FEEDBACK

The Official Newsletter of the
Georgian Bay Amateur Radio Club

October 2024

Election Results

Welcome Tex VE3USI as our new President with Doug VE3DGY returning as our treasurer. The position of secretary has not yet been filled and will be discussed at our next meeting. The secretary simply records the minutes of club meetings and this takes an hour or so of your time monthly. Please consider taking this on. Your club needs you.

President's Message

Marvin VE3VCG

This will be the first of three President's messages I write before turning over the reins to our new President, Tex VE3USI, in January.

In the aftermath of hurricane's Helene and Milton, large areas of the American Southeast and Florida have been devastated. As a major news item, I don't need to spend time detailing the death and destruction these storms left behind as this information is widely shared across many media platforms. In a single word, the impact of these storms is simply "horrific".

Amateur radio operators have played a significant, even heroic role in providing needed communications in areas which became entirely isolated, owing to damaged infrastructure and washed out roads. Amateur radio operators, demonstrated adaptability and worked together to cobble together a wide area network using a repeater located atop a 6,600 ft peak in the Appalachian Mountains. This extended the reach of a number of local networks limited by terrain issues.

This Month

2023/ 2024 Executive

President …..… Marvin VE3VCG
Vice-President…..... Tex VE3USI
Treasurer……..…Doug VE3DGY
Secretary……..… Dan VA3DNY

Club Constitution

By-Laws

Some amateur radio volunteers, with access to Skylink systems were able to create “hybrid” comms plan’s on the fly, further enhancing normal amateur radio communications ability. All this fits very well in the AuxComm concept. Once the storms passed, donated Skylink systems were also airlifted by helicopters into impacted areas.

HAM’s in Florida tracked and provided ground truth reports on Tornado’s which formed in advance of the main hurricane’s making landfall. This kind of eyeball reporting is essential because even the best satellite and weather radar technologies cannot detect if and when a tornado has touched down.

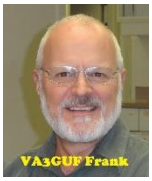
In my view, all this is really about something much bigger than amateur radio. What was and is on display is, impacted communities coming together to help each other in a time of need. Radio technology is another tool in the kit which helps those humanitarian efforts succeed.

As a final thought; I think it is important to consider those events from the storm damaged areas in the American Southeast as a cautionary tale. Here in Bruce and Grey counties hurricanes are unlikely, but we are not immune to severe weather and other threats to our power and communications infrastructure.

With that point in view, I believe it makes sense to have a community based emergency communications plan (AuxComm)in place, including experienced emergency communications amateur radio volunteers.

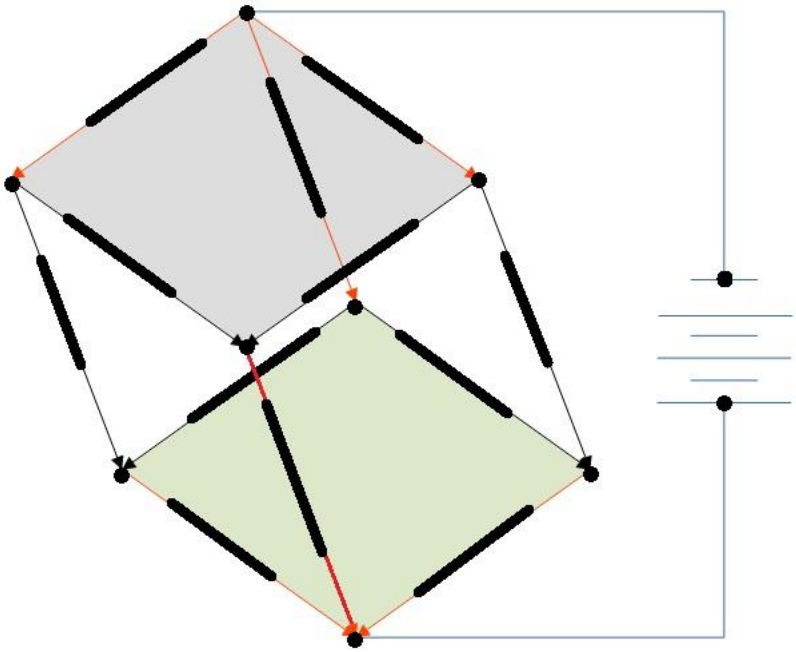
I consider such a community AuxComm plan to be like a life preserver on a ship. You hope to never need it, but will be happy to have it if you do.

