Rambler

Newsletter of the
Ottawa Valley Mobile
Radio Club
Incorporated

Apr 2021 Edition 58 Page: 1

President's Ramblings

I'm (taking a chance) and calling it official: winter has lost its grip. I'm starting to hear ample discussion on the weekly nets regarding many members getting into antenna refreshing and new construction projects. We have guest speaker Ron Schwartz, VE3VN lined up for the April Zoom meeting who will be presenting on his antenna farm installation of a variety of antennas, towers, and other elements. You may want to check out his blog prior to the meeting to get an idea of how deeply he is involved in the hobby: https://ve3vn.blogspot.com/. You may see some areas where you may have questions for him to address. I believe this will be yet another blockbuster of a meeting so be sure to mark your calendar for the April 21 OVMRC Zoom meeting.

The agenda for the April meeting will be the usual opening boiler plate, March meeting minutes approval (published in this issue of the Rambler), Ron Schwartz's presentation, director and committee chair reports, other business, and closing. Remember, attendance at the monthly meeting buys you another "free" ticket for the year end door prize draw if you are a club member in good standing and did not win one of the door prizes last year.

I announced at the March meeting that we are now looking for nominations for the four director elected positions: President, Vice President, Secretary and Treasurer. While the current executive has volunteered to stay on for one more term, in order to encourage interest, we are going to encourage members wishing to try a hand at any of these positions, to step up and give it a try for a month or two to make sure it is a fit for you before submitting your official nomination. I'm sure there are some who may want to give it a try but are not fully prepared step in to any of the positions. We would shadow your efforts along the way to ensure your success. Anyone with questions is encouraged to approach any executive member for further information.

Along the same theme, there are some vacant Committee Chairs that we would welcome more member involvement in order to further the success of the OVMRC.

Field Day is fast approaching. The same rules will apply this year because of COVID and the ongoing restrictions it has imposed upon us all. We will provide a refresher on club participation similar to the way we submitted our individual entries last year. Look for this information upcoming in *(Continued on page 4)*

INSIDE

Calendar

Notice of Meeting

Wednesday Apr 21st 2021
via Zoom

Check-in Time 6:45 to 7:15 P.M.

Members and invited guests will be sent an email invitation several days before meeting date with login and password. Others not on our mailing list please contact Norm at: VE3LC@rac.ca for invitation.

Agenda:

- Call to Order at 7:15 by Barry VE3NA;
- Greetings to Guests and New Members;
- Acceptance of March meeting minutes;
- Chairperson Reports;
- Feature presentation by **Ron Schwartz, VE3VN** about his substantial Antenna Farm at his rural acreage home in North Augusta;
- Other business; and
- Meeting adjourned; and Rag Chew for those interested.

OVMRC Executive and Officers 2020-2021

President:
Barry Allison,VE3NA
ve3na@rac.ca

Vice-President:
Norm Rashleigh, VE3LC
ve3lc@rac.ca

Treasurer & Membership Records:
Nicole Boivin, VE3GIQ
nlboivin@sympatico.ca

Corporate Secretary:
Ron Smith, VE3LBU
rjs3.smith@gmail.com

The above four positions are "Directors" and officers in charge of running the Corporate affairs of the Ottawa Valley Mobile Radio Club Inc.

Standing Committees

Club Projects & Bulk Orders:
Barry Alison, VE3NA
ve3na@rac.ca

Radio Course & Accredited Examiner:
Norm Rashleigh, VE3LC
ve3lc@rac.ca

Meeting Reception:
John McGowan, VA3JYK
john.mcgowan1314@gmail.com

Nets & Radio Operations:
Hugo Kneve, VE3KTN
ve3ktn@rac.ca
Nicole Boivin, VE3GIQ
nlboivin@sympatico.ca

Rambler Newsletter Production:
Norm Rashleigh, VE3LC
ve3lc@rac.ca
Robert Cherry, VA3AOD
cw527@ncf.ca
Bill Hall, VA3WMH
bmhall@rogers.com

Club Web Site & Social Media:
Darin Cowan, VE3OIJ
ve3oij@amsat.org

VE3TWO Repeater Keeper:
Norm Rashleigh, VE3LC
ve3lc@rac.ca

Special Events:
Roger Egan, VA3EGY
va3egy@gmail.com
John McGowan, VA3JYK
john.mcgowan1314@gmail.com

OVMRC Groups.io

Ongoing discussion Group at: https://ovmrc.groups.io/g/main/topics; if you are not a member please subscribe. All radio amateurs are welcome.

