

SVARC Monthly Newsletter

February 2021

Seaway Valley Amateur Radio Club

Next Club Meeting: Wednesday, February 24th, 2021

Virtual meeting on repeater—VE3PGC 443.650 and EchoLink until further notice.

Time: 19:00h (07:00 PM)

Guest Speaker: Cancelled until further notice

*Deadline for newsletter submissions is **ONE** week prior to the next meeting.*

PRESIDENT'S MESSAGE - Larry Giguere (VA3RSQ)

PRESIDENTS LETTER FEB 2021

Well here we are in February 14, 2021 more snow on its way this month with some cooler temperatures

No signs of covid vaccinations for those who would like one. They are giving them to the retirement homes and some of their workers. The government says its on its way sometime in the near future.

There is nothing going on in the way of amateur events or with Aries this month as far as I know. Lets hope that we can get together face to face in the near future. Everyone stay safe...

Weekly SVARC VHF/UHF Net:

Monday on VE3SVC (147.180+ MHz; CTCSS 110.9 Hz) at 7:00 PM local time, followed by a 70 CM net on VE3PGC (443.650+ MHz. CTCSS 110.9 Hz.)

Inside this Issue:

President's Message	1
Club Page	2
From The Editor	3
Agenda	4
Minutes	5-7
CME	8
ISS	9
VE3HTR	10-16
Good Practices	17-18
VE3AIH	19
VA3KD	20-22
This 'n That	23-24



Seaway Valley Amateur Radio Club

4672 O'Keefe Road
St. Andrews West, ON
K0C2A0

www.svarc.ca

SVARC Executive 2020—2021

- **President:** Larry Giguere (VA3RSQ)
- **Vice President:** Doug Pearson (VE3HTR)
- **Secretary:** Chris Lauzon (VA3CRR)
- **Treasurer:** Elizabeth Halliwell (VE3EZH)
- **Technical Consultant:** Doug Pearson
- **Club Membership:** Elizabeth Halliwell
- **Net Manager:** Tom Todd (VA3KD)
- **ARES Coordinator:** Earle DePass (VE3IMP)
- **Editor/Publisher:** Murray MacDonnell (VE3XLJ)

The Seaway Valley Amateur Radio Club operates a number of repeaters in Cornwall and Area. VE3SVC is a VHF Yaesu FM only repeater operating at 147.180 + and a tone of 110.9 Hz. On UHF, VE3PGC, a Yaesu C4FM Fusion repeater with wide area coverage, is located at Bonville. It operates at 443.650 + and a tone of 110.9 Hz. For other repeaters see the Repeater Page at SVARC.ca



Amateur Radio Emergency Service (ARES)

The Amateur Radio Emergency Service (ARES) is composed of certified Radio Amateurs who have voluntarily registered their qualifications and equipment for communications duty in the public service when disaster strikes.

Upcoming Events

A listing of repeaters that are easily accessed from the Cornwall area are on our Club page.

It can be found at..

<https://www.svarc.ca>

Also, check out the “Swap” page!



The Seaway Valley Amateur Radio Club is a proud Radio Amateurs of Canada Affiliated Club.

The SVARC Repeater reports are available on the club website under “Area Repeater List”

<https://www.svarc.ca/>

From the Editor - Murray MacDonnell (VE3XLJ)

Hello Fellow Hams.. Just sitting here on Feb 15th, watching the latest storm beginning.. I'd rather that than -24C temps which we experienced last week!! The snowblower is about my only outside exercise these days ...sadly.

What's new in your world this month? Drop me an article or update for inclusion in next month's Newsletter!

Quiet on my end, making some HF contacts, here and there, and I picked up an ARRL Special Service Club Station, WOJH this morning, operating from huts on the ice in MN. Brrr. Check them out on QRZ.

I am excited for Leonard, VE3OLB, as he sets up his new FT-991A rig and is configuring his station for Wires X and FT-8. Like a kid at Christmas!! He may even talk me into setting up FT-8 station here to see what the excitement is all about !

Don't forget about the Club Facebook page. It is under utilized and it's a good place to share thoughts.

