RAMBLER

OTTAWA VALLEY MOBILE RADIO CLUB INCORPORATED

NOVEMBER 2022

VOL. 65 ISSUE 3

NEWSLETTER OF THE OTTAWA VALLEY MOBILE RADIO CLUB INCORPORATED (OVMRC.CA)

WHAT'S INSIDE:

VIRTUAL MEETING: NOV 16, 7:15 P.M.

AGENDA

- OPENING 7:15 BARRY (VE3NA)
- GREETINGS-GUESTS/MEMBERS
- PRESIDENT'S REMARKS
- MINUTES REVIEW/APPROVAL
- CHAIRPERSON REPORTS
- PRESENTATION: JONATHAN (VA2LOJ) AREDN MESH NETWORK
- MEETING ADJOURNMENT
- RAG CHEW

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.

OVMRC AFFILIATIONS

OVMRC Executive and Officers 2022-2023

DIRECTORS

President:
Barry Allison,VE3NA
ve3na@rac.ca

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

Treasurer & Membership Records:
Nicole Boivin, VE3GIQ
ve3giq@rac.ca

Corporate Secretary:
Alan Fricker, VE3KAE
alanfricker@yahoo.ca

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

Rambler Newsletter Editor and Production:
Alan Hotte, VA3IAH
editor@ovmrc.ca

OVMRC.CA & Social Media: Adam Bird, VA3IRD web@ovmrc.ca

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

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

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OVMRC Groups.io Ongoing discussion Group at:
https://ovmrc.groups.io/g/main; All radio amateurs members and non-members are welcome

Ottawa Valley Mobile Radio Club, Incorporated PO Box 41145 Ottawa, ON K1G 5K9

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

LOCAL WEEKLY NETS (ALL CHECK-INS WELCOME)

- **Rubber Boot Net,** VE3OCE 146.880 MHz (-)136.5 Hz tone weekday 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,** Sunday night, 7:30 PM, 50.090 MHz., horizontal polarization. Join controllers Hugo (VE3KTN), Norm (VE3LC) and Ante VA2BBW for accomplished and budding CW operators alike.
- **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 Saturday 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
- **Almonte ARC's D-Star Net** Tuesday evenings at 8:40 p.m. carried on XLX197 and everything connected to it. Dale VE3XZT presides.
- **OVMRC 2-Metre Net,** Thursday Evenings, 8:00 PM, Club Net on FM will be held through VE3OCE 146.880 MHz (-)136.5 Hz tone conducted by Hugo, VE3KTN.

VOLUNTEER OPPORTUNITIES:

- **Canadian Ski Marathon 2023** The event dates are Feb 11-12, 2023. The radio ops volunteer site is at https://hambone.ca/CSM
- **Rally of the Tall Pines** The event dates are Nov 25-26 2022 https://www.tallpinesrally.com/

INFORMAL AMATEUR RADIO RESTAURANT GATHERINGS

• **QCWA Chapter 70** Breakfast gathering every Tuesday morning at 7:30 to 10:00 AM, Summerhays Grill, 1972 Baseline Rd., Nepean - Restarted

• **Orleans Coffee gathering (*on hold*)** every Friday morning at 9:00 AM, McDonalds, 2643 St. Joseph Blvd, Orleans

• **QRP Group Dinner meeting,** Second Wednesday every month, 5:00 PM, Newport Restaurant, 322 Churchill Ave N., Ottawa

• **Phoenix Net monthly Breakfast gathering (*on hold*),** usually the second Saturday every month at 9:00 AM, Check with Pete ve3xem@rac.ca

President's Ramblings for November 2022

My Ramblings for this month are a departure from what has appeared over the past few years.

This is my Poppy story.
Years ago, I started to do what I thought was a rather unique experience leading up to Remembrance Day. I have missed this for the past two years, but they're back this year!

What I am talking about is the Poppy booths that pop up in grocery stores, malls and other locations around the city. More importantly, the Veterans that are posted to these booths are my focus.

I make it my mission to not pass by, but rather I stop and ask if I can join them for a brief chat.
You would not believe how appreciative they are of someone stopping by to chat. I'm happy to make their day.

When it was time to go, I handed him my donation and he thanked me to which I replied "no (brief pause), thank you!".

The implied meaning of my response was understood. The look of gratitude on their faces move me every year.

That's it for my November ramblings.

Everyone is invited to join the OVMRC November Zoom meeting Wednesday November 16. Check in will start at the usual ~ 6:45 PM with a start time as close to 7:15 as possible.

Anyone not receiving the check in credentials can do so by sending an email to Norm (Zoom custodian) 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 member). Guests wishing to attend can submit a request to the Zoom custodian (see above) and joining credentials will be sent to you.

I look forward to seeing many club members and guests at the November Zoom meeting.

Notes to OVMRC club members:
- contact Alan (Rambler editor) editor@ovmrc.ca for some guidance in submitting an article for the Rambler.
- see elsewhere in this issue of the Rambler for a list of what the OVMRC has for offer for sale to club members **(see page 36)**.

73,
Barry, ve3na

Meeting Minutes

Date / Time: Wednesday, October, 19 2022 @ 19:14
Location: Via ZOOM online meeting

1) Call to order:
President Barry Allison, VE3NA called the meeting to order at 1914. There were 58 official check-ins.

2) Welcome and Guest Greetings:
Barry, VE3NA extended greetings to everyone. Barry welcomed new member, Rick Marcogliese. Rick is new to amateur radio and is currently taking the RAC course. Barry also welcomed special guest Colin Guillas VA3CSG.

3) Approval of minutes from previous meeting::
MOTION: Moved by Bill VA3HWA and seconded by Douglas VE3YDK that the minutes of the meeting held Wednesday, Sept 21, 2022, be approved.
VOTE: No Objections.
CARRIED.

4) Projects, Haves, Wants and Announcements:

Haves:
COAX: Barry VE3NA informed members about current pricing pricing on coaxial cable. LMR 400 is increasing to $1.40 per foot. LMR95 remains at 85 cents per foot. Since there was interest from the club for a bulk purchase of RG58, Barry has purchased a significant quantity and it is priced at 10 cents per foot.

Also Barry has 70 feet of LMR 400 left off a roll and will offer as a deal at a $1.00 a foot. Tim VE3TXB will take it with the addition of connectors.

Wants:
Tom VE3MB noted he wants 2 – 100 ft runs.

5) Agenda and Meeting Content:
Barry, VE3NA outlined the agenda for the meeting which included a feature presentation by Kieran Shepherd VA3KS.

Feature Presentation: Kieran Shepherd, VA3KS, "Everything POTA"

Barry introduced Kieran VA3KS and welcomed him to the meeting. Keiran's presentation was about portable operation – a favourite activity of his. Kieran referred to his presentation as VA3KS All Season Radio Adventure. Kieran mentioned how he was attracted by Parks on the Air (POTA), and his retirement allowed for portable radio activities. He has done 400+ park activations in the last two years in Canada and the USA. Operating portable in urban areas means noise, and so 90 percent of his contacts are therefore portable. He is not not a big

contester but does do some contest work. A favourite activity is camping, since he was a young boy. His favourite park is Frontenac Park south of Ottawa. It is a hiking campsite only and therefore there is little radio interference. It has about 220 kms of hiking trails.

Kieran says he was first licensed in 1979 and always interested in portable ops. He had an Atlas 210x hf radio early on for camping and park contacts. This was pre-POTA. Back then there was little to encourage QRP ops, only some contests. This has all changed with POTA, SOTA, IOTA, Lighthouses on the Air, and Walmart on the Air (Google it).

What is portable? Any operation away from home using an independent antenna and power supply. Can be backpacking or camping or car camping or tailgating. He does run portable ops from his truck but the truck is just an office. He mentioned that POTA has a fantastic website – parksontheair.com. Out of 399 park activiations almost 200 were unique parks. He mentioned that he generally "activates" only and typically doesn't hunt for activators. In the Ottawa area there are about 25 parks that are fairly easy to get to, and outside of the Ottawa area there are 25-30 more. He generally doesn't activate urban parks but he has done Parliament Hill. He mentioned there are 5910 parks in Canada. About 1100 are in Ontario and just under 1000 in Quebec. Some are rare and not well known. Some are hard to get to.

In Ontario, some require a lot of effort to get to. Kieran then explained some of the POTA lingo terms – hunter/chaser, activator(10 contacts to activate), ATNO (all time new one), 2fer (park within a park), 3fer (park within a park within a park), Park Reference – official list of parks, Spot – notification to the POTA world where you are and the frequency, Late Shift – operating in the evening, P2P-Park to Park- activator talks to an activator.

Kieran then talked about why he does portable operations. That is was about his own personal achievement. The activity is based on honesty, includes simple logging and on-line logging, winter night shifts, good behaviour, supplements camping activities, little RX interference, and new cool technology – there is no better time to operate portable with the new technology that is available now.

There can be awards, if that interests you. Yes – for both hunters and activators. You can double dip with SOTA and RAC at the same time. Examples include 1000 Kilo Award, Cheetah Award and the RAC Canadian Portable Operations Challenge.

With respect to safety, Kieran says to ensure someone knows

your plans, and make sure about transportation, first aid kit, water, emergency supplies, cell phone, GPS, and ham gear. Know your limits and take extra caution in remote areas. Check weather and band conditions etc. Suggests you don't post a prior activation notice – people will know where you are in advance. Potentially not a good thing.

Kieran very much enjoys planning the trip. He cautions to respect park boundaries and never trespass or go to closed areas. Much of his planning involves "old school" maps and notes and reminders in note form.

With respect to gear, consider taking extra rope, coax, connectors and fuses. Ensure you charge and maintain your batteries and keep them warm. He also brings along a backup rig. Other items include paper log and computer log, pens/pencils, snacks and drinks.

Kieran then discussed his radio equipment. He uses an ICOM IC705 (expensive), a Xiegu G90 (cheap), and an Elecraft KX2 for backpacking – uses 3 or 6 amp hour battery (expensive). He mentioned that is not a QRP operator specifically but uses 20 watts or less. He uses higher power rigs, an ICOM IC7100 with 20 amp hour battery, and a Yaesu FT991A. He has an FT817 as well. He has built rigs and equip. from QRP Labs.

He mentioned that his CW is not that good and usually doesn't use it

for activations. He has two antennas, an EFHW with 9 to 1 unun and a PAR QRP antenna good for 25 watts. He has some telescopic SOTABEAM masts for set up as well. He also uses a Hustler system – that he says is very robust. He uses their tri-antenna mount for vehicle based activations along with a tripod mount.

With respect to batteries, the technology has changed a lot. New LIPOs are robust and light and provide a lot of power in a small package. He uses 3 to 20 amp-hour batteries (4 of them) and uses Anderson Powerpoles on all of them.

Kieran then gave an example of a winter adventure at Frontenac park and mentioned he likes the challenge of winter camping. He can use a sled to haul gear instead of backpacking. He also described another adventure – an interesting overview of a summer trip. This summer he took a 5 week road trip to Nevada and back. A total of 14,392 kms. On this trip he activated over 30 parks. He tracked his trip via a 30 meter band WSPR station (ZachTek) that was mounted to his truck. This setup transmitted over 1000 grid squares during the trip. The trip Included a trip to WWV site in Nevada and a side trip to Area 51.