Ottawa Valley Mobile Radio Club, Incorporated
PO Box 41145
Ottawa, ON K1G 5K9
www.ovmrc.on.ca

OVMRC Life Members

Ernie Jury, VE3EJJ
Maurice-André Vigneault, VE3VIG
Ralph Cameron, VE3BBM
Doug Carswell, VE3ATY
Doreen Morgan, VE3CGO

OVMRC Repeaters

VE3TWO

147.300 Mhz (+) 100 Hz tone
FM & Yaesu C4FM Digital Operation

VE3RAM

Limited coverage to Orleans and East Ottawa

443.700 MHz (+)
DMR CC1 & D-Star
Network connected to Brandmeister

Special Event & Field Day Call Sign

VE3JW

The Rambler is the official newsletter of the Ottawa Valley Mobile Radio Club Incorporated and is published 10 times a year (monthly, except for July and August). Opinions expressed in the Rambler are those of the authors and not necessarily those of the OVMRC, its officers or its members. Permission is granted to republish the contents in whole or in part, providing the source is acknowledged. Commercial use of the contents is expressly prohibited.

Submit articles and notices to:

Norm at ve3lc@rac.ca

OVMRC Affiliations

The Wednesday evening Cross Canada Weekly C4FM is again hosted on VE3TWO

OVMRC members can again check into the Wednesday evening Cross Canada C4FM net on Club repeater VE3TWO 147.300 (+ offset) thanks to a remote Wires X connection provided by Steve VA3MPS. Steve will be engaging his node station onto the repeater Wednesday Evenings at 9:00 PM. All check-ins are welcome using the Yaesu C4FM digital voice mode.

Emergency Measures Radio Group: (EMRG)

Monthly Repeater Tests are conducted by Dave VE3KMV on the first Wednesday of each month at 8 PM on VE3OCE 146.880 MHz – (136.5 Hz tone). From initial contact on VE3OCE, you'll be asked to test VE3EMV/East 146.985 MHz – (100 Hz@ tone), VE3EMV/West 145.210 MHz – (123.0 Hz tone), VE3OFS 146.670 MHz – (136.5 Hz tone), VE3OCE 443.8000 MHz + 5 (136.5 Hz tone) and VE3EMU 444.9500 + 5 (136.5 Hz tone).
It is advisable that all the EMRG frequencies be programmed into your radio. All check ins are welcome.
See: http://www.emrg.ca/repeaters.htm

Informal Amateur Radio Restaurant Gatherings

(All Cancelled until Further Notice)

- **QCWA Chapter 70** breakfast gathering every **Tuesday** morning at 7:30 to 10:00 AM, Summerhays Grill, 1972 Baseline Rd., Nepean
- **Orleans Coffee gathering** every **Friday** morning at 9:00 AM, McDonalds, 2643 St. Joseph Blvd, Orleans
- QRP **Group Dinner** meeting, **2nd Wednesday** every month, 5 PM, Newport Restaurant, 322 Churchill Ave N., Ottawa
- **Phoenix Net monthly Breakfast** gathering, usually the **second Saturday** every month at 9 AM, T-Basil Restaurant, 2440 St Joseph Blvd, Orleans. (get on Pete VE3XEM's mailing list for monthly reminder VE3XEM@RAC.CA)

OVMRC Repeater VE3TWO :

147.300 MHz +600 kHz, 100 Hz Tone and Yaesu C4FM Digital Voice

OVMRC VE3TWO Weekly Net:

- **Thursday Evenings, 8 PM**, Club Net on FM conducted by Hugo, VE3KTN.

Other Local 2 Metre Repeater & Simplex Nets: *(all check-ins welcome)*

- **Rubber Boot Net**, VE3MPC 147.150 +, (100 Hz tone) mornings at 7:30 AM conducted by Roger, VE3NPO
- **Phoenix Net**, VE3MPC 147.150 MHz +, (100 Hz tone), Tuesday evenings at 7:30 PM conducted by Pete, VE3XEM
- **QCWA Chapter 70 Net**, VE3MPC 147.150 MHz +(100 Hz tone), Monday evenings at 7:30 PM conducted by John, VE3ZOV
- **Capital City FM Net**,VE2CRA 146.940 MHz -, (100 Hz tone), Monday evenings at 8:00 PM.
- **Champlain Mini Net**, VE3STP 147.060 MHz -, (114.8 Hz tone), every evening at 6:45 PM.
- **Upper Frequency Net**, Simplex 144.250 MHz using USB, Tuesday evenings at 9:00 PM conducted by Glenn, VE3XRA. Following check in on 2 m you can check your radios on 6 m at 50.150 MHz and 70 cm on 432.150 MHz as well using USB. All check ins are welcome.
- **DEXNET (Digital Experimental Net)**, Simplex 144.210 MHz, USB, vertical polarization. Check the schedule on groups.io for digital mode used each week.

OVMRC HF Nets

- **Pot Hole SSB Net,** 3760 kHz, every Sunday morning at 10:00 AM conducted by Ernie, VE3EJJ, or Glenn, VE3XRA.
- **Pot Lid Slow Speed CW Net**, 3620 kHz, every Sunday morning at 11 AM conducted by Roger, VE3XRR.

(Continued from page 1)
the May and June meeting agendas.

