



Feedline

Club Meeting 7pm Thursday, March 12th, Campbell building, Niagara Region, Thorold

HAVE YOU RENEWED YOUR MEMBERSHIP?

REPORT FROM THE CLUB SECRETARY

In February, Alex Roglic, VA3RPK, resigned as President of NPARC due to personal reasons. We would like to sincerely thank Alex for stepping up to the plate in our time of need. We understand this is a challenging time for him with the death of his father. Our thoughts are with him.

That being said, we need someone to step into the role of President from now until June. Basically, the President resides over both the executive and general meetings, and oversees the executive. This person doesn't need to do it all, that's what the rest of us are here for; all we need is someone who can run a meeting and delegate responsibility appropriately. Just give it a try--if you like it, we are holding elections shortly for September, and you can throw your hat in the ring. We don't bite, I promise. If you don't want to steer the ship, perhaps you can step into the Public Relations position. This person is responsible for promoting the club. If you are enthusiastic about the hobby, and would like to see more people get involved, this would be the place for you.



ALEX VA3RPK

March is also the month we choose a nominating committee for the election to take place in June. If you don't necessarily want to be on the executive itself, but don't mind scouting out candidates for office, so to speak, we can use your help. In order to grow as a club, we need people to be involved in the running of it. We appreciate all of you, and want to continue being NPARC. Thank you in advance.

April Lewis VE3BHG NPARC Secretary 2019-2020

SK Ezio (Joe) Visentin VE3EUZ Thorold at age 60

Peacefully after a long journey with cancer, Ezio passed away at home on Tuesday, February 25, 2020 at 60 years of age. Beloved husband of Elizabeth for 36 years. Loving father of Carlo (Sammy), Ariana (Stephen). Ezio had worked at General Motors for 31 years before he retired in January 2016. An avid amateur radio operator and boy did he love cars! His ability for meeting people no matter where he went and making them friends is a testimony to the man that he was.



He will be greatly missed by all his family and friends. Please share your condolences, memories and photos at www.pleasantviewcemetery.ca

SK Robert Notarfranco VE3BHH of Niagara Falls at age 91

Passed away peacefully with his loving family gathered by his side, at the Greater Niagara General Hospital on Tuesday, February 25, 2020 at the age of 91. Robert, affectionately known by those who loved him as Bob was predeceased in 2018 by his beloved wife Jackie Notarfranco (nee Gillard) of 57 years. Loving father of Joyce Ann Notarfranco, Rhonda Notarfranco, and Kim Notarfranco (Jerry Vander Veen).



He was a long-time representative for OSSTF and was a founding member of Niagara Peninsula Amateur Radio Club. Bob will be remembered for sharing his expertise in technology and communication. He will be remembered most for his steadfast love and devotion to his family.

GENERAL MEETING MINUTES - February 13, 2020

Call to Order 7:13 pm followed by roll call.

Thanks were extended to Clayton and Dennis for their hard work making the Big Event a success. Our new event coordinator for 2021 is Steve VA3FLF.

Sign up sheets were available for the next Tech Night on February 27th. Possible topics to be repeaters and CW. VE3MM runs an online CWOPS Academy and we have an examiner available for those who wish to become certified.

Repeater Update

The repeaters are working well. VE3WCD wasn't working, but Dale Sackfie has confirmed that the generator at the site is tested on the first Monday of every month, and WCD was working after that. Brian VA3BDL, who is a Communications Service Technician, attended NRS on January 24th and confirmed that a fuse had blown. The Yaesu Fusion repeater is giving us good coverage—it reaches Fort Erie and Port Colborne. The old GEMaster II repeater has been removed from the site for repair to Black Creek Community Center.

We are seeking hams that would be interested in learning about routine repeater maintenance. VE3RNR is Wires X connected.

VE2BTH and VE2FTA have put together a presentation for Lifelong Learning, a club that charges \$15 per year for continued learning for adults. It has been suggested that as a club we may want to get involved with this club to promote ham radio.

Ham Academy

Three sessions were held culminating with Winter Field Day in January. Due to the weather, operations were conducted from inside at Black Creek. The group operated for five hours on Saturday and had a potluck supper afterward. Clayton will be making up Certificates of Completion for those who participated.

Phone Campaign

Geddie VE3CJX has been making phone calls to hams who are former members or who are members and don't attend meetings. She has generated some interest—about three or four people may start coming out to meetings again.

