Rambler

Newsletter of the
Ottawa Valley Mobile
Radio Club
Incorporated

Volume 64 Issue 6 — February 2022 Page: 1

President's Ramblings

Let it snow!

Wow, did we ever get a load of snow at the end of a freezing January, and yet more snow and freezing temperatures at least for the beginning of February. I for one was glad I didn't have to drive to an in-person meeting in January. *(I think I just said: "for once I appreciated a Zoom meeting.")* One day, I hope we can get together in person again, although it is not yet in the cards.

I must send out a big thanks to Hugo, VE3KTN for his presentation on demystifying the end fed antenna and related radiation patterns. The presentation stimulated much commentary during the discussion that followed the presentation. Well done, Hugo.

There was a bonus presentation by Georges-André, VE2VAB regarding the upcoming Québec QSO Party. We'll be reminding club members from now until the upcoming April contest, to participate, if possible. I also noted that in the January ARRL newsletter, the Québec contest received an honourable mention. I always keep an eye out for anything Canadian mentioned in any form of ARRL print. (just a little pride there!)

I want to remind club members that it is never too soon to start planning for another DIY Field Day. We will review this as we get closer to the June AGM. *(think QRP, battery power, and some solar, for maximum multipliers)*

Since many club members are up to some very interesting projects, don't be shy about writing something up for the Rambler, and maybe even a club presentation. You can always contact Alan (Rambler editor) VA3IAH@RAC.CA for some guidance. Further to this, I'm finalizing some orders for toroid cores (FT 114-43 for wire wound, FT 140-43 for coax wound (RG 316) and maybe just a few FT 240-43 (large enough for line cord or larger coax)). These items *(i.e.: the hard-to-get project component, at a reasonable cost)* along with the RG316 will be offered to club members, in good standing, at subsidized pricing for your projects. *(another club membership bonus)*.

There is still more: I'm preparing the orders for the year end door prizes I talked about in last month's Ramblings. OVMRC: the club that gives back to the membership!

That's it for my February Ramblings. Everyone is invited to join the OVMRC February Zoom meeting Wednesday, February 16. Check in will start at the usual ~ 6:45 PM with a start time as close to 7:15 as possible. *(Continued on page 4)*

INSIDE

Notice of Meeting

Wednesday Feb. 16th 2022
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;
- Chairperson Reports;
- Feature Presentation: Les Brown, VE3NNT - Remote operations and contesting
- Announcement of the Québec QSO Party - Georges-André, VE2VAB
- Meeting adjournment to be followed by 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
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Alan Hotte, VA3IAH
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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 Repeaters

VE3RAM

Limited coverage to
Orleans and East Ottawa

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

VE3TWO

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

Special Event & Field Day Call Sign

VE3JW

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

Submit articles and notices to:

Alan at va3iah@rac.ca

OVMRC Affiliations

Informal Amateur Radio Restaurant Gatherings
(All Cancelled until Further Notice)

- **QCWA Chapter 70** breakfast gathering every **Tuesday** morning at 7:30 to 1000 AM, Summerhays Grill, 1972 Baseline Rd., Nepean

- **Orleans Coffee gathering** every **Friday** morning at 900 AM, McDonalds, 2643 St. Joseph Blvd, Orleans

- Q**RP 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)

Local Weekly Nets
(all check-ins welcome)

- **Rubber Boot Net**, VE3OCE 146.880 MHz (-)136.5 Hz tone mornings at 7:30 AM conducted by Roger, VE3NPO

- **Pot Hole SSB Net,** 3760 kHz, every Sunday morning at 10:00 AM conducted by Ernie, VE3EJJ, or Glenn, VE3XRA.

- **Pot Lid Slow Speed CW Net**, Sunday night, 7:30 PM, 144.095 MHz., vertical polarization.

In response to interest, co-controllers Hugo, VE3KTN and Norm, VE3LC have kicked off a re-launch of the Sunday evening Pot Lid Net in its 48th season for accomplished and budding CW operators. A permanent net control station is being sought who can dedicate time as a Net Control Station each Sunday night.

- **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 800 PM.

- **Champlain Mini Net**, VE3STP 147.060 MHz -, (114.8 Hz tone), held Monday through Friday at 700 PM.

- **Upper Frequency Net**, Simplex 144.250 MHz using USB, Tuesday evenings at 900 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

- **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,

(Continued from page 1)
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 new member). Guests wishing to attend can submit a request to the Zoom custodian (see above) and joining credentials will be sent to you.

73
Barry, VE3NA

OVMRC Condolences

On behalf of the OVMRC membership, the OVMRC executive express our deepest sympathies to Ernie, VE3EJJ on the loss, this month, of his wife Erma on February 2nd. Ernie please know that your fellow radio enthusiasts care and support you. 73, from all of us at the OVMRC.

Meeting Minutes for January 19, 2022

Date / Time: Wednesday, January 19, 2022 @ 19:15

Location: Via ZOOM on line meeting

1. Call to order:

President Barry Allison, VE3NA called the meeting to order at 19:16. There were 60 official check-ins.

2. Greetings:

Barry, VE3NA extended greetings to everyone for this first meeting of 2022 including visitor and guest speaker Georges-André Chaudron, VE2VAB, Associate member Shirley Rivard, visitors David Lapp, VE3LHO, James Poulin, VA3JPX, and Luc Pernot, VE3JGL and guests Kyle Knobloch, Raymond Perrin, and Brent Timmons.

3. Approval of minutes from previous meeting:

MOTION: Moved by Bill Henderson, VA3HWA and seconded by Pat Warner, VA3LTN that the minutes of the meeting held Wednesday, November 17, 2021, be approved.

VOTE: No Objections.

CARRIED.

4. Projects, Haves, Wants and Announcements:

A) Haves: Mike Kennedy, VA3TEC has ladder line available for anyone. Contact Mike at godtec@hotmail.com Don Booker, VA2EV has Samsung 4-ohm speakers available. Contact Don at VA2EV73@gmail.com. Roger Egan, VA3EGY is planning a build of about 10, 20 metre Slim Jim kits. Interested members may contact Roger at VA3EGY@gmail.com.

B) Wants: Norm Rashleigh, VE3LC is looking for a Raspberry PI 2 or 3 for an All-Star node. Barry Allison, VE3NA may be able to help. Roger Egan, VA3EGY is looking for satellite TX and RX parts and a G5500. Contact Roger at VA3EGY@gmail.com.

