



# FEEDBACK

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



February 2024  
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## President's Message



Marvin VE3VCG

It can be easily argued that there is a direct relationship between the rise of the internet and cell phones, and a declining interest in the Amateur Radio Hobby.

There are no hard fast numbers one can use to argue the point that this idea is true. However, I think it's reasonable to assume that there is some truth to the idea that, the increase in internet and cell phone use has affected our hobby in various ways.

It is easy to say that, before the internet, Amateur Radio was the first "social media." At a time when making a long-distance call was very expensive, and required the assistance of an operator, the appeal of getting on the air via and amateur radio was, for some, perhaps, stronger than it is today.

One only has to buy a computer and get a basic plan from a service provider to have access to the massive trove of data the internet offers. Likewise, a cell phone with a data plan makes it possible to surf the web, or connect with friends and family from anywhere.

So, all this poses a single interesting question; in this new world of information technology, why would anyone want to get an amateur radio license?

I think this question is essential to ask if the amateur radio hobby is to survive into the future. Finding the answer to the question requires more than just a casual conversation. I believe that just asking that question is not enough. We should first ask of ourselves if we are willing to not only ask the question but also then make do what is needed to keep the hobby alive and attractive to potential HAMs in the years to come.

## This Month

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### 2023/ 2024 Executive

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

[Club Constitution](#)

[By-Laws](#)



It is easy to talk about the issues without developing a plan to change anything. If the general tendency is to wait for others to step forward with a plan, then I think little will happen and the future of the hobby will become uncertain at best.

As I see it, promoting amateur radio is a legacy project. Others might characterize making such an effort as, "paying it forward." I think that, staying positive and focused is, an end unto itself, and so beneficial and worthy of the time and energy needed.

In months to come I will be opening discussions about what we can or might do as a club to promote Amateur Radio in general and GBARC specifically. I look forward to your ideas and feedback.

## 2024 Membership

Membership as of February 17, 2024 Total 30

Callsign	Name	Location
VE3FP	Adam Karasinski	Elmwood
VE3BQM	Bernie Monderie	OwenSound
VE3MPG	Bob Ballargeon	SaubleBeach
VE3LKD	Bob Droine	OwenSound
VE3PAV	Bobby Pavlovic	LionsHead
VA3WBO	Bruce Poirier	Wasaga Beach
VA3DNY	Dan Mills	OwenSound
VE3WI	David Newcombe	PortElgin
VE3BAK	David Rosenfeld	OwenSound
Assoc	Dennis Knott	Meaford
VA3NBP	Don Hall	LionsHead
VE3DGY	Doug McDougall	OwenSound
VA3GUF	Frank Gufler	OwenSound
VA3STG	Fred Lorch	Teeswater
VE3RQY	Greg Larocque	OwenSound
VA3EAC	Janet Double	Paisley
VA3KOT	John Corby	Owen Sound
VA3RCA	Kevin Adams	Alliston
VE3VCG	Marvin Double	Paisley
VA3FIN	Mark Lindstrom	OwenSound
VA3NIR	Norman Reintamm	Flesherton
VA3HYM	Paul Peters	Ayton
VE3QVC	Phillip De Kat	OwenSound
VE3OZW	Richard Osborne	Mildmay
VE3RWY	Rob Walker	OwenSound
VE3USI	Tex brown	Flesherton
IN3IJO	Robert Bertoldi	Owen Sound
VA3TS	Tom St.Amand	ShallowLake
VA3TVA	Tom vanAalst	Owen Sound
VA3TFW	Tom Welden	Port Elgin



**JOIN GBARC TODAY**



## UNIVERSAL INTERFACE (CONTROL BOX) FOR ICOM AH-4 ATU



by Gaspar Delfavero-Cristian **YO2LGX**

<https://www.radioamator.ro/articole/view.php?id=561>

*(Translated from Romanian and edited by Dave VE3WI)*

For many radio amateurs (especially those who live in cities) installing an antenna is a problem. For many, working on multiple bands is not possible because they do not have an adequate antenna. A handy solution would be to install a long wire of any length, usually dictated by the available space. This type of antenna has a major advantage, namely it is fed at one end (usually the shack window). Its presence is discreet, we get rid of the unsightly coaxial cables that hang near the window and often arouse the curiosity of neighbors. In addition, the long wire antenna can cover a very wide frequency range with good results if properly fed.

