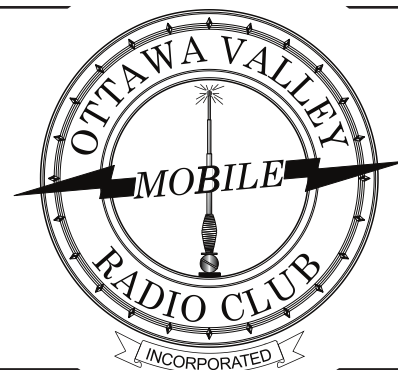


# Rambler



Newsletter of the  
Ottawa Valley Mobile  
Radio Club  
Incorporated



Volume 64

Issue 4

Page: 1

## President's Ramblings

Sometimes, it can be challenging to find a guest speaker for upcoming meetings. Other times, candidates seem to pop up without even canvassing for speakers on various topics. That is exactly what happened for our November meeting. I received an email from Jason, VA3THP who volunteered to speak on his journey in Amateur radio from the beginning, taking the course through obtaining his Certificate of Proficiency, building his first radio and making his first on air contact. What an interesting, well documented presentation, and very much enjoyed by everyone. Many questions followed the presentation. Thanks Jason, well done! I hope the presentation by Jason will inspire other "new Hams" to present their journey into the hobby at an upcoming club meeting.

There are a couple of reminders following:

There is a tab on the club website <https://www.ovmrc.on.ca/> where anyone can submit an article for consideration to be published in an upcoming edition of the Rambler. You can also make a submission directly to the Rambler editor, Alan, [va3iah@rac.ca](mailto:va3iah@rac.ca). We are always

looking for new material for the newsletter.

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).

I encouraged the membership at the November meeting to send me an email indicating your preference for the type of Zoom meeting you would like to have for the December meeting since we will not be getting together for our traditional Christmas Dinner meeting again this year. The overwhelming choice was to simply have a drop in, rag chew/show & tell/what's new, by all dropping in for a short or long stay. There will not be any door prizes, no minutes will be taken, and attendance will not be taken for the purpose of the year end door prize tickets. While this format is quite different from past meetings, we hope to see you there for at least a hello and greetings.

Speaking of year end door prizes, I have received a few very interesting suggestions and will be announcing the choice (s) during the January meeting. This means all who attend the January to June meetings will earn up to another 6 chances to win one of the prizes at the annual AGM in June.

This short December ramblings sums things up for now. Everyone is invited to (Continued on page 4)

INSIDE	
President's Ramblings.....	1,4
Restaurant Gatherings <b>Cancelled</b> .....	3
HF Nets.....	3
OVMRC Repeater Nets.....	3
Local 2 Metre Nets.....	3
Meeting Minutes.....	4-5
"Phaser" HF Digital Mode Transceiver Kit....	5-7
Barber Pole Antenna.....	8-9
Field Day Results.....	10
A Note on Space Weather.....	11
Net Activity Check-ins - November.....	12-13

**Notice of Meeting**  
*Get together*  
Wednesday Dec. 15<sup>th</sup> 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](mailto:ve3lc@rac.ca) for invitation.*

**This year by popular choice instead of a formal meeting with a structured agenda, reports, presentations and minutes we are having an informal drop-in for rag chew, show-and-tell, and a catch up on what is new and evolving with OVMRC members. Hope to see you there!**

*Merry Christmas  
&  
A Happy New Year*

## OVMRC Executive and Officers 2021-2022

### President:

**Barry Allison, VE3NA**  
[ve3na@rac.ca](mailto:ve3na@rac.ca)

### Vice-President:

**Norm Rashleigh, VE3LC**  
[ve3lc@rac.ca](mailto:ve3lc@rac.ca)

### Treasurer & Membership Records:

**Nicole Boivin, VE3GIQ**  
[nlboivin@sympatico.ca](mailto:nlboivin@sympatico.ca)

### Corporate Secretary:

**Ron Smith, VE3LBU**  
[rjs3.smith@gmail.com](mailto: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](mailto:ve3na@rac.ca)

### Radio Course &

#### Accredited Examiner:

**Norm Rashleigh, VE3LC**  
[ve3lc@rac.ca](mailto:ve3lc@rac.ca)

### Meeting Reception:

**John McGowan, VA3JYK**  
[john.mcgowan1314@gmail.com](mailto:john.mcgowan1314@gmail.com)

### Nets & Radio Operations:

**Hugo Kneve, VE3KTN**  
[ve3ktn@rac.ca](mailto:ve3ktn@rac.ca)  
**Nicole Boivin, VE3GIQ**  
[nlboivin@sympatico.ca](mailto:nlboivin@sympatico.ca)

### Rambler Newsletter Production:

**Alan Hotte, VA3IAH**  
[va3iah@rac.ca](mailto:va3iah@rac.ca)  
**Bill Hall, VA3WMH**  
[bmhall@rogers.com](mailto:bmhall@rogers.com)