Concerning Spots, it was important that people knew where he was. He used a POTA phone app

for activations. To do this means that you need to have data set up on your phone. In the absence of data, he had a pre-arrangement with a friend who would spot him at times.

Kieran mentioned he activates at all times of year. He never uses the vehicle battery for that and has activated via bicycle and canoe as well. He cautioned that that electric bikes do generate noise.

In summary, he talked about what is a perfect activation for him. It would include an isolated location, a low noise floor, about an 8 Km hike. It would be off season – no bugs and fewer people. Have data on your phone is important as well as a safe environment. Gravel roads are good as they reduce traffic/people.

Whats next for Kieran? He mentioned he has a US call sign. He plans to spend more time in Nevada. WAS and DXCC interest him. There may be a trip to Europe and Ireland is on his list. He would like to do more tailgate operation and more Quebec and New York State operations.

Kieran thanked the club for its interest.

The presentation generated enthusiasm during the meeting and some general questions and discussion followed. Barry VE3NA mentioned he recently discovered NOTA as well. Rob VE3RXH – asked about support your parks weekend

events – and mentioned that he had recently activated 5 parks in USA. Kieran again stated that for him, it is the aspect of personal goals rather than competitiveness that is more interesting and stated that it is very addictive once you start.

Barry VE3NA thanked Kieran for his presentation. It was very interesting for a lot of people. 58 members were present and it certainly piqued interest. Kieran says he has another trip planned – to Hamvention and Nevada and Utah and back. He will have a "Part 2" if we are interested. Barry VE3NA assured him the club is interested.

6) Budget presentation and approval and membership updates - Nicole Boivin, VE3GIQ

Nicole VE3GIQ reviewed the 2023 Budget and highlighted certain line items for the membership. She informed the membership that the budget had recently been reviewed by the Executive Committee. Budget highlights and items of note included the following:

- **Accounting expenses** $60.00.
- **New line item**-The club has recently purchased a $15k GIC and is expecting about $583.00 interest.
- **Membership income** –$ 2770.00.
- **Rent** – No rent was paid last year as meetings were via Zoom,
- **Insurance Liability** – it has increased and estimated at $647.00

- **RAC affiliation** costs remain the same as last year as are P.O. Box, leasing and Zoom charges.
- **Bulk purchasing** – The club just purchased coax cable in the amount of $1487.00.
- **Donations** – YOTA donation – will give a one time donation $1250.00. In addition $150.00 to DARF, and $200.00 to RAC Foundation Scholarship (Roger, VE3EGY provided a brief summary of the YOTA Camp Project once again for the benefit of the membership.)
- **CNIB Foundation** - $150.00 that was budgeted for last year but not executed, will be donated to the CNIB Foundation this year.
- **Field Day** - $500.00.
- **Christmas Party** – Xmas party $1200.00, and another $100.00 for possible promotional events
- **Door Prizes** – $1200.00 – The same as last year.
- **Hosting fees** – $85.00.

In summary the total anticipated expenditures have increased over last year. The Bank balance is $9827.36. Nicole reported that we now have 107 members in the club.

Ernie VE3EJJ posed a question about the Christmas Party concerning the possibility of using the IBEW facilities. Norm VE3LC informed this is to be discussed later.

Budget approval:
-Barry VE3NA Budget approval:
- Motion to accept: Fred VE3LAF
- Second: Rod VE3RXN
- No objections-all in favour

7) New meeting Venue: International Brotherhood of Electrical Workers (IBEW) Facilities

Norm VE3LC provided an update to the recent club considerations and discussions about a new proposed meeting site.Norm informed that we have been offered an event location for meetings and introduced Colin VA3CSG, VP IBEW Local 586 to comment. Norm mentioned that Colin VA3CSG had provided Norm with a tour of IBEW training facilities located on Canotek Road. It was a very impressive site and includes audio/video capacity, classrooms, large screens and the offer from the IBEW is to host our in-person meetings. Possibly the club might have an in person meeting for the November meeting. Colin mentioned that it was important to be inclusive and have all participate, whether in-person or in a remote location. Colin also mentioned the classrooms are already set up for this with high speed internet. Norm VE3LC asked if there were any questions from the membership. Hugo VE3KTN asked if this had been put to the membership at IBEW and Colin stated yes it had, and they are good with it. Colin mentioned there is parking for 100 vehicles.

The facility also has sufficient meeting rooms so there should be no conflict with IBEW activities. He did mention that in the long term, we should be advised that the plan is to tear the facility down and rebuild it.

Barry VE3NA mentioned he really likes the idea of the video set up and capability and mentioned that it was a welcome offer and we really appreciate it. Norm VE3LC mentioned the parking area has level 2 EV chargers as well.

8) Ham Shack Hot Line Update:

Norm, VE3LC provided an update on Ham Shack Hotline, as well as phone availability and options. Four Cisco phones are now in operation. Norm mentioned that other phones will/may work and Frank VE3YY has phones available. These are "end of life" phones – probably 10 of them at $30.00 each. A power supply is not included. A suitable power supply is about $14.00 on Amazon. He also has access to approximately a quantity of ten "T21 type" phones. These are in good shape in almost new condition and sell for about $50.00. Norm mentioned they are unsupported phones by Hamshack Hotline however, they should be configurable to work. If anyone is interested, send Norm VE3LC an email at VE3LC@RAC.ca. Note that these phones interface with other resources including Allstar link repeaters and hubs. Barry VE3NA thanked Norm VE3LC for the update and information.

9) Chair Reports:

Net Operations: Hugo Kneve VE3KTN

Hugo VE3KTN provided a net update and status. He mentioned that everything is running smoothly and there is not much new. The Thursday evening net on VE3OCE and the Sunday morning Pothole Net, have resumed and attendance is good. Concerning the last Sunday Pothole Net, propagation conditions were odd, but the Net had 16 check ins anyway. Hugo noted the noise level was up for his location, but Glenn VE3XRAs experienced less noise in the city by 2 S units. The Potlid CW continues to run on Sunday evenings. Ante VA2BBW has stepped up to be a net controller along with Norm and Hugo.

The latest Nets Summary can be found in The Rambler.

Rambler Update: Alan VA3IAH

Barry congratulated Alan VA3IAH on the "new look" for the OVMRC website. Alan mentioned that October Rambler is out now. Alan would like to have club feedback and would welcome any articles from members. Coming up for the November Rambler, he would like to plan for a Remembrance Day theme. Any ideas for such, and any article submissions, please get in touch with Alan VA3IAH at editor@ovmrc.ca.

New Web Site: Adam Bird VA3IRB

Adam informed that there is not too much to report. Content update is underway as well as cleaning up some pages including formatting old existing pages. He expects he will soon break out rambler content.

Working with Youth: Roger VA3EGY

- Roger participated in the Jamboree on the Air event with Rob VE3RXH last weekend. He noted that 36 people came in various groups on Sunday and was pleased to see more interest than in previous years.

- Roger also mentioned he now has a more comprehensive Geocaching kit. He recently did an event with Nevada Academy and is in discussion with the 1st Kanata Scouts who want to do an event on either Nov 19th or Nov 20th. Kids will come in the morning from 10 AM until noon. OVMRC Club members are invited to come and observe or participate. He mentioned that it is quite a fun activity with lots going on. It was mentioned that Cubs and Scouts are fully co-ed now and Roger affirmed the intent is to include under represented groups.

10) Adjournment:

MOTION: Moved by Ron VE3LBU to adjourn the meeting,
No objections. All in favour. Barry VE3NA thanked all for attendance and the great support. Barry VE3NA adjourned the meeting at 2105 hrs..

11) Next meeting:

The next monthly meeting of the OVMRC will be held on November 16th. Planning is underway to hold an in-person meeting at the IBEW facilities, supplemented by Zoom for remote participants. Stay tuned for updates and details.

Minutes recorded and prepared by OVMRC Secretary, Alan Fricker VE3KAE.

OVMRC Budget Report for FY 2022/2023

Item/Project	Sub-Items	Actuals 2021/22	Forecast 2022/2023	
Bank	Account Expenses	$55.05	$60.00	
	Interest on GICs	$0.00	$583.00	
	Investments	$0.00	$15,000.00	
Memberships	Associate	$160.00	$135.00	
	Life / Honorary	$0.00		
	Full not RAC	$295.00	$295.00	
	Full RAC	$2,340.00	$2,340.00	$2,770.00
Club Obligations	Museum Rent	$0.00	$0.00 IBEW	
	RAC Liability Insurance	$647.04	$647.00	
	RAC Club Affiliation	$31.58	$31.58	
	Postal Box Rental	$230.52	$230.52	
	Zoom Leasing	$226.00	$226.00	
	Radio Course Expenses	$0.00	$50.00	
	Bulk Buys and Sales	$2,614.10	$1,487.27 Paid	
			$1,250.00 One time donation	
	Yota Camp Carleton U	$0.00		
	DARF	$300.00	$150.00	
	RAC Foundation	$400.00	$200.00	
	CNIB HAM Support	$0.00	$150.00	
Special Events and PR	Field Day	$0.00	$500.00	
	Christmas Party		$200.00 IBEW	
	Promotion Events		$100.00	
	Year End Door Prize(s)	$1,133.30	$1,200.00	
Club Repeaters	Miscellaneous	$61.00	$200.00	
Web Site	Hosting Fees	$140.93	$85.00	
Totals			Expenses:	$6,767.37
	Bank Balance : $9827.36 + $15,000 GIC		Income:	$3,353.00

Membership : 107 to date including non paying

Mini SOTA DXpedition to Iceland - August 2022 (Rob, VE3RXH)

Way back in May 2018, almost on the one year anniversary of my start in Amateur Radio, Michael, VE3WMB, gave a talk on Summits on the Air (SOTA) at the OVMRC monthly meeting and that resonated with me as I have always enjoyed the outdoors. The combination of hiking and ham radio was a natural fit. What a great way to see a bit more of the outdoors and get in some good radio time too.

In summer 2022 I had the opportunity to travel to Iceland to meet up with my son for some hiking, camping and general exploring. Thankfully, Iceland allows full reciprocal operation to Canadian hams who hold an Advanced certificate (as do all EU countries), so I planned to take along some radio gear and researched a few routes to SOTA summits in the hopes of some good weather for an activation or two. Iceland, being a mountainous country, gave us plenty of choice with 910 registered SOTA summits! This is the story of my journey into SOTA and a mini DXpedition to Iceland.

