

**MARCH 2023** 

VOL. 65 ISSUE 7

NEWSLETTER OF THE OTTAWA VALLEY MOBILE RADIO CLUB INCORPORATED (OVMRC.CA)

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CHECK-IN TIME 6:45 TO 7:15 P.M. MEMBERS AND INVITED GUESTS WILL BE SENT AN EMAIL INVITATION SEVERAL DAYS BEFORE MEETING DATE WITH LOGIN AND PASSWORD. OTHERS NOT ON OUR MAILING LIST PLEASE CONTACT NORM AT: VE3LC@RAC.CA FOR INVITATION.

## MEETING: WEDNESDAY MARCH 15 7:15 P.M. VIA ZOOM

#### **AGENDA**

- OPENING 7:15 BARRY (VE3NA)
- GREETINGS-GUESTS/MEMBERS
- PRESIDENT'S REMARKS
- MOTION TO INDUCT BRYAN VE3QN AS OVMRC LIFE MEMBER
- PRESENTATIONS:
  - DENIS VE3BF CALL-SIGN LASER ETCHED PLAQUES;
  - 2) WAYNE VE3CZO, EVOLUTION OF THE USB
- FEBRUARY MINUTES
- CHAIRPERSON REPORTS
- MEETING ADJOURNMENT
- RAG CHEW

## OVMRC AFFILIATIONS





# OVMRC Executive and Officers 2022-2023

#### **DIRECTORS**

#### President:

Barry Allison, VE3NA ve3na@rac.ca

#### Vice-President:

Norm Rashleigh, VE3LC ve3lc@rac.ca

# Treasurer & Membership Records: Nicole Boivin, VE3GIQ

ve3giq@rac.ca

## Corporate Secretary:

Alan Fricker, VE3KAE alanfricker@yahoo.ca

## STANDING COMMITTEES

Club Projects & Bulk Orders: Barry Alison, VE3NA ve3na@rac.ca

# Radio Course & Accredited Examiner:

Norm Rashleigh, VE3LC ve3lc@rac.ca

## Meeting Reception:

John McGowan, VA3JYK john.mcgowan1314@gmai l.com

## Nets & Radio Operations: Hugo Kneve, VE3KTN ve3ktn@rac.ca

## Rambler Newsletter Editor and Production:

Alan Hotte, VA3IAH editor@ovmrc.ca

# OVMRC.CA & Social Media: Adam Bird,

VA3IRD web@ovmrc.ca

### OVMRC Repeater

**Keeper:** Norm Rashleigh, VE3LC ve3lc@rac.ca

### Special Events: Roger

Egan, VA3EGY va3egy@gmail.com, John McGowan, VA3JYK john.mcgowan1314@gmail .com

## \*\*\*\*\*\*

## OVMRC Groups.io Ongoing discussion Group at:

## https://ovmrc.groups.io

/g/main; All radio amateurs members and non-members are welcome

Ottawa Valley Mobile Radio Club, Incorporated PO Box 41145 Ottawa, ON K1G 5K9

#### OVMRC Life Members:

Ernie Jury, VE3EJJ Maurice-André Vigneault, VE3VIG Ralph Cameron, VE3BBM Doug Carswell, VE3ATY Doreen Morgan, VE3CGO

#### OVMRC Repeaters:

- VE3RAM Limited coverage to Orleans and East Ottawa 443.700 MHz (+) DMR CC1 & D-Star Network connected to Brandmeister
- VE3TWO Limited coverage to East and South Ottawa 147.300 MHz. +, PL 100.0 Hz. Analogue FM and C4FM

Special Event & Field Day Call Sign VE3JW



## LOCAL WEEKLY NETS (ALL CHECK-INS WELCOME)

- Rubber Boot Net, VE3OCE 146.880 MHz (-)136.5 Hz tone weekday mornings at 7:30 AM conducted by Roger, VE3NPO
- Pot Hole SSB Net, 3760 kHz, every Sunday morning at 10:00 AM conducted by Ernie, VE3EJJ, or Glenn, VE3XRA.
- Pot Lid Slow Speed CW Net, Sunday night, 7:30 PM, 50.090 MHz., horizontal polarization. Join controllers Hugo (VE3KTN), Norm (VE3LC) and Ante VA2BBW for accomplished and budding CW operators alike.
- QCWA Chapter 70 Net, VE3OCE 146.880 MHz (-) 136.5 Hz tone, Monday evenings at 7:30 PM conducted by John, VE3ZOV
- Capital City FM Net, VE2CRA 146.940 MHz -, (100 Hz tone), Monday evenings at 8:00 PM.
- Champlain STP Net, VE3STP 147.060 MHz -, (114.8 Hz tone), held Monday through Saturday at 7:00 PM.
- Phoenix Net, VE3OCE 146.880 MHz (-) 136.5 Hz tone, Tuesday evenings at 7:30 PM conducted by Pete, VE3XEM