### Club Web Site & Social Media:

**Darin Cowan, VE3OIJ**  
[ve3oij@amsat.org](mailto:ve3oij@amsat.org)

### OVMRC Repeater Keeper:

**Norm Rashleigh, VE3LC**  
[ve3lc@rac.ca](mailto:ve3lc@rac.ca)

### Special Events:

**Roger Egan, VA3EGY**  
[va3egy@gmail.com](mailto:va3egy@gmail.com)  
**John McGowan, VA3JYK**  
[john.mcgowan1314@gmail.com](mailto: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](http://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

### VE3RAM

Limited coverage to  
Orleans and East Ottawa

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

### VE3TWO

Limited coverage to  
East and South Ottawa  
147.300 MHz. +, PL 100.0 Hz.  
Analogue FM and C4FM

## 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:

Alan at [va3iah@rac.ca](mailto:va3iah@rac.ca)

## OVMRC Affiliations





## 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, **2<sup>nd</sup> 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](mailto:ve3xem@rac.ca))

## Local Weekly Nets

*(all check-ins welcome)*

- **Rubber Boot Net**, VE3OCE 146.880 MHz (-)136.5 Hz tone mornings at 7:30 AM conducted by Roger, VE3NPO
- **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**, This net is suspended until further notice. Roger, VE3XRR retired from leading the net each Sunday morning last season and a new Net Control Station has not come forward. If and when the Pot Lid Net resumes, we will advise in the Rambler.
- **QCWA Chapter 70 Net**, VE3OCE 146.880 MHz (-) 136.5 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), held Monday through Friday at 7:00 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.
- **Phoenix Net**, VE3OCE 146.880 MHz (-) 136.5 Hz tone, Tuesday evenings at 7:30 PM conducted by Pete, VE3XEM
- **Thursday Evenings, 8 PM**, Club Net on FM will be held through VE3OCE 146.880 MHz (-)136.5 Hz tone conducted by Hugo, VE3KTN.

(Continued from page 1)

join the OVMRC December Zoom meeting Wednesday December 15. Check in will start at the usual ~ 6:45 PM. Anyone not receiving the check in credentials can do so by sending an email to Norm (Zoom custodian) [ve3lc@rac.ca](mailto:ve3lc@rac.ca).

The OVMRC meetings are open for all to attend. Club membership is not required (but of course we would like to have you as a new member). Guest members can

submit a request to the Zoom custodian (see above) and joining credentials will be sent to you.

Best wishes to all for the upcoming festive season, enjoy the rest of the read in this month's edition of the Rambler and I'm looking forward to meeting all that can attend at the upcoming December Zoom drop in, rag chew meeting.

73

Barry, VE3NA

## Meeting Minutes

**Date / Time:** Wednesday, November 17, 2021 @ 19:15

**Location:** Via ZOOM on line meeting

### 1. Call to order:

President Barry Allison, VE3NA called the meeting to order at 19:18. There were 58 official check-ins.

### 2. Greetings:

Barry, VE3NA extended greetings to everyone including guest speaker Jason Poloski, VA3THP.

### 3. Approval of minutes from previous meeting:

**MOTION:** Moved by Bill Henderson, VA3HWA and seconded by Ernie Jury, VE3EJJ that the minutes of the meeting held Wednesday, October 20, 2021, be approved.

**VOTE:** No Objections.

**CARRIED.**

### 4. Projects, Haves, Wants and Announcements:

**A) Haves:** Peter Carss, VE3XEM has at least one Variac variable transformer to sell. Contact Pete at [ve3xem@rac.ca](mailto:ve3xem@rac.ca)

**B) Wants:** JD Comtois, VA2OJD is looking for an antenna tuner and a dummy load. JD can be reached at [va2ojd@rac.ca](mailto:va2ojd@rac.ca) Ernie, VE3EJJ is looking for a 1KW 'Cantenna' .

**C) The President's Term of Office:** Barry, VE3NA reminded members he will end his term at the end of this membership year. He asked for interested members to 'step up' and fill the gap.

**D) The Secretary's Term of Office:** Ron, VE3LBU advised he too is stepping down in June.

**E) 2022 Year End Prizes:** Three year-end attendance prizes have been approved with a value of \$450.00 each. Contact Barry with your ideas for prizes at [va3na@rac.ca](mailto:va3na@rac.ca).

**F) December Meeting:** President Barry, VE3NA requested members to send him ideas on what format the meeting should take. Guest

speaker? Formal meeting? Pop in and out meeting. Prizes?

### 5. Agenda and Meeting Content:

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

- **Presentation:** Jason Poloski, VA3THP – 'Phaser' HF Digital Mode Transceiver Kit. Jason was first licensed in July 2020 and he presented a spirited review of his build including slides with photos of his kit constructed in May of this year. Jason had first tried a digital transceiver kit by the QRP Guys, without success. This 'Phaser' transceiver is from Midnight Design Solutions. It comprises a single board, 4-watt output running digital mode and SSB. It works well with WSJT-X, FLdigi JS8 Call and more. Excerpts from his presentation will be available in the December 2021 issue of The Rambler, found on the Club's home page here: <https://www.ovmrc.on.ca/>

### • Chair Reports:

Financial Report and Membership - Nicole Boivin, VE3GIQ:

Highlights of the financial summary include:



\$27,247 approximately in the bank account, including cash; 121 Memberships are active. Approximately \$13,000 will be invested from the bank account into a suitable interest paying investment, to be announced. Club donations as per the budget will be doled out soon.