How do we feed such an antenna that has a varied impedance throughout the HF range? The best adaptation can be done with an automatic antenna coupler (ATU) mounted outside, right at the antenna feed point. This ensures a low SWR (and hence low loss) on the coaxial cable, so the energy transfer to the antenna is maximum.

Most established brands manufacture such antenna couplers (for example: YAESU FC-40, KENWOOD AT-300, ALINCO EDX-2 and ICOM AH-2, AH-3 or AH-4) but the problem is that they are intended to work only with the equipment of that company, which is an impediment when we decide to change the transceiver. This shortcoming can be eliminated by using an interface between the existing ATU and any type of transceiver.

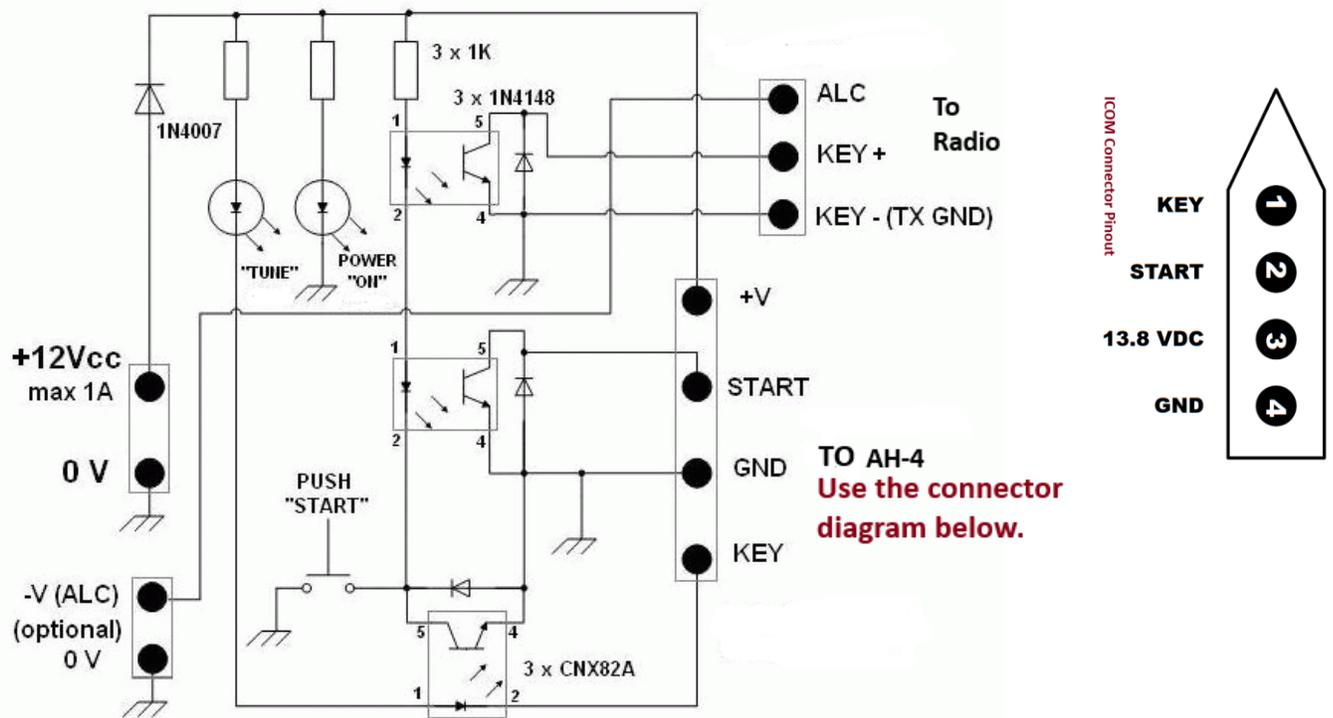
### Why the AH-4?

