



President's Ramblings

The October meeting was noting short of “Spooktacular”. (*Sorry, I just had to work that in*). Business out of the way, we had two presentations lined up. Wayne, VE3CZO provided an update on the continuity checker project delayed by COVID-19 (and available soon, hopefully) and the prime presentation on everything QRP by Mike, VE3MKX delivered beyond expectations. We were also pleased that Mike’s father, John, VE3FDK was also able to attend the meeting. Thanks to Wayne and Mike for stellar presentations.

I also reminded all in attendance that this will be my final year as president of the club and new volunteers will be needed for the president and perhaps other executive positions of the club. This marks the end of eight years on the executive of the club for me (and others) and I’m looking forward to stepping down and perhaps continuing to run the popular coax program and maybe other projects. Go to: <https://www.ovmrc.on.ca/> and check out the club bylaws for the requirements and procedure for nomination.

Next, here is something of interest. A station in Kingston will be

running a special event station in December under the call VX3INSULIN in commemoration of the 100 year anniversary of the discovery of insulin. Apparently operating mostly FT 4 and FT 8, contacts can request a special QSL card. This might be something to watch out for and snag that special card!

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. We are always looking for new material for the newsletter. Now if only we can convince the author in you to put pen to paper and hit that “submit” button!

Everyone will want to be sure to attend the November meeting to hear the presentation by new ham, and new club member Jason, VA3THP. He is going to speak on his journey as a new ham from the start to his first contact. I’m hoping his presentation will stimulate other new hams to present at future meetings on their individual journey in the hobby.

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).

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

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Notice of Meeting

Wednesday Nov. 17th 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 19:15 by Barry, VE3NA;
- Greetings to Guests and New Members;
- Acceptance of October Meeting Minutes;
- Chairperson Reports;
- Feature Presentation:
New Ham Radio Build - A 20 Metre Transceiver
(<https://midnightdesignsolutions.com/phaser/>) (Jason, VA3THP); and
- Meeting adjourned; and Rag Chew for those interested.

OVMRC Executive and Officers 2021-2022

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:

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va3iah@rac.ca
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bmhall@rogers.com

Club Web Site & Social Media:

Darin Cowan, VE3OIJ
ve3oij@amsat.org

OVMRC 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 Repeater

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:

Alan at 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, **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 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**, 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.

OVMRC Weekly Nets:

- **Thursday Evenings, 8 PM**, Club Net on FM will be held through VE3OCE 146.880 MHz (-)136.5 Hz tone conducted by Hugo, VE3KTN.

VE3TWO - Limited coverage to East and South Ottawa 147.300 MHz. +, PL 100.0 Hz. Analogue FM and C4FM.

Other Local 2 Metre Repeater & Simplex 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
- **Phoenix Net**, VE3OCE 146.880 MHz (-) 136.5 Hz tone, Tuesday evenings at 7:30 PM conducted by Pete, VE3XEM
- **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), every evening at 7:30 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)**, every Sunday evening at 7:30 P.M. on 50.750 MHz., USB, horizontal polarisation.

(Continued from page 1)
 join the OVMRC November Zoom meeting Wednesday, November 17. 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.

Everyone is welcome to attend the OVMRC meetings. Club member-

ship 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.

Thursday, November 11 is Remembrance Day. Please take some time to observe a moment of silence at 11:00 AM and if at all possible, visit a mall, grocery store, a Legion, or wherever

Poppies are available and buy a Poppy. The Poppy Drive is a major source of funding and was seriously impacted by the pandemic last year. This is the least we can do for all of our Veterans.

Looking forward to meeting all at the upcoming November Zoom meeting

73

Barry, VE3NA

Meeting Minutes

Date / Time: Wednesday, October 20, 2021 @ 19:15

Location: Via ZOOM on line meeting

1. Call to order:

President Barry Allison, VE3NA called the meeting to order at 19:14. There were 63 official check-ins.

2. Greetings:

Barry, VE3NA extended special greetings to guest speakers Wayne Getchell, VE3CZO and Mike Kassay, VE3MKX who invited to attend the meeting by Zoom, John Kassay, VE3FDK from St. Catherines and William McConnell, VE3TUI from Barrie. A special welcome was extended to new ham and member of the Club, Andy Johns, VA3GIF from Carp.

3. Approval of minutes from previous meeting:

MOTION: Moved by Bill Henderson, VA3HWA and seconded by JD Comtois, VA2OJD that the minutes of the meeting held Wednesday, September 15, 2021, be approved.

VOTE: No Objections.

CARRIED.

4. Projects, Haves, Wants and Announcements:

A) Haves: None noted;

B) Wants: None noted;

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) Delivery of Prizes; Last season's year-end prizes were received and distributed.

Field Day new member reporting prizes have only one outstanding pick-up by Peter, VA3PYT.

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.

5. Monthly Door Prizes:

Are suspended until further notice or, in person meetings resume.