Great scenery and amazing colour in the landscape
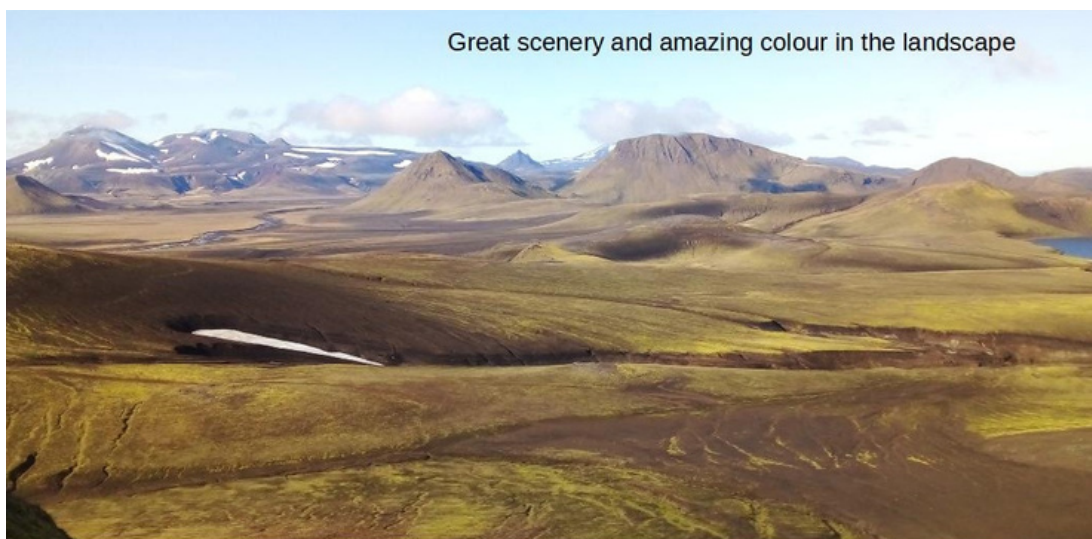
SOTA is an amateur radio awards scheme, with points being awarded when a QSO is made from a registered SOTA summit. Although a summit is involved, all Amateur Radio operators can take part as they can be either an 'activator' (the one operating from the summit) or a 'chaser' (the one at the other end of the QSO) and that can be from the comfort of their shack, mobile, portable or even from another SOTA summit. Activators need to make a minimum of 4 QSOs to earn the points for the summit, but chasers get points for every QSO. Summits are given a points score based on their height above sea level and in many cases a winter bonus is added during local winter months. For example there is 1 point for a low summit and up to 10 points for the highest summits in that region.

At the time of Michael's talk on SOTA, my main operating rig was a classic Kenwood TS-430 which is way too much of a "boat anchor" to haul to any summit, so I began looking for some affordable, light weight equipment that would be suitable for SOTA and other portable operations. QRP would be essential as the battery power needed to run QRO for any length of time would be prohibitively heavy to carry for any distance.

After a long patient wait, in fall 2020 I saw an advert for a well used Yaesu FT-817 portable all band-all mode transceiver complete with the aftermarket WINDCAMP LiPO battery pack, 110v charger and 12v power adaptor, radio stand and the LDG Z-817 automatic antenna tuner, all for a very reasonable price. The FT-817 is well known as a solid rig, with relatively low power needs on receive and it produces 5 watts output over the HF, 6m, 2m and 70cm bands. Well …. we all know the story about 'reasonably' priced gear and so it was no surprise to me that the radio was showing low output power on the VHF/UHF bands when I tested it prior to purchase. However, negotiations were conducted and the deal was done, with me taking the risk that the repair would not break the bank. A refurb at Yaesu in California to replace the final Power Amplifier board (a common repair it seems) was successful and even with the cost of the repair and shipping, the deal was still very worthwhile.

While the radio was off for repair, I purchase an End Fed Half Wave (EFHW) kit and 15 foot fishing pole to use as a mast, plus the bits and pieces to make a mast mount and guy wires. The EFHW kit is the QRP Guys design and contains a toroid, magnet wire, capacitor and circuit board/wire winder with a BNC coax connector. It is an easy kit to assemble and with the addition of some 26 gauge speaker wire cut to about 28 feet long I was able to operate on the 20m band as a half wave and on the 10m band as a full wave. I chose to only operate on 20 and 10 metres to keep the wire length manageable in the sloper configuration on my 15 foot fishing pole, but the option is always there to add more wire for 40m or other bands. At the same time I purchased a similar end fed kit, designed as a random wire that would allow operation on multiple bands with a tuner. My experience so far is that the random wire does not radiate nearly as well as the resonant half wave, so I have stuck with the EFHW for 20m.

After a few practise portable operating sessions and doing some POTA activations around Ottawa with my FT-817 and EFHW I was ready for Iceland. My research on other hams that had activated SOTA peaks in Iceland told me that 20m would likely be a good choice of band, so I stuck with the 20m band as my primary band and my EFHW as the antenna choice, but before leaving Canada, having seen the improving sun spot activity and resultant improved propagation on the higher frequency bands, added a link to my 20m band EFHW so that it would now also

resonate on the 15m band when I opened the link. I also took my 6m band roll up Slim Jim antenna and an HT. My research had also told me that local hams are not so plentiful and the likelihood of a 2m band QSO from a summit was not high. There is however an active Amateur Radio Club, called the IRA, with some SOTA activators and I made contact with them through their Facebook group. I also learned that their Club house hosts an open evening every Thursday and that I would be welcome to drop by. So, I hatched a plan to take some surplus copies of 'The TCA' with me for their clubhouse and I arranged to collect those from RAC HQ in Ottawa before I departed.

I arrived In Reykjavik on Sunday 21 August, picked up a 4x4 rental car and met my son. The next day we set off for 4 days of hiking and camping, using the rough gravel roads to access some of the interior of Iceland.

In all we hiked and operated from four SOTA summits ranging between 4 and 8 points, but sadly the final 6 point summit was a bust as I made only one QSO, and I had to resort to the FT4 digital mode for that! That 'almost' made it worthwhile lugging my heavy laptop to the summit! The foul weather with low, wet cloud on that summit likely contributed to the poor conditions. If ever there was motivation to work harder at learning Morse code, it was that day. No laptop needed for CW. I'm happy to say that progress is being made on that front. A highlight was having the first activation of TF/SL-060 Löðmundur, and there are many more that are yet to be activated if I ever go back, or if you have that urge!!

Photo 2 - TFSL-060 Löðmundur

Here is a summary of my SOTA operations:

Date	SOTA Reference	Points Value	Elevation (m)	Band (m)	Mode	QSOs	Operating Time (min)
22 Aug 22	TF/SL-179 (Búrfell Þjórsárdal)	4	676	20	SSB	7	11
23 Aug 22	TF/SL-060 (Löðmundur)	8	1048	20	SSB	13	10
24 Aug 22	TF/SV-008 (Hafnarfjall)	4		20	SSB	5	14
25 Aug 22	TF/SV-007 (Hvalfell)	6		20	FT4	1	30 +

Photo 3 - Operating at TFSL-179 Búrfell Þjórsárdal

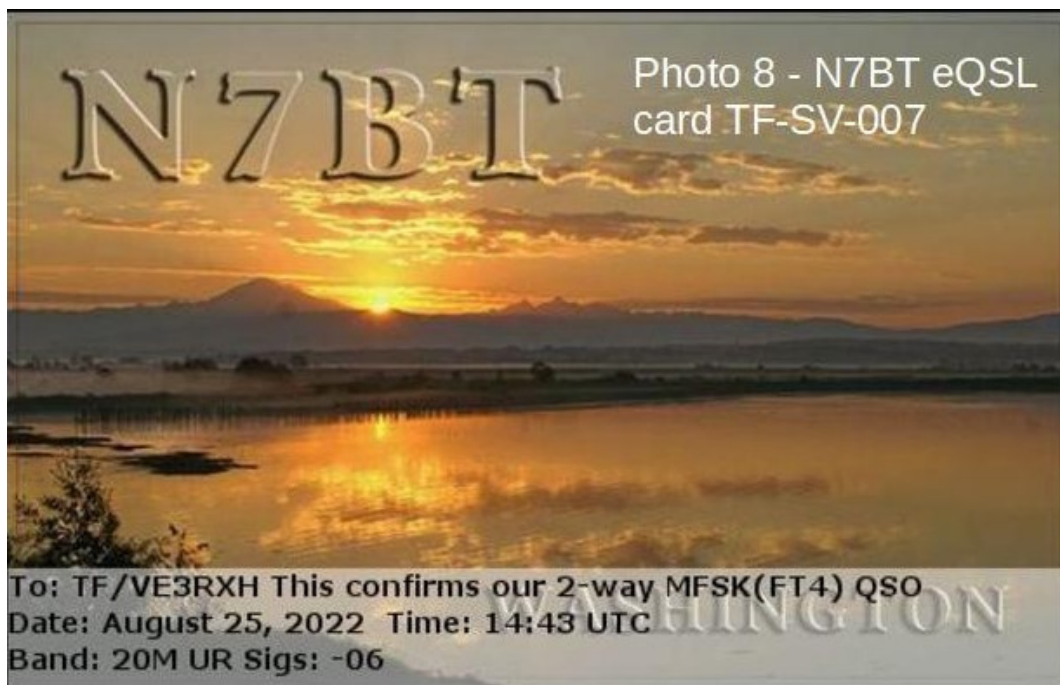Photo 4 - Operating at TFSV-007, Hvalfell

Photo 5 - The way up to Hafnarfjall

Activating the summits was good fun and added an enjoyable activity to the hikes. Our hikes were between 4 and 10 km round trip, climbing up to 1000m for the 8 pointer and a little less for the others. I almost convinced my son to take a turn at the mike, but when a short pileup ensued, he decided to stay an SWL for the moment! Spotting my activations on the SOTA website was essential and it was fun to build a relationship with a couple of regulars who were looking out for me on my next peak and vying to be first in my log for that day. It was chilly sitting on the exposed summits, so light weight gloves were needed and a toque. The majority of

contacts were made into Europe and while I only reached back to North America twice, as the QSO map shows, this included the contact with N7BT in Bellingham, Washington State at about 5274 kilometers (see eQSL card). The EU centric propagation was not unexpected as my activations were around mid day UTC when the propagation westwards to Canada and the US was not yet picking up.

Photo 7 - All Iceland QSOs

Photo 8 - N7BT eQSL card TF-SV-007

To: TF/VE3RXH This confirms our 2-way MFSK(FT4) QSO
Date: August 25, 2022 Time: 14:43 UTC
Band: 20M UR Sigs: -06

My portable kit worked really well, but I didn't see much activity showing on the dx cluster for the 15m or 10m bands, so I stuck to 20m only. There was plenty of operating time from the internal 3Ah LiPO battery and I estimate that in normal SSB operation I use about 1 Ah per hour, so I expect to get about 3 hours of operation from a single charge. Working QRP on SSB will always be a challenge but that is part of the fun. You need

patience and perseverance to make the contacts at times. I carried my laptop on the first SOTA activation in case I needed data modes to reach the required QSOs, but since I was able to get more than the minimum four QSOs using phone without too much trouble, I didn't carry it again until I saw the weather forecast for the last day's hike. Given the poor forecast I opted to take it, and unfortunately even FT-4 and FT-8 could not save me!

To recharge the radio and laptop internal batteries, I used a 12v to 110v inverter to power the battery charger, as we drove between the campsites/hikes. Cell phone coverage is generally great across Iceland with many summits having cell towers, so there were no problems spotting or checking band conditions. The weather was mostly dry and about 10 °C during the day and near freezing at night. Luckily we had little rain and the ground was dry. While travelling to Iceland is not inexpensive, the geology and landscapes are fascinating. If you enjoy off-road driving, hiking and SOTA you will be spoilt for choice with inland low hills, mountains, campsites, lots of coastline and many good trails. Not to mention amazing views, friendly people and 16 POTA parks as well.