- It is relatively simple.
- It covers a sufficiently wide frequency range (3.5 - 54 MHz) for a long wire antenna of at least 7 meters.
- It radiates a maximum of 350 mW during the tuning (so we do not disturb an ongoing QSO on the same frequency).
- During tuning, the transceiver "sees" an SWR of 1:1.1 (protects the PA).
- The power required for tuning is 5 - 15 W (typically 10 W, and if the power exceeds 15 W or is less than 5 W then AH-4 refuses to transmit!).
- It can be removed from the circuit by simply cutting off the power (which is necessary when receiving on a band other than the one on which the transmitter is tuned).

The basic diagram for the AH-4 command interface is as shown in the figure below.

The scheme is relatively simple and contains 3 optocouplers and related discrete components (installation of protective diodes is mandatory!). Optionally, if the transceiver has an ALC control input (most modern rigs have one, and the accepted standard control range is 0 to 4 V), this can be used to force the transceiver to lower its output power to 10 W during the duration of the tuning, thus eliminating the need to manually perform the operation referred to in point 1 of the following procedure.





The tuning procedure (for the variant presented above) is as follows:

1. Set the transceiver to CW mode with output power approximately 10 W
2. Press the "START" button (during the tuning period the red LED will light up)
3. When the red LED turns off, it means that the tuning is done.
4. At this point you can set the transceiver to the desired power and in the desired working mode.

NOTE: The tuner retains its memory only as long as it is powered.

Connection of the interface is made according to the notations in the figure. If the transceiver has an internal CW keyer, it should be deactivated so that during the tuning period a continuous carrier will be emitted.

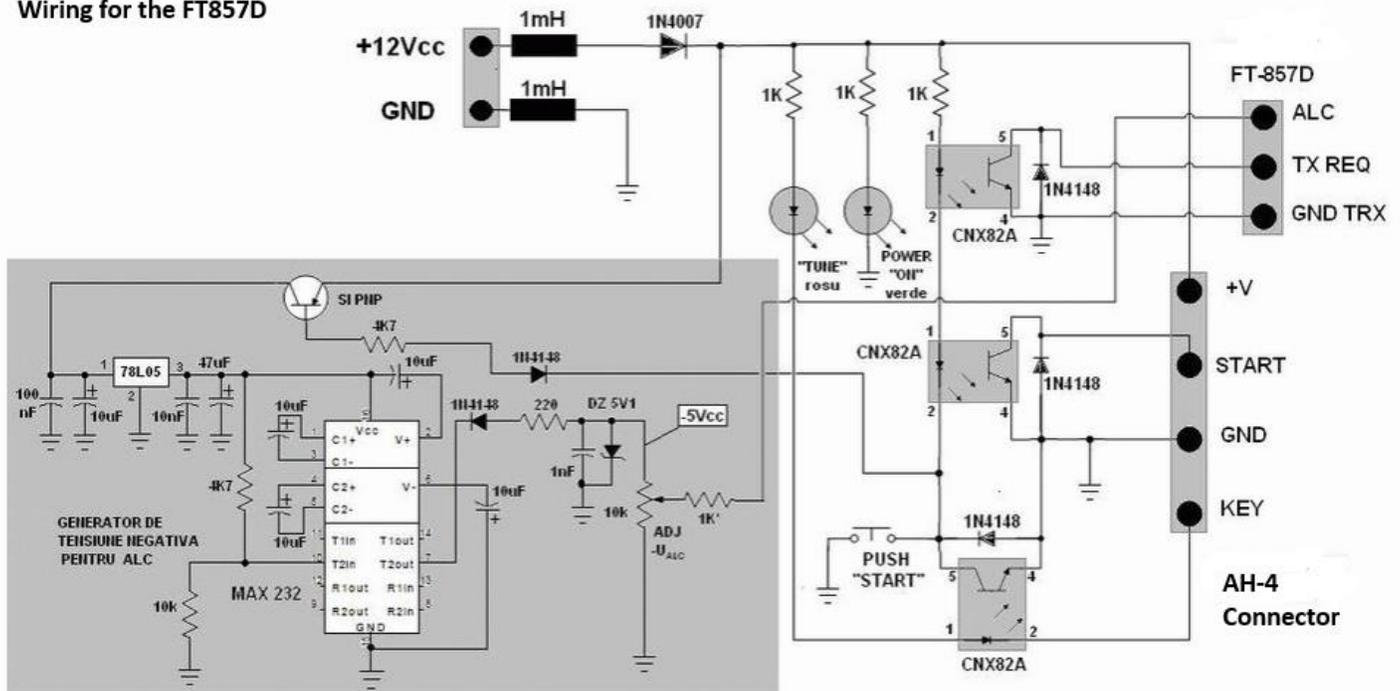
*(VE3WI note: the actual AH-4 control cable pinout has been appended to the above diagram.)*