6. Agenda and Meeting Content:

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

- Financial Report and Budget Approval - Nicole Boivin, VE3GIQ:

Highlights of the financial summary include:

\$27,072 approximately in the bank account, including cash; 120 Memberships are active. Approximately \$13,000 will be invested from the bank account into a suitable interest paying investment, to be announced.

Barry, VE3NA asked if there were questions concerning the proposed Budget. There being none, he called for a vote to approve the 2022 budget as published in the September 2021 Rambler.

Motion to approve the 2022 Budget:

Moved by Tim Bailey, VE3TXB.

Seconded by Bill Henderson, VA3HWA.

CARRIED

- **Presentation:** Wayne Getchell, VE3CZO – Continuity Tester. Wayne led a brief discussion and slide presentation on his Continuity Tester Kit. Parts or the complete kit is available. As a project, the tester assembles in approximately 2 or three hours with 70 surface mount components. Cost is \$45.00. Contact Wayne at ve3czo@gmail.com.

- **Presentation:** Mike Kassay, VE3MKX – QRP Operating. Mike presented an in-depth introduction of QRP considerations and Operating tips from Basics to Advanced skills and the equipment required. Topics covered included rigs, antennas, suppliers along with operating rules and frequencies. There are several support groups, resources and conventions that support QRP for the beginner and the seasoned operator. Please see the November 2021 Rambler on the club website for several screen shots of the slides that were presented.

- **Chair Reports:**

Net Operations: Hugo Kneve, VE3KTN – All is well except the Pot Lid CW Net. The net control Roger, VE3XRR has stepped down and the net has ceased operations. The September 2021 Nets Summary can be found on the OVMRC website here: Ottawa Valley Mobile Radio Club Incorporated – Over 60 years of Continuous Service to Ottawa (ovmrc.on.ca)

Transmitter Hunting: Roger Egan, VA3EGY announced the next event is Saturday, October 30 at Hogsback Park, starting at 10:30

am. Cubs and Scouts will be joining the hunt. More information is available at ardfoottawa.ca.

Canadian Ski Marathon: Neil Herber, VE3PUE provided an update on the CSM event set for February, 2022. Information will be available on hambone.ca under CSM 2022 Radio Ops. Subject to COVID-19 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 with your input.

Items of Interest: VP, Norm Rashleigh, VE3LC reported, "we are very much open for business" conducting exams scheduled for new hams wishing to obtain their initial Basic as well as their Advanced qualifications. Since the last meeting, Andy Johns, VA3GIF from Carp wrote his initial Basic test and obtained Honours followed by his Advanced test and qualification a few weeks later; he is now a member of the OVMRC. Also, Norm reported that new ham and member of the Club, Jonathan Eliuk, VE3OTW is scheduled to write his Advance test this Friday. Norm also mentioned as a result of his presentation at the last meeting on the Raspberry Pi-400 and the HamPi ham radio applications distribution by W3DJS, several members of the Club have bought Pi-400 computers and installed "HamPi" and are using it for the WSJT-X and FT8 operations; these folks include Barry, VE3NA; Wray, VA3EO; Denny, VE3OKD;

and now Tom, VE3MB. Norm also thanked Mike, VE3MKX for his wonderful QRP presentation and reminded members that for contests and for Field Day, there are scoring multipliers for operating QRP. Norm also mentioned he has been recently helping several folks with configuration of their HotSpots and DMR radios and is open to others getting in contact with him at ve3lc@rac.ca

7. 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/>

8. Adjournment:

MOTION: Moved by Patrick Warner, VA3LTN, to adjourn the business meeting at 21:00

9. Next meeting:

The next monthly meeting of the OVMRC will be held Wednesday, November 17, 2021 at 7:15 pm.