We need a nominating committee to be chosen at the March meeting in order to elect the 2020-2021 executive. We need people to volunteer.

We also need speakers for our meetings from March onward. Any suggestions as to topics for presentation are welcome.

Other Business

On behalf of the club, Henry purchased equipment from the widow of VE3BNB. Some of this was sold at the Big Event. A 64-foot tower has been donated to Black Creek and needs to be installed with an appropriate antenna. We have been offered a room at Black Creek in which to store ham equipment under lock and key. Mike Amadio would like to establish Black Creek as an emergency shelter and communications location.

Clayton has acquired a piggy bank from Pathstones, an organization for children's mental health. Any change we collect will be acknowledged with a charitable tax receipt.

Break

Today is recognized as National Radio Day. The 50/50 draw came to \$26.50, which was won by Shaun Casey.

Treasurer's Report was given

Big Event Report was given.

Meeting adjourned at 9:32 pm

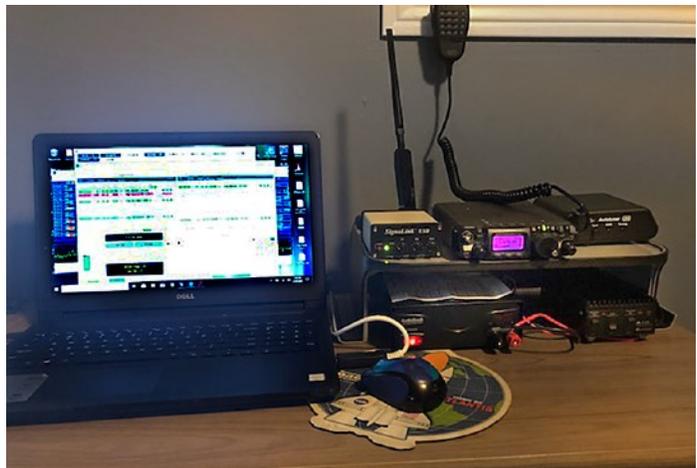
[Minutes submitted by April, VE3BHG, club secretary.](#)

COMPACT QRP FT8 PSK31 STATION

My xyl says that I have no patience, well the last few weeks I have proved her wrong. I am sitting here this evening and have worked two PSK31 contacts and four FT8 contacts using 5 watts and a dipole on the YAESU FT 817ND.

I picked up the 817 with the intent of setting up for digital modes. It took me several weeks to put all the accessories together but I finally got the bugs out and the settings correct.. I must admit I was skeptical about even being successful given the current propagation conditions however I have found that 40 Meters is an excellent band right now for QRP. If you catch the conditions just right in the late afternoon there is no problem finding a few contacts. It is a bit like fishing.....throw the line out at the right time (CQ), and you will get a bite.

I wasn't sure what I needed other than cabling and a sound modem of some kind but thanks to the internet and some helpful sites I was able to get everything I needed for a reasonable price. I already had a Signalink USB and cabling. I found on the Signalink website the proper configuration for the jumpers to get it to work with the 817. I am a Ham Radio Deluxe user and downloaded HRD and WSJTX on a spare laptop I had in the shack. After some tinkering I was able to get audio from the rig into WSJTX and signals were decoding. Unfortunately, I had no CAT control and needed to figure out how to key up the rig.



Let me throw this out right here.....**Groups.io** is a great resource for anything in the hobby. There is a group for every radio or piece of software out there. I found the FT817 group and easily found the best cable to use. I purchased the 817 programming cable from RT Systems. Even though I don't need to really program the rig the cable can be used for CAT control and you don't have t worry about Chinese Prolific Drivers (That is another story).

Cutting to the chase.....all is working great now. I am using the Z100 auto tuner with the little rig, a dipole about 15 feet off ground, and the Signalink with software. In the last few weeks on the air I have made around 50 PSK or FT8 QRP contacts on 40 Meters. I have even tried to get in on the local 2 Meter SSB group a few nights but it is hit or miss for me in Fort Erie. I am looking forward to getting this little baby all set up for portable ops this spring and hit the great outdoors for a little QRP fun.

