH ARC and any other noted source. Proposed materials for publication including pictures, articles, letters to the editor, classified ads, notes about specific errors, complaints or the like are solicited from all readers. Forward such items to the OVH Times Newsletter Editor: PAUL@W4ZB.COM as soon as available at any time, but the cutoff deadline for the OVH Times each month (usually the second Monday of the month) may preclude publication/correction until the following month.

Approx. Circulation - 170.

Last Rev: 20180920

Something noted: I was running the rig off the battery on my father's SUV which he loaned me but discovered that I needed to have the engine running or the rig would turn off. Many of you may already know that the ICOM 7100 (probably all ICOM mobile equipment) shuts off if the voltage drops below about 12.4 Volts (I'm not sure of the exact voltage for cutoff), but I have had it shut off on me several times before. There is a vendor who makes a DC to DC converter which will keep the voltage level to your rig around 13.8 Volts (again, I'm not 100% sure what the exact Voltage level is but it is above 13 volts). I am seriously thinking of purchasing one of those to avoid this "shut off" problem and will investigate further when I get back to Virginia.

Back to the FT8 ops. I did make about ten contacts while I was there which was a lot of fun. I only wished that I had figured out how to add in to the messages that I was at the Titan Missile Museum before I started operating. I did change the Grid Square in case some of you were wondering. I was hoping to make contact with somebody in Virginia but I did not see any 4-land call signs; I sent a text message to John / KG4NXT since he is retired and might be free to try and contact me, however, he did not get my message in time - I think he busier than ever as a retiree. I should have tried the reflector but I was happy with the contacts I was making at the time.

If any of you are going to be in the Tucson area, I would recommend trying out the large discone antenna at the Titan missile museum, however, also bring a shade umbrella. It was really hot there in the open with nothing to block the Sun which also make viewing a computer screen difficult.

A few pictures about this from my ongoing travels appear later in this Newsletter. A lot of OVH activities are going on later this month and through June so be sure to check the schedules later in this Newsletter and at W4OVH.NET.

This month Mark WA4KFZ, will be hosting another online Now What? session on April 23 from 7-9pm. It is mostly for those new to the hobby and for those who want to learn something new. .

April 27th is the NOVA STEM day, and OVH will be there. Wayne N4QLK, is organizing our club's participation. Contact him if you would like to help out.

At the risk of sounding a bit like a broken record, I want to remind the few who has not already done so - to please send in your OVH renewal membership dues. These dues are very modest and will show your continuing support for the local club. This can be done online at W4OVH.NET, using the form later in this Newsletter or at the next regular OVH meeting.

Finally, I hope everyone will be able to make the upcoming regular OVH meeting on Tuesday evening, April 16th at 7:30 pm at the Buckhall Fire Station, Manassas. See you there.

73 BYRON AK4XR

Sunshine Corner:

Happy birthday in April to club members: Harry / KC9TXL, Harry / KN4IJY, Paul / N4PD, Brian / KK4CBS, Gil / KM4OZH, Joe / KI4OHR, Steve / KJ4YHA, Lillian / KK4MXY, David / KI4AZX, Paul / W4ZB, and David / KD4DEE

Condolences to Al / KB4BHB, two of his sisters passed away on April 9th.

Steve / N4OGR seems to be doing quite well as he recovers from his surgery, giving his new heart a workout. Please send him an email or give him a call to say Hi.

Fred / N3KVV drove a car a short distance a few days ago, his first time

Continued on page 4

driving any vehicle since his early December motor vehicle collision. He is still recovering and very tentative about whether he will make the Manassas Hamfest in mid-June.

We had a great time with the Virginia QSO Party in March, just a reminder please turn in your logs and put the OVH down as your club. The deadline to submit your log is April 15th.

We saw many club members at the Vienna Hamfest while we were at our club table.

Manassas Hamfest meetings are well under way! Only 2 months to go for this, our club's biggest event of each year. We need your help to make it a success, please volunteer to help the day of the event (Saturday) and on setup on Friday evening. Contact Don / WA2SWX and let him know that you are willing and able to help the OVH with this. Do not forget we have a new day and location – Saturday, June 15th at the Manassas Park Community Center. A copy of the Flyer for the 2019 Manassas Hamfest appears later in this Newsletter and there is additional information about it on the club's web site at <http://W4OVH.net>

CW Net is every Wednesday at 7:00 pm; the OVH's breakfast is the Saturday morning before the club's monthly meeting at Yorkshire Restaurant at 8:00 am. These are two new great events!