5. Agenda and Meeting Content:

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

- **Feature Presentation:** Hugo Kneve, VE3KTN – 4Nec2 Antenna Modeler and Analyzer Software for modelling the End Fed Wire Antenna. https://www.qsl.net/4nec2/

As several members are using End-Fed antennas, Hugo presented reference material used when modelling various configurations of half-wave end-fed antennas. It particularly goes into detail on high ratio RF transformer design and construction. Links to commercially available end fed antennae are also included. The reference material was created by Steve Dick, K1RF and is available at http://www.gnarc.org/wp-content/uploads/The-End-Fed-Half-Wave-Antenna.pdf. The

information can also be accessed on the OVMRC groups.io page.

- **Quebec QSO Party:** Georges-André Chaudron, VE2VAB – Barry, VE3NA introduced Georges-André who presented the details for the first ever, Quebec QSO party happening on Sunday, April 17, 2022 from 08:00 to 15:00 EST. This event is teamed up with the Ontario QSO Party on the same weekend in April, to take advantage of the synergy between the two provinces. The goal is to bring new people into 'contesting' and create a rewarding experience for all amateur levels. Logging software N1MM already includes the QCQP. The event will take place on the 80-40 and 20 metre bands. The website is up and running so for more information go to https://wp1.quebecqsoparty.org/

- **Chair Reports:**

Financial Report and Membership - Nicole Boivin, VE3GIQ:

Highlights of the financial summary include:

$27,300 approximately in the bank account, including cash; 123 Memberships are active. Approximately $13,000 will be invested from the bank account into a suitable interest paying investment, to be announced. Club donations as per the budget will be doled out soon. Nicole is looking for an expression of interest by members for a presentation on self-Investing your retirement funds. This would be a separate Zoom meeting. Please contact Nicole at VE3GIQ@rac.ca.

Net Operations: Hugo Kneve, VE3KTN –The latest Nets Summary can be found in the Rambler. Hugo advised attendance is up on the 80 metre and 2 metre nets as we go into 2022.

Transmitter Hunting: Roger Egan, VA3EGY updated the local program, which includes an upcoming evening fox hunt for the scouts. One per month is planned. In the IARU Region 2 "Youth on the Air' program, Harrie Jones, VA3HMJ helped with providing two call signs for use by an Oakville youngster and another out west. Funding is available to support the amateur Youth effort and would aid the purchase of 80 metre gear and support youth in geo-'foxing'. Funding would also allow the purchase of FRS radios for public events. There is a Youth Camp in Ohio for young amateurs this year and Hamcation will be followed on line this year for their Youth programs. Members can keep up with these activities on the ARDF website (ARDFOTTAWA.ca).

Canadian Ski Marathon: Neil Herber, VE3PUE advised the Ski Marathon is virtual only and will be held between February 5 and March 21.

Rambler: Alan Hotte, VA3IAH welcomes any and all submissions for publication in the monthly newsletter. Many design changes are taking place and he is contemplating a design suitable for the visually impaired. Please contact Alan at VA3IAH@rac.ca with your article and ideas.

All Star digital node: Norm Rashleigh VP, VE3LC - Norm is working to establish a node through either of the two repeaters for analogue FM. This is a work-in-progress and Norm will update regularly.

6. Upcoming contests:

For more detailed information on upcoming contests, see the WA7BNM contest calendar: https://www.contestcalendar.com/

RAC Members can login and go here:

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

ARRL Members can log in and go here:

http://contests.arrl.org/

7. Adjournment:

MOTION: Moved by Hugo Kneve, VE3KTN to adjourn the business meeting at 21:20.

8. Next meeting:

The next monthly meeting of the OVMRC will be held via Zoom Wednesday, February 16, 2022 at 7:15 PM.

Minutes recorded and prepared by Secretary, Ron Smith, VE3LBU

End-Fed Wire Antenna: A Brief Analysis

Hugo, VE3KTN

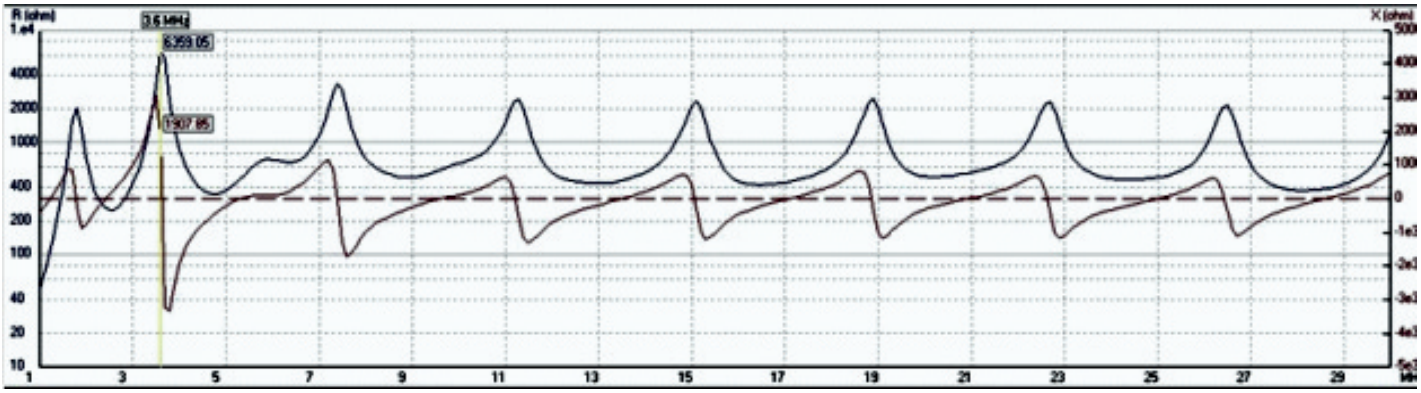
In response to interest expressed after I gave a presentation on the NEC analysis of the end-fire wire antenna at the OVMRC January meeting, this article summarises that presentation and its more important findings.

Many OVMRC members have tried various forms of end-fed half wave wire antennas, both commercially built and home brew, and have said that these antennas provide for an acceptable impedance match at not only the fundamental operating frequency, but also at harmonics. While a good match is welcome, it is also instructive to know what happens to the radiation pattern as one operates at the harmonic frequencies. The variation in radiation pattern was, and is, the main point of my investigation but I will lead off by making some observations on impedance. All results are obtained from the "4nec2" software package, published by Arie Voors and freely available from the internet at: https://www.qsl.net/4nec2/.