STEVE VA3FLF NPARC Past-President

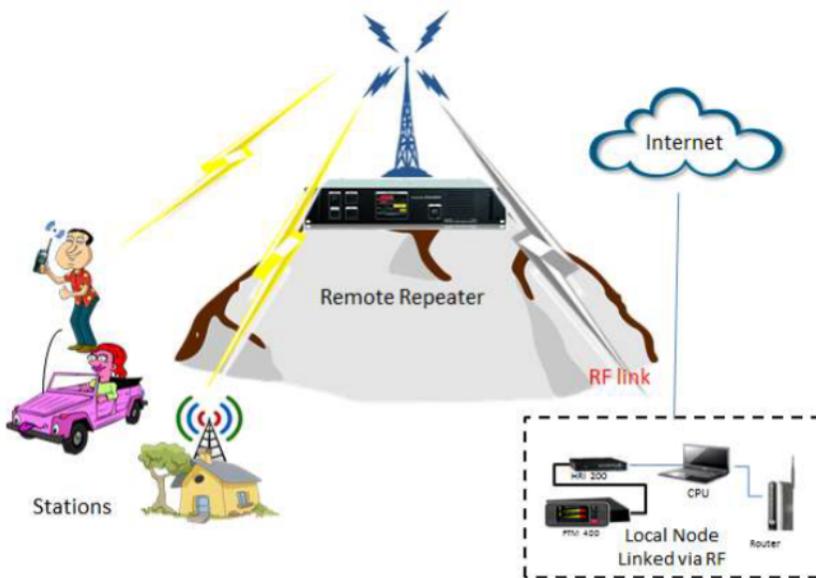
AVALANCHE CONTROL IN THE ROCKIES



Every year the Royal Canadian Artillery are key to preventing avalanches in BC's Selkirk mountains that could close Canadian Pacific right-of-ways and block traffic on the Trans-Canada Highway. Operation PALACI is the world's largest mobile avalanche-control program and runs from November to April. Parks Canada scientists monitor snow condition in Rogers Pass and when they identify a potential area of concern dispatch the CAF crews who fire live rounds from one of 17 locations along the highway. The program prevents huge avalanches from forming closing vital road and rail routes.



The **VE3RNR** UHF repeater, 443.175+ with 107.2 Hz tone, is operational from E. L. Crossley Secondary School in Fonthill. It is a DR-2X Yaesu System Fusion repeater is configured in Auto / Auto analog / digital mode. Wires-x connectivity is now in place. Check out the wires-x net listing and other useful wires-x info at www.hamoperator.com. The wires-x presentation given at the December meeting is posted to nparcgroup@groups.io. If not a member, send an empty e-mail to nparcgroup+subscribe@groups.io.



NPARC Weekly Net - Wednesday, 8:00pm on VE3NRS. 147.240 +107.2

CW OPERATORS' CLUB EXPLAINED

It is wonderful to see such interest in improving proficiency in Morse. I am a member of an international organization that is dedicated to promoting and training radio amateurs in the art of cw. It is called CWops (CW Operators' Club). CWops is celebrating their 10th anniversary this year.

CWops regularly runs cw training sessions for small groups of radio amateurs. The training is called CW Academy. The training sessions are conducted over the internet by experienced instructors. There are four levels of instruction which can accommodate an individual based on his level of proficiency, from the basic beginner to the advanced ham who wants to improve their head copying speed. There is no cost for this training! There are a large number of graduates from this program.

I would encourage you to look at the CW Academy web page and decide if you think it is for you. <https://cwops.org/cw-academy/cw-academy-options/>

73 Rick VE3MM

TED HENRY, W6UOU, TURNS 100 YEARS OLD.



The fascinating Henry family history in amateur radio marketing and manufacturing dates back to the late 1920's. The original Henry Radio shop, started by Ted's brother Bob opened in Bulter, Missouri. All the brothers, Bob, Ted and Walt became fascinated with ham radio. Ted moved to Los Angeles in 1941 and opened a radio shop of his own. His shop survived the suspension of amateur radio during the Second

World War by purchasing gear from hams and reselling it to MARS stations around the world. Ted Henry is best know for his line of tube-type power amplifiers, starting with the Henry 2K model. Henry Radio became the first Kenwood dealer in the USA and the oldest dealer for Bird RF test equipment.

Ted retired at 85.

GO KIT FOR SALE

Two transceivers mounted in a black wooden case are both battery and 110vac powered.
Contact Denis Grantham, the builder, VE3KVE, for details.



Ham Shack in the woods.

Miles from town.

Extremely RF quiet.

Handy Talkie Testing - Part Two - by Glenn VE3NDW

Having already discussed in Part 1 the various parameters that affect the output power of an HT when using a dummy load of 50 ohms, I'd like to discuss the effects when using various antennae. We have previously noted that the use of a dummy load gives us an idea of the maximum power output your HT can produce under ideal conditions.