- Upper Frequency Net,
  Simplex 144.250 MHz using
  USB, Tuesday evenings at 9:00
  PM conducted by Glenn,
  VE3XRA. Following check in
  on 2 m you can check your
  radios on 6 m at 50.150 MHz
  and 70 cm on 432.150 MHz as
  well using USB. All check ins
  are welcome.
- Almonte ARC's D-Star Net
  Tuesday evenings at 8:40 p.m.
  carried on XLX197 and
  everything connected to it.
  Dale VE3XZT presides.
- OVMRC 2-Metre Net, Thursday Evenings, 8:00 PM, Club Net on FM will be held through VE3OCE 146.880 MHz (-)136.5 Hz tone conducted by Hugo, VE3KTN.
- Weekend Allstar Nets, on an ad hoc basis the EMV\_E repeater will be linked temporarily to the Allstar Canada Hub for weekend nets.
  - https://thecanadahub.ca/
  - http://www.emrg.ca/repeater
    s.htm

## INFORMAL AMATEUR RADIO RESTAURANT GATHERINGS

- QCWA Chapter 70
  Breakfast gathering
  every Tuesday morning
  at 7:30 to 10:00 AM,
  Summerhays Grill, 1972
  Baseline Rd., Nepean Restarted
- Orleans Coffee gathering (on hold) every Friday morning at 9:00 AM, McDonalds, 2643 St. Joseph Blvd, Orleans
- QRP Group Dinner meeting, Second Wednesday every month, 5:00 PM, Newport Restaurant, 322 Churchill Ave N., Ottawa
- Phoenix Net monthly Breakfast gathering (on hold), usually the second Saturday every month at 9:00 AM, Check with Pete ve3xem@rac.ca



## **President's Ramblings for March 2023**

While winter slips away, (but not as fast as I would like to see) there are things on the horizon we should start thinking about. Primary on that list is Field Day 2023. We may have an in-person FD if the Aviation Museum site becomes available, but we should stay in the "be prepared mode" just in case we end up doing another individual / club submission again. The club has done very well in the past few Field Days and I have heard from a few members who would like to do this again mainly because it allows many more members to participate while not having to commit to an "away from home" weekend experience.

Having said this, with so many "New Hams" in the club, an "in person" FD would really close the loop on what a group FD is all about. Translated, this means a lot of work and commitment for both set up and tear down / site clean up, but also one heck of a good time operating and of course the meals, ah the good food!

Now as of this writing, it is too soon to say the direction we are going to proceed is firm but it is not too soon to start planning, for both options, until the rabbit is pulled from the hat. More on this in the upcoming meetings. Input from club members is always welcome!

The coax program lives on and the requests keep rolling in for more cable. I have received several requests for RG 8x cable, which is an excellent choice for many applications but currently the club does not offer it. The main reason is the coax requires a different size connector and I would need another die set for my crimper. In place of the RG 8x the club does stock RG 58u cable which is double shielded, flexible, inexpensive at \$0.10 / ft, and uses the same connector as the LMR 195 cable. (One less thing to stock and one less thing to deal with from an inventory point of view.) There are no current plans to add RG 8x to the inventory for the above reasons.

#### Notes to OVMRC club members:

I would be remiss in my duties if I didn't refer you to VA3IAH, Alan's tag line: "we are always looking for Rambler submissions". Don't be shy, put pen to paper and let the club know what you are up to with your projects. Alan can provide guidance in preparing your article for the newsletter should you need some help regarding layout, photos, etc.

The Rambler pays for all submissions by the word. This year rates have gone up 17% over last year yielding the new rate of \$0.00 per word. Where else in these inflationary times have you ever seen anything go up by that amount? (The fame you receive will likely far exceed the remuneration)



That's it for my March ramblings. Please join us at the 6:45 check in time on March 15 for the next OVMRC Zoom meeting. Anyone not receiving the check in credentials can do so by sending an email to Norm (Zoom custodian) ve3lc@rac.ca.

The OVMRC meetings are open for all to attend. Guests wishing to attend can submit a request to the Zoom custodian (see above) and joining credentials will be sent to you.

I look forward to seeing many club members and guests at the March Zoom meeting.

73, Barry, VE3NA

## **OVMRC February 2023 Minutes**

Date / Time: Wednesday, February 15, 2023 @1915hrs

Location: Via ZOOM on-line meeting

#### 1) Call to order:

President Barry Allison, VE3NA called the meeting to order at 1915. There were 54 official check-ins.

## 2) Welcome and Guest Greetings:

Barry VE3NA extended his greetings and welcomed all to the club meeting. Barry welcomed guest Charlie VA3CPI who is just getting back into ham radio. In addition, Bob VE3YX, Tim VA3PYC, Phil VE3HOA and Robert VA3AGN from Pembroke, checked in as visitors. Justin Whalley, who is an associate member is currently studying for his basic radio certificate. Barry welcomed all to the meeting.

## 3) Approval of minutes from previous meeting:

**MOTION:** Moved by Bill VA3HWA and seconded by Ernie VE3EJJ that the minutes of the meeting held Wednesday, January 18, 2022 be approved. **VOTE:** No Objections.

CARRIED.

#### 4) Agenda and Meeting Content:

RAC Email Update: Barry VE3NA reminded club members about the recent notification from RAC regarding the change in the RAC email alias format. RAC members should make note of the RAC email change to "@myrac.ca", effective May 15, 2023 and make updates to personal email usage as required. Neil VE3PUE and Nicole VE3GIQ mentioned that both email



addresses will work until May 15 when the new change takes place.

