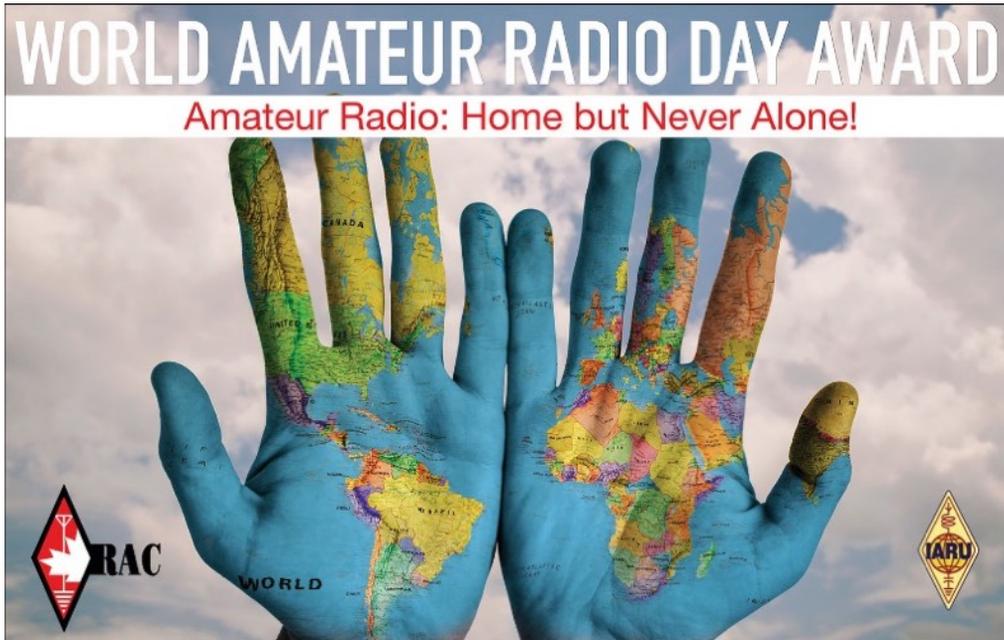




Feedline

Virtual ZOOM Club Meeting 7pm Thursday, March 11th. Contact webmaster@nparc.ca



On Sunday, April 18th, get on the air for a RAC organized event to sponsor World Amateur Radio Day 2021. It will celebrate Amateur Radio and commemorate the formation of the worldwide International Radio Union (IARU). Official RAC stations will operate from coast to coast. A special certificate will be available. More info by pasting this link.

<https://www.rac.ca/operating/world-amateur-radio-day-april-18/>

President's Message

Another month has passed and we are getting closer to Spring...finally! I am looking forward to the warmer weather and hope we can have some in person club events later in the year. Speaking of activities, I am sure it will be no surprise that we have cancelled the Hamfest scheduled for May. The Welland Fairgrounds is not going to host any events until at least the month of July. At this point we will just look forward to the Big Event in 2022 and possibly have a tailgate type sale sometime in the early fall. As you know, it is very difficult to make plans until we can get over the COVID hump.

We finished up the New Ham Academy this past weekend. See photo below. We have had very good participation from the new hams and will begin looking forward to our next class in the late summer. We are going to make a few changes to our Basic Amateur Class process that I will be sharing in this month's meeting.

Phil, VE3ACK, will be our guest speaker for this month. He will expand some more on Meteor Scatter. Next month for April's meeting we have a young ham from North Carolina, Zach Thompson KM4BLG. Zach will give a presentation on Raspberry Pi and Amateur Radio. Zach has already had an article published in the QST Magazine.

NPARC has purchased a 2 Metre Fox Hunt transmitter. We will be looking at holding Fox Hunt Training as a part of Tech Nights and getting out trying to find the hidden transmitter. I have participated in a few of these events over the years and it is always fun.

I want to mention again this month that we are looking for a Public Relations Officer. We have not had a Public Relations Officer since the passing of John Eagle. This position is the NPARC representative to external agencies, such as government entities, newspapers, radio, and working with the Executive about outreach and growing our club. If you are interested in serving in the position, please contact me, Glenn, VE3NDW or Geddie, VE3CJX, who are our current nominating committee.

The nominating committee will be looking for some executive positions for the upcoming year. We will be needing a Vice-President and a Secretary. Please consider serving in one of these positions. I certainly do not want us to go through a repeat of not having enough positions filled to meet Ontario Not for Profit rules.