Should be able to hit the repeater now



Technical Skills Corner:

Box resistor circuit resistance?



Ohms Law skills every once in a while come into play when we set up a radio station while dealing with a 50 Ohm feed line and antenna. This little example below that my dad gave me when I started to learn ohms law as a young teenager can test and may even tax your Ohms Law knowledge skills. Each resistor is shown in thick solid black in the diagram and has a 1 ohm rating. Use whatever voltage or amperage you wish to trouble shoot the total resistance across the voltage load. The grey square is the top of the box and the green is the bottom of the box. Red lines are there for visual purposes to help visualize the box and load connection points at the top rear and bottom front. They also help in setting up the 3 portions of the circuit.

Discuss amongst yourselves (use the GBARC forum if you like) how to best trouble shoot the solution so as to share your understanding of the circuit and learning's with each other. Final solution will be posted in next months newsletter as soon as I receive an email of the solution with sufficient lead time to get it published, other wise it will be in the following months newsletter.

Email solution and how you derived it to va3-guf@outlook.com.

Cheers and have a bit of fun with this small problem.

Join us for our weekly get together
"On the Air"

The club meets each Wednesday evening on VE3OSR 146.940
T97.4 hz at 7:30 pm local time,
and on 3.783 Mhz +/- immediately following.

Elsie’s Breakfast

Elsie's is now open for breakfast at 08:00.
Read More

Christmas Luncheon

Our annual Christmas luncheon is planned for Saturday, December the 7th at 1pm at Elsie's restaurant. The menu this year is as follows.

First Course, Select One of these options

__ Kale and Poached Pear Salad

__ Caesar Salad

Main Course, Select One of these options (1st course and dessert included)

__Package 1 - $29.99 Turkey Dinner-Dark and white meat/mashed potato/stuffing/cranberry/seasonal veg/turkey gravy

__Package 2 - $25.99 Honey glazed ham dinner-seasonal veg/mashed potato/corn bread/brown mustard sauce

Dessert, Select One of these options

__Pie-pumpkin/apple with whip cream/ice cream

__Apple Crumble (small)

If you have anything to donate to give away as a door prize, please bring it to the next meeting. Wrapped or in a gift bag would be appreciated.

Tech Talk Doug VE3DGY

Each month at our club meeting we start off with a Tech Talk. Members are encouraged to offer their presentations. Subject can be anything of interest in Ham radio, maybe you installed a new radio or antenna, or discovered something new on you-tube. Don't assume that what you have isn't good enough. Bring it along for discussion.

Dave VE3WI will be doing the tech talk on LiFePO4 batteries.

Minutes of Meeting

By Dan VA3DNY
GEORGIAN BAY AMATEUR RADIO CLUB

Minutes of the Monthly Club Meeting
24th of September 2024
Call to order by Marvin VE3VCG at 7:00 PM

ATTENDANCE

Executive: Dan Mills VA3DNY Secretary, Marvin Double VE3VCG President, Doug McDougall VE3DGY Treasurer

Members: Greg Larocque VE3RQY, Janet Double VA3EAC, Adam Karasinski VE3FP, Bobby Pavlovic VE3PAV, Frank Gufler VA3GUF, Tom St.Amand VA3TS, Jim Reeves VE3JMD, Larry Price VE3WDF, Dave Newcombe VE3WI, Sarah Goldrup VE3YRB, Richard Osborne VE3OZW, Mark Stuckless VA3VBE, Philip deKat VE3DPB

QUORUM: Yes

TECH TALK:

Frank VA3GUF: Digital RFI Suppression

Frank gave a presentation on how to eliminate Digital RFI from electronic devices like: LED lights, USB chargers, Battery chargers, Solar controllers, Hydro Smart Meters, etc.