#### 5) Feature Presentation:

Feature Presentation - An Introduction to the Winlink Global Email System.

Norm VE3LC introduced Stuart Fedak VE3SMF to the membership. Norm stated Stuart is a progressive radio amateur in the area, is a club member, and has expressed a big interest in Broadband Hamnet, the AREDN net, and has established his own Winlink gateway in the area.

Stuart VE3SMF began with an overview of the Winlink Global Email System. He mentioned that Winlink is a volunteer project of the Amateur Radio Society Foundation Inc. He informed that it is a type of email client software that includes the following noteworthy features:

- Winlink Express is the popular email program. Others are Airmail, Outpost, WoAd, Pat, Paclink
- Developed for Windows computers. There is Linux emulation available.
- Can send emails to other users using call sign as address. Can send SMS messages to phone numbers as well.
- To email a non Winlink address you use the full regular email address.
- To email to a Winlink address use format callsign@winlink.org.
- Files can be sent as attachments. Small images as well.
- Speed is limited particularly HF
- Can be a radio link or internet based telnet connection.
- Can send email from almost anywhere.
- Connections via RMS Radio Message Server by individuals.
- RMS gateways connect via RF or CMS (Common Message Servers) hosted by Amazon.
- Messages are redundantly sent to all CMS locations and can be retrieved by connecting to any RMS Gateway.
- It's also capable of operating w/o internet using Hybrid RMS Gateway. Messages are held and re-forwarded.
- Can connect from almost anywhere, even out to sea or deep in the bush.

Stuart mentioned that Winlink registration is easy and software installation is simple. There are YouTube videos that demonstrate how to do this. Stuart said he would be happy to assist with hands-on training for those who are interested. The best sources for info on the software is https://WINLINK.org.

Stuart said he is interested in generating more interest in Winlink in the Ottawa area. Winlink is rapidly becoming a standard for emergency and disaster relief communications.



So why use Winlink Email Client? Benefits include:

- Templates can be shared among clients for emergencies example ICS-213 Incident general message and ARRL Radiogram Templates.
- Only message content is sent formatting is not sent.
- Winlink is used by CFARS Canadian Forces Affiliate System point to point.
- Can be used for private non-emergency Public Service as well. Example
   Rideau Lakes Cycle Tour.

Stuart then listed the various communications options that are available.

- Telnet is direct via CMS over the internet. It does not require a radio.
- Packet/Pactor can use AX25 packet modem or digital sound card applications. Pactor modems are expensive.
- VARA HF will use the VARA HF software modem almost as good as Pactor.
- VARA FM is a software modem by the same developer.
- VARA modes use multi-channel protocol.
- P2P allow two stations to communicate directly rather than through a gateway.
- Winlink includes a HF channel selector in the software that allows you to select the most useful gateway. In practice try to use something that is strong and close to your station.

Stuart says he tries to connect to different gateways to observe the best s/n ratio to move messages quickly.

What hardware is required? For an HF station you will need a computer, a sound card, an HF radio, and related USB connection. Some newer radios have a sound card built in. Older radios can use Signalink or a packet modem with a computer.

Stuart provided an overview as to how to compose and send an email and provided an overview of the forms available. The built in forms are all html based. Radiogram is a typical form commonly used. Text is limited to 25 words. Free text can be posted to the outbox and sent as well (no form required).

He noted that Packet and VARA can also use digipeaters as intermediate stations. It is for this reason he is trying to encourage local amateurs to set up a Packet or VARA gateway.

At this point Stuart discussed his own experience in setting up his own gateway. He made note of the number of packet gateways set up in the Vancouver area and mentioned that Vancouver is somewhat motivated by the environmental issues they have there. They have been at this a long



time and they have a large number of packet stations set up. He mentioned that the GTA has quite a number of gateways set up as well.

When we look at the Ottawa area, there are only two gateways including Stuart's.

Vancouver has only a few VARA FM gateways. The GTA has about the same number of VARA FM as Packet stations. In Ottawa, Stuart is the only one running a VARA Gateway.

increase to cover the extra insurance cost.

Stuart then talked about why an operator should do VARA FM on VHF/UHF and about setting up a gateway and relevant considerations.

- Its very fast, Is a local/regional resource, is less dependent on propagation.
- You need a good internet connection.
- Once up provides more interoperability with other systems. Emergency systems in northern communities are often operated by a radio amateur which is their end point.
- MESH Network has potential interoperability.
- Can use digipeaters for both packet and VARA to increase range.
- HF radio via Hybrid Gateway can temporarily shut down internet access and the gateway will hold messages.
- Sysop Foundation Skills and Gear he outlined the extent of the commitment to operate a gateway -you need to duplicate the home and gateway station to facilitate instant backup if the gateway shuts down.
- Backup power plan required.

Stuart provided an overview of the requirements to participate as an RMS operator. He mentioned the Gateway Sysop Team - Sysop Guidelines. With respect to operating policy there are established requirements to operate an RMS gateway and he outlined the process required to make a request to operate a gateway, as well as the RMS gateway contingency plan. He pointed out that it must be available 365 days a year, and 24 hours a day.