One of the first things I found out about the end-fed wire antenna (EFW) is that it really ought to be operated against a counterpoise wire having a length of at least 1/4 wave at the lowest frequency of operation. It is interesting that how the counterpoise lies on the ground doesn't really make a great deal of difference to either the impedance or radiation pattern, but it is important in rigorously establishing those characteristics. Trying to feed an EFW against earth, say by tying a feed point
un-un “ground” connection to a grounding spike will work to a certain extent, but it is dependent on the conductivity and dielectric constant of the soil. An EFW fed against an earth ground may work fine upon installation, but could very well change impedance after a soaking rain or as earth conditions change across the four seasons.

Impedance

Here's a look at the impedance predict for an 80 metre band EFW, plotted from 1 to 30 MHz.



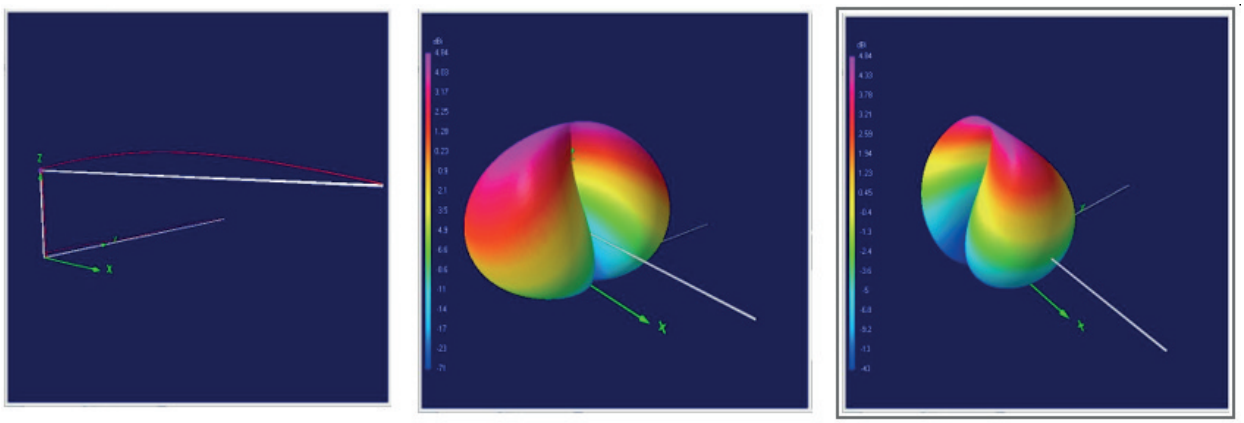
It can be seen immediately that there are a series of well-defined resonance points, where reactance is at zero ohms, at harmonics of the fundamental design frequency of 3.6 MHz., but that there are two distinct groups of similar resistance and slope of reactance. The resonances at 3.6, 7.2, 11.1, etc. MHz. are points where the EFW is operating with a voltage feed.

The other resonances where the reactance slope is much gentler are points where the EFW operates with a current feed. In brief, it is not recommended to operate the EFW at the current resonance points because, (a) high currents at the feed point risk saturating the matching transformer core(s) and (b), there is substantial current going to the counterpoise resulting in a severe degradation of radiation pattern.

Radiation Pattern

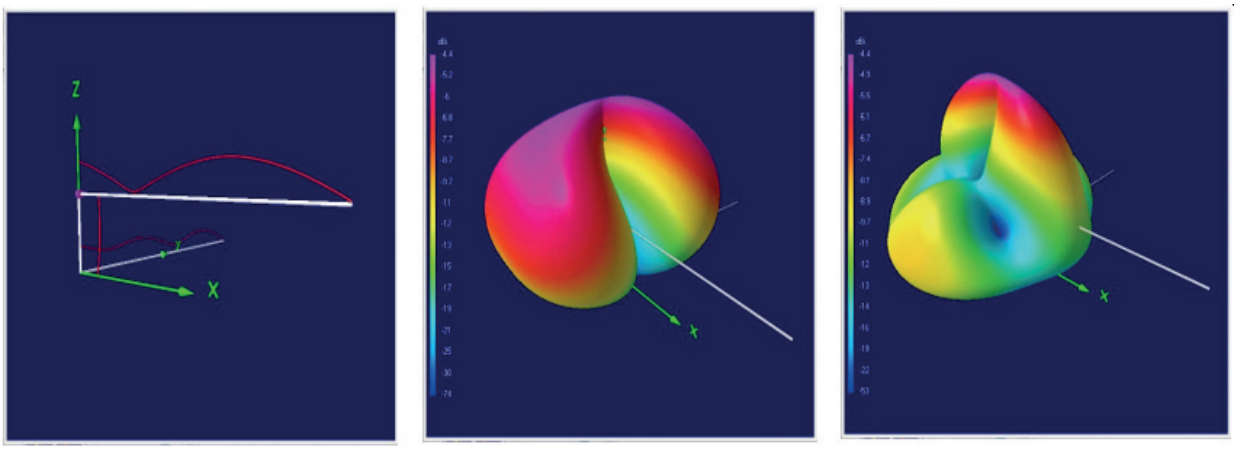
Following are illustrations of the predicted radiation pattern for the first 3 resonance points of 3.6, 5.1 and 7.2 MHz.

