

**Champlain Regional Repeater Association (CRRA)
Annual General Meeting (AGM)**

**19 May 2020
Renfrew County**

1. Amid the COVID-19 pandemic, it was deemed prudent to not have the AGM at a common meeting location as we have done in the past, but rather, have a controlled net using VE3STP repeater during an established mini-net using 147.060 Mhz, -0.6Mhz offset, 114.8 tone.
2. For that reason, the AGM was initiated by Steven Harrison (1st Vice President) VE3FTS at 19:30 hrs on 19 May 2020.
3. Initial check-in included the following callsigns:

| Name | Callsign | Name | Callsign |
|-----------------|----------|------------------|----------|
| Steven Harrison | VE3FTS | Graham Patterson | VE3AMN |
| Greg Kaufman | VE3ECI | Steve Paynter | VE3KEG |
| Don Thom | VE3PM | Sandy Cameron | VE3AAC |
| Wayne Greenough | VE3JSQ | Rob MacFarlane | VE3AGN |
| James Bell | VE3KAW | Alan Hotte | VE3IAH |
| Tim Pychyl | VA3PYC | Peter Costello | VE2BJZ |
| Larry Monuk | VE3KLJ | Curt Bowles | VE3ZN |
| Jean Desbiens | VE2OCQ | Randy Smith | VE3RKS |
| Allen Eddisford | VE3JGU | Rob Gilles | VE3JA |
| Jim Hutchison | VA3GMZ | | |

Total: 19

4. Graham Patterson VE3AMN (President) called the meeting to order at 19:40 hrs.

Reports

Repeaters and Technical

Presenter: Graham Patterson VE3AMN

1. I was elected to serve an additional one year term as president of the Champlain Regional Repeater Association ("CRRA") because Alan VE3CBR had to retire on account of his health. I made it clear at the time that I would serve the one year special term, but on no account would I consider a further extension. I need the time for my YL and other personal interests and importantly, the CRRA deserves newer and younger blood in order that it may move forward.
2. The following report is a blended one and one that doesn't differentiate between my work as president from my work as technical director. This alone highlights what is perhaps a serious flaw in the tactic of trying to fit two hats on one head.

General Health of VE3STP 147.06 & 146.46 mHz

3. Several times a year when in the area, usually after Wednesday breakfast, I measure Forward and Reflected power. The VHF system is consistent: 80 Watts out of PA into duplexer, 58 Watts out of duplexer, into the antenna's feedline. The UHF repeater is delivering 8 Watts into the antenna at 443.6 mHz. An opportunity for a future enhancement would be a power amplifier. Twenty-five Watts up the stack would be an economical and achievable future objective for the CRRA

Arcom RC210 Repeater Controller for VE3STP & Motorola DMR Licence

4. For a while, it has been clear that the 2M repeater needs a new and better controller. During the winter, for instance, an Ottawa area station "sat on his mic" and the repeater was held out-of-service. Neither Don VE3PM the system's licensee, nor anyone else was able to disable it. The addition of EchoLink, and the stated club objective to link VE3STP with VE3YYX, and future possibilities required more control capability than the original NHRC controller is able to provide. I decided to personally purchase a new repeater controller and make a parting gift of it to the CRRA. It will be a "clean" install with no haywire.
5. On the advice on Don VE3PM and my researches on the web, I obtained an Arcom RC210, and am still awaiting some additional pieces for it. It will be assembled & tested here at my QTH and will be installed when I activate the DMR feature.
6. Don VE3PM the licensee, and technical director, and perhaps others as decided by the CRRA's executive will be given remote control access of the equipment at Site-2.

VE3STP Digital UHF 443.6 & 448.6 mHz

7. On a rainy Saturday In late last autumn Jeff VE3EFF, Phil ST. Germain VE3CIQ, and Graham VE3AMN installed Jeff's latest creation, a Raspberry Pi controlled ZUM MMDVM controller which will allow the digital repeater to accommodate D-Star, DMR &

Fusion modes. Previously STP UHF would only repeat D-Star signals. The repeater is based on Motorola RF components, and a Sinclair "Res Lok" duplexer and is multi-coupled to the VE3STP main array, a home-brew 210-C8 knock-off comprised of two Sinclair 210-C4s fed in-phase. Recall that dipoles cut for a given frequency will resonate on a frequency three times the fundamental. The UHF repeater is sturdy and reliable does very well for the eight Watts fed into the antenna, and needs a power amplifier.

VE3STP Packet Repeater 145.01 mHz & Gift from the Western Renfrew Club

8. The packet repeater and its solar power plant continue to function properly, however there was a report by Bob VE3YX that the deviation was set too high. To facilitate our correction of this, Bob presented the CRRA with a Boonton model 82AD deviation measuring test set. Allen VE3JGU and Graham VE3AMN attended the site and corrected the problem. Thank you Bob!