The emergency power plan is very important as power demand management is critical. Installation of a UPS to keep the station operating is recommended as the UPS gives you time to implement your other method of powering the station.

For his station, Stuart is using an Alinco DM-330MV power supply, with a West Mountain Powergate PG40S and a backup battery. He uses a 100 amp hr LifePo4 battery with a West Mountain Radio Epic PWRGate for



management and supporting a solar panel.

Powerpole connectors are on everything. He also uses a DC Powercube and a Honda EU1000 gasoline generator for backup. He is using an older windows computer with Windows 7 for the Gateway with Astron power supply and a deep cycle battery. He uses a 10 Ah battery to power his router if the power goes off. He pointed out that it is important to ensure the computer cannot go to sleep. He plans to replace his computer with a Windows 10 mini computer – dedicated to the Winlink gateway. He uses Signalink USB devices. He is using a Yaesu FT-897 radio for the RMS gateway and his antenna is a Cushcraft dual band Ringo AR270B 70/2m antenna, 57 feet to the tip, with LMR-400.

Stuart mentioned it is important to calculate your ERP do the math.

Stuart then went through the various software required to support the gateway. RMS Gateway is an advanced topic that requires support on a one to one basis. He operates on 145.030 and supports both VARA FM and Winlink Packet and the gateway responds to both. VARA FM is faster with a lower s/n ratio. He mentioned that local users have been using the system, and demonstrated with screen shots how VA3ZTF Jeremy accesses the system and what his system shows. He also provided an example of operation for a Radio in the Park event in 2022.

Stuart finished his presentation by mentioning he had been doing some work on the AREDN Mesh recently and outlined the compatibility of the mesh with Winlink. Stuart talked about the Wavetalkers video training available on YouTube and Zoom and the very helpful resources they provide. Alan VE3KAE and Tim VA3PYC outlined their Winlink experiences as recent users.

Stuart then took questions about his presentation.

Maurice-Andre VA2MA had a question about connecting via straight packet without using Winlink software. Stuart replied that it has to work with the Winlink software. Maurice-Andre mentioned he can connect to VE3OCE via packet and asked if he can connect from OCE to Stuart's system. Stuart says yes, but alternate software may be required. VE3OCE would be acting as a digipeater.

Barry VE3NA stated that Stuart had a great presentation and he can be assured he got the message out there while covering a lot of ground. Norm VE3LC reiterated Barry's comments.

Norm VE3LC had a question about use of frequency 145.030 and is there a plan for packet frequency coordination? Stuart mentioned the US users are still working that out.



Norm VE3LC had a question about use of frequency 145.030 and is there a plan for packet frequency coordination? Stuart mentioned the US users are still working that out.

Consensus is that VARA FM was so quick, frequency management wasn't a concern for now. In fact they can combine voice and digital on the same frequency without problem.

Don VA2EV mentioned that Peter VA3YOW has been asking about a Winlink setup for Emcoms. Question – would Stuart come to the command post to assist? Stuart said he would be honoured to assist. He says it would not take much to set up a portable station and try it out. 60 meters might be a good option. Don said it would be great to have Winlink in the toolbox. Norm said that would be a good usage of the spectrum.

Roger VA3EGY mentioned he has a number of new hams on the net every Tuesday night and was considering challenging them to get set up on Winlink to help them at least to send an email. Roger said it might be helpful to have a coordinated effort to increase Winlink usage and increase the number of people to implement it at a basic level. We can then check the box that the club is doing something with Winlink. Stuart said that could help distribute information and be a training resource. Roger to follow up on the subject.

#### 6. Projects, Haves, Wants and Announcements:

**Haves:** None. **Wants:** None.

#### 7. Neil VE3PUE - Canadian Ski Marathon Report

Neil VE3PUE provided an update on the recent Canadian Ski Marathon. He mentioned that this was the first ski marathon since two years. Neil reported the event as having some of the best conditions they ever had. He noted that turnout for the event was lower than anticipated. Neil expressed a "thank you" to all the volunteers who helped out with the event. The CSM report will be written and posted on Hambone at https://hambone.ca/index.php.

#### 8. Chair Reports:

#### OVMRC Vice-President: Norm VE3LC

Norm VE3LC reported that the club is pursuing an on-site ARRL Field Day event this year at the Canada Aviation and Space Museum grounds. The setup there will include the big tent and trailer as before. The club is



considering the limiting transmitter power to 5 watts to access more multiplier Anyone who wants to contribute to the Field Day organization contact Norm VE3LC.

Norm also reminded that planning is underway for a social event in early April (on a Saturday) at the International Brotherhood of Electrical Workers (IBEW) premises at 1178 Rainbow Street, Ottawa, for an "eyeball QSO" event. Norm noted that the IBEW has a large meeting room and hall with necessary audio/visual connections. VA3CSG Colin is facilitating this for the club at the IBEW premises. The main feature of the gathering is to celebrate the appointment of Bryan Rawlings VE3QN to the Canadian Radio Hall of Fame (CARHOF) (https://www.rac.ca/bryan-rawlings-ve3qn-appointed-to-hall-of-fame/) and the presentation of his award. Donuts and coffee will be supplied. More information about the event will follow.