**Net Operations:** Hugo Kneve, VE3KTN –The latest Nets Summary can be found in The Rambler. The 80 M Pot Hole Sunday morning net hosts a regular attendance of 15 members, while the 2 M VHF Net draws an average of 22 or 23 attendees weekly. Harry Jones is leading the New Hams Net Tuesdays at 8 P.M. on the VE2CRA FM Repeater, 147.940. The Dexnet will be wound up soon.

**Transmitter Hunting:** Neil Herber, VE3PUE announced the ARDF website ([ARDFOTTAWA.ca](http://ARDFOTTAWA.ca)) has the results of the latest event held October 30<sup>th</sup>.

**Canadian Ski Marathon:** Neil Herber, VE3PUE provided an update on the CSM event set for February, 2022. Information will be available on [hambone.ca](http://hambone.ca) under CSM 2022 Radio Ops. Subject to Covid regulations the event may return to a classic 2-day event or a 1-day event or remain a virtual event.

**Rambler:** Alan Hotte, VA3IAH welcomes any and all submissions for publication in the monthly newsletter. Please contact Alan at [va3iah@rac.ca](mailto:va3iah@rac.ca) with your input. Ideas welcomed for the December Rambler.

**Items of Interest:** Norm Rashleigh, VP, VE3LC confirmed the 2021 ARRL Field Day results are available on line now. The aggregate scores are promising, especially for the OVMRC.

### 6. Upcoming contests:

For more detailed information on upcoming contests, see the

WA7BNM contest calendar:  
<https://www.contestcalendar.com/>

RAC Members can login and go here:

<https://wp.rac.ca/amateur-radio-contest-calendars/>

ARRL Members can log in and go here:

<http://contests.arrl.org/>

### 7. Adjournment:

**MOTION:** Moved by Douglas King, VE3YDK to adjourn the business meeting at 20:23.

### 8. Next meeting:

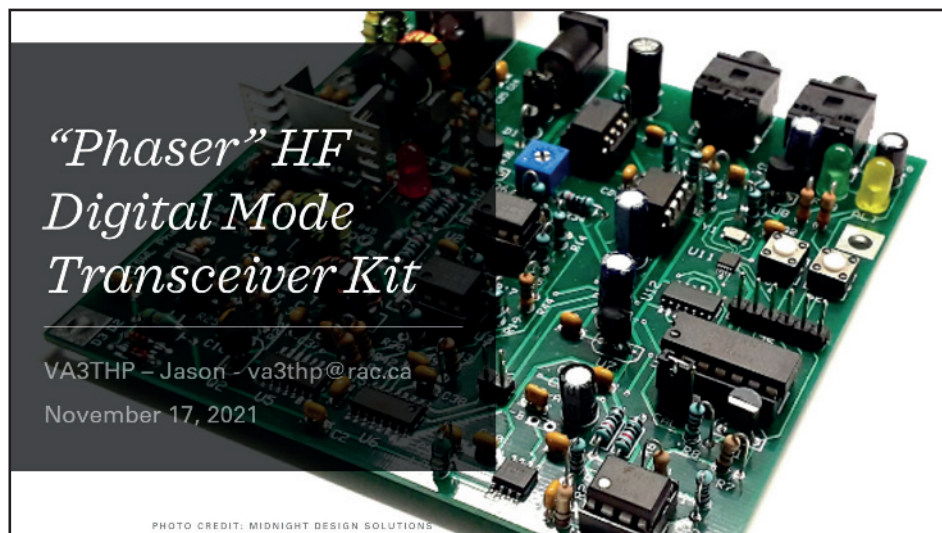
The next monthly meeting of the OVMRC will be held via Zoom Wednesday, December 15, 2021 at 7:15 P.M..

*Minutes recorded  
and prepared by  
Secretary*

*Ron Smith, VE3LBU*

## “Phaser” HF Digital Mode Transceiver Kit

Jason – [va3thp@rac.ca](mailto:va3thp@rac.ca)