This month I have included a submission from Doug, VE3HTR, showing his Shack and workbenches.. Thanks Doug! Just need your Bio for next month ;)

Also included is an article sent to me by Art, VE3AIH, and a Ham Bio from Tom, VA3KD, and pictures of his Shack. Nice key collection Tom.

I also threw in an old but relevant article on Amateur radio operating practices. We all know the basics but we all get lax at times and it never hurts to have a refresher course. Remember, there could be many SWL's out there that are listening and we need to be professional "On Air" and present the hobby with an untarnished image!

Also, I'm curious if anyone has any prospects lined up for a Ham Course if we can put one on this Spring?

Don't forget about our Club Website and check out the SWAP page! I just checked the newly operational "Visitor" counter (thanks to Steve VE3EZB) and it seems to be getting visited a fair number of times.

And, That's about it from here. Hope you enjoy this issue and keep sending in articles and pictures for the next month!

'73

Murray



SEAWAY VALLEY AMATEUR RADIO CLUB INC.

4672 O'Keefe Road

St. Andrews West, Ontario, K0C 2A0

Agenda

General (Monthly) Meeting
Wednesday February 24, 2021
Virtual Meeting on VE3PGC

07:00 PM Meeting starts

Business Arising :

Minutes of last meeting January 27, 2021 – Chris (VA3CRR)

Treasurer's Report – Elizabeth (VE3EZH)

Net Controllers Report – Tom (VA3KD)

Newsletter Report – Murray (VE3XLJ)

Miscellaneous Reports

Repeater Report - Doug (VE3HTR)

Web Report – Ed (VE3EAH)

ARES Report – Earle (VE3IMP)

New Business

Nothing to report

Presentation:

None till further notice

Upcoming Events

none

Adjournment:

Date, time and place of next meeting: Wednesday, March 31, 2021 at 7PM on VE3PGC or at St John Ambulance Building depending on Covid 19

SEAWAY VALLEY AMATEUR RADIO CLUB INC.

4672 O'Keefe Road

St. Andrews West, Ontario, K0C 2A0

Minutes of the General Meeting held at 7:00PM, January 27, 2021

Via RF Due to COVID -19

Present

Members attended this meeting: 18 members : Larry Giguere, President (VA3RSQ), Doug Pearson, Vice President (VE3HTR), Elizabeth Halliwell, Treasurer (VE3EZH), Chris Lauzon, Secretary (VA3CRR), Ed Halliwell (VE3EAH), Murray MacDonnell (VE3XLJ), Art Horovitch (VE3AIH), Suzan Horovitch (VE3EXN), Joseph Tondreau (VA3JHT), Rick Palmer (VA3EV), Tom Todd (VA3KD), Dean Brush (VA3BS), Stan Fortune (VA3JSF), Andre Richer (VA3RDI), Gilbert Boudreault (VE3CFS), Jim Richardson (VE3AFV), Roger Belanger (VA3GBV), David Bernard (VE3JLV)

Opening

SVARC President Larry Giguere called meeting to order at 7:00 PM.

Old Business

Review and approval of the minutes from our previous Meeting of November 25, 2020; The Minutes were read by Chris. Motion to approve by Larry and seconded by Dean, carried.

Reports

Treasurer's Report:

Elizabeth reported there was no change from the previous month.

Monday Night Net:

Tom reported for the Month of November we had 78 check in's on VE3SVC, 77 on VE3PGC and 26 on DMR for a total of 181. December, we had 58 check in's on VE3SVC, 60 on VE3PGC and 24 on DMR for a total of 142.

Newsletter Report :

Murray is pleased with the submissions he is receiving for the newsletter. Keep sending things in.

Technical Report:

Doug stated the 220 MHz repeater is back on the air at three times the power. An identifier still needs to be added. Not many frequencies available for VE3VSW, the old frequency for VE3PGC is still available.

ARES Report:

Earle was not available.

Website update:

No change.

50/50 Draw :

No draw due to RF meeting.

New Business

Steve Harvey is looking to be an examiner, SVARC is willing to sponsor him.

Insurance certificates are in. Larry will circulate them to their respective recipients, as well as the club executive.