We saw how output varies with both output frequency and the source battery voltage. In this report, Part 2, we are going to repeat the same tests, and change the position of the body relative to the HT and also connect various types and lengths of commercially available antennae. In Part 3, we will look at the effect of various antennae on actual radiated output using a near field dedicated signal strength meter.

To continue, I'd like to further clarify what lowers VSWR. We now look at two effects during testing. The first is the effect on the VSWR by placing the HT at various positions related to the user's body, and in the second, examine the effect of counterpoise or may be referred to as a "cat's whisker".

Body Position as Counterpoise

One of the many videos now on Facebook shows antennae testing of an HT with the HT located about 1 meter away from the tester, in effect, an HT all by itself without anyone around. I was suspicious of the results from this form of testing which pointed to unusually high VSWR ratios indicating that the "notch" in the frequency response was outside the amateur bands. This doesn't seem right for an antenna designed for use in the amateur band, so I replicated the test set up.

While I don't have equipment needed to fully duplicate the frequency sweep the tester did to determine the location of the "notch", the resulting VSWR ratios were higher than expected (all above 3), but when I picked up the HT and tested it again in the normal speaking position, that is, the HT hand held near/at the head of the operator, the VSWR ratios lowered to acceptable levels (2 or less). Obviously, the modern HT is configured so that there is capacitive coupling of the HT and the body of the operator, the body of the operator acting as a counterpoise.

This lead to another set of tests, namely, to identify in which position, in relation to the operator's body, do you get the lowest VSWR? I found that the best VSWR occurs when using a chest pack, (probably because the coupling with the body is greatest and the body acting as a counterpoise). With a chest pack, the radio is located on the body at about heart level and, of course, operated using a remote speaker mike.

Ideally, when the HT is held at head level, the antenna is at its highest position and the radiation pattern is omni-directional (it's a vertical antennae after all). Admittedly, the chest pack position is a bit lower and the operator's body, may block part of the signal and alter the radiation pattern (depending upon which way the operator's body is facing in relation to an intended receiver), but should be sufficient for most purposes.

Other Counterpoise Testing

If you do a quick search on the internet for “Cat’s Whisker”, “Rat Tail” or “Tiger Tail” or a similar expression you’ll find many Facebook posts will suggest that this is the greatest low cost addition anyone can add to a HT.

You can buy fancy commercial ones dedicated to various brands of HTs, although you will find these relatively easy to make. The idea is to take a piece of 12 or 14 ga flexible coated copper wire, about 19 3/8 inches long (more or less) to use it as a counter poise and to attach it to the “negative”, non-hot side (or ground) of the HT.

You can attach it using a ring terminal by removing the antennae and placing it between the output connector of the HT and the antennae, or some even suggest, attaching it directly to the body of the HT through one of the screws going into the metal portion of the body (such as one of the screws holding on the belt clip).

I’ve tried these suggestions, attaching both to the antennae post and the screws into the metal body, using both the BF-UV-5R and the Yaseu FT-60. In neither case, did it improve the SWR, in fact, with the FT-60, it made it worse. Needless to say, I was somewhat disappointed. Nevertheless, it is worth a try, your results may vary, but I suspect not, I haven’t seen a lot of hams running around lately with a 19 inch piece of wire hanging down from the HT.

A Word of Caution about VSWR Testing

Just before we get into the actual testing, I’d like to say a few words about VSWR. The voltage standing wave ratio (VSWR) is a quick measure of the ratio of the output power of a rig going into the antennae vs how much power is being reflected back. An ideal ratio, of 1:1 (sometimes written only as 1), is only possible when one has a 50 ohm resistive dummy load attached to the rig.

It is important to note that antennae (and feed line) do have a capacitive/inductive effect, and in theory at the “notch” point (ie: at resonant frequency) the capacitive and inductive impedances cancel, but in the real world, it is nearly impossible to get a 1:1 ratio using an antennae. To simplify somewhat, let’s assume a SWR ratio of 1.25 or lower is excellent, 1.5 is good, 2.0 is acceptable, but not ideal, and 3.0 or above will probably damage the rig if transmission at that SWR ratio is prolonged. Note that most rigs do automatically limit output power if the SWR ratio is above 3.0, but please don’t depend on it!