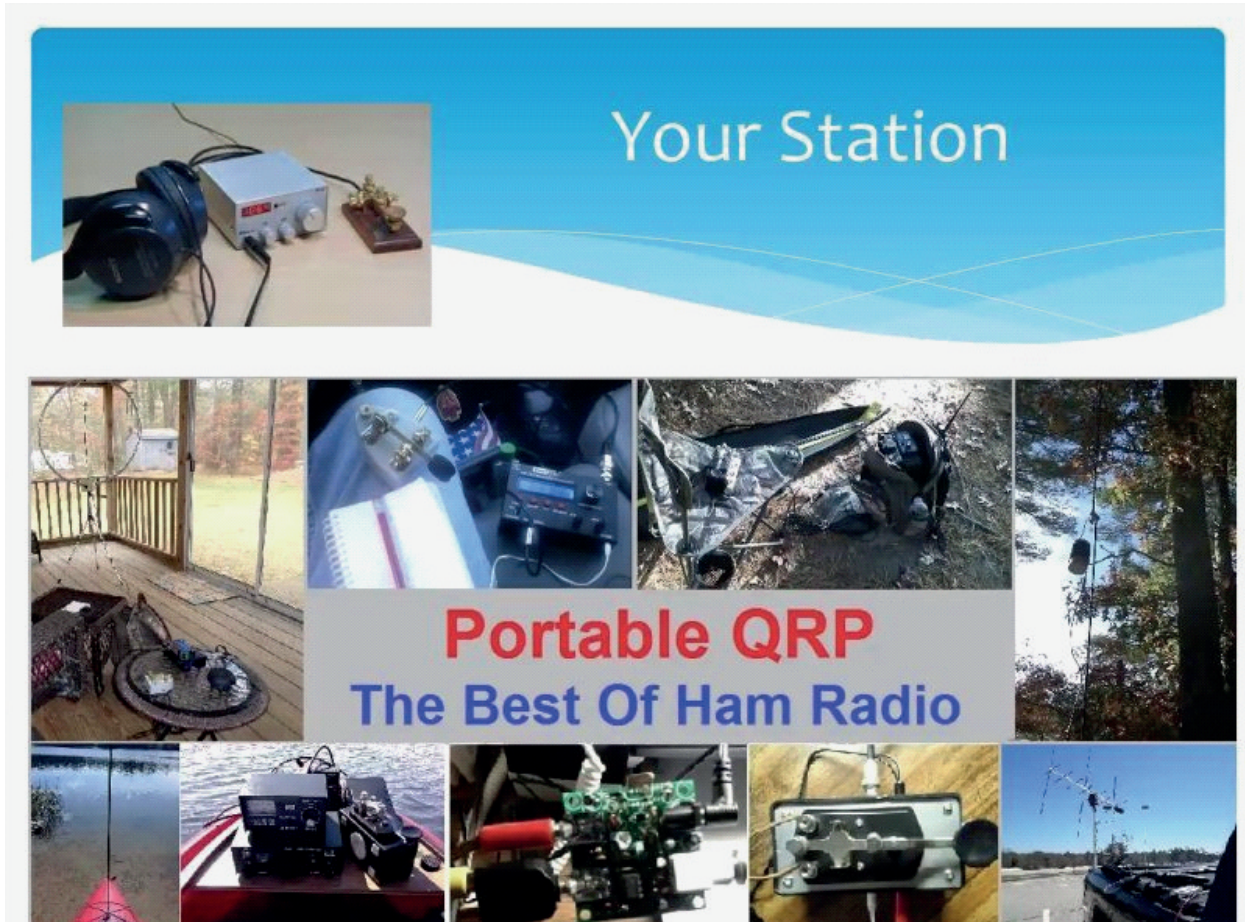
*Minutes recorded
and prepared by
Secretary
Ron Smith, VE3LBU.*

QRP Operating – Mike VE3MKX

From Mike’s presentation at the October 2021 OVMRC meeting, Norm VE3LC took the following screen shots as highlights of interest.

Thanks for a great presentation Mike!

Alan, VA3IAH



QRP Rules

- 1 - Listen, listen, listen
- 2- Have fun
- 3- when in doubt - see Rule #1



Think about it !

- * 100 Watt signal is S9
- * 25 Watt signal is ($\frac{1}{4}$ power) will be S8 (-6dB)
- * 6.25 Watt signal ($\frac{1}{4}$ of 25 watts) will be S7 (-12 dB)
- * 1.5 Watts ($\frac{1}{4}$ of 6.25 watts) will be S6

So a 5 Watt signal is S7 !!



Now What do I do ?

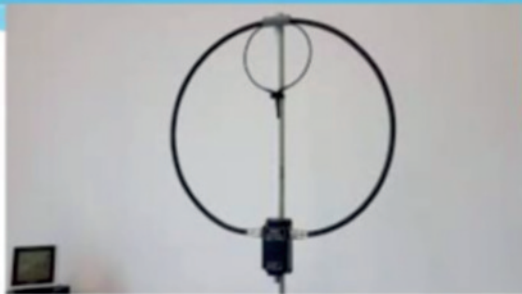
- * Set goals
- * Distance DX
- * Awards
- * POTA / SOTA
- * Clubs
- * Contest
- * Bands
- * Field Day

Goal & Objective Setting



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Portable antennas



Tuners

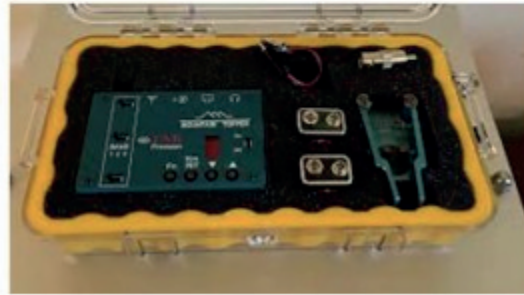


Vintage QRP

Heath HW-7, HW-8, HW-9
 Ten-Tec Century 21, 22
 Ten-Tec Argonaut 505, 509, 515
 Argo 556, Argonaut II, V
 AA Engineering
 K9AY 20, 30, 40m
 Index Labs QRP,
 QRP Yaesu FT-301S
 Kenwood TS-130V
 Icom 731



Portable 'Go Kits'



Contesting

- * QRP Contesting Great way to pick up QSOs countries, states, continents
- * Good operators with good ears Equipment antennae are optimized
- * Lots of QRP-only contests Sponsored by clubs
- * Many QRP categories in larger contests
- * My favorite FIELD DAY You DO have a chance!