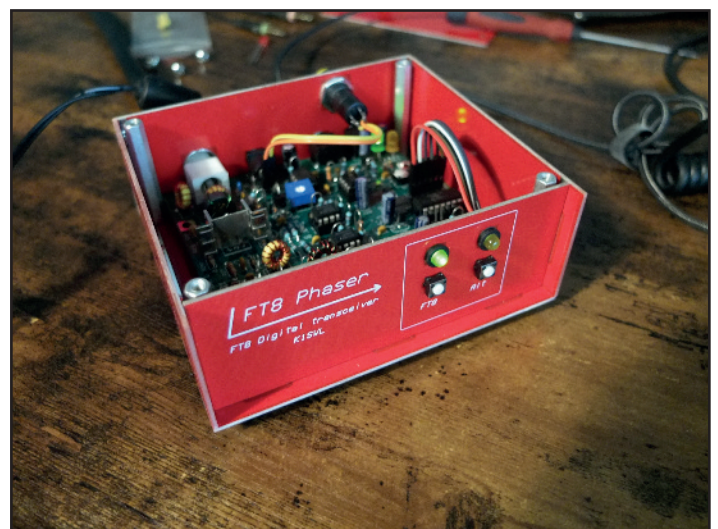
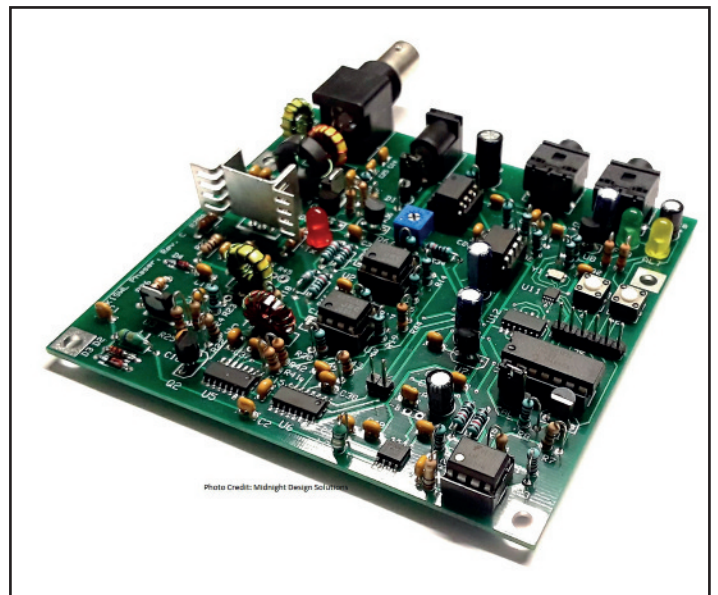
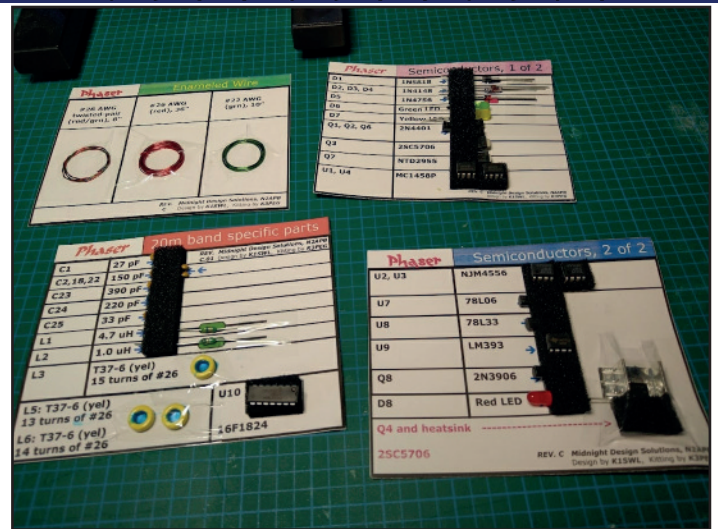
At the November OVMRC meeting Jason, VA3THP made an excellent presentation summarizing his build project and operation of a “Phaser” HF Digital Mode Transceiver Kit. Jason is a new member to the

OVMRC having completed Al Penney’s RAC online course in the spring of 2020, and successfully receiving his Basic with Honours certification in July of 2020.

Undaunted by a first project build of an HF digital transceiver (<https://qrpguys.com/qrpguys-40-30-20m-dsb-digital-transceiver-ii-kit>) that became in Jason’s words a “failed build” due to some challenges with surface mount components and side-band suppression concerns Jason persevered to tackle a second



digital mode transceiver build when he selected the “Phaser” HF Digital Mode Transceiver kit (<https://midnightdesignsolutions.com/phaser/>). The kit is a single-board, 4-Watt digital mode single frequency SSB transceiver for 160, 80, 60, 40, 30, 20 or 17 Metres which through the use of a computer can utilize WSJT-X, FLDIGI, JS8Call among other software programs. Jason selected the 20 metre version of the kit and a case to house his build.

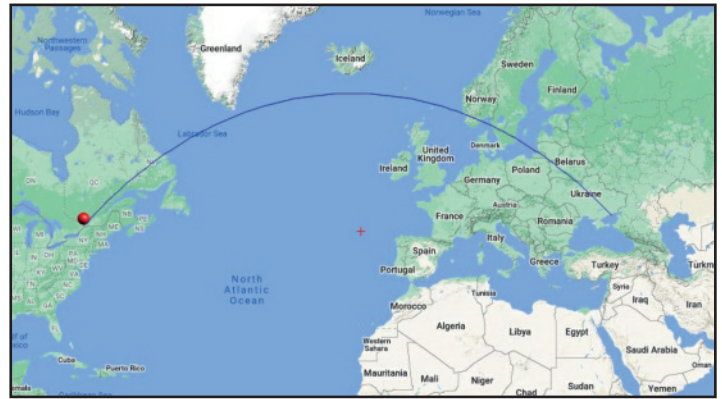


Jason reported that the kit he received was well organized with all components being labelled well and packaged onto part cards for easy identification. He detailed each of the six assembly groups that constituted the project build. He noted some concerns with the design and assembly of the case for the transceiver, but these didn't interfere with the ultimate operation of the transceiver.

