SEPTEMBER 6th PARC GENERAL MEETING MINUTES

Executive Present: President Steve VER3PTA, Vice President VE3KBI, Treasurer Barry VE3BLM, Technical Rick VE3IQZ, Activities John VA3NW, Secretary Bob VE3IEL.

Non-elected officers: ARES Coordinator John VE3VL, PL Net Coordinator Nina VE3IRK, Web-Coordinator Harmen VE3EMA.

Members Present: Keith VA3HXC	Clay VE3YCL	Paul VE3AXT
Wayne VE3LFB	Terry VA3IX	Randy VE3RWN
Don VE3BSR	Rick VE3RKY	Mark VE3LJQ
Teresa VE3TZM	Patrick VE3PQX	Barry VA3BB
Martin VA3OMW	Bob VE3RVZ	Lawrence VA3LBB

Highlight: The linking of repeaters VE3BUY and VE3PBO.

- **Opening Remarks:** President Steve VE3PTA welcomed all the members to the ZOOM meeting. He also remarked how it had been an interesting summer. Steve VE3PTA, then gave tribute to Rick VA3ARD, now silent key. Rick VA3ARD lived near Steve in Port Hope. They often chatted together. Rick was controller of the Monday Club Professional Loafers Net.
- **Treasurers Report:** Barry VE3BLM gave a recent report. Field Day expenses: \$147.90, Petty Cash \$296.20, GIC \$866.69, July Nexicom expense \$62.09 with service charge of \$2.50 August Nexicom expense \$62.09 with service charge of \$1.25, Club donation by Bob VE3IEL toward web hosting \$50.00, Club bank account- \$1,626.04.
- **Technical Report:** Rick VE3IQZ, stated that Repeater VE3PBO is working fine. VE3BUY is working fine. The two repeaters are still not linked. A solution for linking is on-going. The Apsley repeater, VE3APL, needs work. In the next few weeks, it is expected that work will be done. An alternate method of linking our repeaters has been proposed. Randy VE3RWN has more information concerning a long term solution. Some linking progress will not happen until next year.
- Technical Report Cont'd: Harmen VE3EMA, is also involved with the options of linking repeaters. He commented that one option is to get a new internet provider, similar to what was previously available. Another option is to establish a linking system via a microwave link. The microwave system would be similar to the HamWan system that is already working in the Seattle Washington area, that links several repeaters. Harmen VE3EMA, said that he would be working with Rick VE3IQZ, and Randy VE3RWN. Randy VE3RWN then screen-shared some photos of how a HamWan microwave linking system could work at the Cobourg repeater site. Randy VE3RWN, explained how the original internet provisions worked. Finally, after a power outage, the Rogers internet linking system went down. At that point VE3PBO and VE3BUY was no longer linked. Randy noted that the Rogers link has, for several reasons, not been restored. Randy VE3RWN, showed how a new modern linking system could be managed at the Cobourg site. Randy VE3RWN, explained, with pictures, what could be done using existing towers and new equipment. (more)

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- **Technical report cont'd:** Randy VE3RWN, continued with a detailed explanation of what is at the Cobourg repeater site now and what more would be required for a microwave link. Randy noted that a wide area coverage was possible using the Cobourg site for our nets and mobile access along the 401 highway through to Toronto. Other means of communication, such as APRS, or Packet, could also work as part of the overall system. Randy then provided pictures of the commercial broadcast instillation at the Cobourg site. A question was asked about cell-phone capability as well as how the internet worked or did not work. Again, restoring an internet connection either with Rogers, or another provider, and the relative costs was discussed. A continuing cost for an internet connection, along with the Nexicom connection cost that the club has for VE3PBO, might prove a financial burden for our club.
- HamWan explained: Randy VE3RWN then provided a description of how HamWan worked. Randy showed pictures of the HamWan system that is working in the Seattle area. It is a network that links several repeaters and covers a very wide area. The name HamWan itself reveals that it is an amateur radio (ham) wide area network like a cell-phone network. It combines amateur radio & data. There are repeaters linked, a backbone resource, and an internet gateway. Several sites & towers come into play with the Seattle HamWan area network. It is a viable system. It covers a wide area, connected with amateur frequency microwave links. Many modern uses, because of internet connection are possible with this system. It is amateurs using it. Randy VE3RWN, then told of financial grants that might provide assistance for us to purchase equipment for our links. Grants such as ARDC, might be available.
- **Financial Grants**: ARDC, is an organization that had valuable IP assets. Some of these assets were sold. The money was invested and provided support for an available fund that, on an annual basis, makes about \$6,000,000 available for hams to build networks. An application would have to be made and approved. The Peterborough club could make such an application for building a linking system. Randy VE3RWN, then by means of ZOOM share-screen, showed members more of the linking system he was talking about, and the 5+ megahertz microwave antennas & equipment in place. A question about connection cables for this equipment & radios was asked. Cabling the size of RG58 type are used, and for ease of maintenance cables for each radio set-up then is less a problem. Randy then talked about back up battery systems, and special parabolic antennas.
- AREDN Networking explained: Randy VE3RWN then described amateur radio emergency digital networking (AREDN). More info at: arednnet.org. Randy explained that it was something like old time packet radio. Special software & microwave linking is used in this case for more local access. Local ARES might use AREDN for various links to fire halls or court house. Harmen VE3EMA, asked, what the difference is between HamWan & AREDN. Randy explained that the HamWan system was the older system, and capable of fast interchange. AREDN was more experimental yet very good for emergency communication as it is easier for one AREDN group to quickly join another. *(more)*