The club still has LMR 195 @ $0.80 / ft and LMR 400 @ $1.35 / ft, crimp on connectors @ $2.00 ea, (type "N" connectors are $4.00 ea), SMA to BNC adapter kits @ $6.00 ea (2 kits left), and one crimper tool kit @ $95.00 ea. All prices are tax included.

I'll end the rambling here for now. Everyone is invited to join the OVMRC April Zoom meeting Wednesday April 21. Check in will start at ~ 6:45 PM with a planned start time as close to 7:15 PM as practical. Anyone not receiving the check in credentials can do so by sending an email to Norm (Zoom custodian) VE3LC@RAC.CA. All are welcome to attend.

Stay safe, stay home, stay on the air!

73
Barry, VE3NA

Start Thinking about the ARRL Field Day Exercise June 26-27 Weekend

Due to the continued requirement of Social Isolation, the OVMRC will not be sponsoring again this year a traditional Field Day Operation on the grounds of the Aviation and Space Museum. Instead, we will be promoting members of the Club to operate Field Day on an individual basis and submit their results showing their club affiliations as the Ottawa Valley Mobile Radio Club. The ARRL has advised they will "Extend Field Day Rule Waivers from 2020" including:

- Class D Stations may work all Field Day stations, including other Class D stations for FD points. This year, however, Class D and Class E stations will be limited to 150 watts.

- An aggregate club score will be published just as it was done last year. The aggregate score will be a sum of all individual entries that attributed their score to that specific club.

As usual, the rules and resources of Field Day and what it is all about can be found at: http://www.arrl.org/field-day

Also, we invite OVMRC members to refer to the May 2020 issue of the Rambler Newsletter that goes into fair detail about operating Field Day on an individual basis and how you can submit your results on behalf of the Club.

See: https://www.ovmrc.on.ca/Rambler/Archive/Ram2020-05.pdf

Questions? Norm: VE3LC@rac.ca

It was quite a show at our last meeting with Allan Boyd, VE3AJB from Manitoulin Island capturing the interest of many of the OVMRC members with his presentation on the history of D-Star, the evolution of products and networking and a demonstration of the RF Shark OpenSpot3 Hotspot that is able to transcode and emulate all modes of Digital Radio with one Digital Radio. The Zoom session remained open for a Q&A with Allan until 11:30 P.M. which was of particular interest to Arthur VA3BIT and Mike VA3TEC both having new ICOM IC-705 transceivers capable of D-Star operation. At the peak of attendance, 66 folks had checked in.

Three New Hams, Three New Members of the OVMRC

Since last month, we have added three new radio amateurs to the roster of the OVMRC. These folks are a product of self-study and approached me to take their test. All candidates obtained their Basic + Honours qualification and are now looking to purchase equipment.

Please welcome to following persons to the air-waves:

- John-David (JD) Comtois works for Federal Government and is a member of the Ottawa Volunteer Search and Rescue team, he obtained the call sign **VA2OJD**.

- Ke Xu is a student at Carleton University, he obtained the call sign **VA3KXU**.

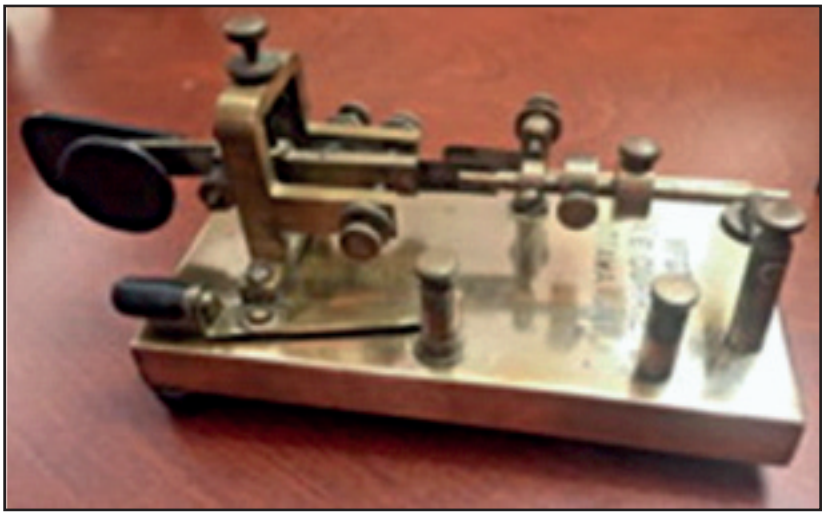
- Kathleen Murphy is a Senior Engineer employed by the Federal Government, she obtained the call sign **VA3WEX**.

