



# **FEEDBACK**

## The Official Newsletter of the Georgian Bay Amateur Radio Club

September 2021  
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## President's Message

John VA3KOT

The GBARC fall season started in grand style with our first Tech Talk. The guest speaker was CEO of DX Engineering, Tim Duffy K3LR, who gave us a scintillating presentation on the incredible K3LR contest station in Western Pennsylvania. The turnout from our small club was supplemented by invited guests from around the region. There are still opportunities for club members who would like to give a talk later in the year.

Our first general meeting of the fall season is coming up on us really quickly. The meeting will take place on Tuesday 28th September at 7:00pm. We are going to take advantage of the opportunity to meet in person, instead of on Zoom. Let's enjoy the opportunity to have a real meeting while we still can!

The meeting will be chaired by our very capable Vice-President Tom, VA3TVA. My busy summer ham radio schedule comes to a conclusion with another Parks On The Air activation that week so unfortunately I won't be able to attend. This time I will be at Killbear Provincial Park near Parry Sound, throwing wire in the trees and pounding brass.

Tom has chosen the bandshell at Harrison Park in Owen Sound for the meeting location. He asks members to assemble there, and if the bandshell is unavailable, he will direct members to another venue within the park.

While Tom is competently taking care of club business for the evening, I will be attempting to competently take care of personal safety. During my last outing, at Grundy Lake Provincial Park, with the POTA activation successfully completed, I ventured out onto the lake in my inflatable kayak. A fresh wind created a flurry of waves that tipped me out into the deepest part of the lake resulting in a

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#### 2021/ 2022 Executive

President ..... John VA3KOT  
Vice-President..... Tom VA3TVA  
Treasurer..... Bobby VE3PAV  
Secretary..... Rob VE3RWY

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long swim back to the shore. My plans for a "maritime mobile" second park activation were promptly abandoned!

For those who aren't familiar with the POTA program, an "activation" is achieved by making 10 contacts within the same UTC day (i.e. between 00:01 and 11:59 UTC) from inside a designated provincial or federal park boundary. Achieving 10 contacts is sometimes challenging, but more often than not, the challenge comes from being able to handle a pile-up from "hunters" when you call CQ. POTA has become extremely popular and gives the opportunity to earn operating awards. I earned the top Sapphire Hunter award without even realizing I had done so!

September is the start of club dues renewals season. The process is rendered a lot easier this year thanks to our new electronic payments facility that deposits your dues directly into the club's new bank account. To get started visit the membership page on the club website. You will find the new system very easy, very quick and very efficient.

Let's make the next few months a period of new activity for Georgian Bay Amateur Radio Club. Whether you are a CW diehard, rag chewer, contester or digital modes fan, let's get the club name onto the sked boards and results pages!



**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.

[www.gbarc.ca](http://www.gbarc.ca)



