



October 2023 Newsletter

Seaway Valley Amateur Radio Club

The **Seaway Valley Amateur Radio Club** is a 'not for profit' organization incorporated in the Province of Ontario that promotes Amateur Radio and provides Auxiliary communication Services in Cornwall and surrounding area. The Club's mailing address is 4672 O'Keefe Road, St. Andrews West, ON. K0C 2A0.

The **Seaway Valley Amateur Radio Club** operates several repeaters in Cornwall and surrounding area. For a detailed list of repeaters operated by the club please visit our website at SVARC.ca.

- **President:** Earle DePass (VE3IMP)
- **Vice-President:** Joe Scott (VE3ADB)
- **Secretary:** Roger Bélanger (VA3GBV)
- **Treasurer:** Chris Lauzon (VA3CRR)
- **Technical Director:** Doug Pearson (VE3HTR)
- **Net Manager:** Earnest Vinson (VA3EWW)
- **ACS Coordinator:** Earle DePass (VE3IMP)
- **Newsletter:** Roger Bélanger (VA3GBV)

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Earle
VE3IMP

President's Message

October 2023

SVARC President's Message

October 2023

Fall with its beautiful colours, shorter days and cooler temperatures is definitely here! Gone are the really light and bright mornings. Some say that it really just the "start" of the antenna work season! Why put off what you could have done when it was warmer to be able to feel the warmth of the tower burn?

Our Fall program is now underway with plans starting to take hold for our Christmas dinner on December 5, 2023. Thanks to Earnest (VA3EWV) for suggesting and selecting the venue if Quinn's Inn. Please advise him soon that you plan to attend. If the Christmas Party was anything like last year, you won't want to miss this fun event!

A warm welcome to our newest member - David Tucker - to the SVARC. David is one of those working on his Amateur Radio Operators licence. He attended our last (October 25, 2023) meeting and seems keen to be involved in Amateur Radio.

Our Coffee Klatches at *Spinners* restaurant on the second and fourth Saturday's continue to go well and attract many. I hope you come out and enjoy the fellowship!

Our last two General Meetings – conducted in hybrid format - have seen the highest attendance ever. Maybe it's the prospect of a change in

executive (lol)?! Our Nominations Committee has been busy and elections take place at our next meeting. There is still a chance that you may wish to take on one of the leadership roles in our small but mighty club?!

Following Joe's (VE3ADB) resignation due to his new work role, Earnest (VA3EWV) continues to do a great job as our Net Manager. Joe was also our Social Convenor at our monthly meetings, and I thank him for his good work at both over the last several months.

How about you take a turn at being the Net Controller one Monday and give Earnest a break?

Our last Fox Hunt - held in a rural setting near Alexandria - was a hoot! Thanks to Steve (VE3EZB) for hiding the crafty transmitter and the Hunter and his team for finding it. We wish Mireille well and a speedy recovery. Hunter will hide the slide machine on November 26, 2023 when our next Hunt will be held.

We hope to see you at our next hybrid meeting planned for November 29, 2023 at *St. John Ambulance*, Cornwall.

Happy HAMming!

73,

Earle DePass (VE3IMP)

President, SVARC (2022-2024)



**Roger
VA3GBV**

Note from the Editor

1. October edition.

The fall colors were in full swing this month and our backyards was no exception.

Enjoy the fall because very soon the snow will be upon us.



2. Fox hunt

Steve (VE3EZB) was our Fox Hunt game master and sly he was. But not sly enough for hunter (VA3HWF), See more pictures on page 4.

3. The Geek's Corner

In the geek's Corner this week a look at a WEB application for predicting repeater coverage. See page **XY**

You are all welcome to contribute to this section and write about what you use, build, program or design.

4. Election year

As mentioned last month, this year is election year for the Seaway Valley Amateur Radio Club.

The present executive has served a 2 year term. As per our by-law, a nomination committee announced the proposed slate for a new executive at the October Club Meeting. Thus, giving each of us time to make-up our mind and prepare to vote at the November meeting.

The nominees are John Grow (VE2EQL) for president, Earnest Vinson (VA3EWV) for Vice-President. The Secretary and treasurer are still open at this time.

5. On a lighter note:

"If you tell the truth, you don't have to remember anything."

Mark Twain

Show and Tell

Coffee Klatches



October 14, 2023, at Spinner's

From left to right: Brendan (VA3BXJ), Rick (VA3KCB), Rick (VA3EV), Dean (VA3BS), Marshall (VE3SX), Don (VA3NC), Doug (VE3HTR), John (VE2EQL), Natalia, Earnest's grandson Knox, Earnest (VA3EWV), Roger (VA3GBV), Jason (VE3PRY) and Hunter (VA3HWF).