Before using the interface, you can run a "cold" test. With the interface disconnected from the AH-4 and 13.8 VDC power applied, the green "POWER ON" LED should light. Jumper the START and KEY connections. When the "START" button is pressed, the red "TUNE" LED will light and remain lit when the button is released. The red LED will go off when the jumper is removed. Repeat the operation above with KEY (AH-4 connector) and KEY + (transceiver connector) jumpered. Once the operation is confirmed, you can connect the interface to the equipment.



A more complex version, which also contains the negative voltage generator for ALC control and is customized for YAESU FT-857D / 897D equipment is shown in the diagram below.

Wiring for the FT857D

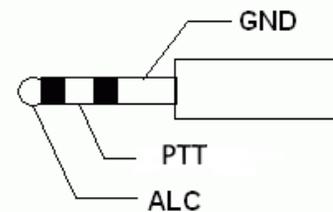


In this variant, step 1 of the above tuning procedure runs automatically. The negative voltage generator uses a MAX232N IC. The IC outputs a negative voltage relative to ground on pin 7. This output is stabilized with a 5 V zener diode, from which the required negative ALC voltage is derived via the 10 kΩ pot.

I personally found -3.6 V ALC worked fine, but this may vary from case to case. The negative voltage applied to the ALC terminal is inversely proportional to the output power of the TRX, its final value must correspond to a range output power of 5 - 15 W for all bands (otherwise, AH-4 refuses to transmit).

This negative voltage generator only operates during the tuning period due to the way in which the PNP transistor is controlled. The TRX power is only forced low during tuning. After tuning is complete, the TRX power automatically returns to the set value.