3.6 MHz.



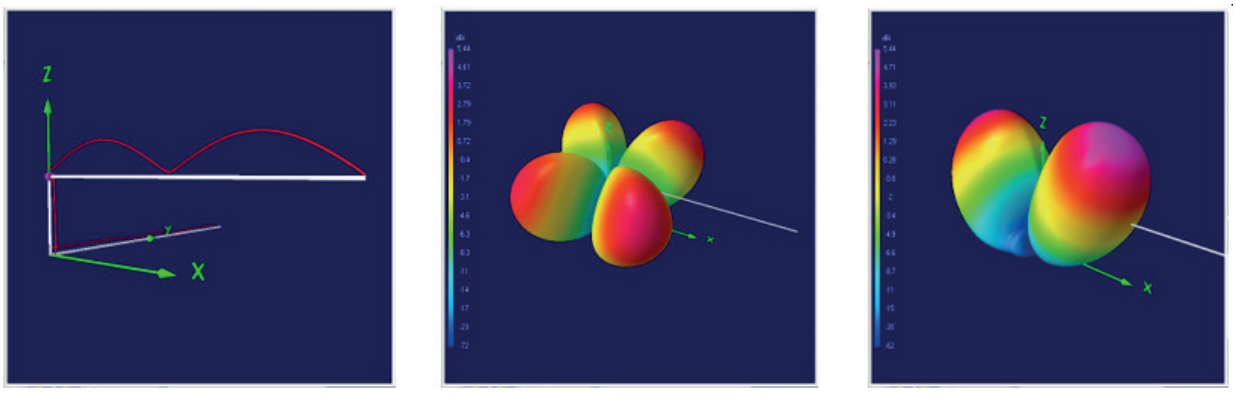
Currents **H-Pol** **V-Pol**

5.1 MHz.



Currents **H-Pol** **V-Pol**

7.2 MHz.

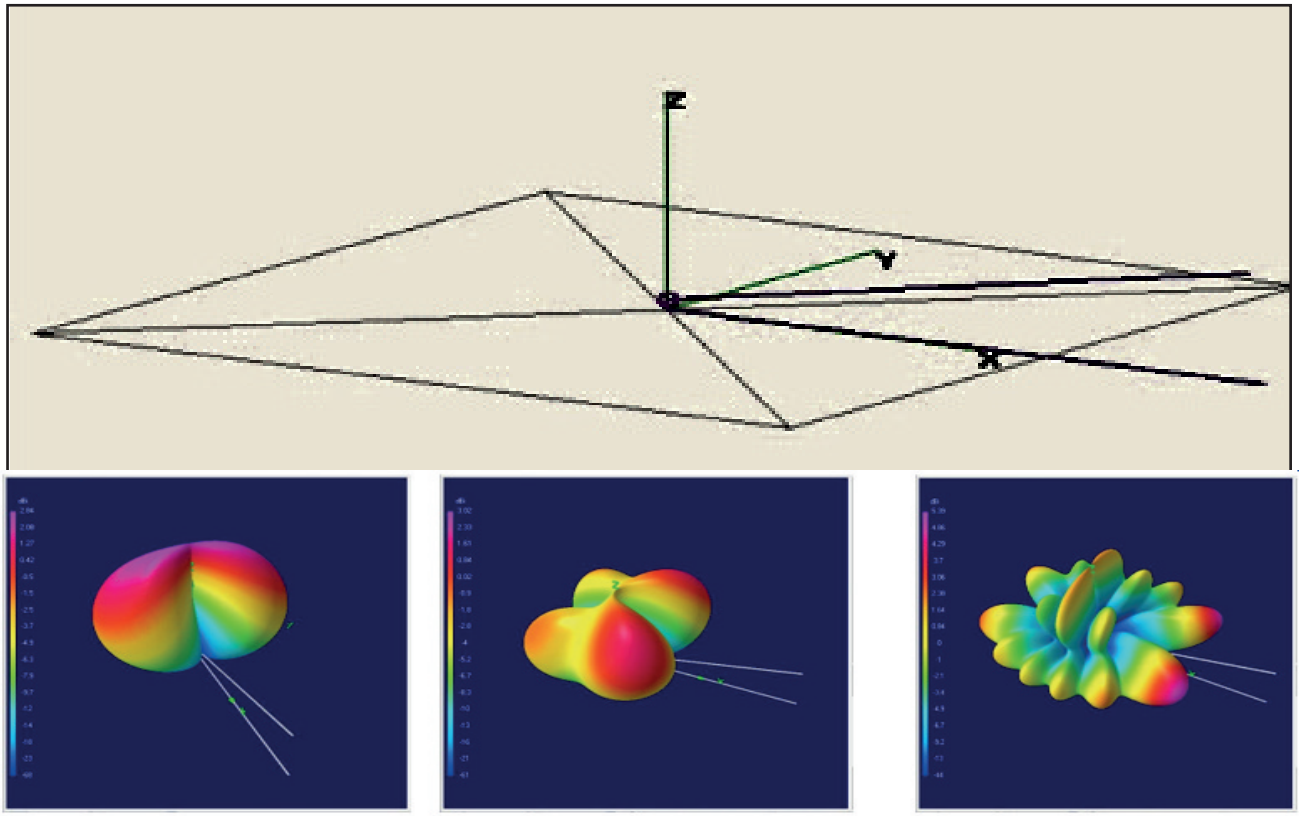


Currents **H-Pol** **V-Pol**

We see from the graphics for 3.6 and 7.2 MHz. that these are voltage-fed configurations with a corresponding current null at the feed point. The resulting patterns are commensurate with what one would see with a conventional centre-fed dipole.

The story with the current distribution and radiation pattern at 5.1 MHz. is quite different though. One sees that the feed point current is at a maximum and that while the H-pol pattern isn't too badly distorted, that's certainly not the case for V-pol. Additionally, the peak directivity at 5.1 MHz. in both H- and V-pol is very poor at -4.4 dBi., whereas the peak directivities at 3.6 and 7.2 MHz. are +4.8 and +5.4 dBi. respectively.

Lastly, to address my initial motivation in doing this analysis, to see what happens to the radiation pattern with operation at increasingly higher harmonic frequencies, I modeled a “sloper” configuration where one end of the radiating element was fed close to ground and the other end elevated.



80 m. H-pol 40 m. H-pol 15 m. H-pol

It's interesting to see the progression of peak directivity orientation moves from high takeoff angle and broadside to the wire at the fundamental and second voltage harmonic to a low takeoff angle and in-line to the wire at the sixth harmonic. The preference of directivity maxima toward the wire's elevated end is a consequence of the sloper configuration; with a conventional "flat top" end fed wire, the pattern would be more symmetric with equal intensity lobes on both sides and ends of the wire.

That's about it folks, I don't have any other conclusions beyond the observations already given. I hope this is of some help to EFW users when planning their installations. I would also strongly recommend downloading the treatment on EFHW wire antennas construction by Steve Dick, K1RF, from:

http://www.gnarc.org/wp-content/uploads/The-End-Fed-Half-Wave-Antenna.pdf

73,
Hugo, VE3KTN

Everything the wrong way, yet here I am – a CW journey

JD VA2OJD

"Would you consider writing up a little piece about your journey towards CW?" he asked. My reaction was a bit like “that doesn't really make for polite conversation”. Yet here I sit, before my keyboard, words and imagery a-flowing through my head. I shall do my best to keep this polite.

Have you ever had to read out loud the word BLUE written in bright red letters? The brain sees one thing but wants to say another. Confu-sion; imagine if one day someone decided to change the sound of all the letters of the English alphabet but didn't change the spelling of the words. Indeed.

Such is Morse code. But it isn’t Morse’s code at all, though, is it? Apparently it’s actually Vail’s code, but we call it Morse code. It’s all very Orwellian and thus perfectly apropos of the confusing reality of this CW stuff.