#### OVMRC Treasurer: Nicole VE3GIQ

Nicole VE3GIQ provided a brief update on club finances. The club has \$8203.00 in the bank and \$50,000 invested in GICs. The club has committed some funding for donations and three of the four causes have been paid out. Nicole commented on the recent RAC email address change notice. She mentioned there are 12 members in our database using a RAC email address for club donations. She says she will convert the addresses in the club database prior to May. Nicole mentioned that the email changes will affect Rambler content where old email addresses are mentioned.

She also reminded the group – if you have changed/updated your personal vital statistics, please send Nicole VE3GIQ the information as soon as possible. Concerning membership, the club has 128 members as of today. Attendance tonight is 54.

#### OVMRC Secretary Update: Alan VE3KAE

Nothing new to report. A big congratulations on the January Rambler.

#### Rambler Update: Alan VA3IAH

Alan reported the February Rambler is now out. He mentioned he has been playing with some potential cover options. Alan is looking forward to Rambler content contributions from anyone for the March issue. This could include construction articles, etc.

#### Web Site: Adam Bird VA3IRD

Adam VA3IRD mentioned that with Alan's VA3IAH help, he continues to break out articles on the site. He reports that RSS news feed is now available for Thunderbird email users. Adam says he can do a small tutorial for those who are interested in this feature.



Hugo noted that Ernie VE3EJJ, has been running the net mostly since the start of the year. Glenn VE3XRA has had an HF antenna problem and has not able to provide his usual net control support for the 80 meter net. Hugo then provided a summary of the winter nets schedule to allow meeting attendees to view and screen print the net listing for reference.

#### 9. Other Business:

Roger VE3EGY - Youth on the Air (YOTA) Update. Roger VE3EGY provided a brief status/update on the 2023 YOTA event. He mentioned the focus currently is to get Carleton University up to the desired standards in preparation for the YOTA camp. Grant funding requests have all been submitted. They have obtained about \$40,000 (US\$) funding to date. All equipment will be eventually donated to Carleton University. He is proposing to establish a volunteer radio group there for ongoing support. He noted that the University of Alberta has a lot going on, and Calgary is interested in the YOTA camp as well, with the possibility for roll out across Canada. He mentioned that YOTA Camp instructors are all under the age of 30. Carleton University has been presented with a base project plan and scope document. Antenna installation and related technical issues will need to be resolved with due respect for Safety Code 6 and much will need to be completed by the end of May 2023.

#### Net Operations: Hugo Kneve VE3KTN

Hugo provided a report on the OVMRC Nets. The OVMRC 2 meter Thursday net has consistently had about 20 check-ins every week. The 80 meter Sunday morning Pothole net attendance has slightly dropped off, possibly due to the sunspot cycle which does not help net propagation at 10:00 AM on Sunday morning.

Roger provided some photos of the proposed area for the radio and antenna installation and operating areas. The actual radio room will be in one of the Mackenzie buildings. All equipment will be Icom brand. There are some existing antennas on site, but they are old and not in good condition. He noted that they are certainly not grounded properly. He mentioned that there are over 30 registered "campers". Two are from the Ottawa area and others are from the USA and South America. He expects that they should be in a position to deliver a YOTA camp "on our own" in three years. Norm VE3LC thanked Roger for his update and report.

**Adjournment:** Norm VE3LC called for adjournment of the meeting at 21:41 Hrs.

**MOTION:** Moved by Douglas VE3YDK toadjourn the meeting, No objections. All in favour.

Barry VE3NA then closed the meeting for turnover to the following chat session.

Minutes recorded and prepared by OVMRC Secretary, Alan Fricker VE3KAE.



# All radio amateurs in the Ottawa Area are invited to attend a Special Amateur Radio Event to present Bryan Rawlings, VE3QN his: Canadian Amateur Radio Hall of Fame Plaque

Date: Saturday April 15th, 2023 Time: 1:30 to 4 p.m.

The award to Bryan will be made at approximately 2:30

Place: IBEW Local 586, 1178 Rainbow St, (east side of Ottawa just off Canotek Rd)

This event is Sponsored by the:

Ottawa Valley Mobile Radio Club; Ottawa Amateur Radio Club; and Chapter 70 (Ottawa) of the Quarter Century Wireless Association.

We have sent an invitation to Phil McBride, VA3QR, President of Radio Amateurs of Canada. Refreshments will be served at this event.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

### What is the Canadian Amateur Radio Hall of Fame (CARHOF)?

Radio Amateurs of Canada recognizes deserving Amateurs by appointments to the Canadian Amateur Radio Hall of Fame. The Constitution of the Hall specifies that the appointment as a Member of the Hall is for "outstanding achievement and excellence to the highest degree, for serious and sustained service to Amateur Radio in Canada, or to Amateur Radio at large." For a candidate to be considered for appointment to the CARHOF, a confidential nomination that includes at least 3 references must be submitted to the Board of Trustees of the Hall outlining the meritorious service of the candidate.