Testing on the 2 Meter Band

Here is a comparison of the test results of the stock Baofeng shorty antenna and the now famous and popular Nagoya NA 771 antenna. The test procedure is as outlined in Part 1, and the same SWR/power meter is used. All tests have been repeated twice.

Stock Baofeng Antenna (120 cm long).

144 MHz	145 MHz	146 MHz	147 MHz	148 MHz	Frequency
5.5	5.1	4.5	4.5	4.1	Output in Watts
1.12	1.12	1.13	1.19	1.20	SWR

Nagoya NA 771 Antenna (390 cm long)

4.8	4.8	5.2	5.4	5.5	Output in Watts
1.66	1.64	1.62	1.59	1.54	SWR

The test results are interesting. It appears, with the stock Baofeng antenna, that it will accept more output at the lower end of the band, but falls off at the upper end of the band, whereas the Nagoya 771, even with a slightly higher SWR, the power level does not fall off as much as the stock Baofeng antenna. In fact, the power level increases a bit with increasing frequency rather than falling off. So, for operation at the mid to upper end of 2 M, the NA-771 is a good choice. By the way, the Nagoya 771 is a copy of the Diamond antenna, and its popularity has prompted further Chinese knock offs. Just for fun, I did purchase one of the knockoffs specifically the HPA 771 and was surprised to learn that there is virtually no difference between the two (except for the price). If you are concerned about purchasing a genuine Nagoya antenna, there are several videos on Facebook illustrating how to identify the knock offs.

Testing on the 70 CM Band

This is where it gets really interesting using same test conditions as before:

Stock Baofeng Shorty Antenna (120 cm)

430 MHz	435 MHz	440 MHz	445 MHz	450 MHz	Frequency
4.1	4.6	5.0	5.5	5.1	Power (watts)
2.0	1.91	1.91	1.93	1.78	SWR

Nagoya 771 Antenna (390 cm)

4.1	4.2	4.8	5.8	6.1	Power (watts)
2.8	2.6	2.3	2.3	2.4	SWR

Again, in spite of the higher SWR, it appears as if the Nagoya antenna will accept more power at the higher frequencies. Now wait a minute: are we saying the Baofeng HT with a Shorty antenna can produce more than 5 watts? I really questioned this myself, so I did the following test using the ideal dedicated 50 ohm 5 watt dummy load.

6.0	6.2	6.2	6.2	6.0	Power- 50 ohm load
1.02	1.02	1.01	1.01	1.01	SWR

So it appears as if the Baofeng UV-5R will really produce 6 watt output on the 70 cm band.

OVER 2 ME... Feedline Editor, Denis VA3ONO



February has been a breakthrough month for VA3ONO. With help from Gary, VE3DZP, I discovered the addictive joys of FT8. And a new logging program by N3FJP, made recording 87 contacts in the March ARRL DX phone contest a breeze.

I owned a used SignaLink for years and had the cable made at Durham Radio in Oshawa for my old FT-817ND before they went under. I sold my 817 two-years-ago and bought a new FT-857D. It was when I purchased a refurbished Dell i5 mini tower at the Big Event this year things got rolling. Gary downloaded ACLog, WSJT-X and JT Alert lickety split. He knew I would probably drag my feet and he was determined to get my feet wet, really wet! My usual disclaimer is I'm a MAC guy so don't know my way around a PC. But Windows 10 is pretty cool,, kinda like the MAC OS I'm use too. I'm learning the ropes and managed to safely downloaded the ARRL DX contest log from the N3FJP website.

So my FT8 and FT4 opening day was Tuesday, Feb. 25th. FT8, Cuba and Japan on FT4. I would say CO8RCP was a ground ball to first, while JL1TZQ might be an off-the-wall triple. And did I mention, digital can be very addictive? A double click here, a double click there,, here a click, there a click. You get the idea!

Now to my March ARRL contesting weekend. Working only a few hours I amassed a record breaking 87 SSB DX contacts. I started with PZ5RA, Suriname and ended with Luxembourg, Italy and Germany on Sunday night. All contacts across 40, 20 and 15 meters. Let's say my 857D with 100 watts and a twisted roof top 40-20-15-10 meter end-fed is not exactly a monster DX station. When 20 and 40 meters a wall of repetitive noise, I struggled on for the love of the hobby. And every now and then, when you least expect it, you would be rewarded with, VA3ONO 59 K, from a 40 meter Hawaiian station 7500km to the west. For a brief second all that ringing in my ears seemed gone and life was very good indeed!