Please renew your OVH membership for 2019! You can either use the mail in form at the end of this Newsletter or do it online at w4ovh.net. The club needs your continued support and collection of the modest annual dues shows your support!

Please try to check in to the Thursday night VHF/UHF FM net at 8:00 pm. You will hear updates and information on everything going on! How to do that is on the OVH web site at <http://w4ovh.net> and you can now also check in either by radio or via Internet connection.

Please send me your news so it can be reported.

73 Theresa KG4TVM



Minutes of the Ole Virginia Hams Amateur Radio Club Meeting held on Tuesday, March 19, 2019:

OVH President Bryon / AK4XR, called the meeting to order at 7:30 pm on March 19, 2019 in the main conference room at the Buckhall Volunteer Fire Department Station.

After the Pledge of Allegiance, all present stated their names and callsigns.

John / KG4NXT gave a presentation about the new JS8 digital mode which included a youtube video by the creator of JS8.

The minutes of the January, 2019 meeting were approved without change.

Since the Treasurer (Don / WA2SWX) was ill and unable to attend, Byron / AK4XR gave the Treasurer's report which was approved.

For the Membership report by Luther / WA3FMO, David Lee / KC4QDW, and Frank Sellers / N4AO were read in, to voted upon at the April meeting.

ARES report by Greg / KM4CCT: the quarterly ARES meeting had taken place and that there

Cont'd on page 5

would be a 1775 event in Prince William Forest. The upcoming Mini-Tri on March 25 is in need of more volunteers.

Training Report by Mark / WA4KFZ: a “What Now” session had been completed on the Internet and that another such session is planned in April.

Scholarship report by Sandy / KM4JUS: the web site materials have been updated for the scholarship applications and 15 emails had been sent to schools to alert the Guidance Offices. The application deadline is the end of April.

Hamfest report by Jeff / WB6UIE: There will be presentations by Karl / W4KRL on Internet of things, Bill / K5AE on NVIS antenna operation and by the Virginia QSO Party Awards. The food vending for Hamfest was also discussed.

Web site / IT Committee report by Kevin / KX4KU: everything associated with the web site is functioning normally; also, the IT committee is now in charge of the OVH email reflector.

Field Day report by Byron / AK4XR: new logging computers have been configured; also, Cat / KM4PBD is chairing the Field Day educational project which will be a Fox Hunt.

Repeater report by Ken / KE2N: the DStar repeaters have not been fully functional for some time now, some work is needed. Ken offers to do the work but needs the signon and pin data.

Sunshine report by Theresa / KG4TVM: Steve (aka Ogre) / N4OGR hopes to be back home in Virginia from Pennsylvania later in the month to continue his recuperation.

CW Net report by Jeff / K9VEG: the possibility of moving from 80 meters to another band. He will try 10 meters going forward. Look on the email reflector for more details on contact Jeff.

There was a vote on the proposed Constitutional Amendment. John / KG4NXT advised that all of the OVH directors had unanimously approved it and that the text of the amendment had been mailed to all voting OVH members. The votes were counted by Rosalie / WIFE and Jim / KM4SXM. The vote was 27 yes and 4 no. The amendment was declared adopted and is now part of the OVH Constitution. The OVH Constitution on the club web site will be updated to list this change.

John / KG4NXT, announced that a second key to the OVH’s Post Office Box in Manassas has been ordered and is expected within a few weeks.

Theresa / KG4TVM, won the 50-50 at the break and donated the proceeds to the club scholarship.

The meeting was then adjourned.

Reminders about some upcoming events / calendar dates:

HAMFESTS:

Friday - Sunday, May 17 - 19, 2019, Hamvention at the Green County (Ohio) Fairgrounds near Dayton, Ohio. This is the largest Hamfest in the world and should be a “must” to attend at least once for every serious ham! More info at <http://hamvention.org> Several hams from the OVH usually attend each year, and a few have been there more than 20 times - so ask around if you need a ride. The excellent Contest University program (see below) takes place in Dayton, Ohio on the day (Thursday) before the start of Hamvention.

Saturday, June 15, 2019 - Manassas Hamfest - for the 45th time - new day of the week and nearby new location this year - see flyer later in this newsletter for more details.

Cont'd on page 6

Friday - Sunday, June 21 - 23, 2019 - Ham Radio in Friedrichshafen, Germany, spectacular location for the largest hamfest in Europe, just slightly smaller than Hamvention. ARRL and other US vendor exhibit there. More info at <http://hamradio-friedrichshafen.de> This conflicts with Field Day this year, but should be on every ham's "bucket list" to attend.