He recommends using type 31 mix ferrite for most HF, but 43 mix is okay as well. The key for a simple setup is to use 1 to 3 ferrite cores on each end of cables for the remote head, pc cables, etc. and some on the antenna feedline. If the core is large enough the cables can be looped for multiple passes through the ferrite.

If a remote auto tuner is used, there should be 5 ferrite cores at each end of the coax and one at each end of the control cable. This should eliminate the majority of RFI travelling on the cables so it can't get into the receiver.

PREVIOUS MINUTES:

Minutes of the June Meeting were published in the newsletter and on the GBARC website. The minutes for May and June were accepted as written and passed by vote.

(motion: Frank VA3GUF, second: Janet VA3EAC)

TREASURER'S REPORT:

Doug VE3DGY submitted the finance report up to the September meeting.

Members:6 renewed so far for 2025, Dues received ($135), cash donations collected field day ($205), matched donation for Tom sent ($410.00), service charges ($18), and website fee ($186). Balance: $2605

The treasurer's report was accepted and passed by vote.

(motion: Jim VE3JMD, second: Dave VE3WI)

OLD BUSINESS:

Frank VA3GUF requested a discussion about purchasing a winlink license. Tom VA3TS made a motion to pay for a winlink and Vara license for the club. Richard VE3OZW seconded the motion and it passed by vote.

NEW BUSINESS:

Marvin VE3VCG discussed the election process for the new executive and we set the closing date for nominations to be October 8th. He will write up and send out a mass email for all members to have the chance to make nominations.

Adam VE3FP questioned the club results he submitted from field day. Marvin was to send him the results from the Winlink portion, but unfortunately there was technical difficulty and the data was lost. Adam also notified us that there was a second LOTW account for the club and that they need to be combined into one. Dave VE3WI holds the club call sign and will look into correcting this with help from Doug VE3DGY.

Adam also recommended that in the future we set up all equipment as a group just prior to a field day event to make sure everything is working properly. This will save a lot of time and effort from fixing problems on field day itself.

Frank VA3GUF notified us that Grey County will be holding a radio set-up net simulation (emergency exercise) tomorrow from 9 to 11 AM and that everyone is encouraged to check in to the net if they are free.

Richard VE3OZW gave us an update about the Paisley repeater. The site has all been cleaned up and the repeater was moved around. It may have to be set up on a table and reconnected.

Marvin VE3VCG made several recommendations for the new executive going forward: Have a field day committee, Exec to decide field day location 2 months prior to the event, each month have a separate executive meeting prior to the regular meeting, and exec to hold all passwords for online logs etc.

The 50/50 Draw winner: Dan VA3DNY amount:$25.

Meeting Adjourned at 8:35 PM

(motion: Doug VE3DGY, second: Adam VE3FP)

Interesting Websites

A Raspberry Pi 5 is Better Than Two Pi 4s

What's as fast as two Raspberry Pi 4s? The brand-new Raspberry Pi 5, that's what. It's going to be the new go-to board from the British House of Fruity Single-Board Computers. But aside from the brute speed, it also has a number of cool features that will make using the board easier for a number of projects. https://www.canakit.com/raspberry-pi-5

aprs tracker
https://youtu.be/_ynCsnNOELo

Monitoring Itron ERT Smart Meters on Android?
https://www.youtube.com/watch?v=DDxhUEHUCEY

Apache Labs USA
October 12, 2024 Press Release. Apache Labs USA LLC Establishes Headquarters in California, Expanding Service and Support for Amateur Radio Enthusiasts For more information about our products and services, please visit our website at www.apache-labs.com or contact us at support@apache-labs.com