Presentation:

None due to COVID-19

Upcoming Events

TBD due to COVID-19

Meeting Adjourned:

Motioned by Larry at 7:17 PM

Next meeting:

To be held February 24, 2021 on VE3PGC at 7:00 PM. Minutes ...recorded by Chris Lauzon (VA3CRR)

The following was submitted by Art, VE1AIH

COVID?? SOMETHING ELSE TO WORRY ABOUT

A “Perfect Coronal Mass Ejection” Could Be a Nightmare. A new study in the research journal *Space Weather* considers what might happen if a worst-case coronal mass ejection (CME) hit Earth — a “perfect solar storm,” if you will.

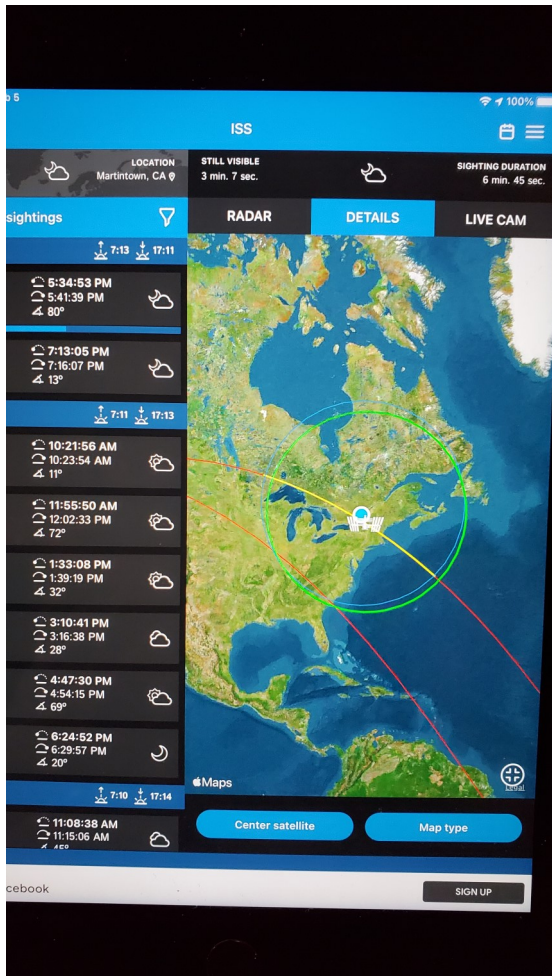
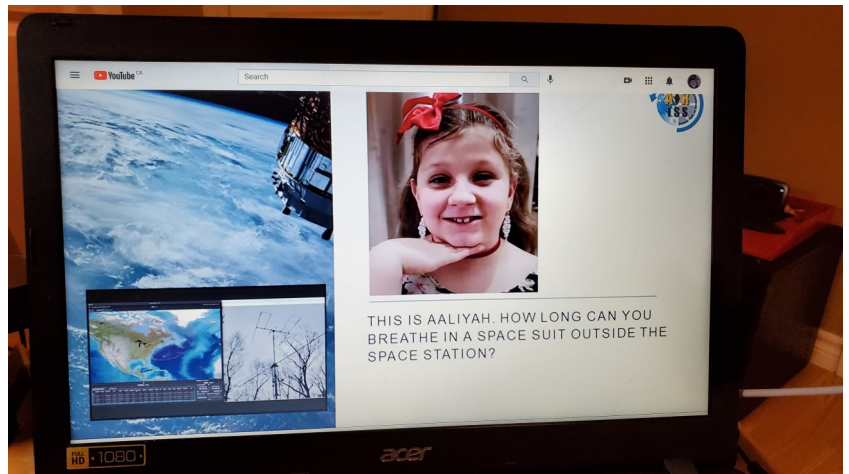
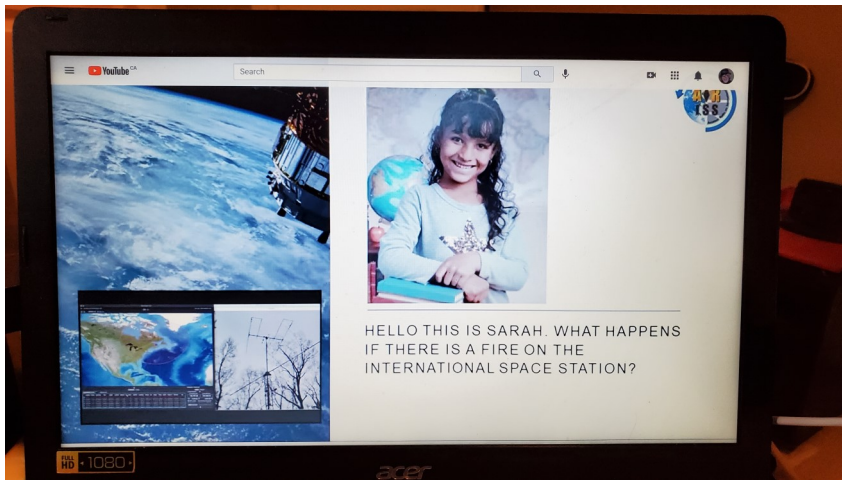
In 2014, Bruce Tsurutani of Jet Propulsion Laboratory and Gurbax Lakhina of the Indian Institute of Geomagnetism introduced the “Perfect CME.” It could create a magnetic storm with intensity up to the saturation limit, a value greater than the Carrington Event of 1859. The interplanetary shock would arrive at Earth within 12 hours, creating a sudden impulse of around 234 nanoteslas, and the magnetic pulse duration in the magnetosphere would be about 22 seconds. Orbiting satellites would be exposed to “extreme levels of flare and interplanetary CME shock accelerated particle radiation,” they said. The event would follow an initial CME, allowing the storm cloud to hit Earth with maximum force.”