HAM RADIO RELATED:

Saturday, April 13, 2019 at 8:00 am, Saturday at the Yorkshire Restaurant, 7537 Centreville Road, Manassas - breakfast for OVH members. This will be the fourth of a new type social "event" for OVH members; it is intended to provide a face to face venue at which members will be able to converse informally and get to know each other better. There is enough interest and this will held as a regular event on the Saturday morning each month just before the OVH's next regular meeting.

Tuesday, April 23, 2019 at 7:00 pm - 9:00 pm, Online - a What Now? session and Q&A forum by Mark / WA4KFZ. Great opportunity for newly minted, as well as seasoned hams to learn new things. Join the call at: <https://www.uberconference.com/indump2> or optionally dial in to telephone number: 703-940-5519. Contact Mark / WA4KFZ for more info.

Saturday, April 27, 2019 at 10:00 am - 3:00 pm, NOVA STEM day at the Northern Virginia Community College, Manassas Campus, 10950 Campus Drive, Manassas. OVH's presence is being led by Wayne/N7QLK who is looking for additional volunteers to assist.

Saturday, May 4, 2019 -(rain date May 5th) - 10:00 am - 4:00 pm, Manassas Air Show at the main terminal at Manassas Airport (KHEF). Although OVH will not be present as a vendor this year, there will still be a lot of radio and electronics stuff there, and it is a great local event. More info at <http://manassasairshow.com>

Thursday, May 16, 2019 - Contest University, Dayton, Ohio. Although the overall emphasis of this excellent program is on HF Radiosport, it also presents a superb learning opportunity with experts on how to improve all aspects of your HF station and operating techniques. The program is different every year. In recent years, several OVH members have attended this, a few of them several times. More info at <http://contestuniversity.com>

Wednesday evenings at 19:00 - OVH Slow Speed CW net. First session was held on January 9th and several sessions since, A few unexpected problems were encountered, but the current plan is to continue to hold this every Wednesday at 13 WPM or slower. Check the W4OVH email reflector and web site for updates. More info: Jaff / N9VEG and on the email reflector.

AMRAD meets monthly in McLean, Virginia - meetings usually consist of high level amateur radio related technical presentations on specific topics. Check the <http://amrad.org> web site for upcoming topics, and exact dates, times and locations for the meetings which have been changing recently.

HAM RADIO OPERATING / CONTEST EVENTS:

Saturday - Sunday, June 22 - 23, 2019 - ARRL / OVH Field Day. The OVH Field Day setup and operation will again be from the Pavilion at the Nokesville Park this year. This is a major club radio operating and social event: save the dates on your calendar.

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

Cont'd on page 7

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

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.

Byron / AK4XR visits the Titan Museum in Tuscon, Arizona and operates from there.



Image above is the 80 foot high, broadband HF discone antenna at the Titan Museum in Tucson, Arizona.

Ham radio operators are welcome to operate from there - see the other images and Byron's description of his visit in the President's letter in this Newsletter. Remember to bring an umbrella for shade - it gets very hot there!

Go to <https://titanmissilemuseum.org> for more info about what there is to see and do at this museum. There is a lot more there besides the discone antenna: underground launch complex for the major cold-war Titan missile facility formerly active at this location..

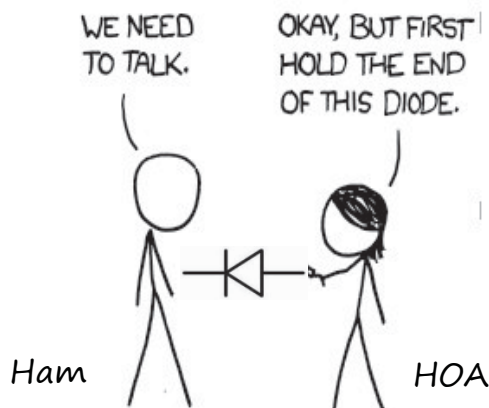
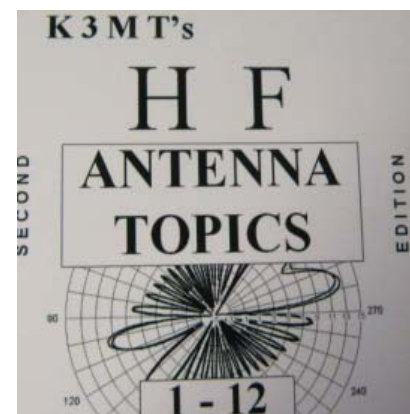
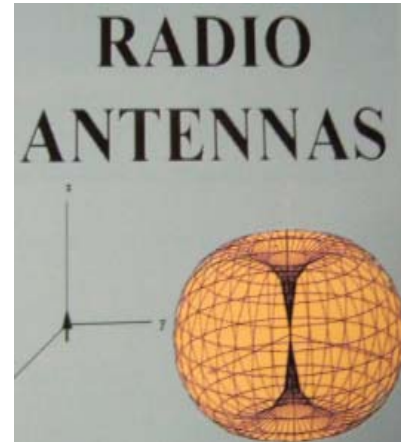
VP's Corner