On a final note, my son and I were made welcome as guests at the IRA open evening in Reykjavik where they have a fantastic meeting facility with lounge, library and contest level shack. They gratefully received the copies of TCA that I had brought.

Photo 6 - TCA mags to IRA v1

Background on SOTA:

The Summits on the Air amateur radio award programme was the idea of John Linford, G3WGV. Although he had the idea many years ago, it was not until he ran across the European Adventure Radio website run by Richard G3CWI, that he put the idea down on paper. Much of the award was discussed and

dissected on the internet before it was launched on 2 March 2002. England and Wales launched first, soon to be followed by Scotland.

Today, SOTA has thousands of participants in Associations across the World, all sharing the same award ethos and infrastructure. Please see https://www.sota.org.uk/ for more information.

73, Rob, VE3RXH

LINKS OF INTEREST
SOTA https://www.sota.org.uk/
Icelandic Radio Amateurs (ÍRA) http://www.ira.is/english/
Löðmundur https://icelandthebeautiful.com/lodmundur-fjallabak/
Iceland landscapes https://www.zigzagonearth.com/iceland-pictures/

Ham Shack Hotline (hamshackhotline.com), Norm VE3LC

The Hamshack Hotline (HH) is an exclusive full-featured VOIP full-duplex phone system provided to the amateur radio community worldwide. The HH works with IP telephone sets using "Session Initiated Protocol" (SIP). IP (VOIP) phones typically connect to your internet router by a physical ethernet cable. The HH service is free of charge to radio amateurs, however; the sponsors of the system do solicit donations to offset the costs of "cloud" based VM hosting services for the PBX server software. The system was developed by a group of US radio amateurs in 2018 and has gained quite a following of subscribers. This now includes a number of Ottawa area hams as well as many OVMRC members that have joined the system recently including:

Norm VE3LC – 6100001196, Barry VE3NA – 6100001261, Alan VA3IAH – 61000000729, Hugo VE3KTN – 61000001213, Adam VA3IRB – 550000400, Bryan VE3QN – 6100001230, Walter VE3SYZ – 6100001179, Jonathan VE3OTW – 5500000286, Daniel VA3GLB – 6100000711, Ante VA2BBW – 5500000395, Frank VE3YY – 5500000387, Mike VA3TEC-14362, Tom VE3MB – 5500000405, Rod VE3RXN – 5500000408, Wayne VE3CZO – 5500000414, Peter VE3XEM – 6100001303 and Luc VE3JGL - 5500000419

(The above list includes their HH phone numbers)

There are several ways of joining the system:

1) By using a "supported" make and model of IP telephone set indicated in the Hamshack Hotline web page: https://wiki.hamshackhotline.com/doku.php?id=kb:supported.endpoints . By requesting service with a supported phone set, you are provided a unique 10 digit phone number (starting with 610) and a URL link that will address your phone (using the LAN IP address for the device) and upload to it a configuration template for the make and model involved. For supported phones, your telephone registers on the "HHUS" server (for the Americas) of which there is now well over 1000 subscribers.

2) Or by using an "unsupported" IP telephone set. However for this option, you are on-your-own to determine the setup and configuration of your phone for proper registration on the HHUX (experimental) server. In response to your request for service, you will be provided your own 10 digit phone number (starting with 550) and the HHUX URL and your unique password which all must be properly entered into the phone by manual configuration. Note that IP phones are typically configured by doing a HTTP session on the IP address of the phone assigned by your router as it resides on your Local Area Network. Note also that all servers on the system are interconnected so that calls originated on one can be equally answered on the other.

3) Or by using one of several available computer and smart phone software applications. Jonathan VE3OTW for instance uses "MicroSip" on his home computer while Ante VA2BBW uses "LinPhone" on his Android phone. Since neither are "supported" applications, they must be registered on the HHUX server. There is also the "Acrobits Groundwire Smartphone App"; it is available a very modest price for Apple IOs and Android based smart phones. This SIP phone app is the only app that is "supported" for use on the HHUS server.

The Cisco "supported" phone models are: WIP-310, SPA-112, SPA-122, SPA-232D, SPA-303, SPA-504, SPA-508, SPA-509, SPA-514, SPA-525G, SPA-941 and SPA-2102. Several of these are available on the surplus market through on-line sites such as EBay and Amazon. However, be careful, you must ensure you obtain a used product that is able to be "Factory Reset" to its default values through user settings. Some surplus phones in previous service have been "locked down" with an administrative password that is difficult to break. A reasonable price for a phone would be $30 to $70. For those that want a nicer phone like the SPA-525G, it may cost more; but this phone has a colour screen, WiFi connection capability and Bluetooth for a wireless headset.

Here is my ham shack Cisco SPA-504G phone; it has 4 line capability.

Here's another HH phone I have in the shack; it is a Yealink T22P. Although this phone is not on the HH supported list, it was easy to configure for use on the HHUX experimental server and works well on the system. This phone is factory reset by holding down the centre button with the check mark for 10 seconds.
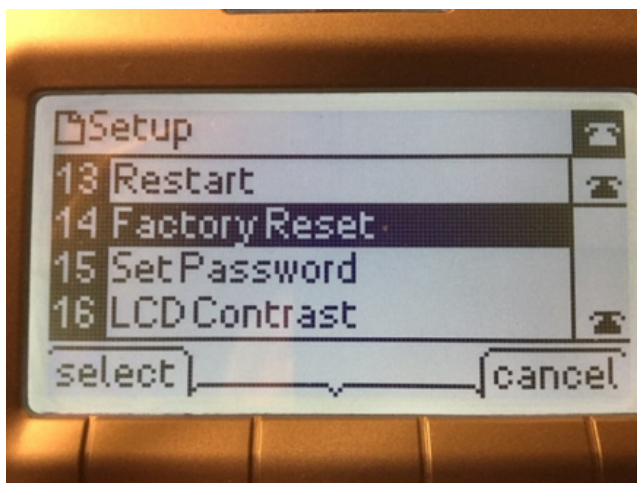
A "Factory Reset" on the Cisco phone is necessary to clear any previous settings. Make sure a factory reset is available to the user on any surplus phone you buy.

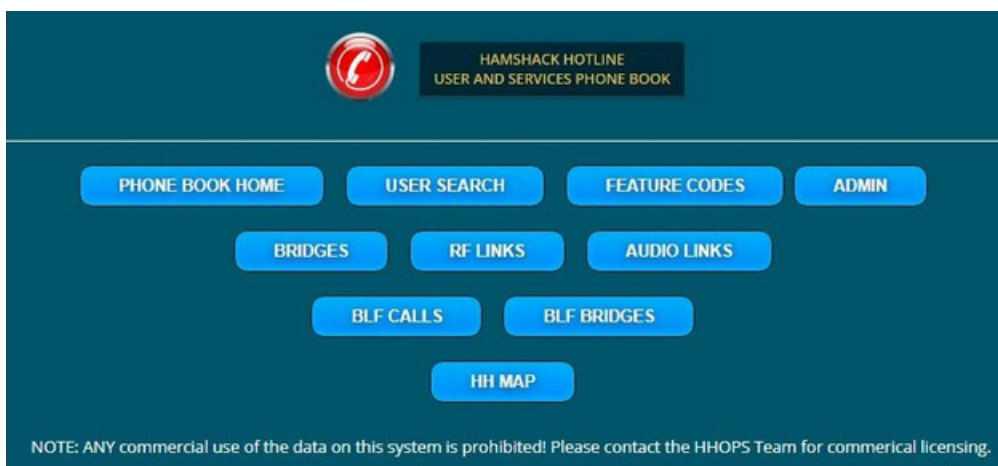**The Hamshack Hotline servers provide several features including:**

- Voice mail for receiving unattended calls; this can be personalized with your own greeting.
- Access to a large number of RF links connected to AllStarLink nodes. For instance, by dialing 94069 you can connect to the AllStar "Canada Hub" or by dialing 94152 you can connect to the XLX197B multi-protocol reflector that connects several D-Star and DMR repeaters including VE3RAM. To Tx on an RF link requires dialing *99 and then # to listen again.
- Access to several "Audio Sources" including some public broadcast radio stations and one even provides code copy practice; see: https://apps.hamshackhotline.com:9091/audio.php
- An "Echo" test to appreciate latency on the system.
- Public and Private conference bridges; the OVMRC has now established its own private bridge for special operations which requires special pin codes to use which can be provide on request.

AIR FORCE MARS	N	HHUS	330	JOE N9VMO	11638
PUBLIC RACES	Y	HHUS	331	MICHAEL KD2DVC	4100
HAM SAR GROUP	N	HHUS	332	ROB KD1JG	6100000714
OTTAWA VALLEY MOBILE RC	N	HHUS	333	VE3LC	6100001196
CENTRAL MS ARES	N	HHUS	334	JACK K5FIT	6100000755
RGN 1 AFMARS	N	HHUS	335	CAL WA1WOK	4474
GATHERING SPOT	Y	HHUS	336	MIKE N8XYM	4523
WESTERN PA AREA	Y	HHUS	337	CHRISTINE N3LRG	4541

- Public bridges are for any group to use and require no special pin codes to access. One each has been established for each Canadian province and territories by VA2DG.

CANADA PUBLIC	Y	HHX	14060	DANIEL VA2DG	11140
NOVA SCOTIA PUBLIC	Y	HHX	14061	DANIEL VA2DG	11140
QUEBEC PUBLIQUE	Y	HHX	14062	DANIEL VA2DG	11140
ONTARIO PUBLIC	Y	HHX	14063	DANIEL VA2DG	11140
MANITOBA PUBLIC	Y	HHX	14064	DANIEL VA2DG	11140
SACKATCHEWAN PUBLIC	Y	HHX	14065	DANIEL VA2DG	11140
ALBERTA PUBLIC	Y	HHX	14066	DANIEL VA2DG	11140
BRITISH-COLUMBIA PUBLIC	Y	HHX	14067	DANIEL VA2DG	11140
NORTHWEST TERR PUBLIC	Y	HHX	14068	DANIEL VA2DG	11140
NEW-BRUNSWICK PUBLIC	Y	HHX	14069	DANIEL VA2DG	11140

- The full listing of Hamshack Hotine phone numbers for users and services can be searched at: https://apps.hamshackhotline.com:9091/services.php

NOTE: ANY commercial use of the data on this system is prohibited! Please contact the HHOPS Team for commerical licensing.

In addition, the operation of IP phones provide many set-based features such as:

- Speaker phone
- Visual call display
- Personal directory
- Multi-line selection
- Do Not Disturb (DND)
- Call forwarding
- Last number redialling
- Accurate time and date display (tied to a NTP server)
- Various user selectable ring tones
- Call History recording and display
- Multi-line capability (this allows phone connection to "Asterisk" open source servers that some clubs setup on their own.

Local Source of IP Phones:

We have to thank Frank VE3YY for making available through his son's business quantity 5 Cisco 504G and 9 Yealink T22P enterprise IP phones; each of these phones sold for $30 each. At the time of this writing, I still have 2 Yealink phones available. Frank says that if there is further local interest in joining the Hamshack Hotline system, his son's business can provide another quantity of surplus Yealink T21P phones for $50 each. The T21P phone is virtually the same as the T22P but is limited to 2 VOIP accounts as opposed to 3 accounts for the T22P phone. If interested, contact me.