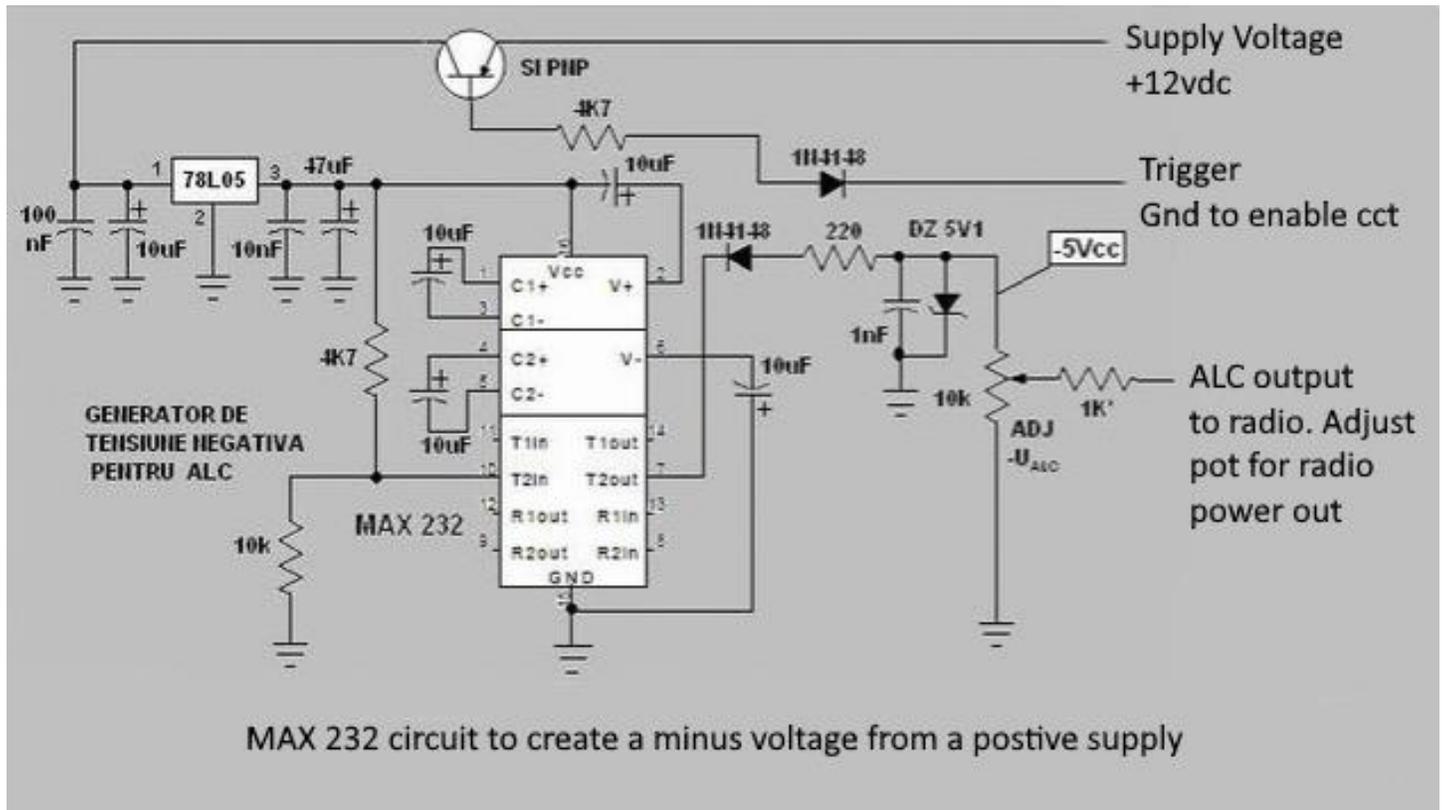
To control the FT-857D / 897D transceiver, the ACC connector on the rear panel of the TRX is used. This is a 3.5mm jack with 3 terminals (stereo) and has the following configuration:



The middle ring has the function of TX REQ (default), i.e. when connected (pulled) to ground forces the transition to TX of the transceiver that will emit a continuous carrier (CW) regardless of the working mode in which the transceiver is set. The tuning procedure in this case is very simple and is limited to just a push of a button without performing other maneuvers: briefly press (about 0.5s) the START button, the red LED will light up (tuning is made), when the LED turns off (tuning is made) and can be issued! The duration of the tuning can vary from 1s to a maximum of 10s.



Conclusions: The operation of the interface is flawless and I did not notice any problem, it works great with all types of transceivers tested (FT-450 and FT-857D). I usually use an ICOM 756-PRO, to which the AH-4 connects directly, but now I can use any type of transceiver with this tuner antenna using the interface shown above.



This is a larger view of the minus voltage supply circuit. This uses the [Max232](#) chip which is normally used as a serial port level converter. It just happens to also contain a charge pump which will be useful for hams to adjust the ALC voltage to make any rig a qrp rig.