QRP

- * Next Time – lower your output power
- * Try operating portable
- * Build something
- * You will be surprised of the results !



Resource's

Online Books - www.b-ok.cc

Various Clubs

Youtube videos - Search QRP or HF portable

You local clubs and Ham's



Questions ?



QRP

Do More With Less

I ❤️ QRP

Thanks again,

73 Mike - VE3MKX /QRP

Radios and Remembrance

When we observe our minute of silence on the 11th hour of the 11th day of the 11th month we often recall the personal stories of so many that served their country in the past and those that do so today. This recollection of personal stories often makes these experiences more relatable spanning the many decades and generations since major world conflicts. The power of these personal stories is the theme of a special exhibit at the war museum called “FOREVER CHANGED: Stories from the second world war” (see <https://www.warmuseum.ca/foreverchanged/>) which will be open until September 5, 2022. While there is an entrance fee for the general public, free access to the exhibit is available on Thursdays from 1700-1900 with free tickets booked in advance (see <https://www.warmuseum.ca/visit/admission-fees/#>).

While not a feature of the special exhibit many Canadians served their country by producing, using and repairing various pieces of communications equipment, including radios made in Canada. Among these included in the permanent second world war exhibit is the Northern Electric Company radio Model No.19, Mk. III, which had the unique feature of having Cyrillic and English lettering on the controls and was manufactured in Montreal for armoured vehicles of the Soviet Union during the second world war (see Figure 1 and a close-up of the letters in Figure 1a). See Figure 2 for a model No.19 with a protective grill.



Figure 1: Northern Electric Model No.19



Figure 1a: Close up of Model No.19

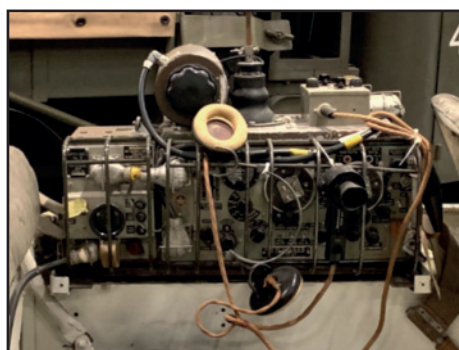


Figure 2: Jeep mounted version of the Model No.19

The Northern Electric Model No.19 also has a devoted following among service personnel and enthusiasts. Chris Bisailion, VE3CBK has written an excellent history of the model 19 set, available at [https://www.qsl.net/ve3bdb/history](https://www.qsl.net/ve3bdb/history.html)

[.html](https://www.qsl.net/ve3bdb/history.html) which details the technical characteristics, role and longevity of this radio and the personal stories that led to its development. The fiftieth anniversary of the Model No.19 was celebrated on the cover of the 1992 July-August edition of the Canadian Amateur which appears on the splash page of the Wireless Set No.19 Group (see <https://www.qsl.net/ve3bdb/index.html>).

The “The 19 Set Group” was founded 1991 by David Lawrence, VA3ORP and Chris Bisailion, VE3CBK through a website maintained and financed by Bob Cooke, VE3BDB (see <https://www.qsl.net/ve3bdb/index.html>). Part of the endearing qualities and bond these enthusiasts have with the radio they refer to as “Set No.19” can be seen in the quote they use on their main web page where they proclaim that

“A Real Radio not only glows in the dark; it hums, sputters and has a faint scent of cosmoline!”

Alan, VA3IAH



My Station in a Box

This is my station. Is it a Go Kit, a QRP mobile Kit, a complete portable station, or simply my home station neatly stored away? One of the above, some of the above, all of the above, none of the above, let's take a look.

Back a number of years ago when SDR's became the thing to have I was less than interested in buying a box that without a computer to run it, the device was, well, just a box. Then, Elecraft came out with a new SDR design and marketed the device with the tag line "the first SDR with a front panel". No computer needed. That was interesting, and over time I was hooked. Mind you, I was not willing to jump into a new product in first year release (old school!). When the clock rolled over to year two product, I decided to make the move and ordered the KX3. That was the start of where things have gone and what I have so far for my multi purpose station.

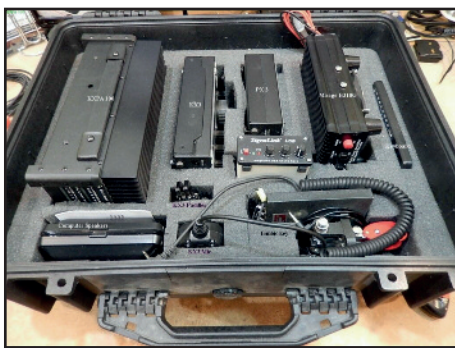


Photo 1.1

Take a look at photo 1.1. This shows everything I have stored in a Pelican case, ready to go. The case size was chosen because it just squeaks by the aircraft overhead bin maximum size. I tested that once on a trip to Regina

and got by with it, but that was 12 years ago, so today's environment may be different.