That wraps it up for this month. We have a lot of going on even with COVID restrictions. We have weekly nets, ARES activities, Tech Nights, Zoom breakfast, contests and much more. Stay in touch with happenings by checking into the weekly net on VE3NRS on Wednesday night at 8pm or following information on the groups.io. Thanks again for hanging in there.

Steve Riddle VA3FLF President



[NPARC General Meeting Minutes February 11, 2021.](#)

Held via Zoom. 25 in attendance. Called to order 7:06 pm. Roll Call

Remembrance of David Digweed VE3FOI and a moment of silence.

Program - Zoom guest speaker VE3ISX

Barry Lisoweski, ONTARS Net Manager, talks about remote stations and requirements.

Announcements

Winter Field Day had 18 participants and 16 stations—one classified as indoors, one outdoors. Our unofficial score was 31,554 points

New Ham Academy—needs a makeup session for material that couldn't be covered due to lack of time. Date to be determined.

Since Phil Gebhardt VE3ACK has stepped down as an instructor, we need more people to become certified instructors.

The executive has proposed a three-phase program for future new hams. The first will be an Introductory Day to include a description of amateur radio, and to let people know what tools and materials are necessary to be involved in the hobby. Following this will be the Basic Ham Class, then Advanced Training, which will cover the topics formerly covered under New Ham Academy. A date for this is yet to be determined, could be late summer or early fall, also contingent upon COVID restrictions at the time.

March Meeting

Phil Gebhardt VE3ACK will be giving a presentation on meteor scatter—what it is and how to use it to bounce radio signals. The topic for April's meeting could be Raspberry Pi and all its radio applications.

We may be able to hold our meetings in May and June outdoors. Keep in mind that the elections will be held in June. Minutes from the January meeting were accepted as printed in the Feedline.

Treasurer's Report

Given by Henry VA3OV, because John VA3WM was not available. It was accepted as presented. The Membership Committee is preparing a Power Point Presentation for the March General meeting.

Henry VA3OV drew the name for the Winter Field Day prize of a \$200.00 Radio World gift card. The winner was Kevin, VE3RRH.

We are still in need of a Public Relations Officer. This person promotes the club in various ways to the general public.

Meeting was adjourned at 9:05 pm.

[April Lewis VE3BHG](#) Secretary

PLEASE STAY 6 GARDEN GNOMES APART



MAKING CONTACTS

By Kevin Lemon VE3RRH

So we are ready, the station is setup, we have antennas in the air and we're ready for the contest. Now What,

Each Contest has a slightly different requirement for the contest contact. In the upcoming ARRL International SSB Contest on March 6 & 7th 2021 the information you will give out in our area is a signal report and our province. ie. 5, 9 Ontario.

See <https://contests.arrl.org/ContestRules/DX-Rules.pdf> for the Contest Rules.

Now please understand that the signal report is always 5 9 in a contest, don't muddy the water with a real signal report, it won't be appreciated unless the station specifically asks for it. If you can hear a station in a contest they're 5 9 in the clear, trust me. The ARRL International DX is a perfect contest because you can work the world that weekend., and we are only supposed to work DX.

As I mentioned earlier there are 2 types of operation in a contest, the Run Station and the Search and Pounce Station.

The Run Station

In a run station you find an unused frequency and call CQ Contest.
 The Chant goes somewhat like this:
 CQ Contest, CQ Contest
 This is VE3RRH *insert your call here :) * Contest.

Pause and wait for someone to call you, they will answer with their call. They will not call you but simply throw out their call on your frequency. You may get one station or many stations calling you, try to pick out a call or a portion of a call sign. ie. a full call, W1RRL or portions of a call sign. the station ending RRL or the W1 call.

Be patient, stay calm, do the best you can, don't try to hurry or go fast, they want to work you, so most will wait for you, and if not, there will be more after them. You control the run, pick the stations you can hear the best. If you start getting flustered, slow down, pause take a deep breath and move on.

When you have the call correct you will answer with WIRRL you're 5 9 Ontario, (say Five Nine) They will answer you with 59 and a number representing their power level or an abbreviation. ie. 59 100, 59 500, or 59 KW, KW = Kilowatt.