- Norm VE3LC

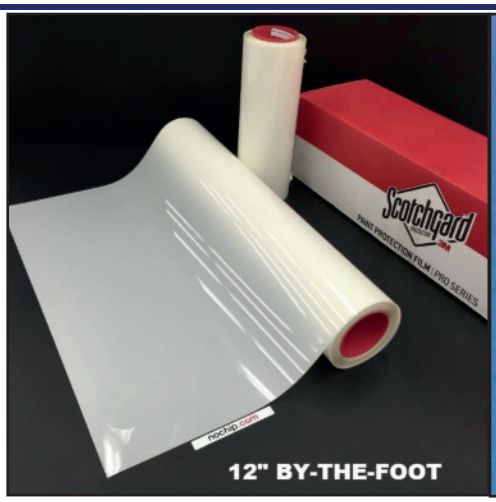
Mystery Bug

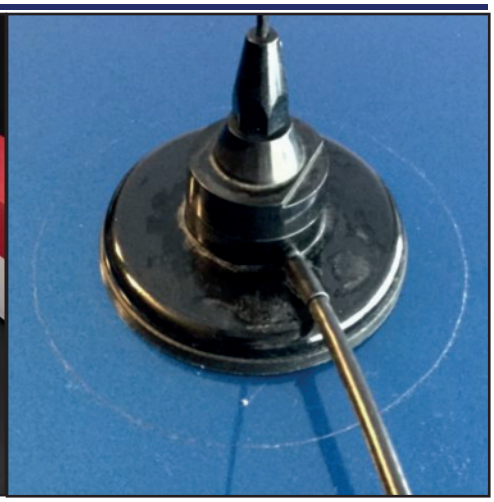
Below you'll find pictures of a mystery bug I found online manufactured by A.E. Currie in Ottawa. Anyone have one of these in their collection? Know anything about A.E. Currie or anything else he may have manufactured? What I have learned so far is that A.E. Currie (1891-1961) lived at 65 Glenn Ave in 1923. The Ottawa directory also listed A.E. Currie's occupation as foreman for the Pritchard-Andrews Company of Ottawa Limited. The fact that he was the foreman of a metalworking company on Sparks Street may have something to do with the production of the bug below and possibly other keys and equipment. Maybe this was a one-off or practice piece to demonstrate his skill in metalwork? Any thoughts or speculation?

Let me know, VA3IAH@rac.ca
73, Alan



Protect Your Car Finish From Using Mag Mount Antennas.





On the Capital City FM net the other week (Monday evenings at 8 pm on VE2CRA), there was a question posed by Dave Scobie, VE3BOW about ways to protect the paint finish from scratches from frequent placement and removal of a mag mount antenna. I have experienced this type of scratching caused inevitably by grit on the paint and mag mount contact surface that grinds into the paint finish. It is particularly a concern when you still have that pride of ownership of a new vehicle and any scratch of the paint surface is distressing. Although there were many ideas offered by people checking into the net, the solution that works for me is what I will tell about here.

I use a material made by 3M and applied to vehicle paint surfaces as a "paint protector" film. This is a clear vinyl material with an adhesive backing that is activated by a solution of water, isopropyl alcohol and a couple of drops of Johnson Baby Shampoo. It is the same material that is sold precut for various car models as a "clear bra" applied over bumpers and grills and hoods for owners of vehicles wanting protection against stone chips. These protective coverings are usually applied by experienced people in auto body shops. The same material however, is also sold in small rolls or by the foot for custom cutting and application. Although I purchased this product at an auto body supply store, I've see it also available by way of on-line purchase through Amazon.

The paint protector material can easily be cut with scissors into round patches a bit wider than the antenna mag mount base and carefully placed in the centre of the car roof or trunk lid top. After the car is traded or you no longer want to use a mag mount again, the patch can be removed leaving no trace it was ever there. As well, having the patch installed on the roof of your car always provides the top centre reference point to properly place the mag mount.

- Norm ve3lc@rac.ca

Minutes Meeting

Date / Time: Wednesday, March 17, 2021 19:15

Location: Via ZOOM on line meeting

1. Call to order:

President Barry Allison, VE3NA called the meeting to order at 19:17. There were 66 check ins including visitors/new hams Allan Boyd, VE3AJB RAC Regional Director for Ontario North and East and President of the Manitoulin Radio Club, Peter Timbrell, VA3PYT; Dave Green, VE3TLY; Sydney Moorcroft, VE3GVI; Verna Moorcroft, VE3ASM; Scott Waller, VE3OCB; Luc Pernot, VE3JGL; Matthew Molsberry, VE3NAM; and Matt Lacasse, VA3KXA.

2. Greetings:

Barry Allison, VE3NA extended greetings to all members and guests.

3. Approval of minutes of February 17, 2021.

MOTION TO ACCEPT: By Wray Jaques, VA3EO, and seconded by Tim Bailey, VE3TXB that the minutes of the meeting held Wednesday February 17, 2021 be accepted.

There were no objections.

APPROVED

4. Projects, Dues and Announcements:

1) Haves and Wants – Several issues of QST magazine are available from Richard Haberl, VA3HBL. Contact Barry at VE3NA@rac.ca if you are interested. Bryan Rawlings, VE3QN is selling some items from his station, including a Yaesu FT1000MP Mk V Field transceiver and a Timewave 599zx digital

audio processor. These items will be posted on the OVMRC groups.io page.