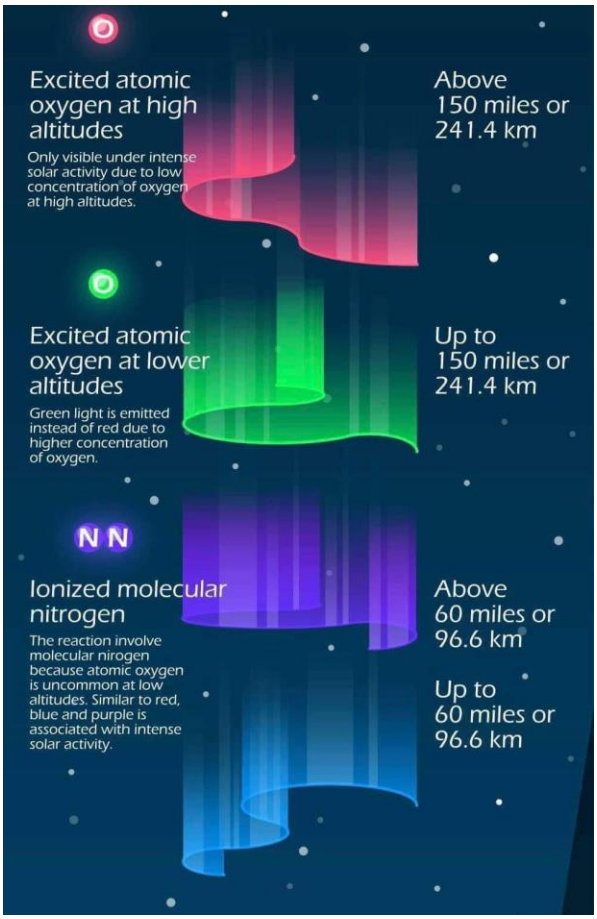
U.S. FCC Regulators propose Repeater Tax
https://ve7nfr.com/thedipole/us-fcc-regulators-propose-repeater-tax

WSJT-X new Super Fox/Hound mode
https://www.youtube.com/watch?v=r6SrwspXkVk&ab_channel=K7AGE

Finally….
a communication device whose menu system I can understand

Northern Lights from our driveway Richard VE3OZW

T'was a chilly night on October 10 and at 22:44, my wife Andrea and I reluctantly plucked ourselves from the comfy couch to don our winter jackets and shoes to go outside in our nightwear (aka pyjamas) to have a look at the brilliancy of the Northern Lights from our driveway. We turned off all the outdoor lighting and watched the colours in the sky and snapped a few pics. The Northern Lights were the result of a series of strong X flares in early October peaking at X9 and provided a wonderful display for many to see down into Central US. I suspect there will be more to come in the coming weeks or months as we have now reached the peak of the solar cycle 25 and the sun is very active. Stay tuned



Marvin VE3VCG

On Thursday night, October 10th many people in Canada, including my family, and our neighbours were able to witness a beautiful display of the Aurora Borealis in the night sky. According to some predictions, this rare event might have also been seen much further south owing to the size and intensity of event.

An auroral display is created by the interaction between charged particles from a solar flare or the solar wind and “gas” particles in earths Ionosphere.

Aside from being visually interesting, this well known phenomenon in Northern latitudes, which is infrequent in Southern Canada. However when it occurs, it allows some amateur radio operators to use something called “Aurora Bounce” to extend the range of VHF signals, hundreds, even thousands of miles.

A similar Auroral display also occurs in the Southern polar regions and is called the “Aurora Australis”. Incoming magnetically charged particles are captured by earths magnetosphere and become concentrated at the poles creating the typical Northern and Southern lights.

Aside from spectacular Aurora’s currently in the news, space weather is of special interest to HAM’s because those high speed charged particles from the sun directly impact our operations here on terrafirma, especially on the HF Bands.