The CME’s 12-hour travel time would allow little margin for preparation. The CME would hit Earth’s magnetosphere at 45 times the speed of sound, and the resulting geomagnetic storm could be as much as twice as strong as the Carrington Event. Power grids, GPS, and other services could experience significant outages. More recent research led by physicist Dan Welling of the University of Texas at Arlington took a fresh look at the “perfect CME,” and he was able to reach new conclusions.

Welling’s team found that geomagnetic disturbances in response to a perfect CME could be 10 times stronger than calculated, especially at latitudes above 45 to 50°. “Our results exceed values observed during many past extreme events, including the March 1989 storm that brought down the Hydro-Québec power grid in eastern Canada, the May 1921 railroad storm, and the Carrington Event itself,” Welling summarized.

A key result of the new study is how the CME would distort and compress Earth’s magnetosphere. The strike would push the magnetopause down until it’s only 2 Earth-radii above Earth’s surface. Satellites in Earth orbit would suddenly find themselves exposed to a hail of energetic, and potentially damaging, charged particles.

From Paul Caccamo
RAC Ontario Section Bulletin
Feb 13, 2020



Here are a couple of pictures of kids in Ottawa talking to the ISS one day about two weeks ago. The picture to the left is a shot of my iPad showing the ISS passing overhead. The blue ring is the effective horizon of my location, relative to the ISS and the green ring is the effective horizon of the ISS. When they are overlapping, the ISS is visible.

The following pictures are from Doug, VE3HTR, our Club VP and Technical Advisor.

Here is a photo tour of my “shack”, shop and a look at the Asterisk AllStar/Echolink node. I also took some photos of the VE3SVC 224.180 repeater and new VE3VSW 443.000 repeater.

73 de VE3HTR

Doug



Main operating position: P25 scanner, TYT TH-9000 222 MHz. mobile, Yaesu FT-7800 dual band mobile, KPC-3 and Signal Link USB TNC's clocks for local and Zulu time, behind them IC-R2500 receiver, Alinco DM-330 power supply Yaesu FT-1000MP HF. Antennas are 80/40 trap inverted vee, Comet GP-15, Diamond discone, and a single Jag RF folded dipole for 220.



“Basement station” Left: UPS, center, IBM mini-PC running Cent-OS Linux, Asterisk Allstar/Echolink. Next to that a USB mono sound interface with PTT control.



Right stack, top to bottom, Motorola M-1225 UHF mobile, Motorola GM-300 VHF mobile modified from 16 to 40 channels, Icom IC-F420 UHF link radio with a 6 element Yagi antenna pointed at VE3PGC, while the two mobiles use a Jetstream JTB-2 (not recommended!)