Jeff Fuller
WB6UIE

Soon spring will be here, birds will be singing, and a young ham's fancy turns to ... antennas. Yes, as part of spring cleaning, now is a good time to check your RF plumbing or maybe think about expanding your antenna farm (cover your ears Pinkie ...) A popular ham radio saying: "If your antenna stayed up last winter, it wasn't big enough. After that last storm, I've determined that mine was big enough ...

Want to brush up on your antenna theory? Learn something new about gain, polarization, or baluns? Then our latest additions to the OVH lending library (right) are for you. W1CRO donated several copies of each to the club. Thanks Art! I'll bring them to the meetings where they'll be available for check out.

How about something a little more hands on - like a simple mobile or portable vertical for six meters? Stay tuned ... we're looking at options for a club project at around \$16 each.



(Adapted from xkcd.com)



I'm sure many of you have wrestled with an HOA (Homeowners' Association) over permission to put up even the most unobtrusive antenna. The loop is one low profile design which seems to be gaining acceptance. As one of radio's timeless designs, it has seen service as both passive direction finder and compact HF radiator. Join us for a presentation by Mark, WA4KFZ, about his latest design (above). Hope to see you there!

Some Possibly Interesting or Useful Information

1. How to get reviews and comparison of transceivers and other ham equipment? With massive info online now, do an online search on eHam.net; Google site:eHam.net EquipmentType in your web browser to find all of the reviews on eHam.net for a particular equipment type. Another good site for receivers and transceivers is Sherwood Engineering (<http://sherweng.com/table.html>) which has tested and compiled actual test data for a long list of receivers and transceivers.

2. Your editor recently turned on his Drake 2B receiver and found it to be completely inop for the first time in its long life. It was a new receiver in 1962 so it has enjoyed a very long life so far; that 2B, together with its accessory speaker and Q-multiplier still performed well as an HF receiver when last used a few months ago. The most likely cause: deterioration and failure of one of the high voltage electrolytic capacitors in the power supply part of the receiver. Is it worth trying to repair it? Certainly, it was one of the best HF ham radio receivers in its day - in the 1960's. So I have been looking online for details about how to do the fix. Lots of information sources came up when I used the Google search string: replacing high voltage electrolytic capacitors in my web browser.

3. The Drake 2B was my second HF receiver; the first was a Lafayette KT-200 receiver which I acquired from brother (now, Fred / N3KVV) a few years earlier, and modified and enhanced by taking the output from the last 455 KHz IF stage as the input to a WWII surplus BC-453 aircraft LF receiver which greatly increased the overall signal sensitivity. That KT-200/BC-453 combo receiver worked quite well for HF DXing, but its most obvious deficiency was that its tuner front end drifted in frequency a lot until the receiver "warmed up" for several hours. I still have the KT-200/BC-453 combo and it still worked when I last had it on a few years ago; now with my recent experience with the 2B, I'm afraid to try it again - perhaps, if I can get the 2B receiver working again.

4. I was still using the KT-200/BC-453 combo receiver when I first got on RTTY on HF in the early 1960's using a retired, commercial Model 26 Teletype (acquired from another ham) which had been manufactured in the late 1920s. (To the right are images of a Model 26 Teletype with and without its cover.) I too still have that old Model 26 machine, and it still works - at least it did when I last tested it a couple years ago. The Model 26 is an electric motor driven mechanical marvel; it is easily tested on a local loop circuit - so that key presses on its keyboard directly activate the printer through an elaborate system of relays and solenoids. In the early 1960's, the standard teletype frequency shift between Mark and Space FSK signals on HF was 850 Hz - so one could still receive and decode RTTY signals on the ham bands using a receiver with modest frequency drift. All that was needed was to carefully watch the tuning indicators, back then, either neon lights for the Mark and Space frequencies (at baseband = audio) or the frequency shift pattern or angles on an oscilloscope, and then manually readjust the receiver tuning as needed with any drift. The KT-200/BC453 combo could be used effectively with 850 Hz FSK RTTY, but was drifted too much to use with 170 Hz shift. The 2B receiver was rock solid with no discernible drift; I began using the 2B for RTTY reception later when 170 Hz FSK shift (now the standard) started to be used with RTTY.