Norm VE3LC
ve3lc@rac.ca

Scout Jamboree On The Air 2022 (Rod VE3RXN)

The Scouting world held the 65th annual Scout Jamboree on the Air, and Jamboree on the Internet (JOTA-JOTI) October 15th-17th. A Jamboree is a large gathering of Scouts, either global or national, and traces its roots back to the early days of Scouting in the last century. The first World Scout Jamboree was held in 1920, and it still takes place every four years, the next is 2023 in South Korea.

As ham radio became popular among Scouts, the idea of holding a Jamboree remotely, using ham radio: the "Jamboree on the Air" was born and first held in 1957. Later, when the internet became popular, the "Jamboree on the Internet" was created in 1995. Today, the two events have merged into a single experience called JOTA-JOTI. Membership in Scouting in Canada is not same as it once was, but it remains a popular youth program and there are active scout groups in more than a thousand towns and cities across Canada, and JOTA-JOTI is an event that connects Canadian Scouts with brother and sister Scouts across the globe.

The National Museum of Scouting on Baseline Road and home of VE3SHQ was centre of Ottawa's JOTA activity. VE3SHQ has a well-equipped tower covering 70cm to 80m bands via a Tri-band Diamond XC2000, TH6DX Yagi and a DXCC trapped dipole. Primary JOTA operation was on 20m & 40m but we also worked across the whole spectrum given variable Band conditions. The shack is equipped with 2 transceivers, an Icom IC-7300 and Kenwood TS-2000. VE3SHQ APRS digipeater continues to beacon via a D130 Discone. VE2CRA was monitored, but not used for QSOs. VE3SHQ's operation was supported by Harrie VE3HYS, Thane VA3TTM, Tom VA3TXL, Roger VA3EGY and Rod VE3RXN, who worked shifts to ensure continuous

operation Saturday October 16th and Sunday October 17th.

A total of 38 Cub Scouts (8-11), Scouts (11-14) and Venturer Scouts (14-18) plus parents, leaders and bystanders came to VE3SHQ. This is an encouraging turnout, particularly after the Pandemic lockdowns curtailed Scout group activities for 2 years. The younger youth were particularly entranced by the ability to operate the rotator and spin the TH6DX Yagi (it had quite the workout). Older youth were interested in the science of radio, time zones and making contacts. DX conditions were not excellent, but Scouts were able to make several American and local contacts. Thank you Ernie VE3EJJ for chatting with one of our Scout visitors.

The Jamboree is also an Internet event and featured live streams from many countries including Geneva, Kenya and Malaysia, which kept Scouts not using the radios interested and engaged. The global 2022 tally is still being tabulated, but the World Scout Office in Geneva previous report detailed participation of 151 countries, logged 753,710 youth participants involving 29,453 Amateur Radio operators. In Canada, we had 95 JOTA events, 125 licensed radio operators, and over 2500 Scouts on the air.

While Scouting continues to focus on camping, outdoors, leadership, and skills for life, interest in STEM (science, technology, engineering and math) appears to be increasing and we are pleased to report JOTA-JOTI 2022 in Ottawa a success. Members of OVMRC who would like to make JOTA-JOTI 2023 an even bigger success are welcome to reach out me (VE3RXN@RAC.CA) to volunteer next October.

73,
Rod Wilson VE3RXN
Group Commissioner, National Museum of Scouting
https://www.scouts.ca/councils/eastern/voyageur/national-museum.html
Jamboree on the Internet (JOTA-JOTI) https://www.jotajoti.info/joti

Lest we forget – Canada's Cold War Military Contribution

For this year's Remembrance Day contribution to the Rambler, I have Fred VE3LAF and Maurice-André VE3VIG to thank for steering this brief reflection toward a focus on Canada's Cold War contributions that are often overlooked. The magnitude of this contribution was reflected in the remarks by General (Retired) Paul Manson in the Globe and Mail, Nov 11, 2015, who recalled the specific remark of the Supreme Allied Commander in Europe, an American, who stated that "You Canadians set the standard in NATO."

General Manson also noted that "Our job was deterrence and deterrence worked. We trained for war so that we wouldn't have to fight a war." and that as a result Canada paid a high price for this commitment as ".. Cold War operations resulted in more fatalities due to military service than in the Korean War, the Balkan conflicts, the Gulf Wars, Afghanistan and peacekeeping — combined."

Also observed by Eric Wagner (2006) was that: "Canada's participation in peacekeeping during the Cold War was primarily motivated by its own strategic interests. Canadians were dedicated Cold Warriors, and perceived the Soviet Union to be a dangerous, expansionary force that threatened the interests of the West. Accordingly, NATO and other multilateral organizations were crucial bodies for the protection of Western interests." How prescient these words seem today!

General Manson's article in the Globe and Mail also was one source of inspiration for Captain (Retired) Maurice-André Vigneault to write of his 38 years of service to Canada during the cold war in his book Mud On My Boots — Dares and Ventures of a Canadian Airman During the Cold War.

Appropriately enough I read most of his book on an airplane as I travelled to British Columbia and Alberta, places that Maurice-André served or visited during his years in western Canada. The story of Maurice-André's early years was uniquely compelling for me as an Anglo-Quebecer noting the struggles and prejudice he experienced as a young person and during his career – something he included figuratively as "mud-on-my-boots" along with the adventures, challenges and tragedies experienced along his ongoing 90 year journey.

Sprinkled in among the "mud" were some remarkable technical accomplishments including a notable voice contact and RTTY communication between Trenton and the Congo during a time of crisis; oversight of a communication network in Europe during the Suez Canal crisis, long-range radar in the Canadian North, and tactical air navigation beacons in the Arctic, as well as establishing a Francophone curriculum in electronics to remove the language barrier for Francophones seeking

technical training in the military. Well, done Sir!

Also a word of thanks to Fred VE3LAF who loaned me his copy of "Mud On My Boots" while my copy was en-route from Amazon. This Remembrance Day Fred was present in uniform at the radio display at the Cold War Museum (CWM), see photo below. Go check-out the Cold War Museum at the "diefenbunker" link below.

Capt (Retired) Maurice-André Vigneault
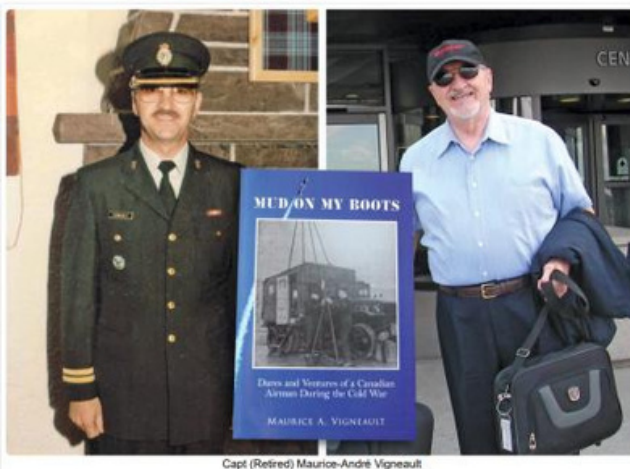
Finally, the Canadian War Museum program "In Their Own Voices" is collecting individual stories of veterans and their families focusing primarily on those who served in Canada's military from the Second World War to the present day. These stories will form a collection to provide insight into the enduring impact of military service, as well as how conflict and war have shaped the lives of veterans, their loved ones, and Canada itself. For more information, see the link below.

Lest we forget all our service men and women, who gave so much for our freedom and security. 73, Alan VA3IAH

Fred, VE3LAF CWM Radio Room

REFERENCES
https://diefenbunker.ca/en/
https://www.amazon.ca/Mud-My-Boots-Ventures-Canadian/dp/0228834716
https://www.theglobeandmail.com/opinion/canadas-forgotten-cold-warriors/article27200333/
http://www.journal.forces.gc.ca/vo7/no4/wagner-eng.asp
https://www.warmuseum.ca/cwm-mcg/in-their-own-voices/

Winlink Express and working DX - Stuart Fedak VE3SMF

Winlink Express (Winlink) (formerly RMS Express) is a radio client for email delivery with or without the internet. It is primarily used by amateur radio operators interested in Auxiliary Communications Service. It is becoming the preferred e-mail client for the RAC Auxiliary Communications Service (ACS).

The concept for Winlink Express, as designed and developed by the Winlink Development Team, was a radio-based e-mail system with maximum interoperability within the amateur radio systems. This radio-based system is compatible with access to the main Central Message System (CMS) using telnet (Internet) and using diverse amateur radio modes such as Telnet Winlink, Packet Winlink, Pactor Winlink, Robust Packet Winlink, ARDOP Winlink, Vara HF Winlink, Vara FM Winlink, Iridium GO Winlink, Packet P2P (Point-to-Point), Pactor P2P, Robust Packet (P2), Ardop P2P, Vara HF P2P, Vara FM P2P, Pactor Radio-only, Vara HF Radio-only, Vara FM Radio-only, Telnet Post Office. Besides using RF and Telnet modes, the system will also operate using MESH.

The magic happens with Winlink Express when messages are sent using the above modes that reach the main Central Message System (CMS) or the various HF/VHF/UHF Radio Message Server (RMS) gateway stations. The originating station can upload email messages using the above modes and the receiving station can download messages from an RMS gateway using the same or a different band, frequency and mode. This is truly the concept of amateur radio maximum interoperability.
I will now focus on Vara HF and Vara FM, which provide high data rates compared to traditional amateur radio modes.

VARA HF MODES

VARA HF sound modem has three operation modes: VARA HF Narrow (500Hz), VARA HF Standard (2300Hz) and VARA HF Tactical (2750Hz). VARA HF Tactical was designed for the military and other professional EMCOMM organizations which use Tactical HF Rigs for the operations, but it can also be used with some Ham rigs, mainly with the Icom IC-7300. VARA HF Standard is compatible with most Ham Radio HF rigs. VARA HF Narrow was designed for the digital bands limited to 500Hz bandwidth. It should be noted that amateur radio is an international community and that not all amateur radio operators have the same access to all the same modes, band segments, and bandwidths and frequencies.