Bryan was nominated last September for this prestigious award for his many years of voluntary service and faithful commitment as "Special Advisor" representing Radio Amateurs of Canada on agenda items impacting the amateur radio service at the World Radiocommunications Conferences (WRCs). His tenure in this important volunteer position began in 2006 when he was recruited by the late Ken Pulfer, VE3PU and Jim Dean, VE3IQ. Bryan was eager to continue their work as part of the Department's Canadian delegation attending WRCs 2012, 2015 in Geneva, Switzerland and WRC 2019 in Sharm el-Sheikh, Egypt. Bryan enjoyed a good working relationship with ISED officials while attending most, if not all, requisite pre-conference preparatory Working Party 5A meetings here



and abroad where agenda items to do with the amateur service spectrum and regulations are studied and national positions developed leading to final negotiations and vote for consensus at the Conference by countries of the world.

Of significance in Canada and other countries, radio amateurs can now enjoy operating on the expanded amateur radio allocations on the 630 and 60 metre bands thanks to the negotiation skills and diplomacy of Bryan. His contrubtions have also been well documented through his numerous articles in TCA magazine, presentations to radio clubs (especially here in Ottawa) and his Conference "Tweets" ensuring that Canadian Amateurs have been well informed on progress being made on international amateur radio spectrum matters.

In 2020, Bryan officially stepped down from his position as Special Advisor to RAC in favour of Paul Coverdale, VE3ICV taking on the meetings of the next ITU cycle preparing for WRC 2023. Nevertheless, Bryan remains involved by often attending ISED and ITU meetings (now on-line) to provide welcome continuity.

Let's honour Bryan Rawlings, VE3QN by attending this Special gathering of his friends and fellow radio amateurs on April 15.

#### Bryan Rawlings nominated for Life Membership in the OVMRC

Further to honouring Bryan for his distinguished appointment to the CARHOF, members of your executive committee of the OVMRC have nominated him to become a "Life Member of the Ottawa Valley Mobile Radio Club Inc." The motion will be presented at the March 15th, 2023 meeting of the Club and reads:

"We move to nominate Bryan Rawlings VE3QN as a life member of the Ottawa Valley Mobile radio Club (OVMRC) for his contribution to the amateur radio service and his outstanding participation as a Canadian delegate for amateur radio to the International Telecommunications Union and the World Radiocommunications Conferences 2012, 2015 and 2019."

**Nominators:** Barry Allison, VE3NA, Norm Rashleigh VE3LC, Alan Fricker VE3KAE, Hugo Kneve VE3KTN

This motion is so published in the Rambler according to the requirements of the Club's By-Laws, section requirements of the Club's By-Laws, 2.3.3 "Life Member" preceding a vote of the membership at the March meeting carried out by secret balloting on Zoom during our March 15 meeting.

#### Norm VE3LC



# Another Take on the IC-705 Hugo VE3KTN

#### Introduction

The Icom IC-705 multi-mode QRP transceiver has been around for a couple of years and has been the subject of many product reviews. Its notoriety as a top line QRP radio, my desire to have a full-function QRP radio for Field Day and not having spent any significant money on my ham radio hobby in many years ended up in my buying one just before Christmas 2022. Nearly three months have passed exploring this new rig and now it's time to let you know what I think about it.

This review focuses more on the rig's RF performance and its ability to both pull signals out of the noise as well as shield desired signals from interferers. I could go into the digital side of things and the D-Star functionality, but that would take another couple of months of operating and not really enhance what I think is important to the average radio user. So here goes.

#### First Impressions

The first thing that struck me about this radio was Icom's attempt to jam as many features as possible into a rather small package. This radio may be difficult to work for people with fat fingers. The SD memory card is very hard to access, being tight against the front screen casting and speaker/mic cord retainer and also being under a rubber dust cap. Working the SD card in and out of its receptacle risks card breakage and I actually resorted to using a hemostat to position the card before clicking it into place. Fortunately, the SD card contents are accessible via a USB data link so this shouldn't give too much grief in the future. There are a few rubber dust cover flaps on various interfaces which are rather small and require some care to move out of the way, e.g. for attaching a micro USB cable, a CW key and the accessory ports. So much for the down side, the rest of it is well thought by Icom.

Icom offers free setup/backup software for their radios. I found the CS-705 configuration and data backup management software for Windows® to be very intuitive and easy to use. I didn't need to read the software user guide at all to figure out how the software works.

My radio came with firmware V1.26 installed, which was adequate for most of my initial assessments but I did end up updating it to the latest V1.32. It's a straightforward process with adequate procedural safeguards along the way which help avoid bricking the radio.



The audio quality from the radio's main speaker is surprisingly good for a 1 inch speaker, being loud enough for use in a vehicle without noticeable distortion with the volume level at 75%. The microphone speaker isn't nearly as good and I wouldn't use it unless the situation demands it. Still, it's a good idea on Icom's part to have separate speaker and mic connections to the radio, allowing flexibility for the user to use whatever audio devices work best.