All but two other pieces of hardware are in this case (I'll get to that later) and all of the interface and power cables are in a separate repurposed computer case. See Photo 2.2. Also, on top of that, I bring the laptop in yet another case.

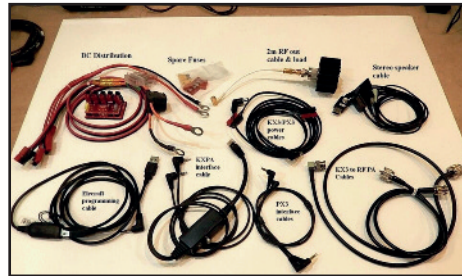


Photo 2.2

I use a large Kirkland battery for portable power. I chose this battery because it (and most likely others) has, well, battery terminals, but also 5/16 threaded studs for connection of ring terminal connectors. Handy. See Photo 3.



Photo 3

Let's say I go somewhere without my battery and have to use another "car" battery. For that I bring a set of battery terminals, see Photo 4. They may look the same, but they are different. It is hard to tell from the photo but the negative terminal of a car battery is smaller in

diameter than the positive terminal, hence the difference in the connector size. The ring terminals then just connect to the wing nut terminals. (note to self: check polarity when connecting power cables!) Attention to detail is required at all times.

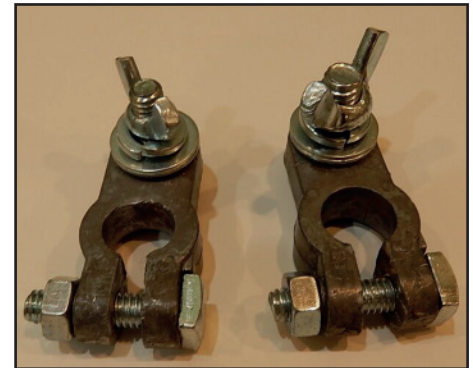


Photo 4

You may also notice I include a set of powered, stereo computer speakers in the kit. There are two things here. First, why the external speakers? Well, that is because there is some powerful programming running in the DSP that produces some awesome stereo sound audio output. It's hard to describe but anyone who has heard it will know what I'm talking about. But there is a problem. The computer speakers run on 5 volts, yet the station only has 12 volts available through my Anderson power pole distribution cables. Solution? See what I made in Photo 5. One end of this cable is a female USB connector and the other end is an Anderson power pole connector to connect to my 12 volt distribution system, but look closer. Imbedded beneath the heat shrink is a 5 volt regulator to bring the 12 volts down to 5 volts for the powered speakers. Since the speakers draw so little current, I didn't need to provide a heat sink

for the regulator. Problem solved. Power for the speakers goes here and the audio cable plugs into the KX3.



Photo 5

This station has the capability of running from 160 m through 2 m. The power limits are ~5 watts on the KX3 internal batteries or ~12 watts on external power, 160 through 6, and 2 watts on 2 m. But wait, there are two 100 watt amplifiers in the kit. What's that all about?

Well, it's simple, I wanted a 100 watt home station, but it would be kind of cool to operate 100 watts, portable. The KXPA 100 provides 100 watts out, 160m to 6m and the Mirage provides 100 watts out on 2 m. This is where the last two pieces of kit come in (*remember I said more to come, above?*)



Photo 6

See photo 6. This is a 12 volt to 13.8 volt dc to dc converter. You need this to operate the amplifiers, reliably. The 12 volt battery can't cut it for the amplifiers, you really need a stiff 13.8 volt rail for optimum performance. This device will produce a solid 13.8 volts output with as little as 10.5 volts input from the battery. I view this as a must have for higher than QRP power.

The last item is a 12 volt to 120 Vac converter to charge the computer battery from time to time. I elected to put these items in the cable kit package since I ran out of space in the Pelican case.

Rounding out the package are two Coleman 40 watt solar panels with charge controllers to charge the Kirkland battery.

The antenna of choice for portable operation is the 20m kit antenna offered to the club a few years ago, but I have dabbled with other antennas over the years.

Now, did we answer the question posed at the beginning?

Is it a go kit? Well yes and no. Go kits usually are a packaged station ready to operate with minimal set up. This package requires more set up before I'm ready to go, but it is all there.

Is it a QRP kit? Yes. Take the KX3, mic, key and go!

Is it a complete portable station? Yes, it's all there.

Is it a complete home station in a box? Well, yes, just add one 13.8 volt bench power supply.

I suppose you could say the kit is all of the above, depending on how much stuff you take out of the box at any one time.

That is my station.