We are now reaching the point of “solar maximum” for solar cycle 25, which began in December 2019 and will continue until 2030. During a solar maximum there is an expected increase in the development of sun spots and over all solar activity including CME’s. This has been especially true during this part of solar cycle 25.

There has seen an uptick in charged particles reaching earth in the solar wind. In addition, there have been more and larger, earth directed solar flares and/or Coronal Mass Ejections (CME’s) during our current solar cycle. A CME is created when the sun ejects a large rope like filament made of plasma.

Interestingly, plasma is sometimes called the fourth state of matter. Which is to say, it differs from the other states in that it not a solid, liquid or gas.

Solar flares are carefully monitored by various satellites positioned in space to constantly observe the sun. These high-tech satellites continue the legacy of official solar monitoring which began in 1755 when sunspots were first counted and recorded by scientists seeking to understand the relationship between solar activity and events on earth.

Various agencies in North America around the world, including NASA and NOAA monitor the sun using satellites and make the information collected available to the public via websites. Reporting, analysis and evaluation of this information can be found from various other sites dedicated to providing oversight on solar activity. Such sites include SolarHam https://www.solarham.com/ and youtube channels like Tamaith Skov https://www.youtube.com/@TamithaSkov

If you are specifically interested in Aurora’s you find lots of information at “Aurora Watch” website, sponsored by the University of Alberta at this sitehttps://www.aurorawatch.ca/component/option,com_frontpage/Itemid,1/

Bob Simpletons Guide to Quarter Wave Antennas

BOB SIMPLETON'S GUIDE TO QUARTER WAVE ANTENNAS

brought to you by **Amateur Radio Trader**

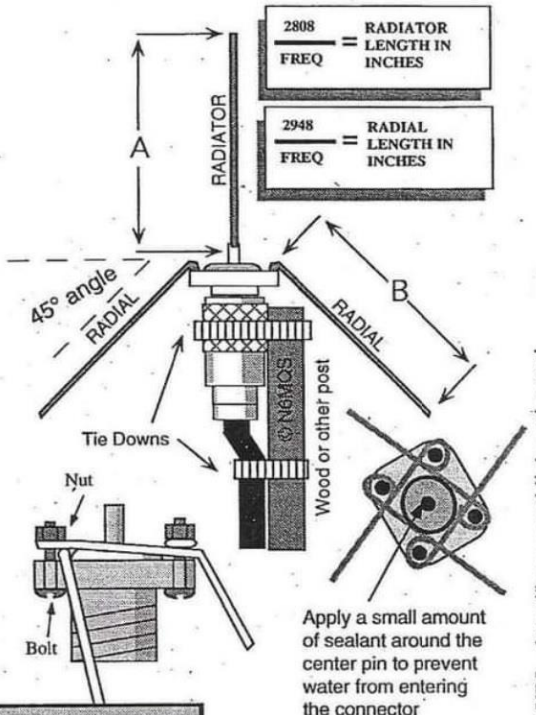
One of the simplest antennas you can build is a quarterwave ground plane antenna. It is small in size and is inexpensive.

The only part you will need to buy is a SO-239 panel mount connector. You can use an old wire hanger for the radiator and radials.

You will need to use your soldering iron or gun to attach the radiator to the center post of the SO-239. File any paint or coating from the radiator wire before soldering. Cut the radiator to the proper length before soldering it. If you can find a short copper tube to help secure the radiator to the SO-239, your antenna will stand up to high winds.

The radials may be soldered or attached with screws. Screws are the easier method if you take the time to overlap them as shown in the diagram. Cutting the radials may be done after the construction is complete.

The radials should be bent to an angle of 45 degrees for 52 ohm base impedance. If the radials are perpendicular to the radiator, the base impedance is approx. 36 ohms. Radials parallel to the radiator have an impedance of approx 75 ohms.