Remote Control of the VE3STP Site Over the Internet

9. The SCADA ("Supervisory, Control And Data Acquisition") has been an ongoing project of Sandy VE3AAC, Allen VE3JGU, and Graham VE3AMN. Originally controlled from VE3AMN's QTH using VHF, it is now controlled over the Internet. Its present only use is to control the Raspberry Pi used for spectrum analysis (see next item re interference on STP's 2 metre input). Its use will be expanded to include remote meter reading and control of the new repeater controller. VHF will be used to back up the Internet.

Ongoing Interference of VE3STP VHF's Input Frequency 146.460 mHz

10. Over the years, since I have been around at least, we have problems with interference on our input frequency of 146.46 mHz. Make no mistake, this problem is our number one challenge. There have been many hypotheses - and some pretty good theories. It's maddening that there have been several definite sources identified and rooted-out - the defective duplexer (used to combine the signals on the UHF & VHF repeaters), comes to mind. It was causing awful intermod ("intermodulation") products. This fault was identified by Jim VE3JKV & Steve VE3KEG and was located and removed by Greg VE3ECI & Graham VE3AMN one Wednesday morning last November after breakfast in Renfrew. The suspected intermod generated by the hundreds of rusty rivets in the old tower at Site-1 sped up our move to the GoZoom tower at Greg VE3ECI's summer residence.
11. In each and every case, the source of the signals which excite the generation of spurious products, was suspected as being the Bell "Fleetnet" system operated for the Ontario government. We never had enough members with enough instrumentation, in the right place(s), at the right time to prove it. We have advanced and are now in a better position to determine EXACTLY what is happening. Jim VE3JKV is in nearby Renfrew with a spectrum analyzer, and Graham VE3AMN has equipped the site with instrumentation which can be read over the Internet from our QTHs. I am preparing a special report on the intermod problem. This time, we will rely on mathematical simulation backed-up by observations & captured screen shots.

The Main VE3STP Antenna Array

12. The antenna, of course, is a key part of our infrastructure. We inherited a wonderful eight dipole array from VE3STP's founders. It was built from four Sinclair 210-A4s and located at the original site. It wore out after nearly forty years of service and was replaced by a similar eight element array made from two Sinclair 210C-4s, by Sandy VE3AAC and Allen VE3JGU. Sinclair would call it a 210-C8. We never got to operate the full array at Site-1, but did install the new antenna at Site-2. Sadly, a mistake was made in the installation and we had to operate with only the lower half of the array. In other words, a single 210-C4 located down below the 100 foot level. Last weekend, our rigger re-connected the upper half of the array and its phasing harness. However, until we identify and cure our interference problem we will be bothered by interference. That antenna is very hot.

VE3YYX, Arnprior.

13. Fred VE3CFZ and I attended the repeater at the Arnprior firehall late last spring. We performed routine maintenance, measured SWR etc and found the repeater to be functioning correctly. I observed in my report that the AC power for the repeater needed to be given an outlet of its own - a Hubble "Twist-Lock" preferably so that the power couldn't be interrupted by accident. VE3YYZ needs a local Arnprior caretaker.

My Conclusions

14. I inherited solid infrastructure from Sandy Cameron VE3AAC my predecessor as technical director. With the assistance of several of you I have attempted to make the system better and have succeeded sometimes.
15. It is time for me to move on to a lessor role. While I hope to be always involved with VE3STP, and the CRRA, it is mainly you, my fellow members that keeps me on the job.
16. I am looking forward to reducing my obligations as technical director over the next year and I welcome the opportunity to assist one or two other members to take over my job.
17. Perhaps you will keep me on as a technical advisor.
18. Graham

Mini Net

Presenter: Rob MacFarlane VE3AGN and Steve Paynter VE3KEG

19. Both Steve VE3KEG and Rob VE3AGN have been taking care of and monitoring the CRRA mini-nets held each night on VE3STP at 19:30 hrs. Rob reports that each night has been covered but is requesting members to step up and volunteer to run a mini-net as some members are doing a double shift and added relief would be appreciated.

20. The following major net counts has been recorded:

| | |
|--------------|---------|
| Rob VE3AGN | 87, |
| Steve VE3KEG | 54, |
| Peter VE2BJZ | 44, |
| Greg VE3ECI | 35, |
| Tim VE3PYC | 31, |
| Steve VE3FTS | 25, and |
| James VE3KAW | 19. |

ARES (Amateur Radio Emergency Service)

Presenter: Steven Harrison VE3FTS

21. ARES has been involved in two local exercises.

First Exercise

- a. First exercise was organized and run by VE3FTS in Arnprior. The scenario was a tornado that had removed power and a lightning strike that ignited a wildfire that was headed towards Braeside. The objectives of the exercise was evaluate the stand-up of an Emergency Operations Center (EOC), to establish a net controller and practice the transfer of message traffic between stations using handheld and mobile radios.
- b. Approximately 25 people from various radio clubs in the valley participated and many lessons learned were discussed during the Hotwash.