Log them and call QRZ, or VE3RRH QRZ, or Victor Echo 3 Radio Radio Hotel QRZ Identify your station each time, or at least after every 3 QSO's, there are new people coming by all the time and they need your call sign to know if they need to work you.

You should be logging with a computer if possible, and the ability to type is useful as well.

The Pileup

In a contest whether as a Run station or a Search station you will have to deal with the "Pile UP" Now imagine you are standing on the stage of an auditorium facing a huge crowd of people. All those people want you to answer them, and they are all shouting their names at you. Your job is to pick a name out of the chaos.

As a run station you can just pick the loudest voice, but beware not everyone will stop shouting even though you're trying to talk with someone else. The bigger the crowd, the more noise you will have to deal with.

As a Search station we have a more difficult job...that is to be heard in the herd.

The Search and Pounce Station

As a search station I use a number of techniques to aid in making a contact, now not all of the DX stations will be buried in a huge pile up, and I will sometimes just pass them by for easier pickings, unless I need that country. But First.

I have my logging program up and running, and I have a note pad and pencil on the desk beside me. When I find a station I want to log, I will listen for a round or two to get their info and I'll enter it into the logging program, I will then call and try to work them. If I am successful it is just a matter of hitting enter and moving on, if I can't get through to them I write their call and info down on the notepad with the frequency they are on. I then hit ESC on the computer to delete the contact and move on, I'll watch for them on the next pass. A lot of times a station I can't work now will be easily worked 10 minutes later, keep moving.

I like to start at the bottom of the band and move upward working stations as I go, when I hit the top of the band I'll reverse and work my way back down, It is amazing how many new stations you

will find as you travel in the opposite direction. I'll also scan my notepad and watch for the stations I missed.

When I hit the bottom of the band I'll start back up, I keep doing this until, I've worked everyone I can hear, I get bored, or the band dies.

As time goes by and the day turns to night or the night turns to day the bands will change, If you run a contest long enough you will hear it or experience it. A band that has signals running north and south can change and the signals will run east and west, or the signals that were going long will change and now fall closer in. It's both fun to watch and can be frustrating, especially when you're trying to make that contact into South Africa and the bands shut down.

An interesting phenomenon is when band conditions change it may sound like the rushing wind. You are busy working stations when you hear a 'wind gust' across the frequency and when it's passed the band is totally different.

The bands also react to the rising and setting of the sun, the transition from night to day or day to night is called the grey line and it affects the way signals react, it's worth watching for the changes as the grey line crosses the province.

Breaking a PILEUP

Tips for getting through the mess.

Listen to a pileup for while and you will hear that it has a life of it's own. Listen to the operator running the pileup and you will learn ways to get his attention. It's all about getting his attention.

Remember the auditorium with the guy standing on the platform and the crowd yelling their names at him. Now you are in the crowd and you want his attention, so how do you get it.

The big dogs run the pileup, you'll hear them, they sound loud, they sound confident and they demand attention. Little dogs get eaten, don't be a little dog.

When you call, call like you're calling your kids, mean it, demand it, sound like a big dog, no one knows you have a 100 watt station, act like you have a kilowatt behind you. It's your voice and your sound that gets attention not your "S" unit on his meter. Project your voice, from the bottom of the diaphragm, don't scream but project, pronounce, speak clearly, don't mumble, you're trying to be heard in the middle of chaos. How you speak into the mike and the resulting sound on the receiving end is what makes the contact. I have broken pileups with 100 watts that others couldn't do with a kilowatts, all because of timing and voice.

Oh yes, timing, lets talk timing. In any pileup there are those who are trying to get in first, it's instinctive and we will all do it, yes me too. But trying to be first doesn't always do it, especially on big pileups.

Operators can use many different approaches to running a pileup or picking calls out of a pileup, some will pick the loudest, or the first clear call they hear, some will pick from the middle of the pileup or some will pick up the last to call.

If you listen to a pileup you will hear the initial blast of calls just after the run station says QRZ, this is the loudest and most raucous, after a period of time the din slows down and a lull appears, this is the mid point, all the first in line have stopped to hear if they are going to be picked. If nothing is heard the second wave will start, as that wave slows down we have the end point. Generally at this point the run station is talking to a caller.

We now have 3 points to try and get the run stations attention, if you're fast on the trigger try to be first. A VE3 call gets a lot of attention if you can get it in first, push the first part of your call when calling after he says QRZ, if he asks for the VE3 call him again.