!

The October 15, 2023, Fox Hunt



Earnest (VA3EWV)



The appropriate winner of the hunt: Hunter VA3HWF), Earnest (VA3EWV) and the horrified! loser Roger (VA3GBV)

The Geek's Corner

Radio Mobile On-Line

https://www.ve2dbe.com/rmonline_s.asp

by Roger Coudé (VE2DBE)

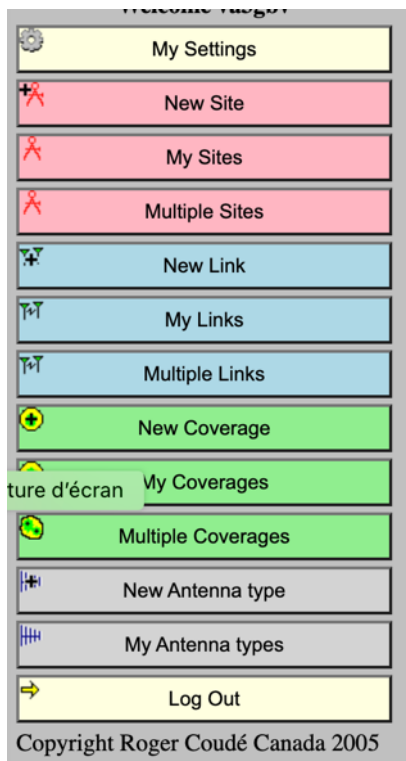
What is it?

Radio Mobile Online is a radio wave propagation prediction tool dedicated to amateur radio. It uses digital terrain information and a mathematical model to simulate radio transmissions between two fixed sites (radio link) or between a fixed site and a mobile (Radio coverage). The digital terrain information comprises three databases: ground elevation, land cover, and population density. Those databases are located on the server and represent a total of 200 GigaBytes.

First you create an account and log-in:

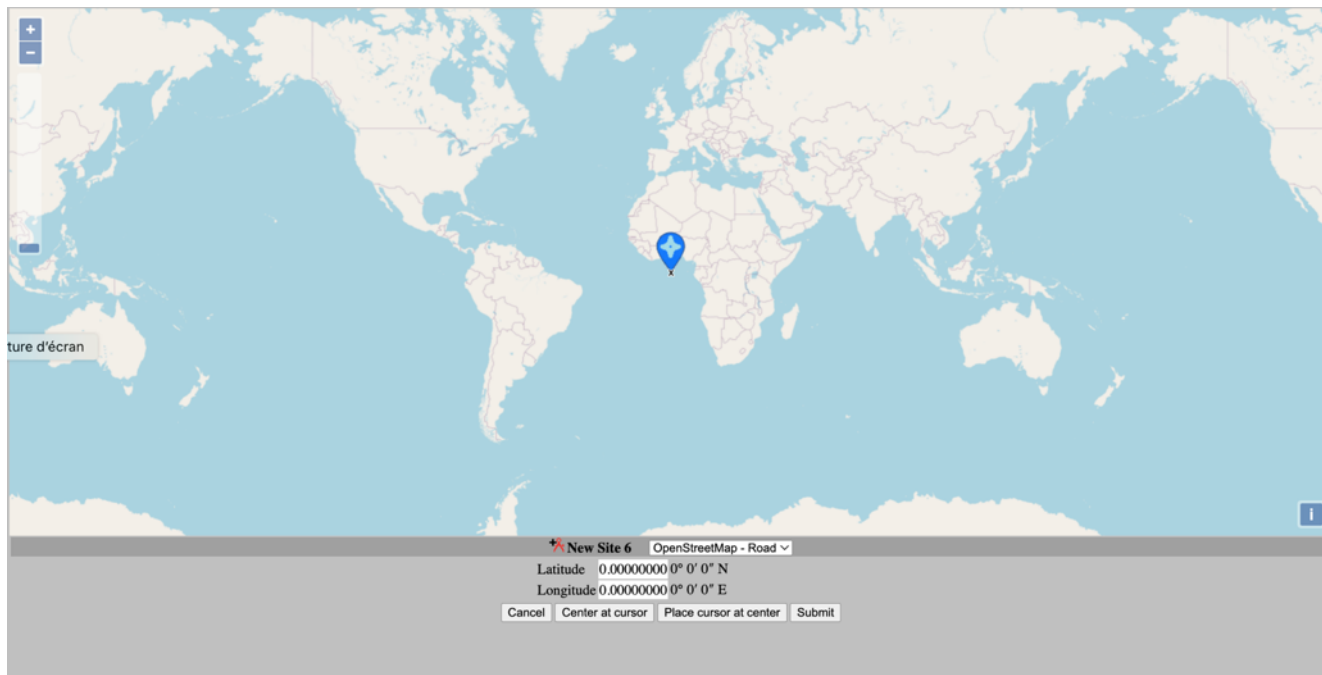
The screenshot shows the login page for Radio Mobile Online. At the top, there is a navigation bar with "Radio Mobile" on the left, "Par/By Roger Coudé VE2DBE" in the center, and "Information" with an info icon on the right. Below the navigation bar is a white banner with a radio tower icon in the center. To the left of the icon is the text "This tool is sponsored by" and to the right is "commandite cet outil". In the center of the banner is the logo for "TowerCoverage.com". Below the banner is a teal bar with a small tower icon and the text "Radio Mobile Online / En ligne". Underneath the teal bar is a link: "Try the new Windows Desktop version - RmWeb 2.1.2.0 - Essayez la nouvelle version pour bureau Windows". The main content area is a grey box containing a login form. The form has two columns: "Utilisateur" (User) and "Mot de passe" (Password). The "Utilisateur" field contains "VA3GBV" and the "Mot de passe" field is filled with dots. Below the fields is a "Soumettre - Submit" button. To the left of the form is a "Fermeture d'écran" button. Below the form are four rows of links for account creation in different languages: "Create a New account" (English), "Créer un Nouveau compte" (Français), "Crea una cuenta nueva" (Español), and "Crea un nuovo Account" (Italiano). To the right of these links are corresponding links for password recovery: "Lost your user name or password...", "Perdu votre nom d'utilisateur ou le mot de passe...", "Perdiste tu nombre de usuario o contraseña...", and "Dimenticato username o password...". At the bottom of the page, there is a footer with "A free tool for amateur radio" on the left, "ve2dbe@yahoo.ca" in the center, and "Un outil gratuit pour la radio amateur" on the right.