In the testing phase Jason connected the transceiver using LMR 400 in his back yard to a 80-10 metre

102" vertical whip antenna with a Silver Bullet 1000 coil tapped for 20M. Testing with his NanoVNA validated an SWR of less than 1.5 without requiring an antenna tuner.



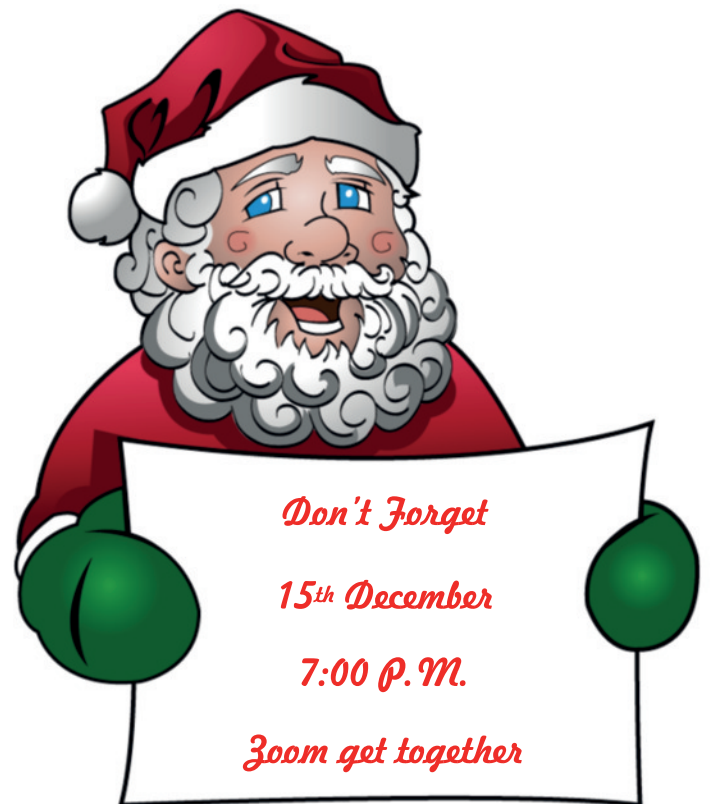
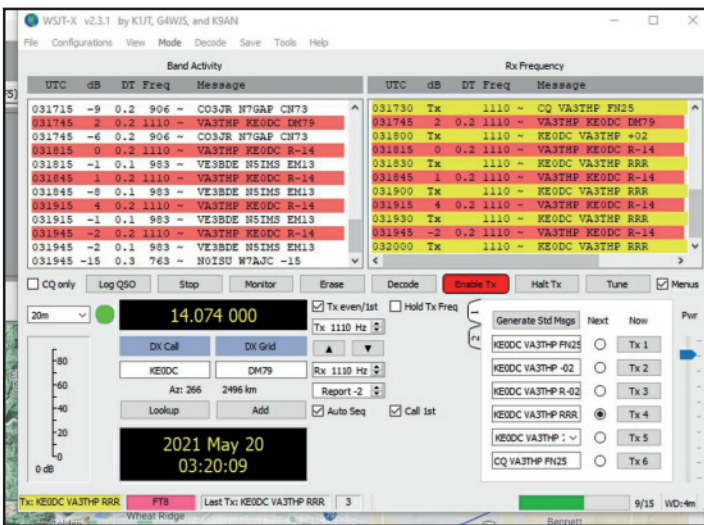


With his mini HF digital station complete, the fun really began for Jason as he turned on his transceiver and not only did it work but he was able to make and have confirmed a first QSO with KE0DC in Aurora, Colorado on FT8 with only 4 Watts to span the 2496 km between them. Jason also went on to experience his longest QSO with Berdyansk, Ukraine on FT8 spanning an amazing 7836 km!

For additional information and to take advantage of the project's excellent documentation Jason also provide the following link, [https://midnightdesignsolutions.com/phaser/revC/Phaser-20%20Instructions%20\(Rev%20C7\).pdf](https://midnightdesignsolutions.com/phaser/revC/Phaser-20%20Instructions%20(Rev%20C7).pdf)

The OVMRC members attending greatly appreciated such a knowledgeable and thorough presentation that engaged much discussion and comment at the meeting. Thank you Jason for a great presentation and we look forward to your future contributions to the club.

Alan, VA3IAH



## Barber pole antenna - A stealthy portable HF antenna

(Mike VA3TEC)

What is a barber pole antenna? A barber pole antenna is an easy to build, stealthy HF Vertical dipole antenna made from commonly available parts. The barber Pole is essentially a centre fed (current maximum) dipole antenna. The elements of the dipole are created along each side with 51 mm wide copper tape, about 3 mm thick, wrapped spirally around a 3.05 meter length plastic PVC pipe. A centre aluminum metal mast (see Figure 1) is used to provide a support structure for the PVC pipe. As the copper tape is non-insulated, nothing should be touching the tape as this will change the characteristic impedance of the antenna. For the 20 Metre Band, the antenna resonance has been designed such that the pole is 3.05 metres in length. The primary intended use of this antenna is with a 10 Watt ICOM 705 on both FT8 and SSB.



Figure 1 - Centre aluminum pole support structure.