Next Month: Dave will show his interface project



# Winter Field Day 2024



Saturday, Jan 27<sup>th</sup>, Ferndale visitors center, 2928 Hwy 6, Lion's Head, ON  
GRID-LOCATOR: EN94IX

This year, we attended the Ferndale visitors center, set up antennas and operated for a short time. This is a nice location but if we go there again, we should bring along tables to use for our operating position. At it turned out we used chairs to hold the radio's and this was less than ideal as it was somewhat uncomfortable. But we had fun doing it, Dave, Bernie and Doug got to set up their portable antennas. Doug had an horizontal end fed with his Elecraft, Bernie used a shorty 40/20 dipole that was only 39' long with his IC7000, while Dave had a 40' vertical mounted on his vehicle trailer hitch which we used with the club's IC7300. Thanks to Bobby VE3PAV for making all the arrangements for the location. Marvin brought along a pot of chilli



<https://www.gbarc.ca/ForumBB/showthread.php?tid=1107&pid=1988#pid1988>

Operator	7	14	Tot	Accum
VA3KOT		7	7	7
VE3OSR	3		3	10
VE3PAV	2	6	8	18
Total	5	13	18	18

2024WFD\_stats





In attendance: VA3TS. VE3RGY. VE3BQM, VE3DGY, VE3VCG, VA3KOT, VE3FP and VE3WDF. Thanks also to all who brought along treats and goodies to share.

CREATED-BY: N1MM Logger+ 1.0.10176.0

QSO: 7166	PH	2024-01-27	1919	VE3OSR	2H	ONS W2ZJ	6I	WNY
QSO: 28437	PH	2024-01-27	1920	VE3OSR	2H	ONS VX4E	3I	WCF
QSO: 7179	PH	2024-01-27	1923	VE3OSR	2H	ONS N9WH	2O	IL
QSO: 7188	PH	2024-01-27	1925	VE3OSR	2H	ONS W9WK	2M	WI
QSO: 7219	PH	2024-01-27	1942	VE3OSR	2H	ONS W8MAI	8H	MI
QSO: 7225	PH	2024-01-27	1950	VE3OSR	2H	ONS W8VTD	5I	OH
QSO: 14299	PH	2024-01-27	2008	VE3OSR	2H	ONS W3OK	2H	EPA
QSO: 14180	PH	2024-01-27	2012	VE3OSR	2H	ONS W4F	4M	GA
QSO: 14185	PH	2024-01-27	2017	VE3OSR	2H	ONS W3YMW	3I	MDC
QSO: 14190	PH	2024-01-27	2021	VE3OSR	2H	ONS W4TTX	2O	NC
QSO: 28450	PH	2024-01-27	2022	VE3OSR	2H	ONS W4ACF	3O	WCF
QSO: 14192	PH	2024-01-27	2023	VE3OSR	2H	ONS K3EMD	1M	MDC
QSO: 14218	PH	2024-01-27	2028	VE3OSR	2H	ONS KE8RV	3I	OH
QSO: 14039	CW	2024-01-27	2059	VE3OSR	2H	ONS W0MOC	2O	MO
QSO: 14037	CW	2024-01-27	2104	VE3OSR	2H	ONS KA0PQW	1H	MN
QSO: 14035	CW	2024-01-27	2112	VE3OSR	2H	ONS KA4JAM	1H	NC
QSO: 14036	CW	2024-01-27	2115	VE3OSR	2H	ONS KA1FO	1H	EMA
QSO: 14037	CW	2024-01-27	2117	VE3OSR	2H	ONS KO4VW	1H	GA
QSO: 14040	CW	2024-01-27	2120	VE3OSR	2H	ONS N4UU	3H	NFL
QSO: 14033	CW	2024-01-27	2121	VE3OSR	2H	ONS W9RNY	1H	IL



## Tiny QRP by Marvin VE3VCG



When I was first licensed, I found the idea of operating QRP attractive. The idea that you can have QSO with only a 5 watt signal and bit of wire seemed like a fun challenge. The counter point to that idea are those who say things like, "Life Is Too Short For QRP."