VARA HF v4.3.0

Level	VARA HF 2750 (Tactical)				VARA HF 2300 (Standard)				VARA HF 500 (Narrow)			
	Symbol Rate	Carriers	Mod.	Net Rate (bps)	Symbol Rate	Carriers	Mod.	Net Rate (bps)	Symbol Rate	Carriers	Mod.	Net Rate (bps)
1	23	40	FSK	18	23	32	FSK	18	23	11	FSK	18
2	47	20	FSK	41	47	16	FSK	41	47	11	FSK	41
3	47	20	FSK	82	47	16	FSK	82	47	11	FSK	61
4	94	20	FSK	175	94	16	FSK	175	94	2	BPSK	88
5	94	3	4PSK	270	94	3	4PSK	270	94	2	4PSK	177
6	94	4	4PSK	363	94	4	4PSK	363	94	3	4PSK	270
7	94	6	4PSK	549	94	6	4PSK	549	42	11	4PSK	441
8	94	8	4PSK	735	94	8	4PSK	735	42	11	4PSK	588
9	94	10	4PSK	922	94	10	4PSK	922	42	11	4PSK	705
10	94	13	4PSK	1203	42	49	4PSK	2011	42	11	8PSK	884
11	42	59	4PSK	2423	42	49	4PSK	2682	42	11	8PSK	1060
12	42	59	4PSK	3230	42	49	4PSK	3219	42	11	16QAM	1286
13	42	59	4PSK	3877	42	49	8PSK	4025	42	11	32QAM	1543
14	42	59	8PSK	4848	42	49	8PSK	4830				
15	42	59	8PSK	5817	42	49	16QAM	5872				
16	42	59	16QAM	7074	42	49	32QAM	7050				
17	42	59	32QAM	8489								

Figure 1: VARA HF levels using VARA HF 2750 (tactical), VARA HF 2300 (Standard) and VARA HF 500 (Narrow). Note the differences in Symbol Rate, Carriers, Modulation, and Net Rate (bps). VARA HF will adjust the Net Rate (bps) as propagation conditions change. Both the sending and receiving stations will adjust to maximize data flow and reduce retransmissions of data.

VARA FM v4.0.0
Speed Levels

Level	VARA FM WIDE				VARA FM NARROW			
	Symbol Rate	Carriers	Mod.	Net Rate (bps)	Symbol Rate	Carriers	Mod.	Net Rate (bps)
1	42	14	4PSK	566	42	14	4PSK	566
2	42	29	4PSK	1188	42	29	4PSK	1188
3	42	58	4PSK	2390	42	58	4PSK	2390
4	42	98	4PSK	4040	42	58	4PSK	3188
5	42	98	4PSK	5387	42	58	8QAM	4252
6	42	98	8QAM	7185	42	58	16QAM	5668
7	42	98	16QAM	9580	42	58	32QAM	7087
8	42	116	16QAM	11340	42	58	64QAM	8505
9	42	116	32QAM	14144	42	58	64QAM	9567
10	42	116	64QAM	16932	42	58	128QAM	11162
11	42	116	64QAM	19003	42	58	256QAM	12750
12	42	116	128QAM	22102				
13	42	116	256QAM	25210				

Figure 2: VARA FM levels using VARA FM Wide and VARA FM Narrow. Note the differences in Symbol Rate, Carriers, Modulation, and Net Rate (bps). VARA FM will adjust the Net Rate (bps) as propagation conditions change. Both the sending and receiving stations will adjust to maximize data flow and reduce retransmissions of data.
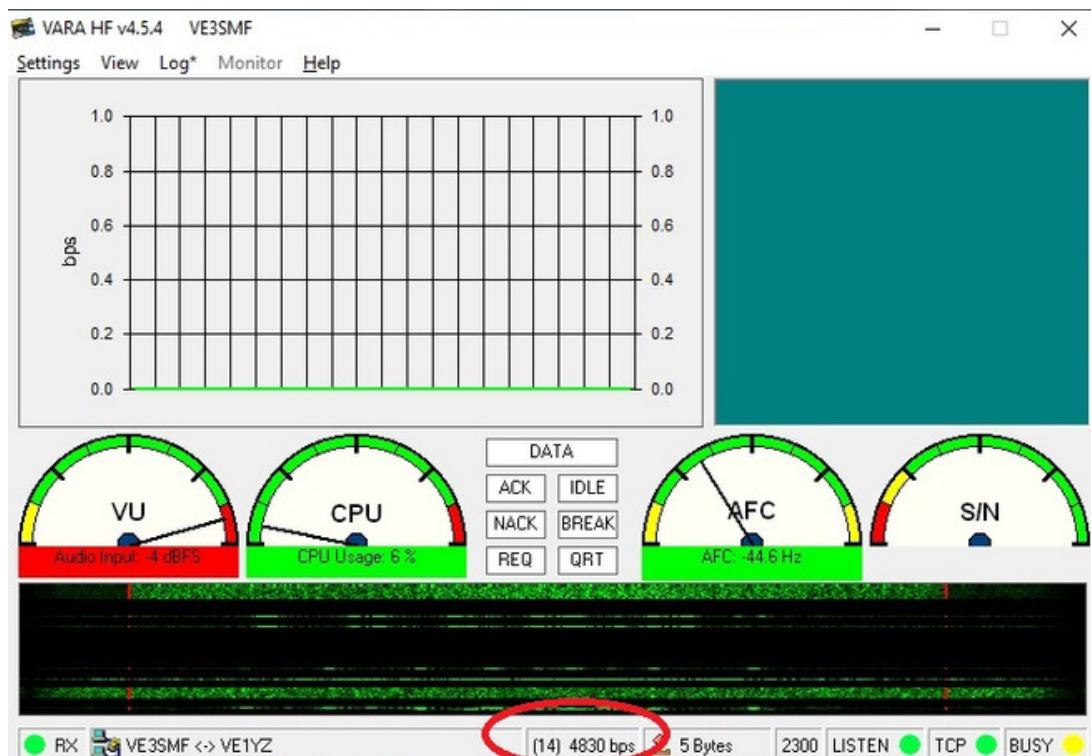
Figure 3: The VARA HF graphical interface demonstrating a VARA HF connection with VE1YZ Gateway between Ottawa, ON and Halifax, NS using VARA HF Tactical at level 14, and data rate of 4830 bps. The graphical interface used on VARA HF and VARA FM permits the operator to visually see the data rates change during the data exchange process.
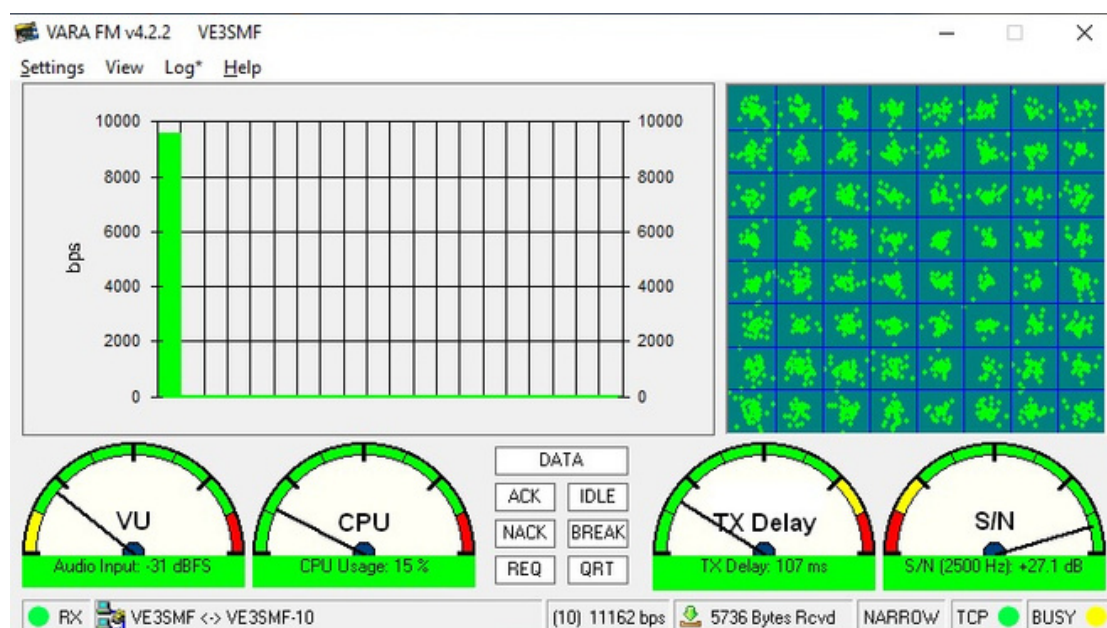

Figure 4: The VARA FM graphical interface demonstrating a VARA FM connection with VE3SMF-10 VHF Gateway and VE3SMF using VARA FM at level (10), and data rate of 11162 bps. This was a test connection between the VHF VARA-FM Gateway and my home station. The potential data exchange rates using VARA HF and VARA FM far exceed those achievable with traditional packet radio.

OK, enough of the theory of VARA HF and VARA FM. Lets move on to what this has to do with working DX. According to Wikipedia, DXing is the hobby of receiving and identifying distant radio or television signals, or making two-way radio contact with distant stations in amateur radio, citizens' band ... other two-way radio communications. Many DXers also attempt to obtain written verifications of reception or contact, sometimes referred to as "QSLs". The name of the hobby comes from DX, telegraphic shorthand for "distance" or "distant".

Most of my operations using Winlink are 99% regional communications, passing e-mail traffic. Sometimes I use the Winlink HF Channel Selector to do various sorts of RMS Gateways based on <Call sign>, <Frequency>, <Mode>, <Grid Square>, <Distance>, <Bearing>,<Path Reliability Estimate> and <Path Quality Estimate> to build up my internal algorithm of propagation paths. This is really the only way to understand which RMS gateways have the highest probability of being accessed at any time of the day.

