



April 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:** Joe Scott (VE3ADB)
- **ACS Coordinator:** Earle DePass (VE3IMP)
- **Newsletter:** Roger Bélanger (VA3GBV)

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President's Message April 2023

SVARC President's Message April 2023

The Ice Storm of April 2023 will be in several minds for some time to come. While not as harsh as Ice Storm '98, I know that many of us were adversely affected. Flooded basements and broken trees were just some of the issues. I hope that you were not too badly affected. Both point to a readiness for us to help as communicators. During the event I communicated with Leighton Woods from the City of Cornwall, offering our willingness to offer communications assistance if necessary.

The Raisin River canoe race 2023 allowed us to once again shine! While I couldn't be there in person, my thoughts were also with the Team. Many thanks to the 13 operators; VA3EWV, VA3EV, VA3GBV, VA3RSQ, VA3HWF, VE3HWG, VE2NJA, VE2JMF, VE3HTR, VE3AFV, VE3EZB, VE2EQL, VE3ADB for making this year's event such a success!

Plans for Field Day 2023 continue to go well. Now that the snow is gone, we can continue our

discussions with the *Raisin River Conservation Authority* as our potential Field Day site.

Our next Fox Hunt planned for May 7 continues to look good! Come out and join us.

Our April 5, 2023, Emergency Communications exercise with the Glengarry Fire Service (GFS) went very well. Thanks to those 7 HAMS; Roger, Dave, Earle, Hunter, Jason, Earnest and Steve who helped to make us look good with the GFS!

Our Coffee Klatches at *Spinners Restaurant* continue to be a lot of fun. Please come out and enjoy on the second and fourth Saturdays!

Our next meeting on Wednesday, April 26, 2023, will see a Zoom Presentation from Roger Egan on Youth on the Air (YOTA) and the International Space Station promises to be quite interesting...see you there?!

Sincerely,

Earle (VE3IMP), President SVARC



**Roger
VA3GBV**

Note from the Editor

1. April was a busy month.

As is often the case, Spring brings all sort of new activities, some great some not so great...

2. Iroquois Hamfest.

Very popular event after such a long absence, See pictures from Earnest (VA3EWV) on page 4.

3. Revamping of VE3SVC-220

On April 4th a major revamping of our 220 repeater at the Cornwall Community Hospital site. Read more on page 6.

4. Em-Com Exercise

Also, on April 4th we had an Emergency Communication exercise with the South Glengarry Fire Department, see more on page 10.

5. Freezing Rain Galore

On April 6th we had a major freezing-rain storm that caused serious damage throughout the area.

The Bonville site was hit hard by first losing power and then a tree fell and blocked the road thus preventing refueling the generator. The whole site went silent until Saturday afternoon at 16:34 on April the 8th.

6. Raisin River Canoe Race

The raisin river Canoe race celebrated their 50th anniversary on Saturday April 15th. The race set an all-time record of 296 boats participating.

Several members participated providing communication for the event. Read more on page 13.

1. Coffee Klatches

And of-course our ever-popular coffee klatches. See pictures on page 19.

And finally: to quote Mark Twain:

“It is better to keep your mouth closed and let people think you are a fool than to open it and remove all doubt”.

Show and Tell

Iroquois Hamfest

Iroquois held their first Hamfest since the end of the COVID era on Saturday April 9, 2023...



Jason (VE3PRY) and Hunter VA3HWF



René VE2DMR, VA3RIA



And a whole lot of people including Hal (VE3HWG)

Revamping of VE3SVC-220



Figure 1: Tytera TYT 9000D 220 Repeater Assembly

The repeater VE3SVC-220 consist of a pair of Tytera TYT 9000D (graciously supplied by VA3EV and VE3HTR) and a homebrew micro-controller board. See Figure 1

The initial installation in 2022 was done with a mobile duplexer (see figure 2) and a Band-Pass, Band Reject-Filter in the receive path to improve the Tx Rx isolation.