Before I digress too far, like many before me, I first memorized the dots and dashes assigned to each letter and number. I went through on-line exercises, hours at a time, cramming through the entire A-Z, 1-0 freebie version of any tools I could find. I burned through reams of scrap paper copying endless random sequences of 5 and 6 letter gibberish. Then I would drop it for months, then pick it up again and go through all those exercises again, trying to visualize the letter when hearing the sound.

This cycle of cramming, dropping, cramming, dropping went on 3 or 4 times over the course of year. Each time I kept wondering "Why bother?" Only very recently did I discover a You Tube video on learning CW with a title something along the lines of ‘If I could do it all over, here's how I would do it’. Interestingly, my path fell quite fully under the “Whatever you do, DON'T do that!” section of his video.

Huh. Do NOT memorize the dots and dashes. Focus only on the sound and retrain in your brain that this is how the alphabet was supposed to sound the first time around. Do NOT use pen and paper - train your ear to hear the new pronunciation for those old letters. Really? Who is not going to look when told not to look?! So, again, it’s awful Orwellian to try to convince someone the letter 'A' is pronounced 'dit-dah'.

Say it’s not so! The one thing I did do that fell within You Tube’s "SHOULD DO" advice was to get on the air. And here I must apologize to all. To paraphrase a line from a book close to my heart, I was like a child, trapped by his own bravado.

For better or for worse, a year after I began, I am copying with a brazen but fragile confidence at about 15 / 7 Farnsworth speed. So I very vocally supported the idea of a 2m CW net. I started a few live CW exchanges with a fellow ham. And most recently I told listeners on two different local nets that I would be trying to call CQ at noon weekdays on 2m. Can't go back, too afraid to go forward. Trapped by my own bravado.

What else am I to do, really? I know all the sounds, all the letters and numbers by their new pronunciation - except when I don't, of course. And that only seems to happen on air.

So here is where I feel a teensy bit qualified to offer a wee dram of advice. I have had the honour of learning 4 languages on top of English and becoming quite proficient in a short period of time. I have a secret weapon in learning languages: You cannot be afraid of making mistakes.

And those whose language you may be butchering are driven to embrace your mistakes because it quickly becomes apparent that those mistakes are proof of your interest in their language. Mistakes become a celebration of the path you will get to share with them. Embrace it as part of the fun of learning.

Your dit-dit-dit-dit-dit-dit-dit-dit is not the sound of failure – Consider it the sound of new adventures to come.

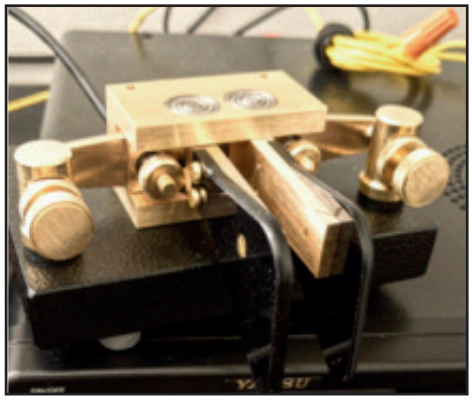
But you may still be hung up on WHY EVEN BOTHER? I can only answer by saying I have lived some pretty harrowing experiences in my international career, including at the working end of handguns, machine guns, and even being mugged by drunken police. Yet I am still here to talk about it.

What I am saying is I don't easily get excited. But after my first CW QSO, despite being pre-arranged, despite having a decoder as a crutch - well, I was fist-pumping the air the entire day. After my first CW net I was just so jazzed I couldn't sleep that night. I couldn't sleep! Hauled off a plane in the middle of no-where Indonesia at the convincing end of a machine gun, passport taken, stuffed into a holding cell? Slept like a baby. CW net? Damn! I had chills. I was buzzing.

Hearing dits and dahs and suddenly there it is – a word is sitting in your conscious mind from a mental echo of a foreign sound? It's almost indescribable.

So why bother? Well, in the end I still can't really say. The reward is intangible. The reward is kind of unknowable, until it whispers itself in your head.

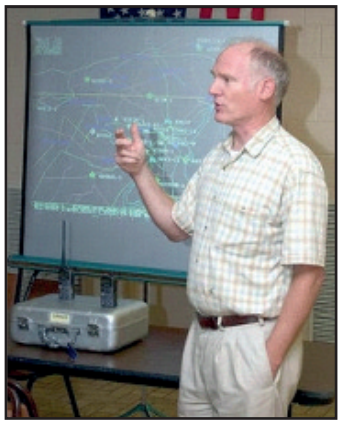
73,
JD, VA2OJD



APRS Developer, Bob Bruninga, WB4APR, SK

The father of the Automatic Packet Reporting System (APRS), Bob Bruninga (WB4APR), died on February 7, he was 73. Over the years, Bruninga readily shared his broad knowledge and experience in APRS and other topics in the amateur radio and electronics fields.

What became APRS had its origins in 1982, when Bruninga wrote his first data map program that plotted the positions of US Navy ships for the Apple II platform. A couple of years later, he developed what he called the Connectionless Emergency Traffic System (CETS) on the VIC-20 and C-64 platforms for digital packet communications to support an endurance race. The program was ported to the IBM PC platform in 1988 and was renamed APRS in 1992. The recognized North American APRS frequency is 144.39 MHz and APRS is linked globally via the internet. Bruninga founded the Appalachian Trail Golden Packet event, which fields APRS nodes from Stone Mountain in Georgia to Mount Katahdin in Maine each July.



ARRL Contributing Editor Ward Silver, N0AX remembered Bruninga this way:

> *"Bob kept pushing APRS beyond its origins as a position reporting system. He developed and helped implement numerous other uses of APRS in support of what has become the 'Ham Radio of Things,' with great potential for future amateur radio applications. Bob's far-reaching vision and imagination were as good as it gets."*

For more on the work of this radio innovator, please see http://www.aprs.org/. This tribute to WB4APR was adapted from the ARRL Letter for February 10, 2022.