Figure 5: Vara HF Channel Selector interface sorted by <Call Sign> to identify HB9AK which is a well-known Swiss HF RMS Gateway in Europe. Note that the Path Reliability Estimate and Path Quality Estimates are very poor.
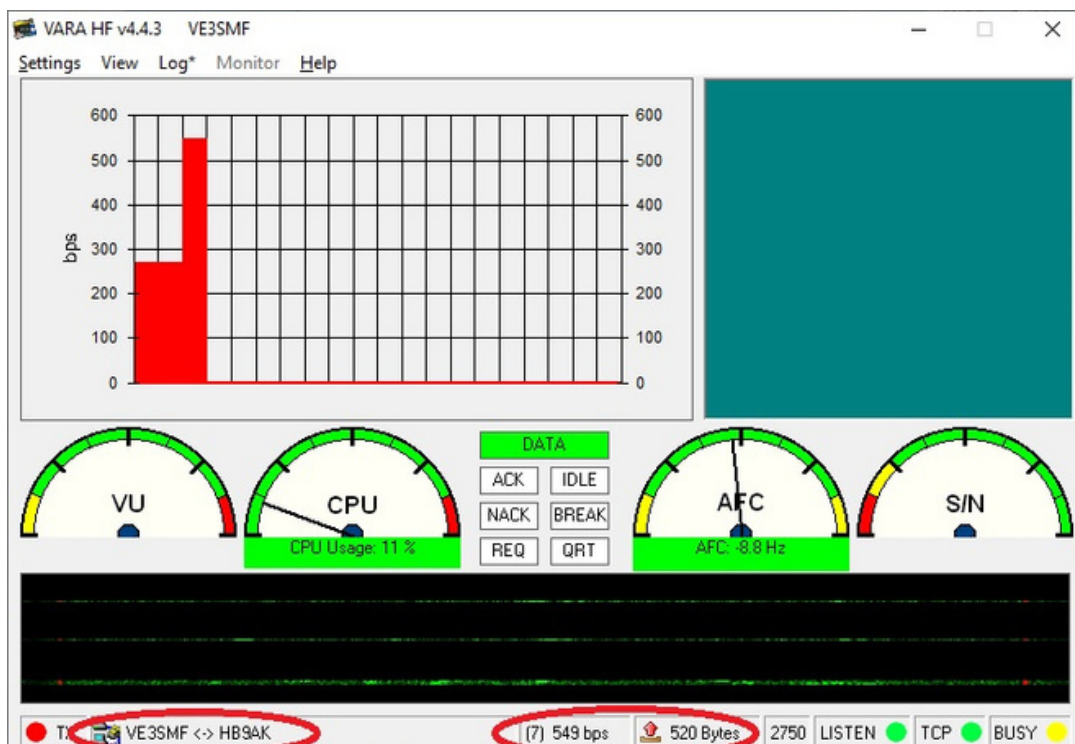
Figure 6: The VARA HF graphical interface demonstrating a VARA HF connection with HB9AK on 20 m band January 01, 2022. Note the VARA HF modem is at level (7) and 549 bps.
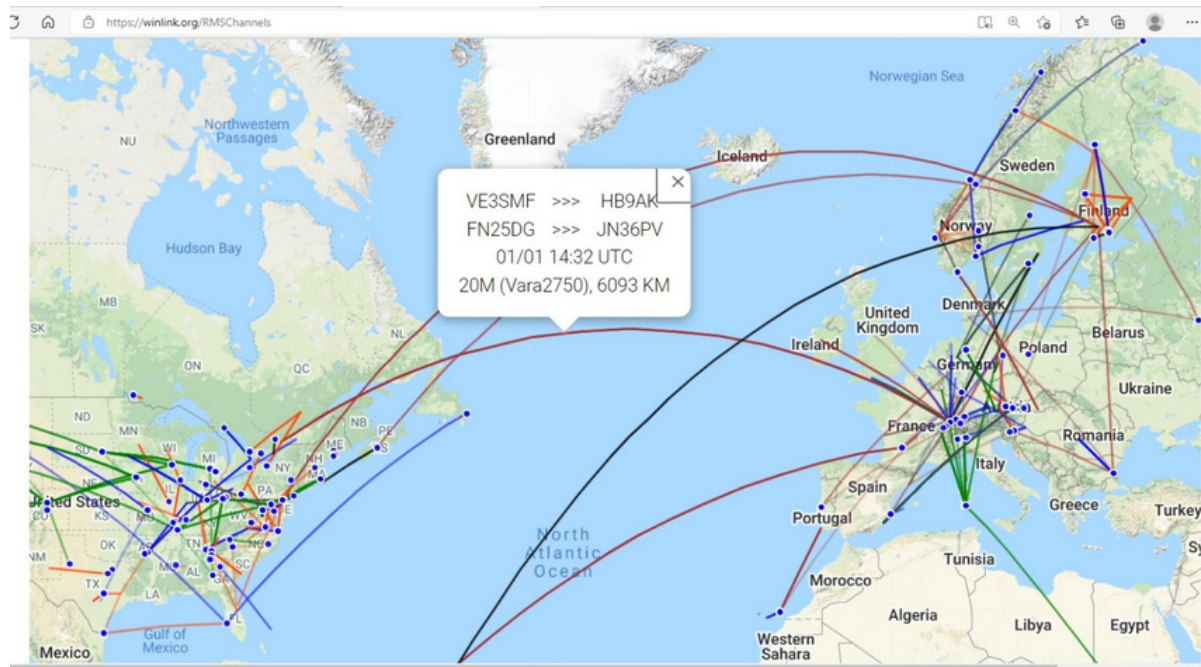

Figure 7: The Winlink.org live time RMS gateway map demonstrating a VARA HF connection of VE3SMF with HB9AK on 20 m band January 01, 2022 using VARA 2750 and a distance of 6093 Km. VE3SMF operation conditions: Transceiver ICOM IC-7300 running 50 watts into a three element HF beam at 50 ft.

Callsign	Frequency (kHz)	Mode	Grid Square	Hours	Group	Distance (km)	Bearing (Degrees)	Path Reliability Estimate	Path Quality Estimate
VK2HL	3625.000	V2750	QF56PG	00-23	PUBLIC	15834	271	0	0
VK2HL	18116.000	V2750	QF56PG	00-23	PUBLIC	15834	271	5	6
VK2IO	7046.500	V2300	QF56LG	00-23	PUBLIC	15859	271	0	0
VK6RX	3598.500	V2300	PH44JF	00-23	PUBLIC	16001	317	0	0
VK6RX	14098.500	V2300	PH44JF	00-23	PUBLIC	16001	317	3	4
VK6RX	10133.500	V2300	PH44JF	00-23	PUBLIC	16001	317	0	0
VK6RX	7044.500	V2300	PH44JF	00-23	PUBLIC	16001	317	0	0
VK6RX	21086.500	V2300	PH44JF	00-23	PUBLIC	16001	317	0	0
VK3MIT	7056.500	V2750	QF33DP	00-23	PUBLIC	16373	271	0	0
VK3MIT	14103.500	V2750	QF33DP	00-23	PUBLIC	16373	271	0	7
VK3MIT	3577.500	V2750	QF33DP	00-23	PUBLIC	16373	271	0	0
VK3DPW	3579.500	V2750	QF21MQ	00-23	PUBLIC	16572	268	0	0
VK3DPW	7185.000	V2750	QF21MQ	00-23	PUBLIC	16572	268	0	0
VK3DPW	10145.000	V2750	QF21MQ	00-23	PUBLIC	16572	268	0	0
VK3DPW	14105.000	V2750	QF21MQ	00-23	PUBLIC	16572	268	0	6

Figure 8: Vara HF Channel Selector interface sorted by <Call Sign> to identify VK3DPW (Australia) on 14 MHz. Note that the Path Reliability Estimate and Path Quality Estimates are very poor.
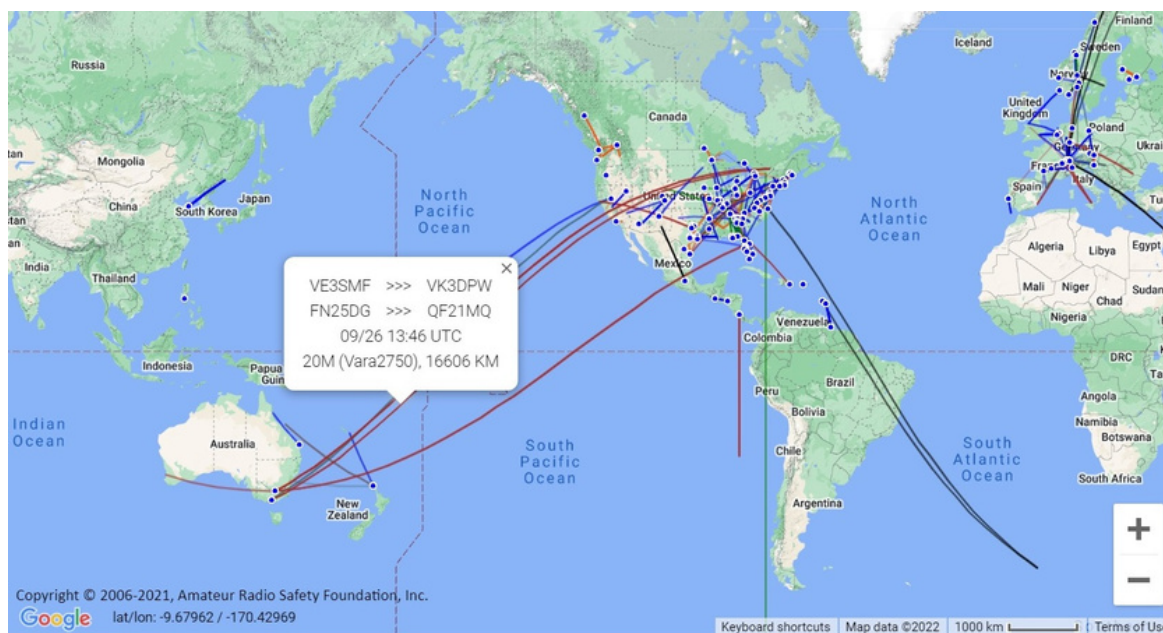

Figure 9: The Winlink.org live time RMS gateway map demonstrating a VARA HF connection of VE3SMF with VK3DPW on 20 m band September 26, 2022 using VARA 2750 and a distance of 16606 Km. VE3SMF operation conditions: Transceiver ICOM IC-7300 running 50 watts into a three element HF beam at 50 ft.

Keep in mind that most maps such as the above are based on "Flat Earth" model, and the lines connecting from Ottawa to Australia are distorted. The path from VE3SMF in Ottawa was with a beam heading of 270 degrees (North) and would have gone over the polar region and then back South towards Australia. On that day, VK3DPW was the furthest Winlink RMS gateway from my location. I had expected this path to be open, based on grey-line DXing principles.

It should be noted that VARA HF and VARA FM were developed for high-speed data use and also for low signal strength use. In the low signal connections that I have made, the RMS gateway can be just at or below the noise level and these modes are still able to transfer small e-mails at low speed. As long as the message gets through, 100 % copy, life is good.