For some QRP seems to be more a lifestyle than an operating mode. Operating small, lite and low-power is a real kick, even in the back yard. For some, the operating location is as important as the operating method. As an example doing QRP from a mountain top, for SOTA, or activating a new park for POTA is a part of the challenge.

Most radios will do 5 watts and so one can do low power operations from the shack. But if operating in the back of beyond, Lite, efficient antenna's are at the centre of QRP operations. Adding to the fun is the fact that there are lots of enough inexpensive QRP antenna kits on the market to satisfy most DIY types that like to build their own.

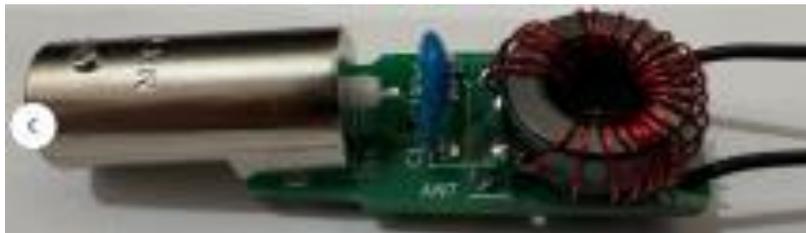
The smallest kit I've seen to date is made by Jonathan KM4CFT. At the time of this article I found it on ebay for \$29.95 USD. I've also just seen one of several youtube videos featuring this tiny QRP kit. In one of these videos, by Mike K8MRD on his channel, "HAM Radio Tube," he demonstrates assembling the kit, then putting the antenna on the air. You can find that video here if you wish to watch it <https://youtu.be/-FPDU4taerQ>

### End Fed antenna QRP unun kit EFHW, EFRW



To say this is a tiny QRP antenna transformer understates the truth. This kit takes QRP to the next level of small and lite. Options on the commercial kit include build it as a 9:1 or 49:1 depending on your preference.

The pictures alone should tell most of the story about how tiny this unique QRP rig actually is. I can only recommend that you watch the video for additional information. Even if you never plan to do QRP, it's worth seeing this neat little kit come together as a functional unit and then to be put on the air.





# Minutes of Meeting

By Doug VE3DGY

GEORGIAN BAY AMATEUR RADIO CLUB

Minutes of the Monthly Club Meeting

Taken by Doug, so don't blame Dan.

23 of January 2024

Call to order by Marvin at 7:20 PM (roads were bad)

## ATTENDANCE

Executive:

Marvin Double VE3VCG, Doug McDougall VE3DGY Treasurer, Tex Brown VE3USI Vice President

Members:

Adam Karasinski VE3FP, Bobby Pavlovic VE3PAV, Philip deKat VE3DPB, Dave Newcombe VE3WI, Bernie VE3BQM, Mary Watson VA3ILT, Greg Laroque VE3RQY, Larry, Doug VE3DGY

QUORUM: Yes

## TECH TALK:

Bernie VE3BQM showed us his GO BOX with the Icom-7000, PC server power supply, auto-tuner and ESP32 controller. He also spent a few minutes showing us how he can remote control his IC7300 through the WFView software program.

## PREVIOUS MINUTES:

Minutes of the November Meeting were published in the newsletter. The minutes were accepted as written.

(motion: Tex, Second: Phil, approved)

## TREASURER'S REPORT:

Doug VE3DGY presented the financial report.

We are down -\$536 since the Nov 27 report, -\$1200 from the purchase of the clubs IC7300 radio and up \$555 from new dues and \$122 from meeting 50/50 draws.



The treasurer's report was approved.

(motion: Greg, second: Phil, approved)

### **OLD BUSINESS:**

QNI process to determine our Ham of the Year.

This process was initiated last year by John Corby and completed by our secretary Dan Mills. The intent of the process was to incent our members participation in events and to track who the main participants were via a points system.

We needed to decide how we were going to proceed this year recognizing that it was a lot of work for Dan to catch up all the data to complete 2023; that said, he mentioned it would be less work if someone volunteered and did the tallying each month. After some discussion it seemed that we had no one willing to volunteer the time so we put three options on the floor and voted.