73
Alan, VA3IAH

Canadian Table of Frequency Allocations: Consultations on proposed revisions

Norm, VE3LC

For those amateurs that may be interested, Innovation, Science and Economic Development Canada (ISED) are consulting on the proposed revisions to the Canadian Table of Frequency Allocations (CTFA).

https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11746.html

This public consultation is issued before final decisions are made by ISED for the release of the Canadian Table of Frequency Allocations (CTFA), 2022 edition, in keeping with the recommendations of the last World Radio Conference (WRC) hosted by Egypt in November 2019. The OVMRC doesn't see anything of consequence relative to amateur service allocations that would be worthy of comment in the proposed revisions. At the represent time, the release of a revised issue of RBR-4 "Standard for the Operation of Radio Stations in the Amateur Radio Service" is still pending which should authorize the use by Canadian amateurs the 472 to 479 KHz allocation (using up to 100 Hz emission bandwidth) and the 15 KHz allocation of 5.3515 to 5.3665 MHz (using up to 2.8 KHz emission bandwidth). These two allocations resulted from the 2012 and 2015 WRCs respectively and are currently included in the 2018 edition of the CTFA.

https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf10759.html

The release of an updated RBR-4, besides the new 60 M allocation of 15 KHz, should also maintain the use of the existing four fixed spot frequencies of 5.332, 5.348, 5.373, and 5.405 MHz. Amateurs should note that the fifth spot frequency used for many years at 5.3585 MHz and heavily used for FT8 activity, is in the middle of the new 15 KHz allocation. It remains to be seen how the new expanded allocation will be used by the amateur community. As part of the consultation on the proposed revisions of the Canadian Table of Frequency Allocations, 2018 Edition, the OVMRC sent a letter of comment that the new 15 KHz 60 metre allocation should be authorized for 100 watts RF power usage instead of the 15 watts Effective Isotropic Radiated Power(EIRP) that was proposed by ISED. This proposal was accepted by ISED and appears in CTFA. Please see the OVMRC letter of comment which can be accessed through the link below.

https://www.ic.gc.ca/eic/site/smt-gst.nsf/vwapj/smse-005-17-ovmrc-comments.pdf/$FILE/smse-005-17-ovmrc-comments.pdf

Norm ve3lc@rac.ca

DMR Notes:
Getting more from SMS

Alan VA3IAH

As serendipity would have it I recently heard about a DMR net called the BC-DMR-Net on Talk-Group (TG) 20371 which runs at 2300 eastern on Friday nights. This net provides a kind of on-air help-desk for the challenges and questions about getting up and running with DMR, operating conditions and general DMR chat from across BC and beyond. The Net also has an excellent web page, listed below, with various DMR resources and commentaries. Given the interest in DMR in the Ottawa area perhaps consideration should be given to establishing a similar on-air net here in the Ottawa area dedicated to DMR on a local DMR repeater on TG-2 or TG-9.

I'm a couple of years into my DMR journey, largely thanks to Norm's (VE3LC) club presentation and foundational overview on DMR in the September 2020 issue of the Rambler. Every once and a while I dust off my binder of DMR notes – yes there is a binder - and try to explore another feature or two of my DMR radio which I haven't yet explored.

I noticed a resource on the BC-DMR-Net's web page with the title of "Can we send SMS over DMR?" which piqued my interest and out came the DMR resource binder and a few additional pages of notes were generated!

My first discovery, described in the resources below, was of what Brandmeister calls "SMS Service numbers and functions". This presents the possibility of obtaining weather information by sending a certain sequence of commands in SMS to service number 262993, which for example might look like WX Ottawa, CA or METAR CYOW or sending the WX command with

properly formatted decimal GPS coordinates.

The second function that caught my eye was the SMSC function at service number 262995. This function, when configured (more on that to follow) allows two key functions, the first being to send emails to call signs (such as VA3IAH) rather than using unique user identifiers in DMR, known as CCS7 IDs. This function holds the potential to send messages such as <VE3LC> <Hello Norm what TG are you on?>. In addition to using call signs Brandmeister also allows for a store and forward capability. This allows user to query and retrieve their SMS messages in their inbox after being off the air. This functionality was described as being akin to an old packet BBS, but with DMR!

The third service number and function that captured my interest was an SMSGTE function at 302999 for Canada, which enables the possibility of sending a DMR text to a smart phone. The SMS for this function would generically look like SMSGTE @<phone number><message text>. This function, is a fledgling service that attempts to bridge the gap between APRS and SMS providing a means of reaching people in areas not covered by cellular services. Currently there are about 6000 users of this service. More on this function can be found in the links below. This function required APRS to be configured on your DMR radio, more on that in a follow-up DMR Note.

The place to start with configuring these SMS functions is your DMR phone's programming software in the section of the software dedicated to SMS, which on my Alinco DJ-MD5GPS software appears on a tab labelled "Digital Fun"! The settings to examine are identified in the links below and also include the necessary changes that need to be made in your Brandmeister dashboard. If any of these SMS service number functions are of interest, hopefully this will launch you on your own exploration of some addition DMR digital fun!

73, Alan, VA3IAH

Reference Links:

https://bcdmr.wordpress.com/

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

https://bcdmr.wordpress.com/2021/08/20/can-we-send-sms-over-dmr/

https://news.brandmeister.network/new-textcapture-feature-the-sms-store-and-forward-service-you-can-now-enable-in-your-self-care/

https://smsgte.org/

QSO Confirmation on LOTW

Joe VE3EUS

At the beginning of February, 2022, there were some 155,000 registered users from around the world with the American Radio Relay League's Logbook of the World (LOTW). The early adoption and the continuing growth of LOTW as the pre-eminent repository of amateur logs have made it an undisputed success. And in the generous spirit of much of the hobby, it's free to use.

I was curious to learn how reliable claims of LOTW usage made by amateurs on their QRZ.COM webpages are in predicting confirmations in LOTW. Further, I wanted to know how rapidly after a QSO amateurs might be expected to confirm their contacts in LOTW.

QRZ.COM as a Predictor of Confirmations on LOTW

First, I looked into claims made by amateurs on QRZ.COM with respect to LOTW.

Some QRZ.COM pages claim that their owners use LOTW, some pages claim that their owners don't use LOTW, and some pages are silent on the subject.

After completing each of the QSOs that I made in 2020 and in 2021, I collected data from QRZ.COM on what the stations worked claimed about their usage of LOTW. I entered those data into an Excel database. I did not want to bias my analysis. Therefore, prior to attempting a contact, I did not select potential QSOs partners on the basis of the claims they made on QRZ.COM with respect to LOTW.

Then, at the end of December 2021, I downloaded my QSO and QSL data for 2020 and 2021 from LOTW. I entered those data as well into my database. I then used the data from LOTW in conjunction with the data that I collected from QRZ.COM for my subsequent analysis.