This configuration came at a price, namely:

- Transmit Power limited to 20 Watts
- High insertion loss for both TX and Rx path in the duplexer
- Additional Insertion Loss from the Band-Pass, Band Reject-Filter in the receive path.

Doug (VE3HTR) found an available Sinclair Q2221E four cavities duplexer from Scott VA7SL in BC for a reasonable price (see Figure 3.)

On April 4th Doug (VE3HTR), Earnest VA3EWV) and Roger B. (VA3GBV) went to CCH to replace the existing configuration of VE3SVC-220 with the new duplexer. See Figure 4 illustrating the old and the new configuration

With this new configuration, the difference in performance is summarized in Table 1

Before the change, an attempt to make a range check was made.

Using A Baofeng Handheld with a rubber-ducky 220 antenna, we drove west until we could no longer be heard. That happened at Long-Sault Plaza, 14 km from the CCH site. On the Repeater TX side. Operators could be copied clearly out at least to Upper Canada Village, 30 km from CCH.

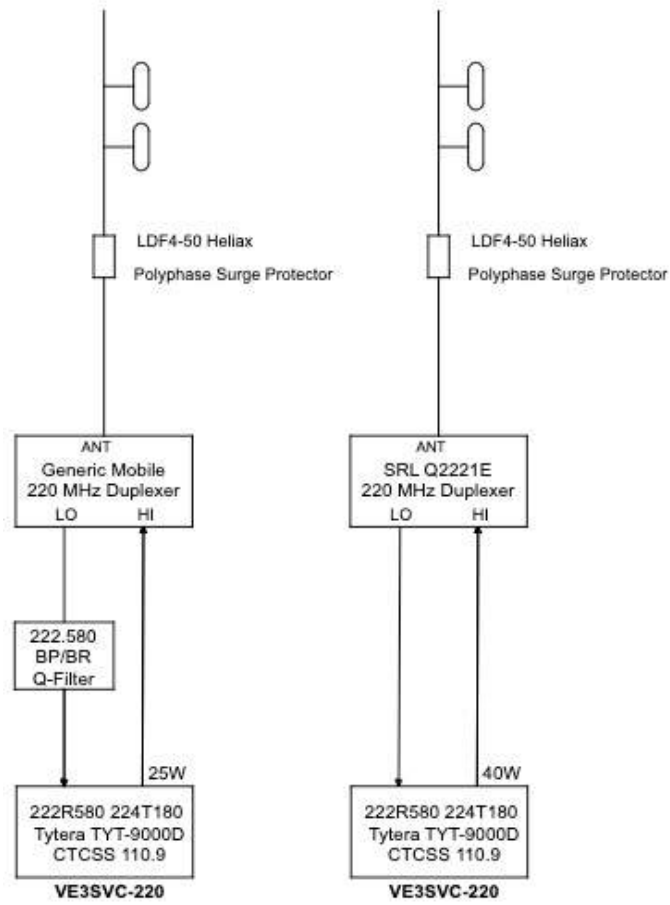
After the modification, I could sustain a QSO with VE3HTR all the way to Upper Canada Village, 30 km from the CCH site. While twice the distance is theoretically 6 dB more space losses, the characteristic of the location of the HT is hard to predict, sitting on an elevated spot, obstacle, vegetation etc, may make the path loss vary considerably. Nevertheless the repeater seems more sensitive in this new configuration. No doubt a major improvement is to be expected on TX, as shown in Table 1, but was not measured.