**Constructing a Barber Pole antenna:** The length of copper tape required for resonance at 20 metres was determined by calculations prepared by Stephen Clayton (KK4NNH). The total calculated length of copper tape was 62.9 feet. This is then split in half for the centre fed dipole. A close-up view of the centre feed point has been included as Figure 2. The exact length may be influenced by the close proximity of metallic objects, such as fences, as well as other factors including trees and the wetness of the ground. To help compensate for these influences the PVC pipe was wrapped with a little extra copper tape to permit trimming to resonance. For a list of components and exact specifications involved in building the antenna, please see Table 1.



Figure 2 - Soldered centre coax feed point.

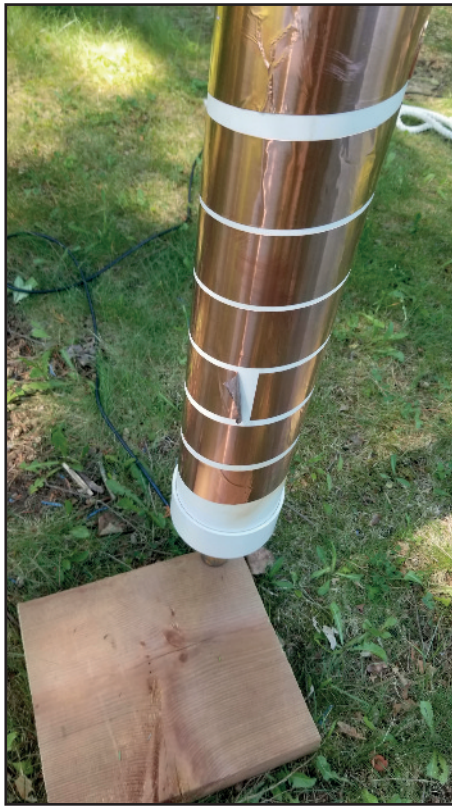
FREQUENCY	14.15 MHz	
velocity factor of copper	0.99 c=	299792458
¼ wavelength in inches	206.4456564 inches	
Circumference or length	120 inches	
outside diameter of PVC	4.25 inches	
width of Copper tape	2 inches	
spacing between wraps	0.15 inches	
overall height per wrap	2.15 inches	
length per wrap horizontal	13.3517575 inches	
overall hypotenuse length	13.52375423 inches	
number of wraps for length	55.81395349	
Copper required	754.8141893 inches	
	62.90118244 feet	
inductance of coil=	11.53865541 uH	
Wire Diameter=	0.0065	
wire length =	206.4456564	
Permeability of copper=	0.99994	
Inductance of wire=	11.54080099 uH	

Table 1: Barber Pole Antenna material and specifications

Antenna: Tuning this antenna was both fun and challenging. The fun part was tuning the antenna by using a razor blade to slice off a portion of the copper tape from each end of the dipole to ensure the best tuning as measured by my NanoVNA. As I experienced during the tuning process the antenna in three separate physical locations, see figures 3, 4, 5, the surrounding environment has a great influence on the performance of the antenna. In particular the wet environment at the cottage (wet ground, next to a lake) influenced the performance of the antenna. During Field Day 2021, an Italian station came through quite strongly. The barber pole antenna also was able to tune up with a reasonably low SWR the 2 metre and 70 cm bands as well.

For additional information on the barber pole antenna, there is a Facebook group of dedicated antenna developers and enthusiasts devoted to this vertical dipole antenna (see <https://www.facebook.com/groups/243039923817151/>).

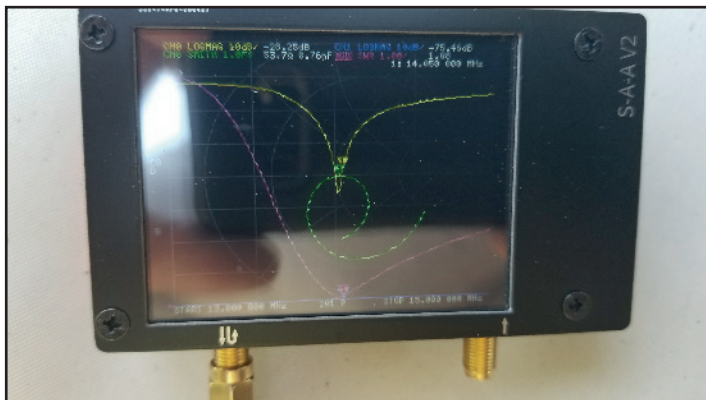




*Figure 3 - Razor slice in copper tape for tuning.*



*Figure 5 - Temporary tuning set up at the cottage.*



*Figure 4 - NanoVNA measurement at the cottage.*

The Facebook group provides resources and advice including an RF inductance calculator for single layer helical wound-wire coils, see <https://hamwaves.com/inductance/en/index.html> .

73, Mike, VA3TEC



## OVMRC 2021 Field Day Results – Aggregate score first in Canada!

### **OVMRC Field Day Results 2021 as posted in the December QST.**

This year we had 27 Club members submit their individual results for an aggregate score of 17,307; this compares to our score of 11,847 last year with 22 members participating.