The master oscillator can be adjusted in real time and with very fine granularity to take out any incidental tuning error. I'm a bit finicky for things like this and found that the factory setting of 47.2% was on the low side when monitoring the WWV signal on 25 MHz. I use a technique of switching between USB and LSB on a known standard CW signal to figure how good the radio's tuning accuracy may be. Switching between modes will result in an audible tone on both sides and it's only when the two tones are perceived as equal in frequency that the radio is actually receiving a signal at an RF frequency coincident with what's indicated by the VFO dial. Most people can detect a difference of around 3 Hz. in tones across a 500-1000 Hz. range which is more than enough to have your radio tuning adequately close to the real RF frequency.

In my case the USB/LSB method led me to adjusting the Ref Oscillator to 52% from its original of 42.7. It's important when receiving a signal on the air that the highest possible RF signal should be found as Ref Oscillator errors multiply up with increasing frequency and can be quite high when in the 70 cm. band. Also, to allow the radio to stabilise at the manufacturer's nominal ambient temperature (typically around 21° C.) for at least a half hour after power-up.

Lastly, the operating menus are arranged quite logically as accessed through the front panel row of keys below the LCD display. The Menu key is equivalent to "what do I want to do?" and the Function key is equivalent to "how do I want to do it". A very smart way to operate a radio in my view.

#### Spectrum/Waterfall Display

The Spectrum/Waterfall Display (I'll call it a panadaptor for brevity) has exceptionally good resolution and sweep speed; I'd say it's comparable to a high end consumer grade spectrum analyser.

The frequency span settings are good, ranging from ±2.5 kHz. to ±500 kHz. There is some automatic resolution bandwidth adjustment being done among the different span settings as the displayed noise floor increases with wider span. If you want to keep the displayed noise floor at a constant level, this can be done by adjusting the panadaptor Ref control.



In most cases the noise floor can be adjusted to be just visible but there are cases, given the very low noise of the radio's RF section, where one of the built-in RF preamplifiers may have to be enabled.

While the visible span is adjustable, the vertical level scaling is fixed. Something of a niggle with me; I mean with all the DSP horsepower in the IC-705 why can't the vertical scale be adjustable to pick out those really marginal signals, but there it is.

One very useful panadaptor tool is what I call a Point&Shoot feature. If a signal pops up and you want to tune to it quickly, all you have to do is touch the screen near where the signal appeared, a magnified snapshot of that area is taken and then touch again on the desired signal to tune the radio. I can see this being very useful in a contest or Field Day.

#### SSB Reception

I can summarise the SSB performance of this radio as being nothing less than exceptional. Adjacent channel and opposite sideband rejection are very good. Figure 1 shows an example of being able to pick out a relatively weak signal in the presence of a much stronger signal in the alternate sideband's passband. In this case I could detect no interference whatsoever from the stronger signal. Similarly, for signals outside the radio's IF passband, called FIL in Icom-speak, the filters are very sharp. I could find weak signals in the presence of a much stronger signal only 3 kHz. away and again had no interference issues.

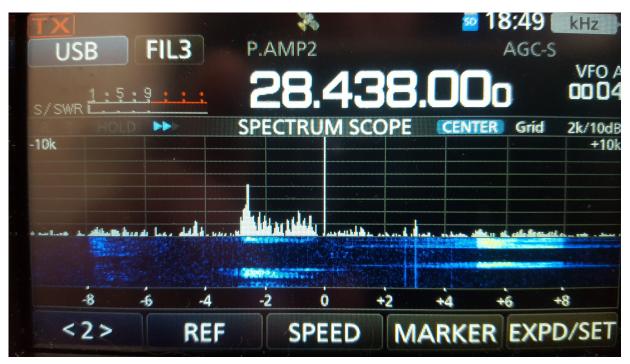


FIGURE 1 - SSB ISOLATION



On the subject of IF filter passbands, the IC-705 does have the ability to shift the IF filter skirt positions using the PassBand Tuning, PBT, feature. I tried using this a few times but found in most cases it really isn't necessary because of the inherently sharp IF filtering already available. Nevertheless, it's a useful feature to have in particularly difficult interference situations. The PBT adjustment is done via a popup window but I did find the window's timeout delay to be rather short. I think I'll be sending ICOM a note about this with a suggestion to lengthen it in the next firmware release.

The DSP noise reduction is quite effective and, unlike that implemented in late model Yaesu radios, is apparently a single noise reduction algorithm that is applied in increasing levels of aggressiveness. I found the DSP-NR on the 705 to be much superior to that on my FT-991A.

The DSP Auto-Notch and manual notch filters work quite well. Auto-notch will eliminate most of the annoying tuner-uppers that appear occasionally when having a conversation without having any noticeable effect on the quality of the desired signal.

#### CW Operation

The first thing that struck me when looking at CW signals was the obvious phase noise envelope around all the carriers.