Figure 2: Generic Mobile Duplexer



Figure 3: Sinclair Q2221E 4 cavities Duplexer



Previous Configuration New Configuration

Figure 4 Old and New VE3SVC-220 Repeater

Table 1: VE3SVC-220 Performance Improvement

RX Improvement

Item	I/P Power	Gain/Loss	O/P power
Baseline reference from Antenna			0
Removal of BP/BR Cavity	0	1,6	1,6
Removal of Mobile Duplexer	1,6	2	3,6
Install SRL: Duplexer	3,6	-2,33	1,27

Total Improvement			1,27
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TX Improvement

Item	I/P Power	Gain/Loss	O/P power
Baseline reference to Antenna			0
TX transmitter O/P Power increase	0	3,98	3,98
Removal of Mobile Duplexer	3,98	2,2	6,18
Install SRL: Duplexer	6,18	-1,71	4,47

Total Improvement			4,47
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Note 1:

Power measured into the Duplexer (W) **47 W**

Power measure at O/P of the duplexer (W) **28 W**

$10 \cdot \log(28/47) =$ **-2,25 dB**

Note 2:

Power increase from 20 to 50 Watts **3,98 dB**

April 4 Emergency Communication Exercise

An emergency Communication Exercise was performed with the South Glengarry Fire Department.



South Glengarry Fire Chief Dave Robertson, Roger B. (VA3GBV) at Cemetery Road Bridge and the full moon



Martintown Fire Hall and Rescue #2



Earnest (VE3EWV) at Williamstown Fire Hall



The ACS crew debriefing at Quinn's Inn

Clockwise around the table from the left: Hunter (VA3HWF), Jason (VE3PRY), Dan (VE2JMF), Earle (VE3IMP), Roger (VA3GBV), Steve (VE3EZB), Earnest (VA3EWV)

April 15 Raisin River Canoe race

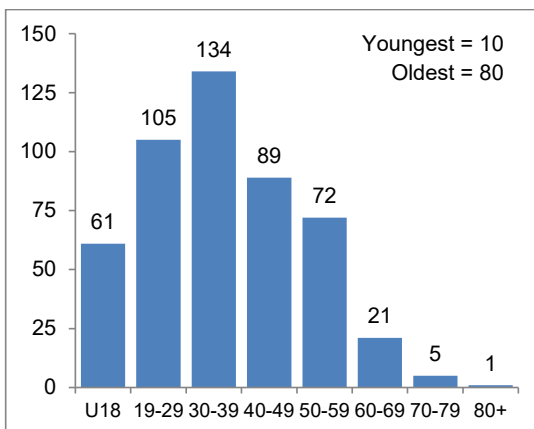
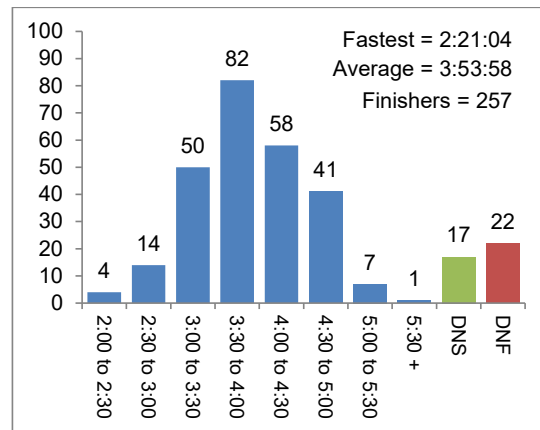
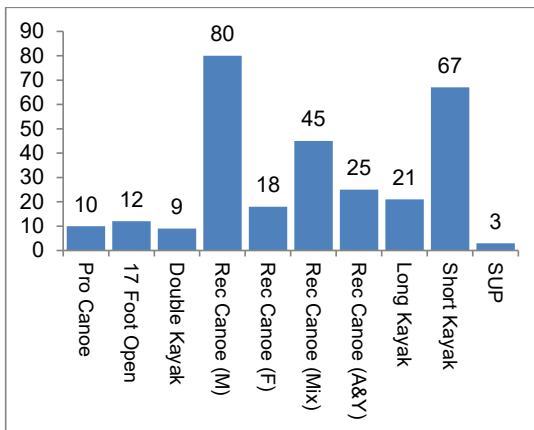
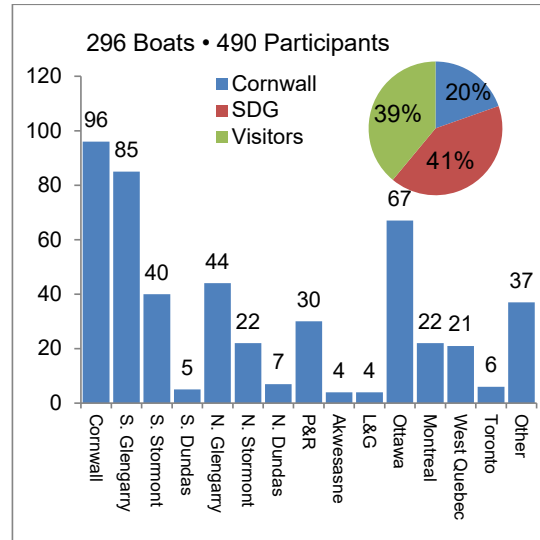
This year's event was very special in that it was celebrating the 50th anniversary of the event. The weather was exceptional with sunny skies and temperatures in the mid 20's.