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- **Ongoing plans**: Harmen VE3EMA, explained how another antenna at repeater VE3PBO, could be placed for a link to repeater VE3BUY. Getting water tower access for more water tower antenna placements might be a problem.
- Barry VE3BLM, indicated that he would be willing to donate \$100, toward Randy's **Financing:** solution for linking our repeaters. Barry also noted that other Peterborough hams might also be willing to donate a little money. Randy VE3RWN, noted that an ALLSTAR and internet connection could be made quite quickly with a cost of around \$60 to \$70, a month. This would be a commercial method of providing linking. Someone would have to source the best service and get it installed. Randy reported that he was willing to make some funds available on a short term basis, just to have a link of some kind in operation as quickly as the club seems to want. Harmen VE3EMA, asked the question about the availability of the equipment required. For internet, that would be a commercial option for a short term solution, with donations to cover the commercial equipment & hook-up. For this short-term Randy VE3RWN, was willing to donate one third of the cost. A club microlink solution would be less costly in the long run. John VA3NW, mentioned that he would be willing to donate \$50.00 toward the cost of linking repeaters. Bob VE3IEL, mentioned that he would match John's donation. Barry VE3BLM, asked about cell phone availability at the Cobourg site. Randy VE3RWN, responded, that 5ghz availability is workable. Barry reported that he had a spare modem that might work there, if tried. Don VE3BSR, showed interest in just getting something going as soon as possible. Harmen VE3EMA, is concerned about continuing access to the Cobourg repeater site, the towers there, and the equipment. Randy VE3RWN, noted that he could provide access when available. The installation & testing of Barry's internet modem in Cobourg was discussed.
- **Future plans:** Other clubs such as the Quinte club, the Campbellford club, and other area hams seem interested in the linking idea. A microwave solution should therefore be in a plan for long term reliable multiple links. A microwave linking system will take time, so in the short term, internet linking through a commercial provider such as Rogers would likely work. Yet, our own system for emergencies, or ARES use, would be better using our own amateur links. Transmitter call signs for amateur equipment is not a problem. A phased approach toward our linking goals is what is now under discussion. President Steve VE3PTA, indicated that the club membership would decide how far our links' endeavours would go. More discussion then took place concerning financial grant possibilities. The club would be responsible for the grants; and use the money provided, as per proposal. The cost of the grant is, no cost, if the grant is approved. In time, replacement costs as equipment wears out would be from the club. When and if a grant is provided, then work would need to be done in a timely way that is part of any proposal. Rick VE3IQZ, suggested that we should consider the problems of our location for repeater traffic. Some people can reach certain repeaters, and some have to use a different repeater for their traffic, depending on where they live in the area.

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Further Link discussions: Randy VE3RWN, suggested that PARC should have a project manager to oversee ongoing works. This person would also need to research what grant opportunities might be available and move forward toward obtaining such grants and utilizing the money for new technical equipment. New technical equipment perhaps, for Packet, Winlink, a newer repeater equipment, battery backup, or whatever else, might be considered. Randy, noted that grant providers really like to promote youth training & education. Getting and having younger members will keep our club going. Currently, at this ZOOM meeting, it is mainly an older group.

Line of sight from antenna-to-antenna possibilities was then discussed. Line of sight transmissions from a Peterborough high point to the Cobourg repeater towers would provide a good radio link.

Barry VE3BLM, was thanked for offering an internet modem that, when installed, would likely provide a short-term solution toward linking VE3PBO to VE3BUY. Outsourced internet commercial connection is prone to failure by storm activity. Unexpected service glitches could be very problematic for the provider, and thus for us as well. Randy VE3RWN, noted that having our own independent linking connections would eliminate the outsourced commercial dependence. Microwave linking would then be our own way of connecting repeaters or other resources. AREDN networking could be added to our own local ham sites or operational areas. Of course, the costs should be resolved, and agreed upon. Again, project leading persons, or person, might be selected to move and advise on such progress. A phased approach toward a long-term operational system is advisable.