TP-Link Router to connect node computer to the Internet, Astron RS-20 power supply powering it all. The close-up shows the cooling fan behind the link radio, controlled by a thermal switch on the power supply heat sink. The link radio got too hot to touch during those hour long Thursday and Sunday nets before the fan was added.



Basement workshop, obviously not cleaned up for the photo, overall view. The 224.180 repeater is on the bench for installation of the repeater controller / CW ID unit.



Power supplies, and more power supplies.



Another power supply, audio signal generator, 5 digit DMM with a type K thermocouple attached, displaying the room temperature, Hantek digital storage 'scope, RF signal generator (470 MHz., arbitrary waveform function generator, hard drive (3.5"/2.5") test stand, two laptops, XP and MS-DOS for programming older radios, solder fume extractor.



Some Hakko type temperature controlled soldering stations/irons, hot air workstation for SMD boards, vacuum desoldering station for through lead component boards.



Vision aids; a 7" LCD microscope, 10 power stereo microscope and "Luxo" style magnifier with ring light, an old but still good Tektronix 475 CRT 'scope.

Not shown, a HP spectrum analyser, a Rigol spectrum analyser/tracking generator, and a few more computers and power supplies.

Plus some handheld (portable) and mobile radios. But that's enough for one photo essay!



Good Operating Practices

Congratulations! You've got your new Amateur Radio license and can't wait to start operating on HF phone. However, you're not certain how you want to conduct yourself. After all, there are few if any mandated rules. Most hams have developed good operating practices and etiquette simply by listening to more experienced hams and you will as well. Here are some of my ideas for your consideration.

Do

- Always be polite regardless of the circumstances. If not, avoid transmitting.
- Set a good example especially for short wave listeners who may be thinking about becoming a ham.
- Be a good listener. It will help you better organize your thoughts before transmitting.
- Reply to a CQ, or call CQ yourself. It helps keep alive the magic of ham radio.
- Speak clearly and slowly, especially when giving your call sign to someone you have never worked before.
- Promote friendship and goodwill to DX contacts. Look for ways to get to know each other rather than simply exchanging signal reports and 73s!
- Try to keep track of everyone in the QSO. Hopefully someone has assumed the role of "traffic director" to make sure everyone has a chance to contribute to the discussion. If not, don't hesitate to do it yourself.
- Make it clear at the end of each transmission which station is expected to transmit next. Try to do this even when operating VOX.
- Operate on frequencies that are in whole Khz (e.g. 18.130 KHz). This alleviates ambiguity and makes it easier for everyone to be on the same frequency.
- Openly praise other hams when you observe them doing something that you feel is especially deserving. e.g., helping demonstrate ham radio to a group of scouts.
- Always be ready to quickly and calmly respond to emergency situations. Rehearse what you would do if presented with various scenarios.
- Pause between transmissions. "Quick keying" gives the appearance that other hams are unwelcome in your QSO.
- Consider using the Internet to enrich your QSO. Many hams have developed their own comprehensive websites which you can usually find through QRZ.COM.
- Respect the privileges of hams operating in other modes on the HF bands including those who enjoy AM.
- Make a point to try 17 and 60 meters. Good operating practices are especially prevalent on these bands.
- Look for opportunities to "Elmer" newly licensed hams when you hear them on the HF bands. Welcome them, solicit their questions and give them pointers on good operating practices.
- Remember that no one country can proclaim to be the leader of the Amateur Radio world. Likewise, no one country's foreign policy is any more right or wrong than that of another country.
- Develop good operating practices. You will be doing your part in helping insure the continuance of our long and proud tradition of self-regulation.