2) Reminder that paid up members are eligible for the year-end draw prizes. Membership dues outstanding as of now are considered delinquent and those members are not eligible for the draw. See the September 2020 Rambler, page 4 for instructions on paying using e-transfer.

https://www.ovmrc.on.ca/Rambler/Archive/Ram2020-09.pdf

3) Get well wishes were extended by Ernie Jury, VE3EJJ to Doug Carswell, VE3ATY who was recently moved to Grace Manor, following a lengthy hospitalization. Barry VE3NA wished Doug the best on behalf of the Club.

5. Agenda, Meeting Content and Directors' Reports:

Barry Allison, VE3NA outlined the agenda for the meeting which included:

- **Guest Presentation:** An Introduction to the Digital Mode D-Star and the OpenSpot3 – Allan Boyd, VE3AJB

Norm Rashleigh, VE3LC, introduced Allan, VE3AJB, a long-established ham and a retired 35-year veteran of the O.P.P. Allan resides in Little Current, Ontario on Manitoulin Island. He is an accredited amateur radio examiner as well as President of the Manitoulin Island Radio Club and the RAC Director for Northern and Eastern Ontario. Allan is also the Emergency Coordinator for Manitoulin Island and a regional coordinator for ARES. Alan hosts the Monday night Northern Ontario D-Star Net on reflector XRF103B at 8 P.M. as well as a Zoom Saturday morning discussion group of the Manitoulin Island ARC members at 10 A.M. If you are interested in dropping in, contact Allan at: dir.ontario.north.east@rac.ca. From time to time, you can also find Allan conducting the Friday evening Can-Net at 9 P.M. The Can-Net is also available on D-Star on reflector XRF103B as well as DMR Brandmeister TG302050 and YSF reflector 36010 (Ontario Pro-Com).

Allan, VE3AJB began with a slide presentation that provided a background to the D-Star (Digital Smart Technology Amateur Radio) origins and its development over the years. The D-Star System of Repeaters, Reflectors and Gateways, particularly his regional club repeater VE3RXR, was discussed before a brief ICOM video was shared. There are a number of D-Star resources available on line that provide the ham with access to a D-Star users' list, an information portal, reflector directories and dashboards, repeaters and a repeater directory. D-Star is linked world wide to reflectors and gateways some of which that provide cross mode access to other digital modes like DMR and YSF. Allan's presentation in PDF less the video, is available on groups.io here at : https://ovmrc.groups.io/g/main/topic/81493352

Following the D-Star presentation, Allan gave a brief introduction to one of the most creative cross mode hotspots available today, the Shark RF OpenSpot and the newest model, the OpenSpot3. Once the business meeting concluded, Allan provided an in-depth demonstration of the OpenSpot3 to members. There were numerous questions with most members staying on line asking a variety of questions until 11:30 P.M. The Shark RF website can be found here: https://www.sharkrf.com/products/openspot3/

Barry, VE3NA thanked Allan for a terrific presentation and demo on behalf of the club.

- Next Month's Guest Speaker: TBA

- **Succession Planning:** Barry Allison, VE3NA advised Members that the current Executive Committee which includes the 4 elected positions of President, Vice President, Treasurer and Secretary have accepted standing another season running the affairs of the Club; which of course, is subject to a vote of confidence by the membership at our June Annual General Meeting. However, this does not negate the submission of the nomination of eligible candidate(s) according to the rules and procedures of submission published in Club ByLaws and available on the Club Website. However, if re-elected, any or all of the current incumbents should not be expected to seek re-election after next season ending August , 2022. The current executive officers of the Club therefore will be seeking able, willing and eligible folks from the membership to take on any of these responsibilities to continue the

well running of the OVMRC after next season. If interested in serving the Club and wanting to know what responsibilities are involved, again please, refer to the Club ByLaws and make your desire and commitment known to any current member of the Club's executive committee and we can involve you as an understudy to any of the positions by way of an invitation(s) to the Club executive meetings which will most likely continue using Zoom video teleconferencing.

- **Finance and Membership Report:** Nicole Boivin, VE3GIQ reported there are now 111 members as of the meeting. Under the Financial Report, the Club has $27,726.37 in the bank, $62.00 cash for a total of $27788.37

- **VE3KTN Net Operations Update:** Hugo, VE3KTN regularly updates the full schedule of regional nets. Right click to open this link: https://www.ovmrc.on.ca/club-info/amateur-radio-info/amateur-nets-ottawa-area/ Hugo reported good attendance and participation on the club nets, including the Sunday morning Pot Hole Net at 10 A.M. on 80 metres.

- **Fox Hunting/Transmitter Hunting Update:** Roger Egan, VA3EGY advised the hunt is on this coming weekend from Friday March 19th through Sunday late afternoon. The beacon will be set at 147.570 and run at half a watt. Activity information is available on the ARDF (Amateur Radio Direction Finding) Ottawa.ca website. There will also be information on groups.io. Roger advised that this is a mobile event and if members need the loan of hunting equipment, to advise himself or Rob Haddow, VE3RXH. As before, please email Roger at VA3EGY@gmail.com when you think you have located the beacon. Include your name and call sign, plus the beacon location. An event a month is planned through September, 2021.