Based on my analysis, the probability of getting a confirmation from stations that claim, on their QRZ.COM pages,

that they use LOTW is over 82%. For those stations that are silent in QRZ.COM on their usage of LOTW, I received a confirmation 43% of the time. For those that claim that they don't use LOTW, I still received a confirmation 21% of the time. (Table 1). These results are based on 4,338 QSOs and 2,921 confirmations in LOTW over the period March, 2020 through December, 2021. During that period of time, my confirmation rate was over 67% of QSOs, a rate slightly higher than my long-term rate of 65% since I started using LOTW. QSOs in 2020 and 2021 were made mainly on FT4, FT8, CW and RTTY.

From my analysis, it's clear that claims made on QRZ.COM pages by some amateurs about their LOTW usage differs substantially from their actual QSL behaviour. Nonetheless, overall, these pages are a useful tool in predicting confirmations, even from those who do not specifically claim to use LOTW.

Delay in Obtaining a Confirmation on LOTW

Second, I looked at how long it takes after a QSO to get a confirmation in LOTW. I used my QSL and QSO data for 2020 and 2021 downloaded from LOTW into my database to calculate the elapsed time between the QSO date and the QSL date. To simplify the analysis, I grouped the resulting information in ten-day periods.

Based on my analysis, over 6% of stations that provided confirmation of a QSO on LOTW had uploaded their logs on the same day (UTC) that the QSO was made (Figure 1).

Surprisingly, almost 72% of stations had uploaded their logs to LOTW between one and ten days after a QSO. Another 7% of stations had uploaded their logs between 11 and 20 days after a QSO. More telling yet was that after 40 days, I had already received 90% of the 2,921 QSLs that I would ultimately receive by the end of December 2021 for QSOs made during 2020 and 2021. After 40 days following a QSO, the probability of a confirmation on LOTW diminishes quickly. After 80 days had elapsed, I had already received 95% of the 2,921 QSLs that I would ultimately receive by the end of December 2021.

However, just because the rate of confirmations declines rapidly with time, that isn't to say that confirmations won't appear out of the blue, years after some stations have been worked. From time to time, I am surprised with confirmations of fairly old QSOs.

I didn't compare the number of days elapsed between QSOs and QSLs for 2020 and 2021 separately because I didn't expect that the results would differ substantially from those obtained for the two years combined. I may test that hypothesis at some point.

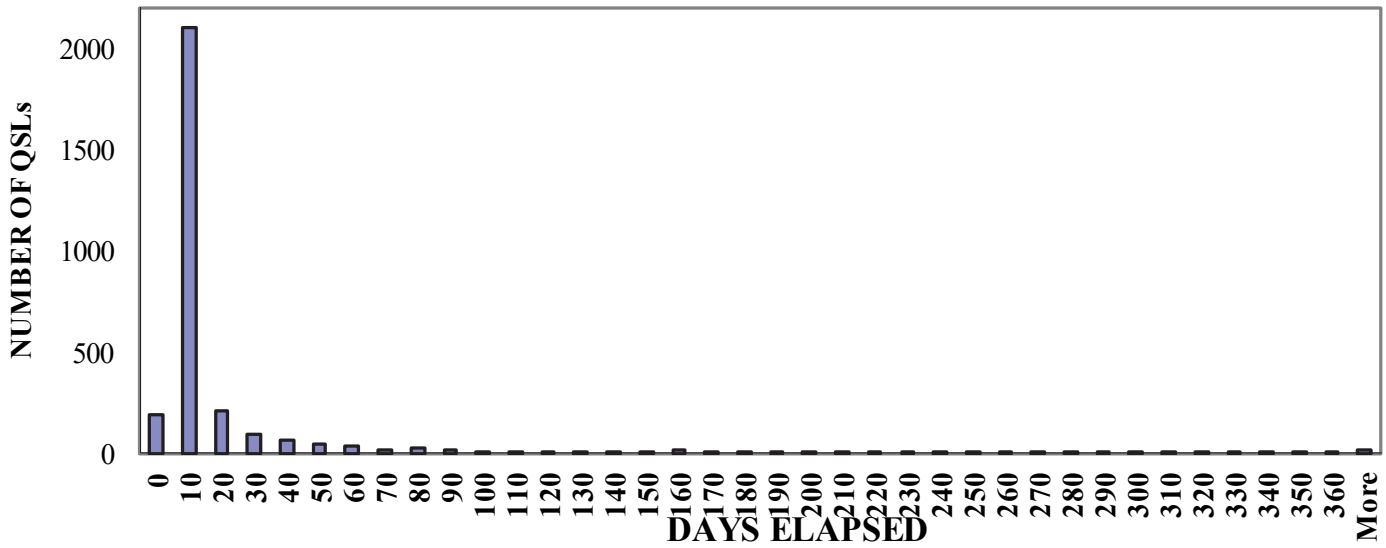
Conclusions

The use of LOTW by some amateurs differs markedly from the claims they make on their QRZ.COM pages. Those who claim to be users are the most likely, by far, to upload their logs

Table 1: PROBABILITY OF QSO CONFIRMATION ON LOTW BASED ON 4,338 QSOs, March 2020-December 2021 and indications of LOTW Usage on QRZ.COM

	INDICATIONS OF LOTW USAGE ON QRZ.COM			
QSL STATUS	SAYS USES LOTW	DOES NOT SAY IF USES LOTW	SAYS DOES NOT USE LOTW	TOTAL
QSL RECEIVED	2,548 (82%)	232 (43%)	141 (21%)	2,921
NO QSL RECEIVED (YET)	568 (18%)	309 (57%)	540 (79%)	1,417
TOTAL	3,116 (100%)	541 (100%)	681 (100%)	4,338

Figure 1: DAYS ELAPSED BETWEEN QSOs and QSLs Based on 2,921 QSLs Received From LOTW Between March 2020-December 2021



to LOTW. In addition, a significant number of those amateurs who don't state that they are users, upload their logs to LOTW. Therefore, it would be a mistake to ignore potential QSO partners because they do not claim, on their QRZ.COM webpages, to be users of LOTW—especially if they were rare DXs.

Most confirmations on LOTW arrive shortly after the QSO date. After two to three weeks, the odds of receiving a confirmation on LOTW begin to diminish significantly. Nonetheless, after that, there is still a slight chance of some eventual confirmations, even if very tardy.

73 and good DX from the balcony and elsewhere.

Joe, VE3EUS

A convergence of interests: Amateur Radio Astronomy?