Don't

- Act like some sort of Broadcast Radio station. Your fellow Amateurs will most likely not appreciate such a blatant display of personal ego.
- Acknowledge the presence of deliberate interference. After all, that's most likely the overall objective of the person doing the interfering.
- Be excessively long winded especially when in a round-table discussion and during times when band conditions are changing.
- Just talk about ham radio. Most hams have many more interests.
- Operate when you are in a bad mood. You will be that much more vulnerable to losing your temper.
- Overuse Q-codes and other ham jargon on the phone bands.
- Claim or homestead any particular frequency for nets, schedules, etc. If your designated frequency is already in use, simply move up or down as necessary.
- Transmit before first determining that the frequency is clear. This includes transmitting within 3Khz of other known QSOs.
- Break into an ongoing QSO unless you can hear the majority of the participants.
- Ignore someone new to a round table QSO. We should all do our part to make everyone feel welcome. Avoid making the discussion appear exclusive to your particular circle of friends.
- Test your transmitter over the air. It is far better to use a dummy load.
- Cough, sneeze or clear your throat into your microphone.
- Operate VOX except when in a QSO with three or less participants. It tends to foster "quick keying" which may give the appearance that you don't welcome breakers.
- Become a "Band Policeman" quick to tell others what you feel they are doing wrong. In instances where it may be called for, always be polite and constructive.
- Turn up your microphone gain or resort to excessive speech processing in order to be heard. Such practices will most likely result in diminished audio quality and increased likelihood of interference to nearby QSOs.
- Use the word "break" when wanting to join an on-going QSO. Simply give your call sign between transmissions and reserve the use of the word "break" for more urgent situations.
- Join an ongoing QSO unless you have something to contribute to the discussion. It is especially rude to interrupt other hams with a request for audio checks, signal reports, etc.
- Operate in any fashion that is not in keeping with good amateur practice. Be certain to always comply with the provisions of Part 97 of the rules.
- Knowingly interfere with an ongoing QSO just because you are working DX, especially split frequency.
- Say that the frequency "is not" in use when you hear someone inquire. Refrain from responding at all except unless you know for certain that the frequency or one nearby "is" in use.

K4QKY "Don" is the publisher of the above.

Ridicule other hams or express any negative views of the overall state of Amateur Radio. If you don't have something positive and constructive to say, avoid saying anything at all

The Radio Amateur is

CONSIDERATE...He/[She] never knowingly operates in such a way as to lessen the pleasure of others.

LOYAL...He/[She] offers loyalty, encouragement and support to other amateurs, local clubs, the IARU Radio Society in his/[her] country, through which Amateur Radio in his/[her] country is represented nationally and internationally.

PROGRESSIVE...He/[She] keeps his/[her] station up to date. It is well-built and efficient. His/[Her] operating practice is above reproach.

FRIENDLY...He/[She] operates slowly and patiently when requested; offers friendly advice and counsel to beginners; kind assistance, cooperation and consideration for the interests of others. These are the marks of the amateur spirit.

BALANCED...Radio is a hobby, never interfering with duties owed to family, job, school or community.

PATRIOTIC...His/[Her] station and skills are always ready for service to country and community.

- adapted from the original Amateur's Code, written by Paul M. Segal, W9EEA, in 1928

A last minute note from Rick, VA3EV..

Rick has been experimenting with computer power supplies and wants to me to get the word out that if anyone is interested in building a Ham Shack DC power supply from an old computer power supply, he has the “hands on” experience now and is anxious to pass on his new knowledge! Please contact Rick directly for an easy “How To” session and save a few bucks while making use of some discarded parts.

Thanks Rick.

The following is a submission from Art VE3AIH

Be careful about contacts on DMR worldwide Talk group 91. About the time of the Capitol riot in Washington, I was in contact with a station in Frisco, Texas near Dallas. The next day, I got an e-mail from someone who said they had heard me on TG 91 and asked me to join their group, called the North Central Texas DMR group. They gave me the TG number. Presumably they had obtained my e-mail address from my QRZ.com page. So I looked that up and I was directed to a website. It turns out this is a far right group, which I will not name, whose members patrol the Texas border with Mexico to alert the Border Patrol about illegal immigrants crossing. Photos on the website showed them with Trump signs and some were openly armed. They believe fervently in the First Amendment of free speech as well as the Second Amendment to bear arms. I have a right to bare arms also, but I usually put sunscreen on to avoid a burn in the sunny climates of the south. When I read what they were about, I politely told them how much I had enjoyed visiting all parts of Texas over the years, including the border area several times. But for now I will take a pass on joining their group. As Murray said, "Art I can't imagine you in camouflage carrying an AK-47. It doesn't fit your image."