Apply a small amount of sealant around the center pin to prevent water from entering the connector

FREQUENCY CUTTING CHART

RADIATOR FREQ	RADIALS	
28.1	99.93	104.93
28.2	99.57	104.55
28.3	99.22	104.18
28.4	98.87	103.82
28.5	98.53	103.45
28.6	98.18	103.09
28.7	97.84	102.73
28.8	97.50	102.38
28.9	97.16	102.02
29.0	96.83	101.67
29.1	96.49	101.32
29.2	96.16	100.97
29.3	95.84	100.63
29.4	95.51	100.29
29.5	95.19	99.95
29.6	94.86	99.61
29.7	94.55	99.27
29.8	94.23	98.94
29.9	93.91	98.61
50.0	56.16	58.97
50.5	55.60	58.38
51.0	55.06	57.81
51.5	54.52	57.25
52.0	54.00	56.70
52.5	53.49	56.16
53.0	52.98	55.63
53.5	52.49	55.11
54.0	52.00	54.60

RADIATOR FREQ	RADIALS	
144.0	19.50	20.48
144.5	19.43	20.40
145.0	19.37	20.33
145.5	19.30	20.26
146.0	19.23	20.19
146.5	19.17	20.13
147.0	19.10	20.06
147.5	19.04	19.99
148.0	18.97	19.92
220.0	12.76	13.40
220.5	12.73	13.37
221.0	12.71	13.34
221.5	12.68	13.31
222.0	12.65	13.28
222.5	12.62	13.25
223.0	12.59	13.22
223.5	12.56	13.19
224.0	12.54	13.16

RADIATOR FREQ	RADIALS	
423.0	6.64	6.97
424.0	6.62	6.95
425.0	6.61	6.94
426.0	6.59	6.92
427.0	6.58	6.90
428.0	6.56	6.89
429.0	6.55	6.87
430.0	6.53	6.86
431.0	6.52	6.84
432.0	6.50	6.83
433.0	6.48	6.81
434.0	6.47	6.79
435.0	6.46	6.78
436.0	6.44	6.76
437.0	6.43	6.75
438.0	6.41	6.73
439.0	6.40	6.72
440.0	6.38	6.70
441.0	6.37	6.69
442.0	6.35	6.67
443.0	6.34	6.66
444.0	6.32	6.64
445.0	6.31	6.63
446.0	6.30	6.61
447.0	6.28	6.60
448.0	6.27	6.58
449.0	6.25	6.57
450.0	6.24	6.55

About Rubber Ducks

The rubber duck antenna on your handheld is not a very efficient antenna. The typical 2 meter rubber duck has a 5 dbs loss. If you have a 3 watt radio, your rubber duck will only radiate less than 1 watt!! A quarterwave antenna has 0 db loss and will allow all 3 watts to be radiated!!

Did you know...

Why we use 52 ohm coax ?

During world war II it was discovered that the minimum amount of material was needed to make a 52 ohm cable. It conserved critical war materials and increased profits for the manufactures!

Thanks to W3JIW for the info!

World Scout Call Frequencies

Jamboree On The Air / Internet: October 19-20

Scouts in Trinidad and Tobago looking for JOTA/JOTI Contacts
https://www.rac.ca/jota-jamboree-on-the-air-october-18-20/

The Jamboree On The Air is an annual event in which Scouts and Guides all over the world connect with each other by means of Amateur Radio. Short-wave radio signals carry their voices to virtually any corner of the world.

The JOTA 2024 starts at 00:00 h local time on Saturday, October 19 and runs up to 23:59 h local time on Sunday, October 20. Note that details for use of special radio licenses, operating times and allowance for Scouts to use radio transmitters may vary per country.