You can also wait for the mid point, and send your call as the noise subsides, finally you can be a Tail End Charley and send your call as the pile up subsides. I use all these methods, they all work. It depends on the operator.

I have found that it is better to give your call clearly and at a reasonable speed instead of trying to speak it very fast, don't draw out your call, it won't work, and don't put it on speed dial, that isn't effective either. Say your call fast but say it clearly, you can also repeat parts of your call, ie. VE3RRH RRH, or VE3RRH VE3, also use phonetics. VICTOR ECHO 3 RADIO RADIO HOTEL. Now I use Radio instead of Romeo which is the correct phonetic in the proword list. I use Radio because it has a harder consonant sound and it cuts through the noise better, also hams all recognize radio.

Some hams will use funny sayings for their call signs but I prefer to stay with the accepted prowords for the most part. Lynn likes to use VICTOR ECHO 3 FEELS NO YOUNGER or FLOWERS NEVER YELLOW, it gets attention, mostly in North America, but it requires the operator to interpret the call, that can lead to mistakes and slows the operator down.

Something to remember, almost all hams speak English on the air, but it is not always their first language so keep your language direct and avoid slang terms.

For an example, my Elmer Frank VE3JUP loved to use my call as ROMPER ROOM HAM, funny, but not recognizable anywhere off the North American continent. You had to be a kid in the 50's and 60's to know what Romper Room was.

I have tried to give you an understanding of what it's like to run in a contest, how a Run Station works, how to Search and Pounce, and how to break a pileup. I have also touched on changes to propagation as the contest goes on, now you need to jump in at the deep end and see for yourself what it is like.

You will have fun, you will discover things about yourself, your station and the world of Ham radio, and DX.

Go and Have Fun. Every contact is an accomplishment, every contact is a story, and a victory.



STILL OWNS FIRST RIG

The last letters of this ham's first call were QZP and this is what remains of there first transmitter, a model 65A, Globe Scout.

Used from 1975 to 1978, would you like to guess who we are talking about?

ZOOM VIRTUAL CLUB MEETING SPEAKERS

- | | | |
|-----------------|---|-------------------------------------|
| <i>March 11</i> | <i>Phil Gebhardt VE3ACK</i> | <i>Meteor Scatter Operations</i> |
| | <i>Glenn Holden VE3NDX</i> | <i>Membership Report</i> |
| <i>April 8</i> | <i>Zach Thompson KM4BLG</i> | <i>Raspberry Pi & Ham Radio</i> |
| <i>May 13</i> | <i>TBD</i> | |
| <i>June 10</i> | <i>Field Day Prep, Last Business Meeting Until Sept. 9th.</i> | |

Steve Riddle, VA3FLF, President, Henry Jarzyna, VA3OV, Vice President

John Lorenc, VA3WM, Treasurer, April Lewis, VE3BHG, Secretary.

VE3NRS Club Net, Wed., 8pm 147.240MHz, + 107.2 Tone.

Membership information available at nparc.ca

NIAGARA ARES

Spring is in the air. We are looking forward of resuming outdoor activities either solo or in small groups. In the last couple meetings we talked about NVIS antenna building for HF emergency communications. We will need to field test these antennas. We will need to understand their effective range.

We can also resurrect GWEN (Ground Wave Emergency Network). South of the border various ARES Groups are experimenting using JS8call over 2M SSB, 6M and all the other HF bands to coordinate Net Control stations over a wide area.

As of this day we do not foresee any Public Service activities. All the Hamfest for the first half of the year are cancelled. Hopefully the second half of year will offer better prospects.

We like to offer some Technite activities in a virtual settings for now. When the weather / temperature will improve we can move to outdoor settings where we can share our projects and field test them. Please share your electronic projects, antenna designs, Raspberry Pi applications. If interest grow we can have kit building groups.

Stay Busy. Be Safe. [Henry Jarzyna, VA3OV](#)

MR. ICOM IS COMPANY FOUNDER TOKUZO INOUE

Mr. Inoue, founder and Chairman of Icom, became interested in radio when he was a junior high school student. He had a growing interest in electronics. He looks back on those days, as when I decided my lifework would be in wireless communications. After graduating from high school, he started a shop for electronic equipment at his parent’s house. But he soon joined a medical equipment manufacturer. His new employer highly valued his technical knowledge and he was designing RF medical equipment. However, it took him four hours to travel back and forth to work. The president of the company asked Mr. Inoue to become a subcontractor and continue designing for them from home. Mr. Inoue made a small shack in his yard, then started the business as “Inoue Electric Seisakusho” in 1954. This is the beginning of ICOM. In 1964 he produced his first radio. The FDAM-1 was an all-transistor, small, 50MHz, AM portable transceiver.