REMINDER



Yes, it is that time of year again!!!! Below is the 2019 Renewal Application.

Please fill out the form below (for database), attach your check and mail to the address below or drop off at a meeting. Be sure to update all information, including your e-mail address, telephone number(s) and nine digit ZIP

MEMBERSHIP RENEWAL APPLICATION "OLE VIRGINIA HAMS AMATEUR RADIO CLUB" for 2019

NAME: _____
ADDRESS: _____

CALL SIGN: _____
Home Tel: _____
Cell Tel: _____
Work Tel: _____
EMAIL: _____
BIRTHDAY: _____

ARE YOU PRESENTLY AN ARRL MEMBER? (YES/NO)

ARE YOU A VOLUNTEER EXAMINER: (YES/NO)

MAY YOUR TELEPHONE NOS. BE LISTED IN THE "Members Only" OVH ROSTER? (YES/NO)

WHAT IS YOUR PRESENT LICENSE CLASS? _____

Dues are now **\$20.00** per year and payable on January 1, 2019. Dues for each additional family member living at the same mailing address are \$10.00. Dues for a full time student at the college undergraduate or lower level [list school attended and grade or level:
_____] are \$10.00.

NAME AND CALL OF FAMILY MEMBERS:

AMOUNT ENCLOSING: _____

Name: _____
Name: _____

Call: _____
Call: _____

Return to: **Treasurer, OVH**
P.O. Box 1255
Manassas, VA 20108-1255

NORTHERN VIRGINIA'S LARGEST

Manassas Hamfest

AMATEUR RADIO, TECHNOLOGY & MAKER SHOW

An ARRL-Approved HAMFEST Presented By:

The OLE VIRGINIA HAMS Amateur Radio Club, Inc.



Note the new location - close to the former one - and the new day - Saturday - this year!

Saturday, June 15, 2019

New location at the Manassas Park Community Center with outdoor and indoor flea market areas, indoor air-conditioned commercial areas and ample parking

Street address: 99 Adams Street - Manassas Park, Virginia -- Talk-In Repeater on 146.97-

INDOOR EXHIBITOR SPACE

6-foot tables: \$30* each
with chairs & electricity
(\$25 if reserved by May 31th)
Setup 5:30 PM - 8:30 PM Friday
and 5:00 AM - 6:30 AM Saturday

GENERAL ADMISSION

\$10* per person at gate
(Age 18 and younger: no charge)
(*See web sites for prepayment discounts before 5/31/2019)
Gates open at 6:30 AM

TAILGATING (admission is extra)

Outdoor Spaces: \$10* per space
(*See web sites for details about online prepayment discounts before 5/31/2019)
Gates open at 6:30 AM

* Online ticket sales and vendor registration at <http://manassashamfest.org>

For our Most Current Vendor Info, Lists and Ticket Sales Visit our Web Pages:

<http://manassashamfest.org> and <http://w4ovh.net>

PRIZES

- Door prizes hourly 9 AM to 1 PM (be present to win)
- Major & Tailgate prizes awarded at 1 PM

INFORMATION

- ARRL Roanoke Division Officers attending
- Virginia QSO Party Forum and Awards
- New location this year: no pets or firearms are allowed
- Also, overnight camping: not allowed at the new location
- Check our web pages (below) for the most up-to-date information

ACTIVITIES

- Flea Market & Vendors - all day
- VEC License Exams: 8:00 AM - 12:30 PM (\$15.00 Fee per Examinee at the VE Exams)
- 4th Call Area QSL Bureau Representatives & DXCC QSL Card Checking will be available
- Amateur maker project demos
- Amateur Radio Satellite Forum
- Various technology and radio demos
- More Forums to be announced, check web sites

<http://manassashamfest.org> and <http://w4ovh.net>

Dealer Info from Don / WA2SWX: vendors@manassashamfest.org
 General Info from Don / WA2SWX: chairman@manassashamfest.org
 VE Testing / Exam Information: vetesting@manassashamfest.org