Second Exercise

- c. Second exercise (called Rendezvous Two) was conducted at Pinwey Point, Ontario to simulate an earthquake in Gatineau and Ottawa areas. The objectives of the exercise was to evaluate interoperability between participating agencies such as Red Cross, Salvation Army, National Defence, Coast Guard, Ottawa Search and Rescue (OSARVA) and the Civilian Aviation Search and Rescue Association (CASARA). Amateur Radio clubs were asked to participate in order to augment communications during the exercise.
 - d. Amateur Radio proved to be an effective capability and complimented the communication, command and control for the Incident Commander and his team as well as search parties deployed to the field.
22. ARES representatives have come together every second month in Almonte to discuss ARES issues, the health of the repeaters and the standardization of capabilities amongst the clubs.
23. ARES is always looking for volunteers to take the lead in continuing training and running such exercises.
24. Steve VE3FTS continues to be the certified member for CRRA ARES but will be stepping down in Mar 2021 or a move to Winnipeg (whichever comes first).

Treasurers and Membership

Presenter: Greg Kaufman VE3ECI

May 2020 Treasurer's Report

| | | 2019 | 2020 | |
|---------------------|---------------|--------|--------|--|
| Membership | New | 5 | 4 | |
| | Renewals | 23 | 21 | VE3JKV, VEAGMZ, VA3IAH, VE3KAW |
| | Lifetime | 2 | 2 | |
| | Silent Keys | 1 | 2 | VE3GE and VA3TJP |
| | RAC Members | 10 | 15 | RAC membership gives the club a break on insurance. |
| | Total members | 30 | 27 | |
| Financials | | | | |
| Income | Membership | \$494 | \$585 | |
| | Donations | \$765 | \$385 | |
| | Other | \$0 | \$0 | |
| | Total | \$1199 | \$970 | |
| Expenses | Insurance | \$426 | \$388 | |
| | Bank Fees | \$2 | \$0 | |
| | Web Site | TBD | \$25 | |
| | Equipment | \$0 | \$0 | Future: duplexer, cables, connectors |
| | Projects | \$0 | \$0 | |
| | Other | \$0 | \$0 | |
| | Total | \$428 | \$413 | |
| CRRA Account | | | | |
| | Balance | \$1512 | \$2070 | |

25. Greg VE3ECI stated that a RAC membership is important as it provides a financial break in insurance to the club. Members are encouraged to join.

Executive Elections

Presenter: Steven Harrison VE3FTS

26. Each year the club votes in a new executive. This coming year will see a few vacancies and the positions will need to be filled. The club has voted and has accepted the following names, they are as follows:

| Position | Name | Callsign |
|--------------------------------|-------------------|----------|
| President | Greg Kaufman | VE3ECI |
| 1 st Vice President | Randy Smith | VA3RKS |
| 2 nd Vice President | Allen Eddisford | VE3JGU |
| Secretary | Tim Pychyl | VA3PYC |
| Treasurer | James Bell | VE3KAW |
| Net Manager | Robert MacFarlane | VA3AGN |

| Other Key Positions | Currently held and need nominees | |
|---------------------|----------------------------------|--------|
| Technical Director | Graham Patterson | VE3AMN |
| ARES Prime | Steven Harrison | VE3FTS |
| Web Master | Jim Hutchison | VA3GMZ |

27. Normally during an AGM, nominees would be asked to step out of the room so that a voting process could be conducted. Due to the fact that the AGM was being held on VE3STP, a level of privacy was required during the voting process. Therefore, all members of CRRA have been sent an email of the nominees. The member have voted by stating YES or NO beside the nominee and have returned their vote by email to Steven VE3FTS (steven.harrison@icloud.com) for tally which was forwarded to Graham VE3AMN for confirmation and announcement which was done on VE3STP at 19:30 hrs on 26 May 2020. The new executive handover was immediate and effective on 26 May 2020. Congratulations to the new executive members.

Conclusion

28. Graham VE3AMN concluded the meeting by thanking all members for their participation in the many roles and functions they completed over the past year and what an honour it was to have worked with them all. Graham further commented that he enjoyed his tenure while being president. Tim VE3PYC expressed on behalf of the club membership, their sincerest sense of gratitude to Graham for his undying support, knowledge and expertise. A thundering round of cheers, whistles and applause could be heard in the background of VE3STP.

29. Tim VE3PYC motioned that the meeting be adjourned.

30. Curt VE3ZN second the motion.

31. The meeting was adjourned at 20:42 hrs on 19 May 2020

Graham Patterson VE3AMN
President

Steven Harrison VE3FTS
1st Vice President