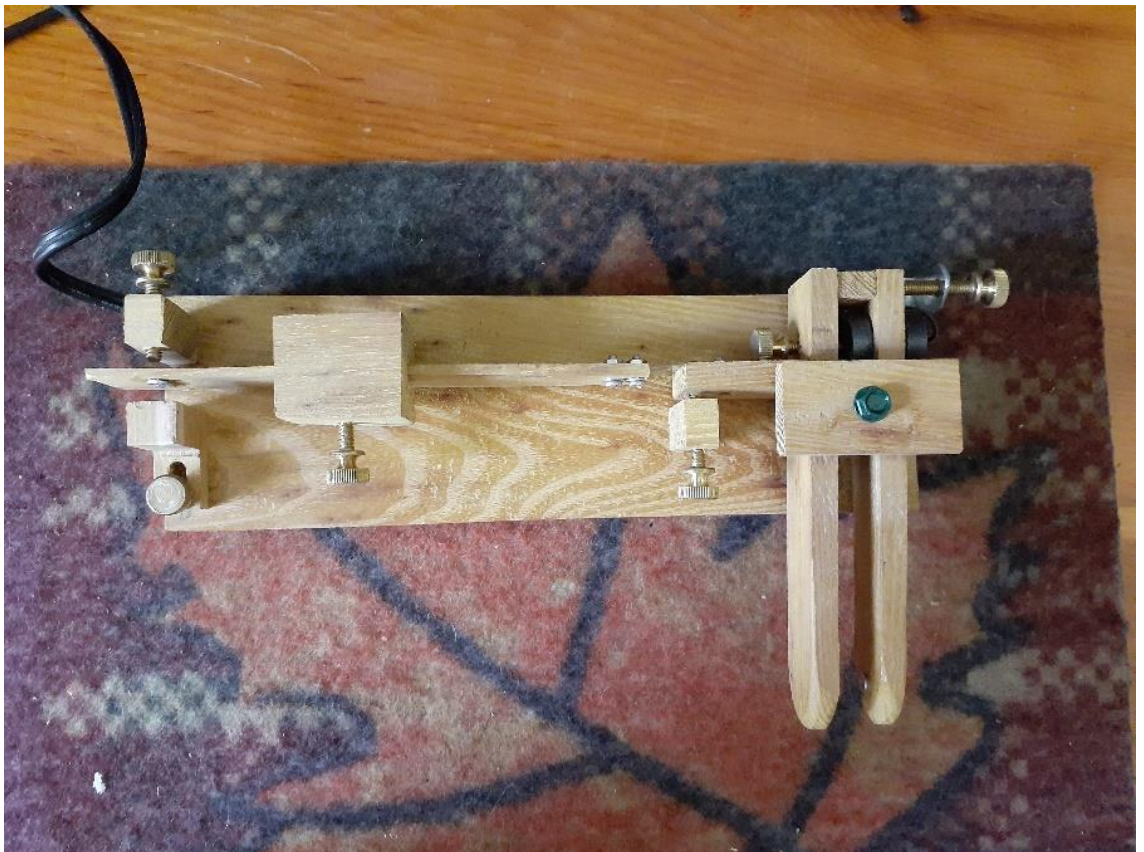


# Right Angle Bug

Don VE3IDS

I have been thinking of trying another build of a wooden bug for a while. I got around to it recently and thought I would share the results. I wanted to make a right angle bug for two reasons. They take less room in front of the rig as they don't stick out like traditional bug configuration, and secondly they don't walk around the desk while in use as the hand force is distributed along the length of the bug rather than from side to side. This is important with a wooden bug as they are very light compared to a metal bug. I didn't want to have to add weights to the base, I wanted to have it made from wood as much as possible.

I used a piece of wood that I had in my little stockpile of unusual pieces. It is Osage Orange wood which has a nice grain, is fairly hard and has a high natural oil content. The grain is very fine and closed which is nice for





working with. For the main spring I used a piece of 10 thousands feeler gauge material. The brass thumb screws are from home hardware. I drilled and tapped the wood to take the screws. I initially tried some small bearings that I had for the pivots but they had more slop than I wanted. I had some 3mm stainless rod that I cut up and a 1/8" hole fit nicely on the wood. The wood is hard enough and has a natural oil in it so I think it should be fine, It has a nice smooth feel to the movement. I used a brass screw head for the dash contact and I used a magnet and a reed switch for the dot contact. The paddles are tensioned by magnets that are adjustable with a thumb screw. I have a wooden weight but lately I have been using a brass stair gauge that you use on a carpenter square. I got it from the hardware store as well. It gives a wider range of speed. I would estimate 13 to 30 wpm.



For feet, I used 6-32 screws tapped into the bottom and capped with silicone cupboard door bumpers. They are quite soft and grippy and keep it on the desk.

I have a short video of it on YouTube.

<https://youtu.be/GD0t-TsTYsq>

## QNR Reducer Don VE3IDS

I unfortunately have a plasma TV that emits great amounts of RFI on the lower HF bands. I have tried toroids and grounding of the TV with no improvement.

I bought a kit from Terry vk5tm. It has all the on board parts but not the case, jacks and knobs. Assembly is straightforward and the only tiny parts are the two FETs which are surface mount. There is quite a bit of room if you solder these on first before other parts get in the way.

The unit is very similar to the MFJ 1026 but is a fraction of the price and you get to melt solder! You require a second antenna for the unit to work. There are 4 connections: your main antenna, a





secondary or sense antenna, a PTT input from the rig, and the antenna line from the box to the antenna connection on the rig.

The way it works is as follows:

The main antenna input sees the desired signals as well as the noise. The second or sense antenna sees this as well but a poorer antenna for your sense is actually better. It will have more of the local noise as compared to the main antenna. You have two phase controls and a level control for the main antenna. The sense antenna signal is inverted 180° and mixed with the main antenna input. With the phase adjustments you can null or cancel the noise component but not the desired signal. It actually does work well and seems to be stable across a good portion of the band you are set up on. An important feature is the rig PTT input. This input reverses a pair of relays inside the box which bypasses the active components inside during transmit. Without this hooked up you will let out the magic smoke from the FETs guaranteed as soon as you transmit.

I have built a second unit from an eBay kit from China as well. This is a lower priced copy which worked well when finished but there is no documentation and some parts are missing, no LEDs to show active state for instance. I wouldn't recommend this unless you have some experience homebrewing as you will need to do some reverse engineering. Terry's kit is great and Terry will respond to your emails as well. Great customer service.

I have a YouTube video of it in action

<https://youtu.be/zUzTtnjSYy8>

There are many other videos from other hams posted there as well.





This can be a low cost solution to handle some of the QRN that is very common today from switch mode supplies found in almost everything these days.

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## Heathkit HR10

(Aug2021)

Just finished the HR 10 cleanup. It is working well now and sporting a bath and a new paint job. The last couple things I want to do is replace the dial cord and add a little speaker inside. The old dial cord is a little worn. A cool thing I discovered is the original builder wrote "January 1966" neatly in Sharpie marker on the side of the chassis. Unfortunately no callsign. I have the HR 10 B to finish up yet. I like the front panel colours that heathkit used on this series better. More vintage look, the B version green is much darker and the cream is more white.