- **Home Brew Night:** Dave Scobie, VE3BOW, advised Members that the OARC is staging its first ever 'Home Brew Night' via Zoom and plans are in the works. Dave will have more information as the event gets closer.

- **Exams Report:** Norm Rashleigh, VE3LC advised that course packages continue to be distributed to those who have expressed interest in becoming a radio amateur. He has also been administering exams on a regular basis in a Covid friendly environment.

6. Upcoming contests:

For more detailed information on upcoming contests, see the WA7BNM contest calendar:

https://www.contestcalendar.com/

RAC Members can log in and go here:

https://www.rac.ca/category/prog/contesting/

ARRL Members can log in and go here:

http://contests.arrl.org/

7. Adjournment:

Moved By: Ronald Smith, VE3LBU that the business meeting be adjourned at 21:34. A Q&A with demo continued after the formal meeting with Allan Boyd on the OpenSpot3.

8. Next meeting:

The next virtual monthly meeting of the OVMRC will be held Wednesday, April 21, 2021 at 7:15 P.M. via ZOOM meeting. Please watch for your email meeting invitation and link to Zoom.

Minutes recorded and prepared by:
Secretary
Ron Smith, VE3LBU.

Canadian Researchers Discover "Quantum Coax"

Researchers at Canada's Moppett Communications Laboratory have announced their discovery of what is being called "quantum coaxial cable". The new type of cable has the same dimensions and other physical characteristics well known to the electronics industry but has newly controllable propagation characteristics thanks to a proprietary doping compound added to the dielectric supporting the centre conductor.

While conducting research on different dopants in advanced doped fibre optic amplifiers (DFA), researchers discovered that certain compounds exhibited quantum characteristics where their electron spin could accelerate or retard the phase velocity of a travelling electromagnetic field. When added to common polyethylene, the quantum dopant was found to alter the dielectric loading in coaxial cable, such loading being commonly known to shorten electrical length relative to the speed of light. The quantum spin acts to either "kick" or "buck" the electromagnetic field depending on whether the spin is in the direction of the travelling field or against it. By controlling the amount of dopant and its electron spin direction, the quantum coax electrical length can be varied as a function of its physical length. Furthermore, by shining a red laser pointer through small holes in the coax braid, the quantum spin distribution in a small section of cable can be polarised or return to a random state when the laser is switched off.

Dr. Benson Honeydew, lead investigator for the quantum coax project, said that the applications of this new discovery are manifold. The ability to vary electrical length while holding physical length constant has immediate application in radio astronomy, phased array radar and monopulse antenna tracking systems in both military and commercial environments. There are further applications currently under investigation where a series of red lasers located at specific points along a coaxial line could act as an ultra low noise in-line amplifier by bunching the electromagetic field in a way similar to electron bunching in slow wave beam amplifiers such as travelling wave tubes and klystrons.

Some dopants also exhibit a promise of accelerating eletromagnetic fields faster than the speed of light which has many new and exciting consequences. An experimental video circuit has demonstrated an image that would appear at the destination view screen several tens of nanoseconds before the subject was presented at the source modulator. The lead investigator for this research, Dr. Beeker Klooj, could not be located to further explain this claim.

Moppett Labs is a class 9 classified military research establishment situated at an undisclosed location in Canada's high arctic. The northern location was selected as ideal for research into room temperature superconductivity and prototype testing over distances of several kilometers. It conducts research in other novel and undisclosed fields of fibre optics and lasers. It is believed this facility began operations in late 1963 under the direction of Dr. Henson Moppett, formerly a technical clerk at Canada's National Research Board, however since the discovery of quantum dopant propagation, no one is really sure.

End.

found during a random walk through Neverland,

Hugo Kneve, VE3KTN.

Shack Profile: VA3IAH

When I was first licensed, in December 2019, my shack consisted of a single HT (Yaesu FT-70D) with a stock "rubber-duck" antenna. Looking to improve the "Get-Out-Ability" of my HT *(see VE3LC's Rambler article of October 2016)* I added a replacement whip antenna and a counterpoise or "rat-tail". I also learned that even with 5 watts, when the counterpoise is draped across your hand it can give a little RF sting when transmitting!

Not knowing how much of an antenna would really be required to reach local repeaters, I went big and bought a 16 foot Comet GP-9 (2m/70cm antenna, 8.5dBi/11.9 dBi) and placed it on an 8 foot hydro mast gable mounted to the end of my house. To ensure local reach, I also picked up a 1987 Yaesu FT-2800M with 60-ish watts for extra power. The mobile FT-2800M rig also required something else – a power supply! With used power supplies being about the same price as new ones, I ordered a new TYT (TH-1380) switching power supply with adjustable voltage and noise off-set. With the power supply and the FT-2800M any problem reaching local repeaters and a few out of town was solved!