As usual SVARC was there:

Start	St. Andrews School	All	All
1	Highway 138 Bridge	VA3EWW	Earnest
2	S.S. Twp 22 (Lefebvre) Road Bridge	VA3EV	Rick
3	Delaney Road Bridge	VA3GBV	Roger
4	Cemetery Road Bridge	VA3HWF	Hunter
5	Martintown start of Portage	VE3HWG	Hal
6	Martintown C.R. 18 Bridge (Dam)	VE2NJA	Linda
6a	Rapids	VE2JMF	Dan
7	MacGillvrays Bridge C. R. 27	VA3EWW	Earnest
8	Old CPR (Peanut Line) RR Bridge	VE3HTR	Doug
9	Williamstown C.R. 19 Bridge	VE3AFV	Jim
Finish	Williamstown John St. C.R. 17 Park	All	
EV 1	Emergency Vehicle (Kayle Lafave)	VE3EZB	Steve
FD 1	Martintown FD CR18 Bridge (Chief Kenny)	VE2EQL VA#RSQ	John, Larry
Net Control		VE3ADB	VE3ADB

Many thanks to all and a special thanks to Joe for running the show so proficiently.

2023 Raisin River Canoe Race - Stats



Year	Flow	Boats	Year	Flow	Boats
2004	388	219	2014	275	159
2005	184	225	2015	300	173
2006	130	128	2016	636	162
2007	512	134	2017	2,649	205
2008	1,232	213	2018	450	165
2009	144	189	2019	1,300	207
2010	175	0	2020	Covid	0
2011	595	144	2021	Covid	0
2012	71	98	2022	1,400	222
2013	1,313	153	2023	630	296

Summary Statistics of the event

See below some picture taken by Earnest VA3EWV).



Joe (VE3ADB) Our Net Manager ready to go.



Jason VE3PRY, Larry VA3RSQ, John VE2EQL, Joe VE3ADB, Roger VA3GBV, Hunter VA3HWF, Earnest VA3EWV an Jim BE3AFV kneeling in front.



Hunter VA3HWF at Cemetery Road bridge



Rick VA3EV and OPP Auxiliary Jim Brelsford VA3SPY at Lefebvre Road bridge



Earnest VA3EWV and Jim VE3AFV at Williamstown bridge.

Here is a very interesting video taken from Captain Hank Drone service:

[2023 Raisin River Canoe Race](#)

Coffee klatches



APRIL 8 FULL HOUSE

Going clockwise around the table:

Doug (VE3HTR), Dean Brush (VA3BS), Hal (VE3HWG), Jamie (SOON), John Grow (VE2EQL), Earnest Vinson (VA3EWV), Don (VA3NC), Rick Palmer (VA3EV).



APRIL 22

Clockwise from the top: Doug (VE3HTR, Rick VA3EV, Hunter VA3HWF, Dean VA3BS, Earnest VA3EWV, Roger VA3GBV, Preston Vinson (TBA)