The main menu looks like this:

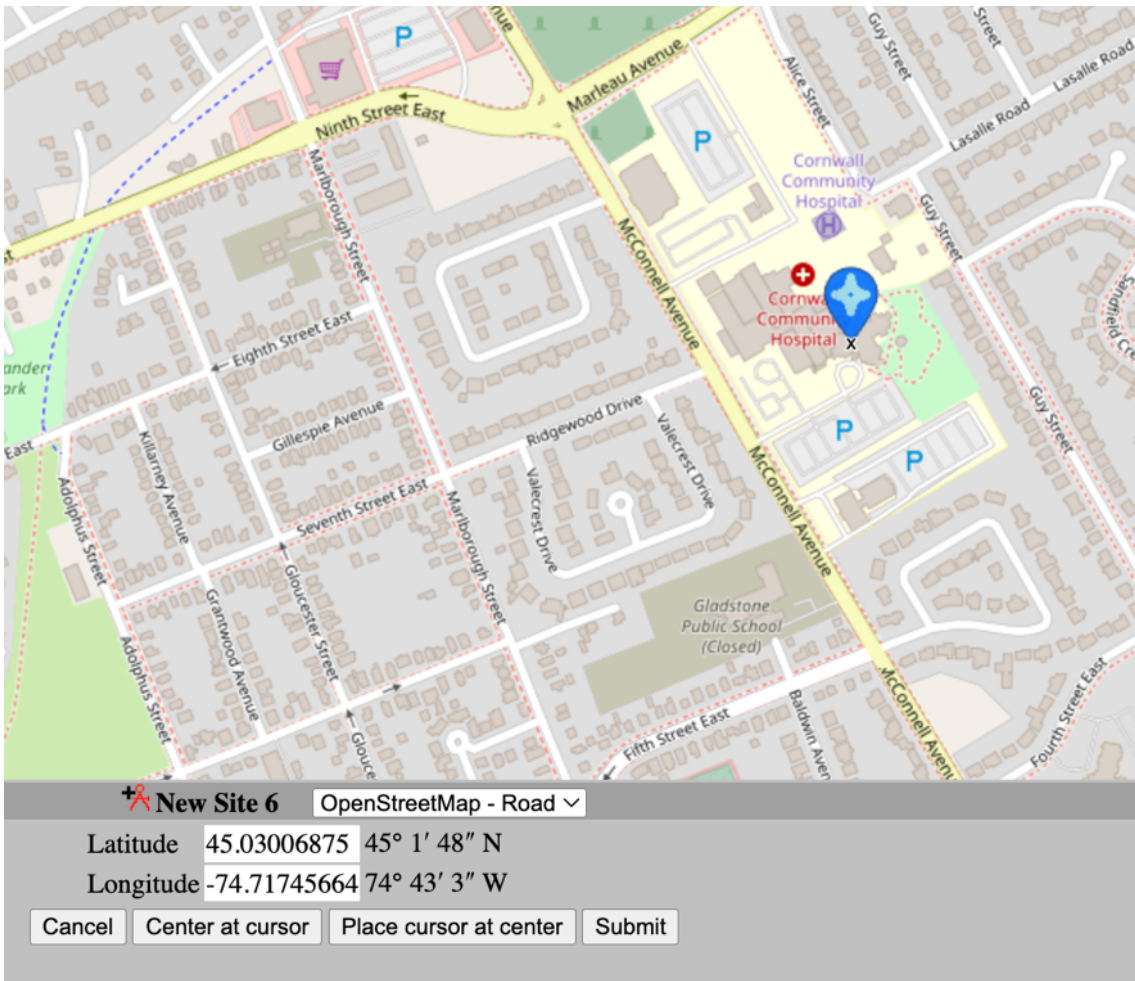


As an example, let’s look at what the VE3SVC coverage would look like for HT users of this 2 meter repeater.

First, we have to define a site, so we select “New Site”, which opens a new window:



You then drag the cursor to the wanted position, in our case the Cornwall Community Hospital:



And click “Submit”

Give it a name : VE3SVC and Click Add to My Sites

Return to Main Menu and select My Sites and the sites you created will open:

My sites(7)

VE3SVC

Latitude 45.02978966
 Longitude -74.71781381
 Zoom 17
 Elevation (m) 68.70
 Description VHF repeater
 Group SVARC

Latitude 45° 01' 47.24"N
 Longitude 074° 43' 04.13"W
 QRA FN25PA
 UTM (WGS84) 18T E522229 N4986298
 Canada Index 31G2

[See on Google Maps](#)

Modifiez l'écran

Aucun fichier choisi

we have to enter the repeater and HT basic parameters, which are:

Here we return to the main menu and select “New Coverage” and the following window opens:

Radio Mobile

New Coverage

From: VE3SVC 147.180 MHz*

Centre Site VE3SVC

Antenna Height (m above ground) 20 65.62 ft

Antenna Type Omni

Antenna Azimuth (°) 0

Antenna Tilt (°) 0

Antenna Gain (dBi) 5

Mobile Antenna Height (m) 2 6.56 ft

Mobile Antenna Gain (dBi) 0

Description VE3SVC 147.180 MHz**

Frequency (MHz) 147.18

Tx power (Watts) 45 46.53 dBm

Antenna gain (dBi) 3

Antenna tilt (dBi) 0

Rx threshold (µV) 0.2 -120.98 dBm

Required reliability (%) 95

Strong Signal Margin (dB) 10

Strong Signal Color

Weak Signal Color

Opacity (%) 50

Maximum range (km) 100 62.1371 mi

Rendering High resolution

Use land cover

Use two rays

This is where we have to enter the correct parameters for the coverage:

1. Select one of the sites we created, in this case VE3SVC
2. Height of antenna above ground: I assumed 36 m or 4 meter per floor plus the antenna mast.
3. Antenna pattern: Quasi omni
4. Azimuth is irrelevant for an omni, so we put 0.
5. Tilt: Our antenna is a Sinclair 2 bay folded dipole. The vertical pattern would normally show a slightly positive launch angle, I assumed 10 degrees.
6. Published gain is about 5 dB.
7. HT height above ground, assuming you hold it at eye level, 1,75m, if you are tall!
8. HT gain, 0dB at best for a rubber ducky.
9. Tx frequency: 146,180 MHz (VE3SVC)
10. Tx Power: 40 Watts
11. Tx Line loss: Assume 3 dB including Diplexer or Multi-coupler depending on your configuration
12. Rx Line loss: Assuming we are interested in the coverage of our repeater for Hand-Held transceiver, then RX line loss is 0dB because the HT antenna is directly mounted on the HT.
13. Rx Threshold or sensitivity: Check your HT spec., typical value is $2\mu\text{V}$ in $50\ \Omega$ for 12 dB sinad (Signal to Noise and Distortion) or -120 dBm.
14. Reliability: This is a little obscure because but is likely related to terrain effect which has a probabilistic component. I use 95% for what it's worth!
15. Strong margin signal: The coverage plot will show 2 contours, one for the receiver sensitivity limit ($2\mu\text{V}$) and a smaller area with a contour for a 10 dB stronger signal.
16. Opacity is just for the opacity of the colours in the contour.
17. Maximum range is the range over which the signal level will be computed. I use 100 Km to make sure the coverage will be display to the $2\mu\text{V}$ limit.
18. Rendering is self-explanatory.