73,

Barry, VE3NA

Qualifications, Privileges and Call Signs: U.S. Hams compared to Canadian Hams

Here in Canada, as most new hams know, we have a Basic Qualification examination which consists of 100 multiple choice questions from a total question bank of approximately 950 questions. Each examination is unique with a randomly generated distribution of topics with each question having a randomly ordered list of multiple choice answers. The examination pass mark is 70%; but ideally, the candidate wants to achieve 80% or better on the Basic exam; to achieve an "Honours" designation allowing the new radio amateur to operate on all amateur band allocations. Without Honours standing, a new ham's operating privileges are restricted to the VHF bands and above. For those that did not achieve Honours on their Basic exam, privileges to operate on the HF and MF bands can be added by again writing the Basic exam and achieving at least 80% or taking the Advanced Qualification exam and scoring 70% or better or by taking the Morse code exam and achieving a sending and receiving proficiency of 100% at 5 wpm. The Morse code exam in Canada is otherwise not a requirement to operate CW. The exam was retained, however, as an optional test in Canada so that Canadians could qualify for temporary operating privileges in countries that retained a Morse code proficiency requirement for operating HF, after it was dropped

from an International amateur requirement back in 2003. In the U.S., an official Morse code exam is no longer offered.

Canadian amateurs with Basic or Basic with Honours qualification are restricted in transmitter RF power to 190 Watts CW or other full carrier envelope emissions or 560 Watts peak envelope power (PEP) on SSB. Furthermore, the holder of the Basic qualification (Honours or not) cannot design and build their own transmitting equipment or hold a call sign certificate for a repeater or club station; an Advanced qualification is required for these privileges. The Advanced qualification also allows the holder to use a linear amplifier to boost transmitter RF power to a maximum 750 Watts CW or other constant envelope modes or 2250 Watts PEP on SSB. An Advanced qualification is also necessary to obtain a "CEPT Radio Amateur Licence" from the European Conference of Postal and Telecommunications Administrations (CEPT) for temporary operation of an amateur radio station in most European countries under the provisions of CEPT agreement T/R 61-01; more on this later.

There is no distinction in call signs issued to Canadian Amateurs based on their level of qualification; the one issued for Basic qualification can be retained on upgrades to Advanced or otherwise. The only way to check a Canadian amateur's qualification level is to check the Innovation, Science and Economic Development Canada (ISED)

database of Canadian amateurs available on-line at:

[https://apc-cap.ic.gc.ca/pls/apc_anon/query_a_mat_cs\\$.startup](https://apc-cap.ic.gc.ca/pls/apc_anon/query_a_mat_cs$.startup)

Qualification Levels for our U.S. Friends south of the Border

For radio amateurs in the U.S., their structure of qualification and privileges is somewhat different and is known as "incentive licensing". Their current three levels or "Classes" of qualification are called Technician, General and Extra.

Technician Class

For American hams, the first qualification level is the Technician Class and consists of a rather simple 35 question multiple choice exam. One day of study usually suffices for most candidates to know enough to pass this exam; 75% is required. The Technician level allows the new amateur in the States to operate:

- 40 metres – 7.025 to 7.125 – CW
- 15 metres – 21.025 to 21.200 – CW
- 10 metres – 28.000 to 28.300 – CW and data modes
- 10 metres – 28.3000 to 28.500 – CW and phone
- 6 metres and above – all privileges.

The Technician class is restricted to 200 watts when operating in the segments of the HF bands for which they have authorization, as indicated above.

The General Class

The next level of qualification for U.S. hams is called "General Class"; this is another 35 question multiple choice exam for which again 75% is required to pass. Often, a new amateur candidate will take the Technician and General class exams in one sitting. The holder of a General Class "licence" in the U.S. is given additional HF band operating privileges; including:

- 160, 60, and 30 metres – all amateur privileges
- 80 metres – 3.525 to 3.600 – CW and data
- 80 metres – 3.800 to 4.000 – CW, phone and image
- 40 metres – 7.025 – 7.125 – CW and data
- 40 metres – 7.175 – 7.300 – CW, phone and image
- 20 metres – 14.025 – 14.150 – CW and data
- 20 metres – 14.225 to 14.350 – CW, phone and image
- 17, 12 and 10 metres – all amateur privileges
- 6 metres and above – all amateur privileges

The General Class radio amateur is allowed to operate at full RF power of 1500 Watts PEP on SSB unless otherwise restricted on a per band basis, such as 60 metres.

Extra Class

As can be seen, the bottom 25 kHz of the 80, 40, and 20 metre bands is out of bounds for CW operation as are portions of the phone segments for the Technician and General Class licensees.

To gain operating privileges in these segments of the HF amateur band allocations, U.S. amateurs must take another 50 question multiple choice exam to give them their "Extra" class qualification with a pass mark of 75%.

Although the current Class structure of U.S. amateur qualification is presently Technician, General, and Extra, in the past there were other qualification Classes that included Novice, Advanced and Technician Plus. Although these are no longer issued, they remain grandfathered and can influence the privileges of the holder which is beyond the scope of this article.

Even an Extra Class U.S. Ham cannot operate Phone over the entire HF amateur band allocations as we can in Canada.