Figure 10: Live Winlink System Information on Sunday 30-10-2022 of Packet RMS stations in the BC Vancouver area demonstrating the number of currently active Packet RMS gateways. The density of VHF Packet RMS gateways in the Canadian/USA border area and in the BC Interior should be noted. The major emergency services threats in BC and the USA area include earthquakes, tsunami surge, river floods, forest fires, political action, etc. The density of RMS Gateways in the costal areas reflects the relative risks.
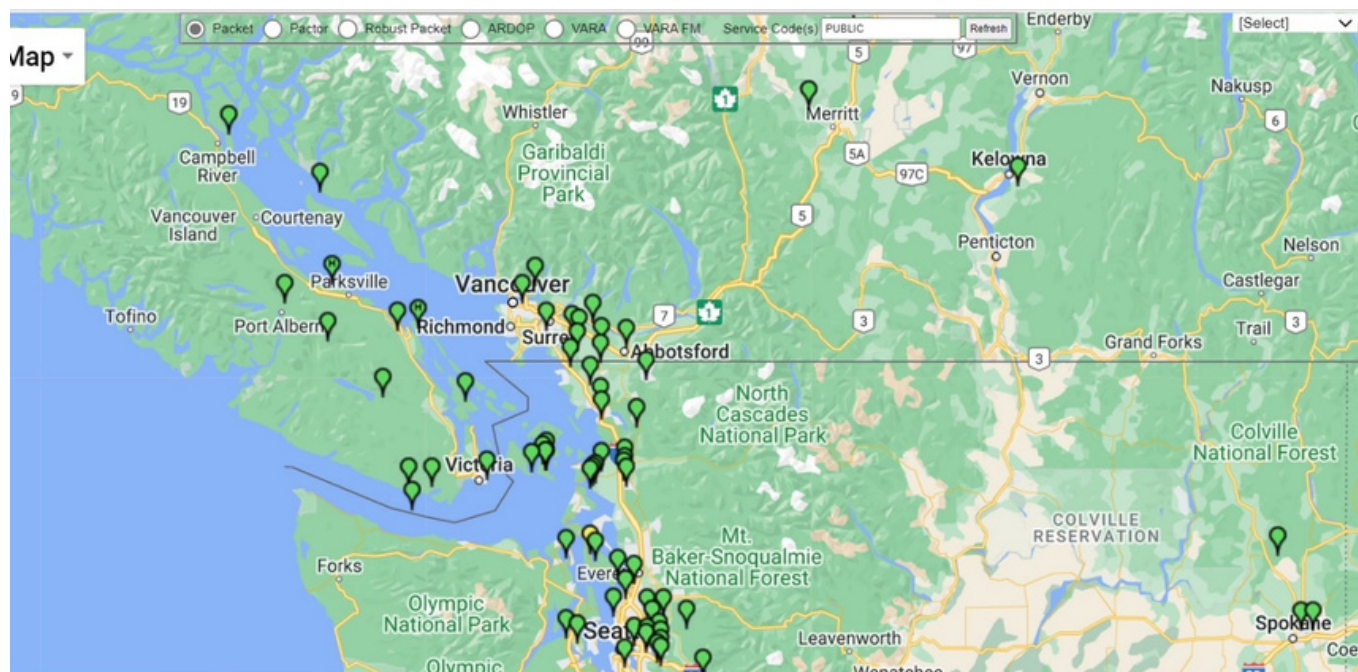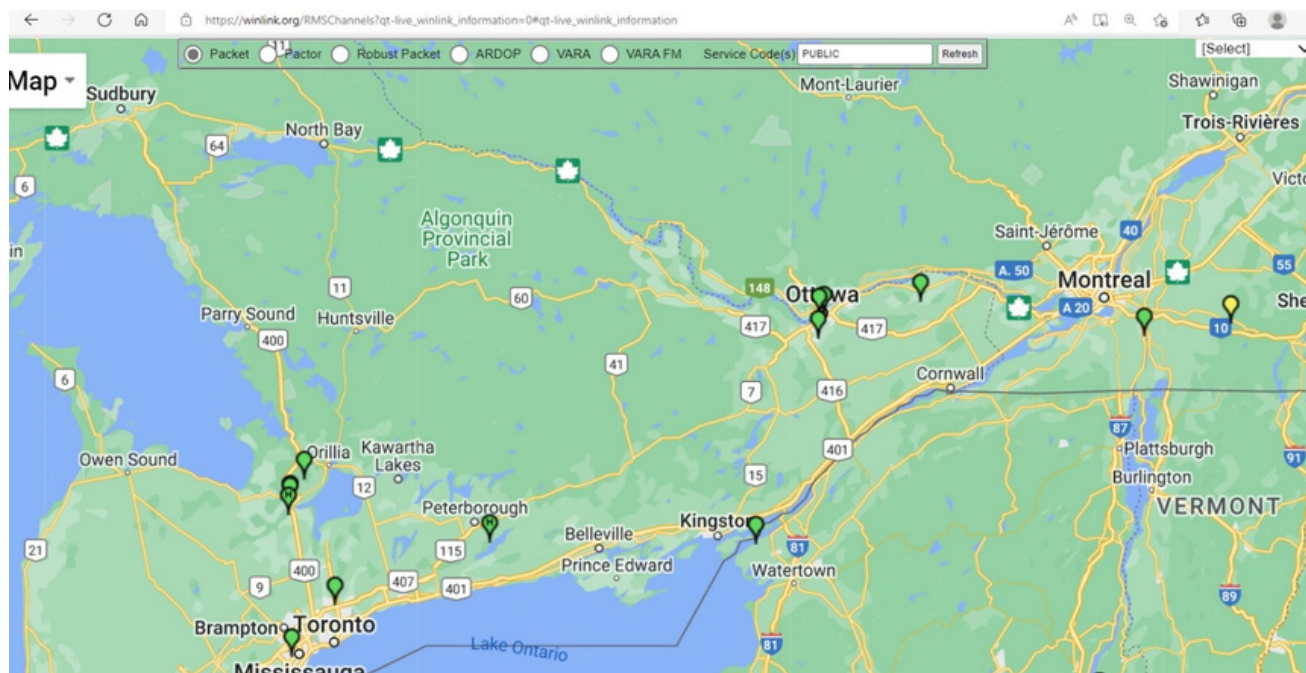
Figure 11: Live Winlink System Information on Sunday 30-10-2022 of Packet RMS stations in the Ottawa, GTA/USA border area demonstrating the number of currently active Packet RMS gateways. It should be noted that the density of VHF Packet RMS gateways is not vey significant considering this is one of the highest population density areas of Canada. The conventional argument in the National Capital Region (NCR) was that the City of Ottawa was prepared to handle any emergencies that may occur in the NCR. The conventional wisdom in Ottawa was that there was no need for amateur radio Auxiliary Communications Service. Recent events have demonstratedthe major emergency services threats in Ottawa now include earthquake, river floods, forest/grass fires, extended power outages, extended Internet outages, tornado damage, derecho (widespread, long-lived, straight-line wind storm), political action/disruptions, that all have the potential to overwhelm the City of Ottawa/National Capital Region (NCR). Note: this map is the same scale as Figure 10.

For further information on Winlink express please visit http://winlink.org and for Canadian information on the use of Winlink Express for the RAC Auxiliary Communications Service (ACS) please join the Canadian Winlink Operations Team whose goal is to facilitate training Canadian amateur radio operators in the use of Winlink Express to support local and regional mutual aid communications. main@RAC-ACS-Winlink-Net.groups.io | Home

If there is sufficient interest in the National Capital Region, I am willing to organize a series of Zoom Sessions aimed at the basic level required to Download the Winlink Express software, register your amateur radio call

sign, and send/receive radio based messages. The expectations that I have are that participants be willing to install this software on a PC Windows based system (Windows 7 or higher) and be willing to troubleshoot their own hardware.

With sufficient interest, I will organize a weekly Winlink Wednesday net where stations send a message to the Net Control Station (NCS) in a formal net setting used by the local Auxiliary Communications Service.

Stuart Fedak VE3SMF

- Member of the Canadian Winlink Operations Team
- Administrator of the Canadian Winlink Operations Team site main@RAC-ACS-Winlink-Net.groups.io
- Sysop of the local Ottawa VHF RMS gateway that operates dual mode using Packet Winlink and VARA FM on 145.030 MHz.

OVMRC Bulk Procurements

Several years ago, the club embarked on a program to procure certain items for club member projects and buy them in large quantity to leverage lower cost for the club member. The initial item was quality feedline for primary station set up, but over the years, the list has grown as a result of input from club members. The following list on the next page is what the club has on hand and the associated prices. Should your requirements exceed what we have on hand, additional bulk procurements can be actioned to fulfill your needs.

Placing an order can be started by sending an e-mail to ve3na@rac.ca identifying what you need. I'll work on the order and send a reply e-mail when it is ready for pick-up. The preferred payment method is by e-transfer to the club account. Alternatively, you can bring exact change at pick up and I'll deal with the transfer to the club account.
Additional items may be considered for the program providing the new item has broad interest in the club. This could also include a bulk procurement for a club project, especially if some custom or hard to get parts are involved.

Input is always welcome,
Barry, ve3na

Description	Qty Available	Cost
COAX		
RG 316 teflon	250 ft	$0.80 / ft
RG 58 U	550 ft	$0.10 / ft
LMR 195	650 ft	$0.80 / ft
LMR 400	115 ft	$1.40 / ft

Connectors

RG 316

	Qty Available	Cost
SMA Male	12	$3.00 ea
SMA Female	8	$3.00 ea
BNC Male	5	$3.00 ea
BNC Female	6	$3.00 ea

RG 58 U & LMR 195

	Qty Available	Cost
PL 259	19	$3.00 ea
SO 239	22	$3.00 ea
BNC Male	40	$3.00 ea
BNC Female	0	$3.00 ea
Type "N" Male	9	$3.00 ea
Type "N" Female	12	$3.00 ea

LMR 400

	Qty Available	Cost
PL 259	11	$3.00 ea
SO 239	12	$3.00 ea
Type "N" Male	9	$3.00 ea
Type "N" Female	9	$3.00 ea

Adapters

	Qty Available	Cost
SMA Female to PL 259	3	$5.00 ea

Toroids

	Qty Available	Cost
FT 114-43	68	$1.50 ea
FT 140-43	8	$3.30 ea
BN-73-202	8	$1.00 ea

OVMRC Net Activity, Check-ins for October, 2022.

Prepared by: Hugo Kneve, VE3KTN

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

October 6	October 13	October 20	October 27
VE3KTN - NCS	VE3KTN - NCS	VE3KTN - NCS	VE3KTN - NCS
New & Visitors	**New & Visitors**	**New & Visitors**	**New & Visitors**
	Don – VE3PM Bob – VE3DE		
General Check-ins	**General Check-ins**	**General Check-ins**	**General Check-ins**
VE3RUU	VE3RUU	VE3RUU	VE3RUU
VE3LAF	VE3ZZU	VA3LUI	VE3YY
VA3PSI	VE3OKD	VE3OKD	VE3NA
VE3NA	VA3LUI	VE3SYZ	VE3KAE
VE3LC	VA3GFY	VE3ENU	VA3IAH
VE3KAE	VE3NA	VE3NA	VE3LC
VA3IAH	VE3LC	VE3LC	VA3HBL
VA3GFY	VE3KAE	VE3KAE	VE3NPO
VE3ZZU	VA3IAH	VA3IAH	VA2BBW
VA3GLB	VE3VIG	VA2BBW	VA3CSG
VA3TXL	VE3NPO	VA3CSG	VE3LBU
VE3LBU	VA3HJR	VE3LBU	VA3WEX
VA2BBW	VA2EV	VA3EO	VE3VIG
VE3VIG	VA2BBW	VA3WEX	VE3DE
VA3WEX	VE3LBU	VE3OTW	VE3ZZU
VA3EO	VA3GLB	VE3ZZU	VE3KJQ
	VA3WEX	VE3KJQ	VA3GLB
	VE3RXH	VE3VIG	VA3HJR
	VE3LAF	VA2EV	

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

October 2 SFI:148 A:3	October 9 SFI:157 A:12	October 16 SFI:115 A:18	October 23 SFI:105 A:27	October 30 SFI:134 A:20
VE3XRA - NCS	VE3EJJ - NCS	VE3XRA - NCS	VE3EJJ - NCS	VE3KTN - NCS
New & Visitors	**New & Visitors**	**New & Visitors**	**New & Visitors**	**New & Visitors**
		Scouts HQ - VE3SHQ Rudy - VE3RZU		
General Check-ins	**General Check-ins**	**General Check-ins**	**General Check-ins**	**General Check-ins**
VE3EJJ VE3RXN VE3YY VA3PSI VE3KTN VE3LC VA3BGO VE3NPO	VE3BAE VA3QV VE3XRA VA3EO VE3KTN VE3NPO VE3LC VA3PSI VE3YY	VE3CWM VE2WAB VE3LC VE3EJJ VA3BGO VE3YY VA3PSI VA2EV VA3IAH VE3SYZ VE3KTN VE3OWV	VE3LC VE3YY VA3PSI VE3RXN VA3IAH VE3KTN VE3NPO VE3XRA VE3SYZ VA3TXL VE3CWM	VE3KAE VE3LC VE3XRA VE3SYZ VE3RXN VA3BGO VA3PSI VE3YY VE3NPO VE3CWM VE3OWV

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.

Editor's Note:

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 editor@ovmrc.ca
73, Alan VA3IAH