A lot of you have collections of QSL cards tucked away or filed in binders.. and I was thinking that each of us who do, likely have a **favourite one**, that brings back a fond memory or two. How about taking a picture of that Special Card or cards and sending them in with a note as to what makes that QSO or card special to you. I'll share and I am sure others will be interested in seeing them!

VA3KD Biography

I owe my interest in amateur radio to my time in the Boy Scouts back in the late 1960's. The page about Morse code in the Boy Scout manual was my first introduction to CW. In 1970 my Boy Scout troop visited a neighborhood ham in Amherstview, Ontario. (near Kingston) I remember the racks of tube equipment and the smell of fresh solder in his basement shack. We participated in a Jamboree on the Air type QSO and I asked a question into the mic. That experience shaped my choice of hobby later in life. I received my first call sign, VE3PVI in 1987 and I upgraded my license to Advanced one year later. My first radio was a Ten Tec Century 22, 20 watt, CW rig. HF is my favourite spectrum of ham radio. I like the idea of throwing my signal off into the atmosphere and waiting to see who answers. The act of calling CQ has been compared with fishing, where you repeatedly throw your line in the water and wait to see what you are going to get. It is always a surprise. I prefer chasing awards and special event stations to rag chewing. Morse code is my favourite mode although I will never be great at it. Morse has a rich history and nostalgia and I like the simplicity of it. I also do SSB and lately I have been trying FT8. FT8 is definitely not as personal a QSO as phone or CW but I find it to be extremely efficient for chasing DX, states and special event stations.

My favourite on air club is the Straight Key Century Club. I registered and received my personal SKCC number years ago but I was using an iambic key at the time and I refused to switch to a manual key. (SKCC is all about using old school manual and semi automatic keys) Two years ago I decided to drag out my straight key and I started making SKCC contacts and working towards their many awards. I am now a confirmed cootie key (side swiper key) user and my other keys sit on the shelf. I admire the way SKCC members welcome beginners to Morse code. Most SKCC contacts take place at medium to slow speeds, depending on the speed of the slower ham. The SKCC has all sorts of awards to work toward, which is very appealing to me. Although I still have the call sign VE3PVI I prefer my new VA3KD call sign because it is better for CW. My HF antenna is a Doublet at 35 feet and my VHF/UHF antenna is a Diamond X50.

I hope to meet you on the air soon.

'73 Tom



Tom, VA3KD, kindly sent me in pictures of his operating stations, one for VHF/UHF and one for HF

VA3KD Shack Description

On my HF desk you see my brand new Yaesu FT DX-3000 radio, a MFJ 969 manual tuner and an Astron SS-30m power supply. The key is my new W1SFR 'Green Machine' sideswiper (cootie). Missing from the photo is a Heil PR-781G desk mic, which I will buy in April.

My UHF/VHF radio is an Icom 5100 with a Astron 30 power supply and an MFJ external speaker. My HF antenna is a Doublet at 35 feet and my VHF/UHF antenna is a Diamond X50.

73, Tom



VA3KD Key Collection

From left to right they are: A home brew cootie; a Bencher straight key; a K8RA iambic key; a Vibroplex bug; and a W1SFR 'Green Machine' cootie. I forgot to mention in



And YOU thought you were having a bad day!