Click Submit

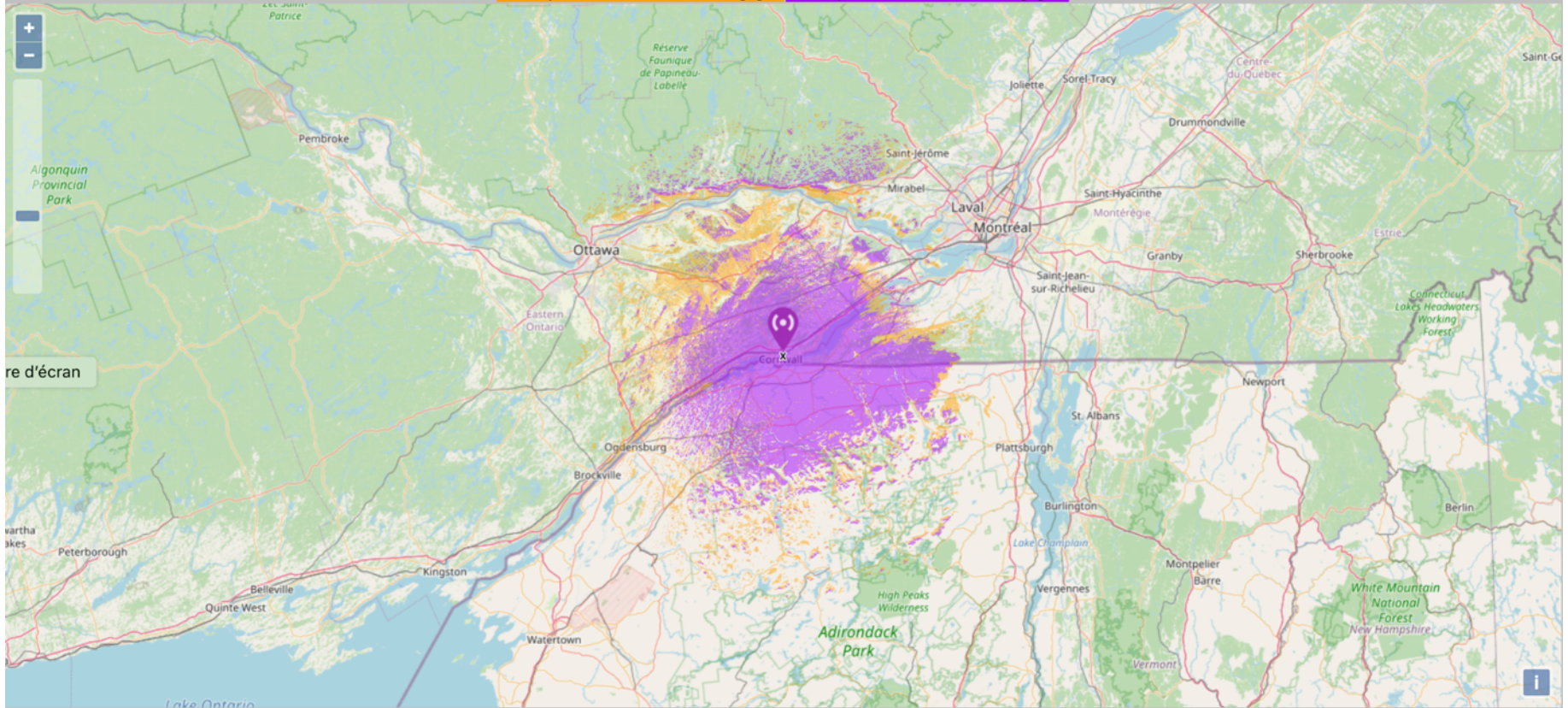
You get the following coverage

You can use this application for estimating your base station coverage by applying the appropriate parameters.

Play with it it is fun and instructive.

Note that the coverage also gives you the area in Km^2 and the population inside this area. May be interesting if you want your own broadcast station !!!

0.20 μ V 11407 km² 408906 pop 0.63 μ V 7374 km² 229203 pop



Description  OpenStreetMap - Road  VE3SVC 147.180 MHz* VE3SVC
[\(Files of VE3SVC 147.180 MHz*\)](#)

[Return to my coverages](#)

[Return to main menu](#)