In the U.S., even for Extra Class hams, there are specific portions of the amateur radio bands where voice mode operation is not allowed; these are reserved for CW and data communications. For instance, phone operation (SSB or otherwise) on the 20 m band is not allowed below 14.150 MHz. or below 7.125 MHz in the 40 m band. In Canada, we have no specified regulatory restrictions as to mode except as they may be influenced by the amount of emission bandwidth they occupy which is specified on a band by

band basis in the allocations tables of ISED document RBR-4. For instance, several of the HF bands are restricted to no more than 6 KHz emission bandwidth which is what is required for communications quality amplitude modulation. Therefore, Canadian hams can legally operate AM or SSB voice on most (not all) HF bands top to bottom. This gives some of our Canadian SSB nets spectrum free from SSB QRM from our American neighbours. For instance, the Trans-Provincial SSB Net on 40 m is conducted at 7.100 MHz, but the Americans cannot check-in with their SSB signals. The same applies to the Trans-Canada Net on SSB using 14.140 MHz. That said, Canadian hams when operating in the U.S. must obey the U.S. rules and not check into the Canadian nets noted above using SSB; our Canadian HF privileges must not exceed those American Extra Class hams when operating in their territory.

The same across-the-band-same-mode-privileges apply in most other countries as in Canada. For this reason during an on-air event like the CQ WW SSB contest, taking place during the last weekend in October, we typically hear European hams on the 40 metre band calling CQ just below 7.100 MHz, while indicating that they are listening on a frequency above 7.200 MHz. This is done to capture calls from U.S. General Class hams that are not allowed to transmit below 7.175 MHz or even Extra Class hams below 7.125 MHz.

Although Canadians are **legally** allowed to operate voice modes

across the HF bands, we are obliged to respect the **Band Plans** as developed and published by Radio Amateurs of Canada which are often slightly different than those published by the American Radio Relay League.

See: <https://www.rac.ca/rac-0-30-mhz-band-plan/> and <http://www.arrl.org/band-plan>

American Amateur Call Signs can indicate their Class Level and Operating Privileges

Extra Class licensees in the U.S. mainland (48 states) have the privilege to obtain a so-called 1 by 2 call sign that starts with a K, N or W or a 2 by 1 call sign with prefixes AA to AK, KA to KZ, WA to WZ, NA to NZ, or a 2 by 2 call sign prefixed by an A. However, many extra class folks opt to keep their 1 x 3 call signs assigned when they were a General Class ham.

Examples of **Extra Class** call signs are:

- 1 by 2 call sign such as W1AW or K1JT etc.;
- 2 by 1 call sign such as AA1B or KB2C; and
- 2 by 2 call sign such as AK6LC.

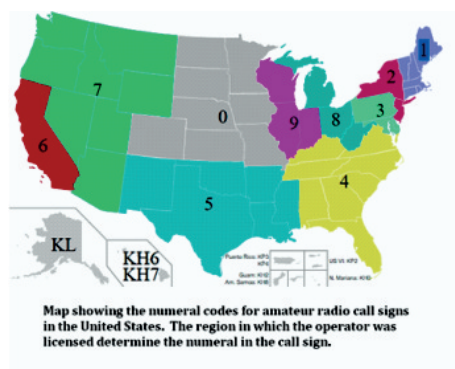
Technician and General Class holders will be issued 1 by 3 or a 2 x 3 call sign starting with W, N or K as sequentially available call signs available in their district at the time.

Examples of **Technician or General Class** call signs are:

- 1 by 3 call sign would be W4ABC; and
- 2 by 3 call sign would be KB5ABC.

New amateur call signs in the U.S. are issued from a sequential pool available in each of the call sign districts associated with the **number** that is part of the call sign. However, it is permissible to take the call sign with you when relocating from one call sign district to another. Frequently; nowadays, there is no correlation between the number within the call sign and where they are operating from in continental U.S. This is unfortunate as previously we generally knew where to point our antennas based on the number in a U.S. call sign according to the following U.S. Map, see Figure 1. Note the prefixes containing L for Alaska and H for the Hawaiian Islands and P for Puerto Rico etc.

Figure 1: U.S. Amateur Radio numeric call-sign designations



Canadians can obtain an American Call Sign

Canadians that frequently travel and stay in the U.S. can obtain a U.S. call sign by seeking out a U.S. Volunteer Examiner and write the U.S. exams. There are usually test writing sessions at most American Ham Fests. The only other requirement is a U.S. mailing address. This may be appealing for Canadian Snow Birds wintering in Florida. The same can be done by U.S. residents wishing to obtain a Canadian call sign also having a Canadian mailing address.

U.S. Vanity Call Signs

There is a Vanity Call Sign program in the U.S. to change your call sign to something that is available and more to the liking than what was originally issued to the new ham from the District next-one-available sequential pool. Vanity call signs in the U.S. must still conform to the prefix-number-suffix structure depending on the call signs rules and qualification class of the applicant.