* Randy VE3RWN, put forward a motion that a first part of a phased approach be installing Barry's internet wireless modem equipment if that is OK. Harmen VE3EMA seconded the motion.

Barry VE3BLM, then showed a picture of the wireless modem with its antennas. Following a local test of Barry's modem, a team including Harmen VE3EMA, Rick VE3IQZ, & Randy VE3RWN, would then install the modem as a short term linking solution. Randy VE3RWN proposed that after that, HamWan microwave technology links be considered. Rick VE3RKY indicated that he would contribute \$800.00 toward the cost of the equipment needed to start a microwave network. More donations could create self-funded support for another phase of networking solutions. Randy VE3RWN responded that he, also, would contribute to support the next phase consideration.

* Rick VE3RKY, tabled a motion that the club move forward on a plan for the second phase of microwave networking. Barry VE3BLM seconded the motion. More phased installation information was discussed regarding antennas, and signaling paths. Harmen VE3EMA, agreed that signaling paths, especially for the Peterborough area, be worked out. John VE3VL, may get the contacts arranged for access to our repeater water tower site. His contacts with city and other administrators will be within this effort. More documentation on our club's construction plans would be helpful for John's effort. John VE3VL, agreed.

(more)

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- **Discussion on the presented motion**: Donations were discussed. Barry VE3BLM, indicated that he would contribute \$100.00 toward our club's plan. A question was asked by Don VE3BSR, about the need for permission to access our sites. It was suggested that should access problems be found, then other sites or approaches would be devised. This response satisfied Don.
- **Recognition of motions:** Secretary Bob VE3IEL, asked the club if the motions presented in this meeting now could be accepted. The motions were acknowledged as passed.
- **Moving forward**: It is expected that a group of members will be formed with Randy VE3RWN, as an advisor for our phased plans, and applications. Rick VE3RKY, suggested that those club members who wish to be a part of a standing work, ways & means group, indicate their willingness, perhaps by putting their names in a hat. The group leader could be chosen by members of the group.
- Meeting time concerns: Randy VE3RWN, thanked the club membership for the time given to present his views on club linking progressions. The club executive thanked Randy for the information he provided. Many members remarked that repeater VE3BUY is important for our club, thanks to its coverage.
- Upcoming social business: The subject of the up-coming corn roast was introduced by Club Secretary, Bob VE3IEL. Time to promote the corn roast was asked by Paul VE3AXT. The corn roast is planned for next Sunday, September 11th. Paul VE3AXT, had left the meeting, but it is understood that the corn roast & barbeque would take place at Paul's home on Sunday afternoon, beginning at 2:00 PM. The party will be potluck with corn, burgers, coffee, treats, salads & local fruit from Paul's berry patch.
- Activity business: John VA3NW, reported that the Trent regatta is scheduled for Saturday October 1st. Later, on Saturday October 15th, the Boy Scout Jamboree On the Air happens. We need lots of volunteers for the Trent Regatta. John said that we barely scraped through with enough volunteers last time. Full day or part day work can be arranged for this year. John also mentioned the rally of The Tall Pines, a car rally. Volunteers for the car rally event are also needed. John indicated that the car rally, he thought, was October 26th. He will confirm the date. John said that he would be at the car rally, as would Lawrence VA3LBB. The car rally radio volunteers see more than the general public, or even some of the officials.
- ARES report:John VE3VL, reported on the recent ARES deployed exercise in South
Monaghan on August 27th. John noted that we had participation from the
local township Fire Chief, Chuck Parsons who is also a radio ham VA3NY.
Chuck contributed greatly to the planning & monitoring of the exercise.
Communications worked well considering the rolling hills and distances.
Four tall antennas were established; and, provided good coverage. (more)

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- ARES report cont'd: For the first time the Winlink mode for passing traffic was used in a portable set-up. Winlink also worked quite well. John VE3VL was able to send an e-mail message by Winlink to Chief Parsons, from his portable position. All in all, the exercise was a great success. John VE3VL is looking forward to having ARES members take part in Trent Regatta communications.
- Accommodation: Beginning in October our club will meet in the Otonabee Valley Public School at 580 River Road South. We can now have in person PARC meetings. It is hoped that these meetings can be electrically streamed for those members unable to personally attend the meetings. The first meeting at the school is scheduled for Tuesday, October 4th. Barry VE3BLM, was unable to secure the school for tonight's general meeting. Barry is arranging to hold future club meetings at the school.

The meeting was concluded by President Steve Cavanaugh VE3PTA, after a move for adjournment was made by Clay VE3YCL. The meeting ended at 9:12 PM.

September 6th General Meeting minutes, submitted by Secretary Bob VE3IEL, September 13th, 2022.