Option 1: Use the QNI process and wrangle a volunteer

Option 2: The Executive decides at the end of the year

Option 3: Call for nominations on the website and the exec decides

The vote was taken and the majority preferred option 2 with a caveat that it would benefit the Exec to solicit suggestions from the membership. That all said thanks to John Corby VA3KOT for all the effort he put into developing the system and to Dan for completing last year's tally.

### **50 Year Anniversary preparations:**

1. Dave VE3WI has secured a special call sign for us to use Mar 23 + 1 month, it is VC3GB
2. Doug VE3DGY has put our events into ARRL to be included in the March issue of the QST magazine under special events, and will also add to ONTARS
3. Doug will print the QSL/Advertising post cards for March
4. All have agreed to meet at Tom's VA3TS QTH on March 23 from noon to 6pm to operate the radio for the special event. Operators and Loggers are still required. See the gbarc.ca webpage under 50th anniversary to look for available shifts and send [contact@gbarc.ca](mailto:contact@gbarc.ca) a note to be added.
5. Marvin reiterated his desire to have one or more public displays set up when the weather is better. He needs some support so please consider if you would help in the set up and working a booth/table for a couple of hours to promote the club. Let Marvin know.

### **NEW BUSINESS:**

Winter Field Day Prep

1. Bobby secured us the Visitor Centre (\$50) in Ferndale from 11am-9pm, Sat Jan 27
2. We'll use the club 7300 and Marvins' radio, bring portables if you wish.



3. Marvin is bringing antennas and Dave his 40', (slightly overstated) vertical
4. Marvin is bringing chilli for lunch

**NEXT MEETING NOTICE:** Greg has suggested we park in the south lot and come in through the south door right into the hall, that way we can see who's there if someone is late and Steven isn't at the front door.

Meeting Adjourned at 8:45 Moved by: Bernie

## Interesting Websites

Video hosting made easy

<https://streamable.com/>

VARIOUS NETS ON ECHOLINK

[https://www.roc-ham.net/wp-content/uploads/2021/11/VARIOUS\\_NETS\\_ON\\_ECHOLINK111321.pdf?utm\\_source=amateur-radio-weekly&utm\\_medium=email&utm\\_campaign=newsletter](https://www.roc-ham.net/wp-content/uploads/2021/11/VARIOUS_NETS_ON_ECHOLINK111321.pdf?utm_source=amateur-radio-weekly&utm_medium=email&utm_campaign=newsletter)

Meshtastic

<https://meshmap.net/>

<https://meshtastic.org/>

NETWORK 105 HF PACKET RADIO

<http://ww2bsa.org/ww2bsa-network105.htm>

Map of HF Packet Stations

[https://www.google.com/maps/d/viewer?mid=1nvF-\\_-fES9hNtrDTWSO23BwOujCxlcoJ&oid=0&ll=42.664453277314536%2C-95.27043803065902&z=4](https://www.google.com/maps/d/viewer?mid=1nvF-_-fES9hNtrDTWSO23BwOujCxlcoJ&oid=0&ll=42.664453277314536%2C-95.27043803065902&z=4)

Get on Packet Radio with a soundcard

<https://mocars.org/uz7ho-soundmodem-installation-and-configuration/>

Packet HF with UZ7HO Software

[https://www.youtube.com/watch?v=q9evYp6HcdA&ab\\_channel=AD6DMDennis](https://www.youtube.com/watch?v=q9evYp6HcdA&ab_channel=AD6DMDennis)

ICOM 7300 Memory Manager

<https://kb3hha.com/>

Telegram Secure Messaging

<https://telegram.org/>



## 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 [webmaster@gbarc.ca](mailto:webmaster@gbarc.ca), any format, any size, anytime, but if you want it to appear in the current month's 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 here: [Membership](#)

## Join the Radio Amateurs of Canada

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



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.

AND THAT'S HOW RADIOS ARE MADE