The Canadian equivalent to a vanity call sign would be a call sign with a 2 letter suffix, such as VE3LC. This is available to a Canadian after 5 years being a new ham. However, in Ontario, typically, there are none available until someone holding a 2 letter call sign passes on and only then after one year in order for a qualified family member to have a chance to acquire it. Of course, in Canada, any radio amateur can change their call sign to something available more to their liking for a \$60 administrative fee. It is also

possible to hold more than one call sign or a call sign out-of-province to where you live.

Special Event Call Signs

The U.S. also issues 1 by 1 call signs for special event stations for up to 15 days at a time such as W1C or K7A etc. This is similar to the Canadian Special Event Call Signs program which is more accommodating with respect to prefixes and suffixes and the period of validity (typically up to one month). Details concerning Canadian special event call signs can be found in RIC-9:

<https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf02102.html#sect2>

The current Special Event Call Sign listing for Canada can be found at:

[https://apc-cap.ic.gc.ca/pls/apc_anon/query_spev\\$.startup](https://apc-cap.ic.gc.ca/pls/apc_anon/query_spev$.startup)

More on the CEPT Licence

For those folks contemplating travelling to Europe and wanting to operate their HF or VHF portable radio for up to 90 days, they will require a CEPT license which is administered and provided on behalf of ISED by Radio Amateurs of Canada. For this, according to the qualification equivalency and privileges document titled "Recommendation T/R 61-01" which is available at: <https://docdb.cept.org/download/2ae38a89-e58a/TR6101.pdf>; it specifies a Canadian "Advanced" qualification is required. To apply for this permit, more can be read at:

<https://www.rac.ca/operating/cept-permits/>

It's good to be a Canadian Ham

Considering all of this, I am rather glad I am a Canadian Ham with

the rules of the game we have here as opposed to those in the U.S. Although entry into the hobby may be a bit more daunting with our 100 question Basic Qualification exam compared to the American 35 question Technician exam, the

Canadian rules are not as complicated for HF phone operation and we don't have to worry about being officially reprimanded for operating SSB in portions of the band we shouldn't.

73 Norm, ve3lc@rac.ca

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

Prepared by: Hugo Kneve VE3KTN

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

October 7	October 14	October 21	October 28
VE3KTN - NCS	VE3KTN - NCS	VE3KTN - NCS	VE3KTN - NCS
New & Visitors	New & Visitors	New & Visitors	New & Visitors
		Andy – VA3GIF Jonathan - VE3OTW	
General Check-ins	General Check-ins	General Check-ins	General Check-ins
VE3RUU VA3LUI VE3ZZU VE3NA VE3LC VE3YY VE3KAE VE3OKD VE3BOE VA3WEX VA3KXA VA2EV VA3GLB VA3IAH VE3VIG	VE3RUU VE3ZZU VE3KJQ VE3YY VA2XC VE3NA VE3LC VE3LBU VA3IAH VA3HJR VA3GLB VE3KAE VA3EO VA2EV VA3KXA VE3BF VE3RXH VE3NPO VE3VIG	VE3LAF VA2XC VE3ZZU VA3LUI VE3RUU VE3NPO VA3HJR VE3NA VE3LC VE3LBU VA3IAH VA3HBL VE3KAE VA3KXA VA3GLB VE3SYZ VE3BOE VA3PSI VA3WEX VE3KJQ VA3EO VE3MDC VE3VIG VA2OJD VE3OTW	VE3RUU VA3LUI VE3ZZU VE3NA VE3LC VE3LBU VA3IAH VA2OJD VE3KAE VA2EV VE3BOE VE3YY VA3KXA VA3WEX VA3PSI VE3XEM VE3KJQ VE3NPO VA3HJR VE3OTW VE3LAF VE3VIG VE3SYZ

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

October 3 SFI:90 A:8	October 10 SFI:90 A:5	October 17 SFI:79 A:6	October 24 SFI:91 A:3	October 31 SFI:111 A:10
VE3XRA - NCS	VE3EJ - NCS	VE3XRA - NCS	VE3EJ - NCS	VE3EJ - NCS
New & Visitors	New & Visitors	New & Visitors	New & Visitors	New & Visitors
General Check-ins	General Check-ins	General Check-ins	General Check-ins	General Check-ins
VA3EO VE3QN VA3BGO VE3SYZ VE3ICV VE3YY VA3PCI VE3NPO VE3RXN VA2EV VE3EJ VE3EKN VE3KTN VE3LC VE3BOW	VY2BIT VA3IEN VE3LC VA3PSI VE3SYZ VE3KTN VE3EKN VE3YY VE3XRA VE3NPO VE3BOW	VE3QN VA3BGO VE3EJ VE3ICV VA3PSI VE3NPO VE3KTN VE3SYZ VA3QV	VE3QN VE3KTN VA3PSI VE3SYZ VA3EO VE3KAE VE3YY VA3HBL VE3ICV VE3NPO	VE3QN VE3SYZ VE3KTN VE3LC VA3EO VA3PSI VE3RXN VA3IAH VE3YY VA3BGO VA3PCI VE3XRA VE3WMB VE3NPO VE3BOW VE3ICV

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



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