Alan VA3IAH

If your interest in propagating radio waves includes the layers of the ionosphere, satellites, the moon, meteors and aurora scatter, you might be interested in the mix of amateur radio and amateur astronomy.

For those looking to explore these interests, the website of the Canadian Centre for Experimental Radio Astronomy (CCERA) lead by Marcus Leach (VE3MDL) is a good place to start your further exploration of the convergence of these two interests with excellent beginner resources and examples of amateur and more advanced level projects promoting STEM and youth engagement.

If this convergence of amateur radio and amateur radio astronomy is something you have explored and think there is a project you would like to share as a brief piece for the Rambler, please contact me and we can discuss further. Alan, VA3IAH (VA3IAH@RAC.CA)

Links of potential interest:

http://www.ccera.ca/about/

https://public.nrao.edu/radio-astronomy/

Lancaster Bomber 80 Special event stations GB6IBC & GB80LAN:

Ed, VA2XC

Please see attached a message forwarded by Ed VA2XC / VE2MPP on the special event and special event stations commemorating the 80th anniversary of the first operational use of the Lancaster bomber. Ed has inquired about whether a DMR radio TG will be established and will keep us posted.

Email received by Ed, VA2XC from the Lincoln Shortwave Club UK -

Hi, Lincoln Shortwave Club UK and the International Bomber Command Memorial Centre Lincoln UK are running a special event station and educational family day on Saturday the 5th of March to mark 80 years since the first operational use of the Lancaster Bomber and to pay tribute to all the hero's that served in them.

GB6IBC 10 until 3.30 UTC Saturday March the 5th.

https://internationalbcc.co.uk/abou.../news/events/80-years/

As Canadians paid such a huge and heroic part in Bomber command (10250 killed) it would be great to organise skeds with some of you from our station at the centre. And if you are going to try and contact us on the day and have a family story we could use that would be amazing too.

The International Bomber command memorial and Centre is a world class education facility and memorial the walls of names contain the name of every one of the 57861 people from 62 nations killed in Bomber command service and its impressive spire towers over the city of Lincoln.

https://internationalbcc.co.uk

Later in the month we are running GB80LAN from former RAF East Kirkby now the Lincolnshire aviation heritage centre it would be great to hear from you then too, 10 until 4 UTC March the 11th and 12th.

Please share this to any other groups in Canada where you feel it could help many thanks for reading.

LSWC.ACTIVITIES@outlook.com

Please see below the message he received.

Thanks Ed for passing this along to the Rambler, and I will also add this to the OVMRC web site.

While on the subject of the Lancaster and heroic Canadians, the link below describing the duty and sacrifice of F/O Lloyd Albert Hannah to save the residents of Little Grimsby and personalizes the service and great sacrifice of many Canadians who served so others could live and we all can live in peace and freedom. Thanks to F/O Lloyd Albert Hannah's nephew, David Langner, for the research which has resulted in the following page: http://www.aircrewremembered.com/hannah-lloyd-albert.html

73, Alan VA3IAH

OVMRC Net Activity, Check-ins for January 2022.

Prepared by: Hugo Kneve VE3KTN

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

January 6	January 13	January 20	January 27
VE3KTN – NCS	VE3KTN – NCS	VE3KTN – NCS	VE3KTN – NCS
New & Visitors	**New & Visitors**	**New & Visitors**	**New & Visitors**
Taylor – VA3THS			
Check-ins	**Check-ins**	**Check-ins**	**Check-ins**
VE3RUU	VE3RUU	VE3RUU	VE3RUU
VA2OJD	VE3NPO	VE3FNG	VA3RLA
VE3NA	VE3FNG	VE3ZZU	VA2OJD
VE3LC	VE3NA	VE3NPO	VE3GIQ
VE3LBU	VE3LC	VE3NA	VE3NPO
VA3IAH	VE3LBU	VE3LC	VE3NA
VE3ZZU	VA3IAH	VE3LBU	VE3LC
VE3YY	VE3ZZU	VA3IAH	VE3LBU
VA3PSI	VE3VIG	VE3OTW	VA3IAH
VE3BOE	VA3PYT	VE3VIG	VE3EUS
VA3GLB	VA3PSI	VA2OJD	VE3VIG
VE3OKD	VA3GLB	VA3EO	VA3AL
VE3VHU	VE3UU	VA3AL	VE3BOE
VA3EO	VE3YY	VE3SYZ	VE3ZZU
VE3KJQ	VE3VHU	VA3PSI	VE3KAE
VE3SYZ	VE3KJQ	VE3BOE	VA2EV
VE3OTW	VA2EV	VE3KJQ	VA3EO
VE3VIG	VE3OTW		VE3SYZ
VE3LAF	VA3EO		VE3OTW
	VA3BGO		VE3RXN
			VE3KJQ

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

January 2 SFI:93 A:11	January 9 SFI:103 A:14	January 16 SFI:83 A:9	January 23 SFI:95 A:10	January 30 SFI:125 A:17
VE3XRA – NCS	VE3EJJ – NCS	VE3XRA – NCS	VE3EJJ – NCS	VE3EJJ – NCS
New & Visitors	**New & Visitors**	**New & Visitors**	**New & Visitors**	**New & Visitors**
Check-ins	**Check-ins**	**Check-ins**	**Check-ins**	**Check-ins**
VA3QV	VE3ICV	VE3BAE	VE3BAE	VE3XRA
VE3EJJ	VE3QN	VA3EO	VA3QV	VE3KTN
VE3LC	VE3LC	VE3QN	VE3QN	VE3LC
VE3NPO	VE3YY	VE3LC	VE3ICV	VA2EV
VE3YY	VA3EO	VE3ICV	VE3LC	VA3PSI
VE3ICV	VA3PSI	VE3EJJ	VE3RXN	VE3SYZ
VE3BOW	VA2EV	VA3PSI	VE3YY	VE3YY
VA3IAH	VA3BGO	VE3RXN	VA3PSI	VA3BGO
VE3SYZ	VE3EKN	VA3BGO	VA3BGO	VA3EO
VA3EO	VE3KTN	VE3BOW	VA3IAH	VA3IAH
VA3BGO	VE3LAF	VA2EV	VE3SYZ	VA3QV
VE3RXN	VE3XRA	VA3IAH	VE3KTN	VE3RXN
VE3KTN	VE3SYZ	VE3KTN	VA3EO	VE3BOW
VA3PSI	VE3NPO		VE3BOW	
VE3WMB			VE3XRA	
VA2EV			VA2EV	
			VE3KAE	

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.