73 Don ve3ids

**Net Control Station Volunteers WANTED**  
**Send email to**  
[netmanager@gbarc.ca](mailto:netmanager@gbarc.ca)



## Websites of Interest

Copy/Paste the urls below into your browser

### How to Read Capacitance Values on a Capacitor

<https://www.dummies.com/programming/electronics/components/electronics-components-how-to-read-capacitance-values-on-a-capacitor/>

### A phase-coherent software defined radio with five RTL-SDRs

<https://www.crowdsupply.com/krakenrf/krakensdr>

### Alexander Graham Bell 1847-1922 Inventor of the Bell System

<https://www.telecommunications.ca/alexander-graham-bell-invention-telephone.htm>

### VY2WPE

<https://www.facebook.com/Western-Prince-Edward-Island-Amateur-Radio-Club-112360560318131/>

### Manitoba Amateur Radio Museum Inc.

<http://www.marminc.ca/>

### Resurrecting a PK-232 TNC for Winlink email

<https://www.domsmith.co.uk/blog/2018/04/15/pk-232-winlink/>

### A Short Tutorial on Using Echolink from your mobile

<https://gbarc.ca/echolnk.php>

## Minutes of Meeting

### GEORGIAN BAY AMATEUR RADIO CLUB

Minutes for club meeting 22 June, 2021

Present: Tom VA3TS, Jim VE3JMD, Janet VA3EAC, Marvin VE3VCG (acting club secretary), David VE3WI, David VE3BAK, Tom VA3TVA, Doug VE3DGY, Maureen VE3MIO

Chairman - Tom VA3TVA

Meeting declared open at 7 PM EST (1900)

Quorum present:

**Treasurer's Report:** Current summary of accounts, was read into the record. Motion - Tom VA3TVA: Accept the Treasurer's Report. Second – Marvin VE3VCG: Motion carried

**Secretaries Report:** Read into the record as posted on the club website. No errors or omissions were noted. Motion - Doug: Accept the minutes for May. Second – Tom VA3TVA, Motion carried.

**Old Business:** Motion - Marvin: Club to establish a contingency fund. Discussion as to the amount of this fund to be undertaken at a future date. Second – Tom VA3TVA Motion carried.



Discussion: As to the matter of changing banks was undertaken. Opinions and ideas were offered as to personal experiences with various banks. No consensus was reached and the matter was put over for consideration at a future date. Doug will do further investigation.

**New Business:** No new business was brought forward.

General discussion: Taking down Dieter's tower, sometime in July, possibly 3rd or 4th. Tom VA3TS advised that he would coordinate and get back to the club with additional information on a date.

General discussion: Individual plans for field day.

Motion – Janet VA3EAC: Close meeting at 7:39 PM Second – Maureen VE3MIO

Secretary's Note: Meeting ended without being formally closed. Zoom stopped audio/video feed with a notice that the meeting was stopped because the host had not shown up.

## Upcoming Events

The Bruce Peninsula Biosphere Association has invited the club out to provide support communications for their **BRUCE PENINSULA GRAVEL GRAN FONDO**. Sunday October 3<sup>rd</sup> 2021

They require all volunteers register on their website for contact tracing, lunch menu, and T Shirt size. In the portion of the volunteer form where we are asking how we would like to volunteer, I suggest that we all put something to the effect of "GBARC communications support". I also ask that each volunteer also sends me an email that I might plan where to place people on the routes. Not everyone needs to stay all day. But I will need more people early through mid day if we are to do a fair job of it. Tom VA3TVA  
<https://www.brucegravelfondo.com/volunteer>

**Thornbury Turkey Trot SATURDAY, OCTOBER 9th, 2021**

Formerly called Run Blue Mountains, a multi-year fun run organized by the Thornbury-Clarksburg Rotary Club; The Thornbury Turkey Trot is the new name for the same, spectacularly stunning, scenic Run Blue Mountains, now just relocated to the Saturday of the Thanksgiving long weekend.  
<https://www.tcrotary.ca/run-blue-mountains.cfm>

**Simulated Emergency Test** will be held on Saturday, October 30 from 9 am until 12 noon local time.  
<https://gbarc.ca/acs.php>

## The Last Word

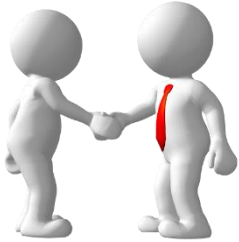
A few words of appreciation to those that contribute to this newsletter by submitting news stories or interesting web links or ideas. If you have something then send it to contact "at" gbarc "dot" ca , any format, any size, anytime, but if you want it to appear in the current months newsletter, then send it by the 3<sup>rd</sup> Tuesday of the month.







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**Membership** for details regarding membership in the club, click the image



### Meetings

Click the image for our meeting schedules and updates

*The next newsletter will be in October 2021*

**Join the Radio Amateurs of Canada**

**Our National Voice** <https://www.rac.ca/>



**Announcement** – John VA3KOT will be your new newsletter editor. After many years and time constraints I have decided to pass this function on to others. Thank you for all your support.

To contact John to submit articles or items of interest, please contact him at

newsletter “at” [gbarc.ca](mailto:gbarc.ca)