"Mr. ICOM" - Tokuzo Inoue, JA3FA

GETTING THE MOST FROM METEOR SCATTER

By Phil Gebhardt VE3ACK

It's been roughly 75 years since Oswald Villard (W6QYT) and Allen Peterson (W6POH) at Stanford University were investigating the mysteries of communicating using the ionized trails of meteors.

It was only about 10 years later when Canada became a world leader in meteor research as the Canadian government funded major research projects at the NRC (National Research Council).

The secrets that were revealed during those early days of meteor communications still hold true and today's amateurs can use them to our advantage.

While most amateur radio meteor communications currently take place on 6 metres and 2 metres, Villard and his team were experimenting with forward scattering from ionized trails on 20 metres. At times, they moved their research down to 80 metres! Given the number of hams on 80 metres these days, this band is now out of the question. The 20-metre band would even be a challenge. However, while we are close to the minimum in the solar cycle,

there are certainly opportunities on the 15- and 10-metre bands. Tests that I conducted in October 1997 on 10 metres showed that there is untapped potential for the HF bands.

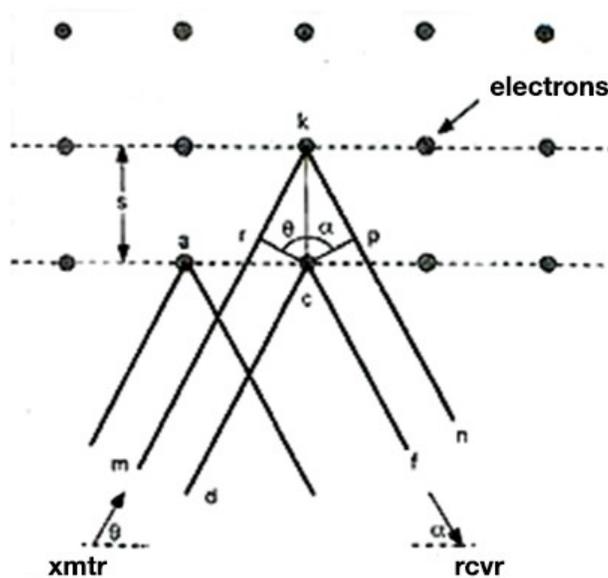
In the 1950s, researchers already knew that communications between stations as far apart as 2000 km was possible. Now, as then, the issue was using an antenna with a low take-off angle of the order of 5° or 6°. A more realistic goal was to aim for a distance in the range of 1200 to 1300 km. Using amateur radio equipment and power levels typical of 1947, the researchers were able to show that “during the early morning hours, several thousand meteor reflections per hour can be detected.” That translates to approximately one per second. Admittedly, not all the reflections could have supported an exchange between stations. Nevertheless, meteor researchers today estimate that there are 10^{12} meteoroids entering Earth’s atmosphere every day. With either estimation, continuous communication using meteor trails should be possible. So ... why isn’t it possible? And ... what can we do to maximize our chances of making successful contacts? These are among the issues that we will look at during the March 11th’s virtual general meeting.

For the most part, Villard and his team were focussing on sporadic meteors while the emphasis today in amateur radio is on major meteor showers when the meteor rate is higher and the chance of success would seem to be greater. And to a certain extent that’s true. During the Leonid meteor shower in 1999, I was able to copy the time signal on 7335 kHz from CHU in Ottawa continuously via meteor trails. However, evidence indicates that with the right equipment and the right approach, communication via meteor trails should be a daily occurrence on the amateur bands. Certainly, digital techniques have made the task easier.

Another issue with major meteor showers is the number of meteor trails that will reflect signals versus the number of trails that will scatter signals. Since the incoming meteor rate during a meteor shower is high compared to the sporadic meteor rate, it is reasonable to expect that the number of meteor trails that will reflect signals will also be higher during a meteor shower. And while this is generally true, it is important to realize that only 10 percent of trails reflect signals; the majority of trails (90 percent) scatter signals.