WORLD SCOUT CALL FREQUENCIES

Band	SSB (Phone) Call/Segment	CW (Morse)
80m	3.920 – **3.940** MHz & 3.670 – **3.690** MHz	3.570 MHz
40m	**7.090** & **7.190** MHz 7.180 – 7.200 MHz	7.030 MHz
20m	14.270 - **14.290** MHz	14.060 MHz
17m	**18.140** – 18.150 MHz	18.080 MHz
15m	**21.360** – 21.400 MHz	21.140 MHz
12m	**24.960** – 24.980 MHz	24.910 MHz
10m	28.350 – **28.390** MHz	28.180 MHz
6m	**50.160** – 50.200 MHz	50.160 MHz

WOSM suggested calling frequency in **bold**; suggested band segment range as shown. If call frequency in use, try up/down.

Or via IRLP and/or Echolink using VHF/UHF repeaters

*If using **IRLP** on VHF/UHF radio, join the **Radio Scouting** reflector on IRLP node **9091** to chat with other JOTA participants all weekend long!*

*Complete list of **IRLP Nodes** is available here:*

http://status.irlp.net/index.php?PSTART=5

Organization: The Scout Association of Trinidad and Tobago
Number of Group Participants: 350
Location: Trinidad & Tobago, Port of Spain
Call Sign: NWDTT
Email denylle.yearwood@gmail.com
Group JID: 6TT16H

Membership as of 8th Of October

Red text indicates 2025 Membership Paid

VE3FP	Adam Karasinski	Elmwood
VE3TUQ	Aubrey Alderslice	Meaford
VE3BQM	Bernie Monderie	Owen Sound
VE3MPG	Bob Baillargeon	Sauble Beach
VE3LKD	Bob Droine	Owen Sound
VE3PAV	Bobby Pavlovic	Lions Head
VA3WBO	Bruce Poirier	Wasaga Beach
VA3DNY	Dan Mills	Owen Sound
VE3WI	David Newcombe	Port Elgin
VE3BAK	David Rosenfeld	Owen Sound
Assoc	Dennis Knott	Meaford
VA3NBP	Don Hall	Lions Head
VE3DGY	Doug McDougall	Owen Sound
VA3GUF	Frank Gufler	Owen Sound
VA3STG	Fred Lorch	Teeswater
VE3RQY	Greg Larocque	Owen Sound
VA3EAC	Janet Double	Paisley
VA3KOT	John Corby	Owen Sound
VE3JMD	Jim Reeves	Port Elgin
VA3RCA	Kevin Adams	Alliston
VE3WDF	Larry Price	Port Elgin
VE3VCG	Marvin Double	Paisley
VE3MMJ	Marc MacDonald	Southhampton
VA3FIN	Mark Lindstrom	Owen Sound
VA3NIR	Norman Reintamm	Flesherton
VA3HYM	Paul Peters	Ayton
VE3QVC	Phillip De Kat	Owen Sound
VE3OZW	Richard Osborne	Mildmay
VA3RYK	Rijk Van Huisstede	Owen Sound
VE3RWY	Rob Walker	Owen Sound
VA3SGZ	Sheldon Greig	Chatsworth
VE3USI	Tex Brown	Flesherton
VE3CAB	Terry Darling	Meaford
VA3TS	Tom St.Amand	Shallow Lake
VA3TVA	Tom vanAalst	Owen Sound
VA3TFW	Tom Welden	Port Elgin

JOIN GBARC TODAY

Welcome to our newest member Sheldon VA3SGZ from Chatsworth

The Last Word

A few words of appreciation to those that contribute to this newsletter by submitting news stories or interesting web links or ideas. If you have something then send us a an email with https://gbarc.ca/contact.php, and we will get back to you.

Help US Out *Would you like to receive email notifications when this newsletter is posted? Sign up for our mailing list. No ads and no personal information, your email address is never shared with anyone else.* *Subscribe*

Membership for details regarding membership in the club click here: *Membership*

Join the Radio Amateurs of Canada

Our National Voice https://www.rac.ca/

Club Membership Dues

Membership renewals can be paid anytime after 1 Sept to 31st of December for the 2025 year
Click HERE for more information