As an initial taste of SSB, I made a Kijiji impulse-buy of a 1978 IC-211 2m all-mode radio with 10 watts and built in power supply. With the IC-211 and the GP-9 my radio experience was broadened to include local simplex SSB nets, even if the radio was known to be a little "drifty" on SSB. This is my favorite radio so far because of its simplicity, multiple modes, simple control knobs and even a carry-handle on the side of the old brick. Also on FM, the radio has a sound quality that has been reported to surpass the sound quality of the newer more powerful mobile FT-2800M radio in local simplex operation.

With a base radio, mobile radio, power supply and a base antenna as part of the station something other than the corner of my desk was required as a location for my "shack". I selected a corner of my basement at the antenna end of the house very near my house's electrical ground as my current "shack" location. Also with other electrical work going on in the house I was able to add two dedicated 20 amp circuits in the same area just in case this might be useful down the road.

Beyond the analogue FM usage, I was also able to explore the C4FM capability of the Yaesu FT-70D to explore, for the first time, nets and contacts on a global scale. A memorable "gee-whiz" moment was to walk my local neighbourhood connected to a local C4FM repeater with my FT-70D and monitor a digital talk group in Australia!

This was also about the time that interest in DMR radio was coming on strong in the club and generally in the amateur radio community. Norm's presentations, articles and discussions on nets provided a road map to explore DMR. As a result and building on my original experience with C4FM, I jumped into DMR with an initial purchase of Baofeng CH-6DMR (which I returned due to all-or-nothing volume control) to move on to an Alinco DJ-MD5 (which couldn't transmit on DMR as it turned out and had to have the mother-board replaced). All to say that I should have spent a little more for the Anytone 878 – definitely a lesson learned!

To complement the digital HTs I also ordered the parts and built a simplex hotspot and set up Pi-Star for cross-mode access to YSF, DMR and P25 talkgroups, as well as D-star reflector (XLX-196) for a local net and talk group. The hot spot also provided the option to wander about the house with my HT (with a bullet Diamond SRH805S antenna) and transmit with 0.5 watts through my hot-spot to both locally and globally – yet another "gee-whiz" moment.

While in the midst of my digital internet radio explorations, I was also presented with the opportunity to obtain a 100W Yaesu FT-890 HF radio with a built in antenna tuner to explore HF. This opened up the possibilities of exploring SSB, AM, FM, and CW modes on HF, but first I required an antenna. Somehow by exploring HF I felt I was entering a traditional mainstay of amateur radio. Inspired by this, I took on the construction project of a multi-band ZS6BKW (G5RV variant) antenna, with some hard drawn copper antenna wire, a cutting board centre insulator, some good 450 ohm window line, glass end insulators and a good chunk of LMR-195 coax from Barry VE3NA. With the aid of a recently acquired Vector Network Analyzer (VNA), I was able to determine that the SWR was less than 1.6 on four bands (20M, 17M, 12M, and 6M) and was less than 2.5 on two more (40M and 10M). For the remaining bands there were higher SWR ratings of 6.37 for

15M, 7.4 for 30M and 7.5 for 80M. As an alternative to the built in antenna tuner of the FT-890, I also added a manual MFJ-945C antenna tuner and observed the peaks and valleys of SWR with my VNA which corresponded nicely with the noise levels produced by the transmitter and antenna variable capacitance knobs. One of the charms of the MFJ antenna tuner is the call sign of a previous, now SK owner and the hand painted indications of which band was best suited for as few of the "A" to "L" inductance choices.

My HF journey has really just begun, but I have found that 20M at sunset has resulted in contacts as varied as Louisiana, California and Belgium. I have heard some South African stations beaming North America, but alas they could not hear me. The orientation of each leg of my antenna above the house takes the shape of a chevron and seems to pick up the south western United States very well. I have built a 10M copper pipe j-pole antenna that I had horizontally vertically mounted in my attic as a bit of an experiment, which didn't really work all that well. The next destination for the copper cactus may be as a 10M vertical in the medium sized spruce tree I have on the corner of my property, but given band conditions, I may be able to take my time getting this antenna into service! I am also contemplating building a short 80M vertical using a mid-coil and capacitance hat as I have had some challenges being heard on 80 M with the ZS6BKW.

Finally, during the pandemic, other than taking the Advanced RAC course on zoom (twice!) with Dave Goodwin VE9CB and passing my exam with Norm VE3LC in February 2021, I have also started down the road of hearing and practicing CW. To support this latest facet of the hobby, I ordered and built a Morcerino-32 CW trainer kit and have acquired a WWII RCAF Grimmer-Wilson straight key and a nearly new Bencher BY-1 iambic double paddle to practice with. Learning CW is very much a work in progress and I am enjoying the almost meditative focus on hearing the timing and patterns of dits and dahs as well as the physical engagement in forming "dits" and "dahs" with the keys according to the strict algorithms of the Morcerino-32 trainer at 12 WPM.