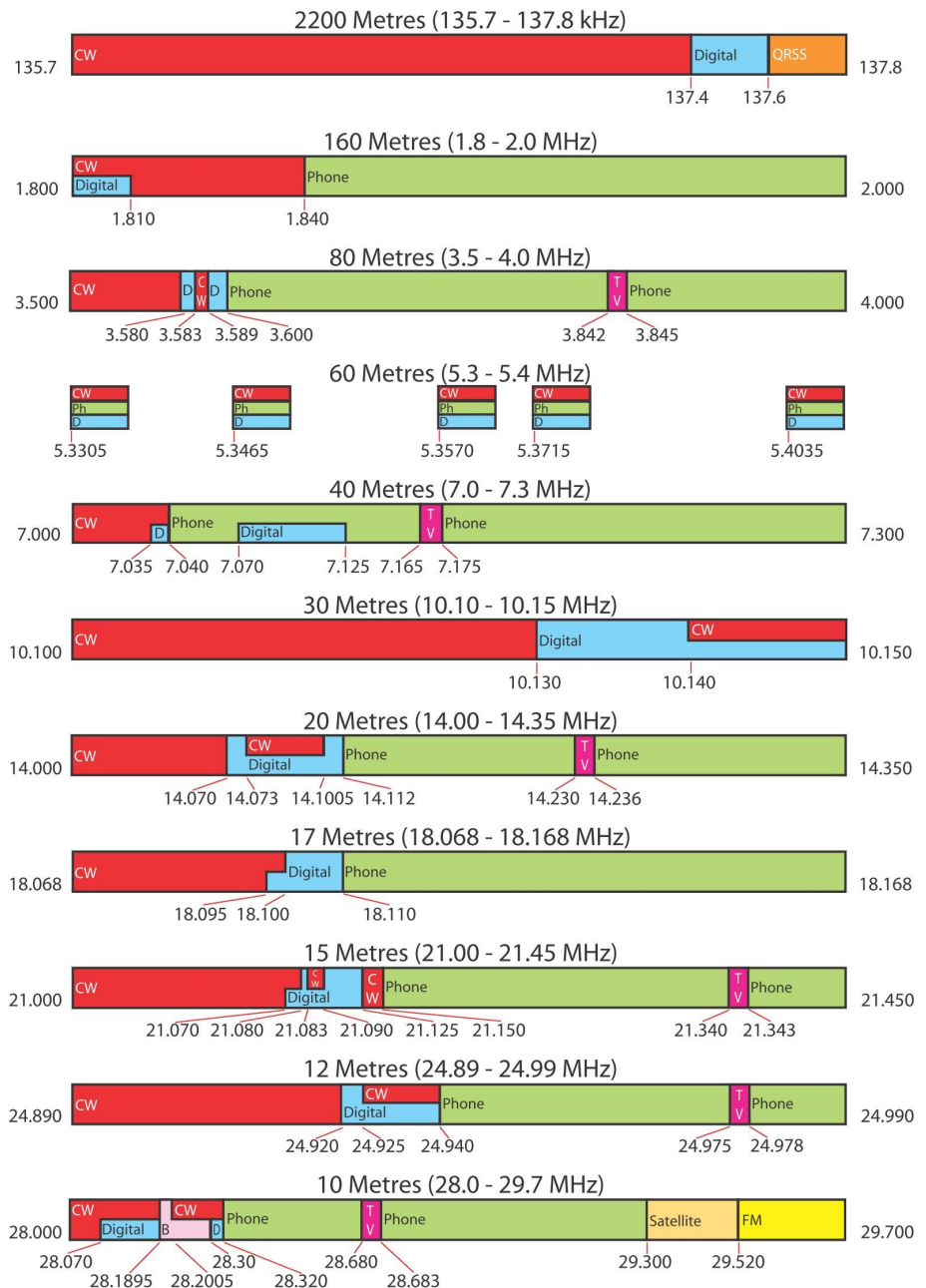


Canadian 0 - 30MHz Band Plan

Effective Date:
December 1, 2015

1. This is a simplified version of the official RAC Band Plan. Not all permissible modes/activities are represented.
2. LSB is used on 160, 80 and 40m. USB is used on all other bands that permit SSB, including 60m.
3. Consult various online resources for detailed information on what digital modes are used.
4. Maximum bandwidth permitted on 2200m is 100 Hz. Maximum power is 1 Watt EIRP.
5. Refer to the IC and RAC websites for full details before operating on the new 60m channels.
6. Remember not to allow your signal to spill over into adjoining band segments when operating close to the edges. During major weekend contests, activity in certain modes can spill over into other segments.
7. This graphic is a living document and will be reviewed and updated periodically to reflect changes in the band plans and operating habits.

www.rac.ca



Key		
■	CW	■ FM
■	CW QRSS	■ SSTV
■	Phone	■ Beacons
■	Digital	■ Satellite