Similarly, just as we shouldn't favour periodic meteor showers over daily sporadic meteors, we shouldn't completely focus on forward-scattering techniques and overlook backscatter possibilities. To maximize the distance between stations, amateurs focus on forward-scattering techniques. However, backscatter can be a major factor in achieving successful contacts.

So, how do we balance these various factors to maximize our meteor communications opportunities? We'll look at the overall picture during the March 11th virtual general meeting. In addition, we'll examine the possibility of conducting some tests during the upcoming meteor shower in April.



The majority of ionized meteor trails (about 90%) are under-dense. Consequently, the transmitted signal penetrates the trail and individual electrons re-radiate the signal. The result is that the transmitted signal is scattered rather than reflected. This too presents a problem. Are the HF bands the solution?

Gleaned from a perplexed FT8 FT4 operator:

NOTE ON FT8 and FT4....DO NOT SHORT CUT THE PROCESS. If I do not receive an "RR73" in many cases I will NOT put you in my log. I wait to see if there is a "RR73" given. If you want LOTW, QRZ or eQSL Confirmation, then "Complete the Process!"

OVER TO ME (a weekend of contesting)

I started on 40 metres and ended on 40 metres. And I covered a lot of ground during the recent ARRL International SSB DX contest. Since I was spending most of my time on FT8, a weekend on phone, DXing looked promising. While I'm not a dedicated tester, I manage to work a few hours here and there, acting the part. In the process I beat last year's score by 8,910 points, with 6 additional multipliers.

From the get go, the bands were crowded and noisy. My ICOM 7000 filters were put to good use.

On Saturday morning I heard several raspy voices. Hams that did all night shifts. I told one chap, "Hey, you're loosing your voice!" And he just said, "Yeah, I know."

In my case it wasn't my throat that was giving out but rather my ears. They are still ringing Sunday night, three hours after the contest. I was piping the rigs audio right into my face through an old Radio Shack, 8 ohm, external speaker. It has very little bass and an abundance of treble. Oh My Ears!

One of the reasons I'm able to contest, I picked up a used PC at our 'last' Big Event and bought the N3FJP contest log package. Downloading the logging software is easy and immediately you're ready to begin.

To be totally honest, I got off to a slow start Friday night with just four 40 metre contacts. Saturday, I started my day with J68HZ on the Caribbean island of St. Lucia. If there was one station I kept tripping over, multiple times, it was this one. The team was living in a luxurious hilltop rental villa, complete with a superstation! Take a look at their digs here. www.VillaGrandPiton.com They were most likely, eating and sleeping ham radio, around the clock and never made it to the beach until the contest was over. This tropical dream shack always seems to finish at the top of the contest points board year after year.

As mentioned Saturday I began on 20 metres, then jumped back and forth between 20 and 15. At night it was back to 40 metres. It was between 3am and 4am, local time, Sunday morning I felt the urge to get back on 40 metres, so I jumped out of bed. The band seemed quiet, no traffic, no QSB. Then I heard a loud ZM4T calling, "Contest!" VK3GK, was right behind him. I added both New Zealand and Australia to my 40 metre contest log, plus Costa Rica, Portugal, the Azores and of course our friends on St. Lucia, J68HZ, before heading back to bed.

During the contest the majority of the stations I heard were in the kilowatt class. Italian stations, 500 watts, in the UK, 400 watts, a number of 100 watt stations and only one QRP station. It was a Spanish amateur, EA5HJV, with a beautiful, strong, signal. Easily 5-5 or 5-6. He was creating a pileup. When I checked his QRZ page there was nothing about his love of 5 watts. Instead his page was a big promotion for a full line of cubical quad wire beam antennas. www.bigsignals.es Was his signal so strong because he was using one of these antennas? Have a look at his web site. Click English and checkout some very different antenna designs.

My station is minimal. A four band end-fend and a 100 watt transceiver. During a contest you have the opportunity to compete with the big DX stations. Along as your ears hold out.

Denis Cahill VA3ONO - Feedline editor

WHERE'S NRS?

There seems to be some confusion regarding where the VE3NRS repeater is located. Thorold or St. Catharines? The sign on the perimeter fence indicates, 5 Allanburg Rd. South, St. Catharines.

Strangely there is an Allanburg Rd. and actually a place by that name in Thorold South. By South I mean on the east side of the Welland Canal.

It can't get anymore confusing.