**Bravo to all OVMRC members that participated.**

	Call	Name	Class	Section	QSOs	Score
1	VA2EEK	Don	1E	QC	15	530
2	VA2OJD	JD	1E	QC	12	110
3	VA3BGO	Brian	1D	ONE	7	64
4	VA3DEF	Jim	1D	ONE	210	890
5	VA3JYK	John	1B	ONE	10	150
6	VA3KXA	Matt	1D	ONE	42	200
7	VA3LJS	Tom	1D	ONE	125	518
8	VA3PYT	Peter	1B	QC	12	210
9	VA3VGR	Richard	1B	ONE	1	155
10	VA3WEX	Kathleen	1B	ONE	8	190
11	VE3BOE	Marc	1E	ONE	237	2820
12	VE3EUS	Joe	1D	ONE	79	366
13	VE3GIQ	Nicole	1D	ONE	55	160
14	VE3KJQ	Pat	1E	ONE	72	970
15	VE3KTN	Hugo	1E	ONE	163	1980
16	VE3LAF	Fred	1B	ONE	26	330
17	VE3LBG	Ron	1D	ONE	14	106
18	VE3LBU	Ron	1E	ONE	94	574
19	VE3LC	Norm	1E	ONE	358	3900
20	VE3NA	Barry	1E	ONE	24	370
21	VE3OKD	Denny	1D	ONE	40	210
22	VE3QN	Bryan	1D	ONE	111	494
23	VE3RXH	Rob	1D	ONE	137	646
24	VE3VIG	Maurice-André	1D	ONE	53	262
25	VE3XEM	Pete	1E	ONE	85	320
26	VE3YDK	Douglas	1E	ONE	72	394
27	VE3YY	Frank	1B	ONE	69	388
<b>OVMRC Member's Aggregate Score for 2021 – First in Canada!</b>						<b>17,307</b>



## A Note on Space Weather

*Hugo Kneve - VE3KTN*

Some readers who are also participants in the OVMRC 2 metre net will know that I make mention of space weather factors which are of significance in determining whether there may be some elevated activity on the HF bands. The indicators I recite are the Solar Flux Index, SFI, and the A-Index, but what is the significance of these values to HF propagation? There are numerous and extensive writings on this subject available on the internet, but I'll attempt to summarise.

Perhaps the easiest parameter to understand is the Solar Flux Index, SFI, which is a measure of 10.7 cm radio emissions by the sun. Measurements of this parameter are directly relatable to the sun's level of ultraviolet light emission which, in turn, directly affects the amount of ionisation in the earth's D, E and F layers. The greater the ionisation in the E and F layers, the better the chance they have to reflect HF signals in frequency ranges above 10 MHz thus, the higher the SFI, the greater likelihood of good DX openings on 20, 15, 10 and 6 metres. The D layer however is absorptive to frequencies below 10 MHz so high SFI values can be expected to close up daytime HF propagation on 160-30 metres. SFI values will vary in cadence with the 11-year sunspot cycle from minima of around 70 to maxima which can reach values of 200 or greater. Anything above an SFI of 100 can be looked upon as creating the possibility of an HF opening.

The other parameter of interest is rather a group of parameters which indicate the level of instability in the earth's magnetic field. These are the K- and A-Indexes. The K-Index is determined from measurements of variation in the horizontal component of the earth's magnetic field as observed at various stations around the world. Magnetic field variations are taken in 8 periods of 3 hours and the results of all network stations are combined into a unified planetary K-Index. This index is published at the end of each 3 hour interval 0000-0300, 0300-0600, ...etc to 2100-2400 UTC and is a measure of the short term field stability. The A-Index is a daily average of the eight K-Index values, converted to a linear scale, and published at 0030 UTC each day.

Higher values of both indexes indicate an increasing level of disturbance in the earth's magnetic field and a consequent degrading effect on HF propagation. I have chosen to report the A-Index rather than the K-index because it is on a linear scale rather than the exponential scaling of K-Index and so, its values provide for finer granularity in determining when propagation might start to get dodgy. The A-Index also provides for some smoothing of observations since it is an average of the eight K readings and so, a reasonable indicator of how propagation may be shaping up for the weekend following the net.

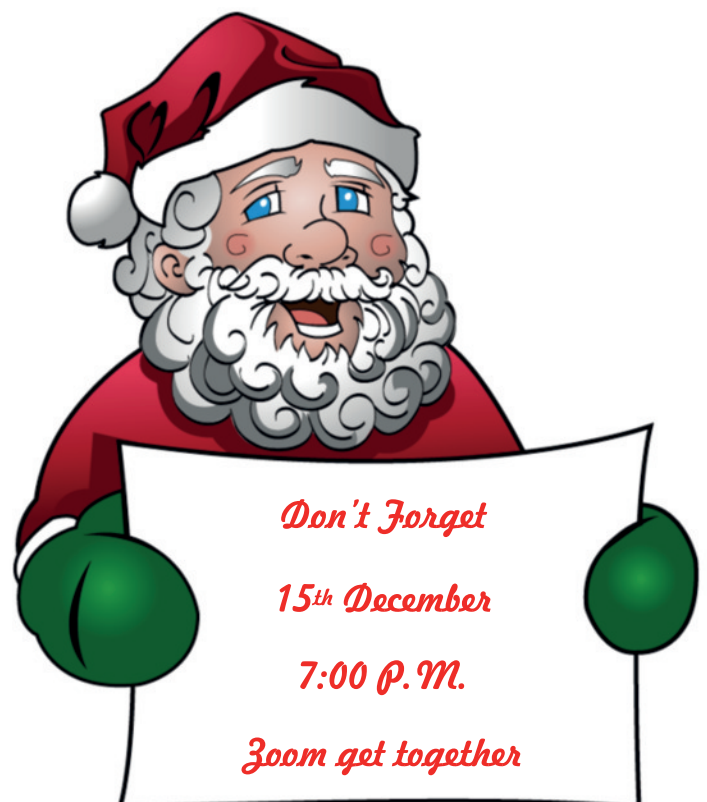
And there it is. The bottom line is High SFI and Low A-Index ought to translate to good HF propagation conditions. If you want to learn more:

<https://en.wikipedia.org/wiki/K-index>

<https://www.arrl.org/the-sun-the-earth-the-ionosphere>

<https://www.swpc.noaa.gov/products/station-k-and-indices>

73,  
*Hugo, VE3KTN.*



## OVMRC Net Activity, Check-ins for November 2021.

Prepared by: Hugo Kneve VE3KTN

OVMRC 2 Metre Net: VE3OCE 146.880- 136.5 Hz. tone, Thursdays 8 p.m. local.

November 4	November 11	November 18	November 25
VE3KTN - NCS	VE3KTN - NCS	VE3KTN - NCS	VE3KTN - NCS
<b>New &amp; Visitors</b>	<b>New &amp; Visitors</b>	<b>New &amp; Visitors</b>	<b>New &amp; Visitors</b>
Doug – VA3LS			
<b>General Check-ins</b>	<b>General Check-ins</b>	<b>General Check-ins</b>	<b>General Check-ins</b>
VE3RUU	VE3RUU	VE3RUU	VE3RUU
VA3LUI	VA3LUI	VE3RKB	VE3LAF
VA3BGO	VE3ZZU	VE3NPO	VE3ZZU
VE3ZZU	VE3KAE	VE3ZZU	VE3NA
VA2XC	VE3NA	VA2XC	VE3LC
VE3OTW	VE3LC	VE3NA	VE3LBU
VE3NA	VE3LBU	VE3LC	VA3IAH
VE3LC	VA3IAH	VE3LBU	VA3EO
VE3LBU	VE2OCQ	VE3OTW	VE3YY
VA3IAH	VA2OJD	VA3EO	VA3KXA
VE2OCQ	VA3KXA	VE3KAE	VA3PYT
VE3YY	VA2EV	VA2OJD	VA3VGR
VA3CSG	VE3YY	VA3KXA	VE3OTW
VA2OJD	VE3NPO	VE3YY	VE3KJQ
VE3KAE	VE3KJQ	VE3SYZ	VA3WEX
VE3OKD	VE3VIG	VA3WEX	VA2EV
VA3WEX	VA3WEX	VA3GLB	VA2OJD
VE3KJQ	VA2XC	VE3BOE	VE3XEM
VA3KXA	VA3HBL	VE3KJQ	VE3VIG
VE3BOW	VA3PSI	VA3HJR	
VE3NPO	VE3OTW	VA3VGR	
VA3EO	VA3BGO		
VE3VIG	VA3HJR		



## OVMRC Pothole Net: 3760 kHz. LSB Sunday mornings at 10 a.m. local.

November 7 SFI:88 A:18	November 14 SFI:81 A:3	November 21 SFI:81 A:10	November 28 SFI:92 A:5
VE3XRA - NCS	VE3EJJ - NCS	VE3XRA - NCS	VE3EJJ - NCS
<b>New &amp; Visitors</b>	<b>New &amp; Visitors</b>	<b>New &amp; Visitors</b>	<b>New &amp; Visitors</b>
<b>General Check-ins</b>	<b>General Check-ins</b>	<b>General Check-ins</b>	<b>General Check-ins</b>
VE3BAE VA3BGO VE3EJJ VE3LC VE3RXN VE3NPO VE3YY VE3SYZ VA3PSI VE3QN VE3EKN VA3EO VE3KTN VE3BOW	VE3ICV VE3BAE VA3BGO VE3LC VA3PSI VE3SYZ VA2EV VE3YY VE3KTN VE3EKN VE3NPO VE3BOW (on CW) VE3CWM	VE3NPO VE3YY VA3BGO VE3LC VA3PSI VE3EJJ VE3SYZ VA3EO VE3KAE VE3KTN VE3CWM VE3ICV	VE3ICV VE3LC VE3RXN VA3PSI VE3KTN VE3XRA VE3CWM VA2NB VA2EV VA3EO

The “SFI” and “A” values are the Solar Flux Index and Geomagnetic A-Index respectively as reported on the N0NBH Space Weather web site: <https://www.hamqsl.com/solar.html>. Values are taken within 30 minutes prior to net start time.

**For DMR Radios, Hotspots, Antennas, QRP HF Radios and More**



**DXCANADA.CA**

*AnyTone* <sup>Del</sup> Canadian Authorized Distributor

**\$15 Discount to OVMRC Members on \$300 or more.**