Where to next? Well having just scratched the surface of HF, I hope to be able to add an interface to the FT-890 to explore software-based digital modes on HF. Also, as I work away at my CW, I have various training modes, keyer and software-based transmitting capabilities to explore with the Moreserino-32.

If you have enjoyed this piece and would like to share the journey of developing your radio amateur station and the "gee-whiz" moments you have had along the way, please consider submitting a shack profile of your own to the Rambler!

73, Alan, VA3IAH

Equipment from Left to Right:

Top: *Icom IC 211 (1980 vintage), MFJ-945 Tuner, Yaesu FT-890 HF transceiver*

Bottom: *Yaesu FT 2800 2M FM transceiver, TYT-TH1380 power supply.*

Other equipment shown *on the table is Bencher iambic paddles connected to the Morserino-32 . The Wilson straight key is on top of the HF transceiver.*

See also photo on page: 14

OVMRC Net Activity, Check-ins for March, 2021.

Prepared by: Hugo Kneve VE3KTN

OVMRC 2 Metre Net: VE3TWO 147.300+ 100 Hz. tone, Thursdays 8 P.M. local.

March 4	March 11	March 18	March 25
VE3KTN - NCS	VE3KTN - NCS	VA3AUM - NCS	VE3KTN - NCS
New & Visitors	**New & Visitors**	**New & Visitors**	**New & Visitors**
		Pete – VE3YPD	
Check-ins	**Check-ins**	**Check-ins**	**Check-ins**
VE3RUU VA3LUI VE2MPP VA3IAH VE3WGD VE3OCB VE3NA VE3LC VA3EGY VE3LBU VE3VIG VE3KAE VA3PSI VA3EO VE3ZZU VA3BIT VE3LAF VA3AUM VE3RXH VE3KJQ VA2EV	VE3RUU VE2MPP VE3NZL VE3NA VE3LC VE3LBU VE3ZZU VE3OKD VA3DEF VE3VIG VE3OCB VA3AUM VA3EO VE3KAE VE3KJQ VE3RXH VA3BIT	VE3RUU VE2MPP VA3KXA VE3YY VE3WGD VE3YPD VE3NA VE3LC VE3VIG VA3EGY VE3KTN VE3ZZU VE3KAE VA3EO VE3OCB VA3IAH VE3LAF VE3RXH VE3WNX VE3KJQ VA3BIT VE3NPO VA2EV	VE3ZZU VE3RUU VE3NPO VE3YY VE3QN VE3BOW VA3GFY VA3EO VE3NA VE3LC VE3LBU VE3KAE VA2EV VE3BOE VE3RXH VE3KJQ VA3IAH VA3BIT VE3VIG

OVMRC Pothole Net: 3760 kHz. LSB Sunday mornings at 10 AM. local

March 7 SFI:76 A:16	March 14 SFI:76 A:17	March 21** SFI:74 A:29	March 28 SFI:74 A:8
VE3EJJ - NCS	VE3EJJ - NCS	VE3EJJ - NCS	VE3EJJ - NCS
Check-ins	**Check-ins**	**Check-ins**	**Check-ins**
VE3MKX VE3QN VE3XRA VE3LC VE3YY VA2ZCB VE3EKN VE3NA VE3KTN VA3PSI VE3KAE VA3EO VA3BIT VE3NPO VE3IAH	VE3XRA VA3BGO VA3BIT VE3QCW* VE3LC VE3NA VA3EO VE3KAE VE3YY VE3KTN VA3IAH VA3HBL VE3MKX VA3PSI	VE3QN VE3NPO VE3LC VE3KTN VE3NA VE3EKN VA3BGO VE3KAE VA3EO VA3IAH VA3PSI VA3BIT VE3MKX	VA3BGO VE3KTN VE3LC VE3QN VA3PSI VE3NPO VE3YY VE3KAE VA3EO VE3NA VE3XRA VA3IAH VA2ZCB

* VE3QCW special event station of QCWA Chapter 70 for weekend QSO Party. Brian, VE3QN at the mic.

** Extremely poor band condition for this net.

OVMRC Digital Experimental Net: 144.210 MHz. USB, V-pol Sundays 7:30 P.M.. local.

Net meets on PSK31 before proceeding to the mode-of-the-day.

Date	Mode	Config
2021-04-11	DominoEX	DominoEX8
2021-04-18	Thor	THOR16
2021-04-25	Throb	THROBX4
2021-05-02	Hellschreiber	FELD HELL
2021-05-09	RTTY	45.45B/170Hz shift
2021-05-16	BPSK-31	
2021-05-23	QPSK-31	
2021-05-30	MFSK16	
2021-06-06	FSQ	FSQ4.5
2021-06-13	Olivia	8-1000
2021-06-20	Contestia	8-1000
2021-06-27	MT63	MT63-500