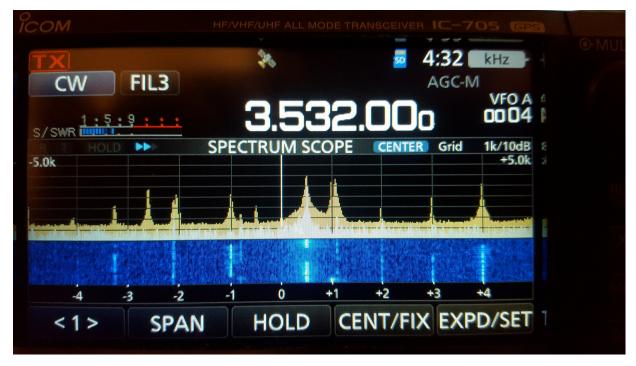


FIGURE 2 - CW SPECTRUM



At first I thought oh boy this isn't good, but then I tuned to WWV on its 10/15/20/25 MHz. signals and saw that their carriers were dead clean. Well, that can only mean that what we're seeing with CW is the phase noise behaviour of most radio transmitters on the air today. Despite this, there doesn't seem to be any additional noise at audio level so, for a ham radio operation, things are ok.

Selectivity at a 250 Hz. IF filter setting, FIL3, is quite good. There is complete isolation between signals I found having a 30 dB. level difference. I could easily pick out the desired weak signal in the presence of an interferer 500 Hz. away. I could only dream of this kind of performance with my old FT-101E; even with a CW crystal filter installed.



FIGURE 3 - CW ISOLATION

The only CW features missing from the IC-705 are carrier zero-beat tools that are on the FT-991A. These are the Yaesu SPOT function to zero-beat to a CW signal manually and ZIN which will automtically zero-beat without having to fiddle with the VFO.

#### FM Operation

There's not much to be said about FM operation with this radio since it has features common to many FM amateur rigs. The basic setup and memory/scan of repeater frequencies is easy to understand and works quite well. A very helpful feature is the CTCSS Tone scan feature which will scan and automatically identify a repeater's transmitted PL tone.



Something very useful when on the road and in an unfamiliar region where there's no immediate access to information about the local repeaters.

#### **RTTY Operation**

The IC-705 has a built-in RTTY codec. It defaults to the 45 Baud standard commonly used with amateur radio but the RTTY speed and tone offsets can be tailored if you want to listen in on other RTTY transmissions in the HF bands. I had the chance to check out the RTTY decoder performance during a recent RTTY contest and it behaved quite well. Coupled with the Point & Shoot panadaptor feature I mentioned before, it was easy to move quickly from one signal to another. Isolation from interferers was very good when using the FIL3 setting.

Transmitting with the built-in RTTY codec is rather limited as it only allows sending preset scripts that are stored in memory, so the user has to set up these scripts before embarking on a contest and hope that the exchange format doesn't change. Nevertheless, the built-in RTTY capability can be useful on in-the-field events such as Parks On The Air.

#### Conclusion

That's as far as I've come with assessing this radio. It's a very fine product, although pricey running at C\$2000.00 when buying in Canada including the taxes and shipping. Still, it's jam packed with all the features of a desktop radio and the DSP-FPGA engines work exceptionally well. It's a great radio for someone looking to go QRP which seems to be a growing interest these days. Some reviews have said that while the IC-705 is a fine radio, they would never take it out in the field simply because they wouldn't even want to think about losing an expensive radio like this if their canoe were to tip over. Well, true enough, but I guess it's up to the individual as to what they want to pack in their getaway kit.

Outside of all that, I'll conclude with saying that I'll be keeping this radio for a long time. I see nothing on the horizon that can beat it for features and performance.

Cheers to all and 73, Hugo, VE3KTN.



## Follow OVMRC.CA Articles Via RSS Adam VA3IRD

RSS (Really Simple Syndication) is a system used to disseminate information in a "feed". RSS is used as the backbone of the podcast distribution system, but can also be used to to follow your favourite websites and news providers. If you enjoy reading the content on the OVMRC.ca website, but forget to check back on a regular basis, then RSS could be for you!

#### Feed

RSS feeds are shared as simple URLs. The feed for ovmrc.ca is https://ovmrc.ca/feed

Feeds can be input into RSS reader applications in order to "subscribe" to RSS feeds. Your RSS reader will automatically update as new content is added to the feed.

#### **Email Clients**

If you are a user of the Thunderbird email client, you can add RSS feeds and read them just like emails. In Thunderbird click **Edit -> Properties -> Account Actions -> Add Feed Account**. Once a feed account has been set up you can add individual feeds to it by clicking the "Manage Subscriptions" button.

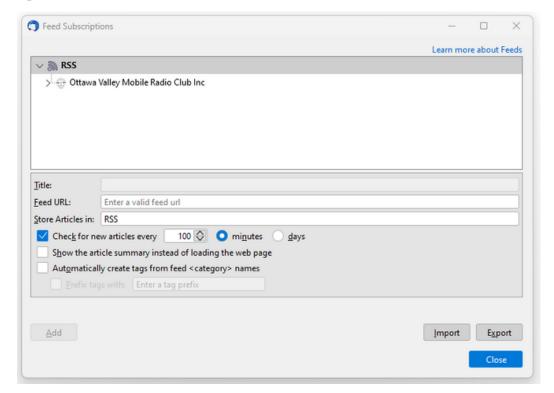


FIGURE 1: THUNDERBIRD'S ADD FEED INTERFACE



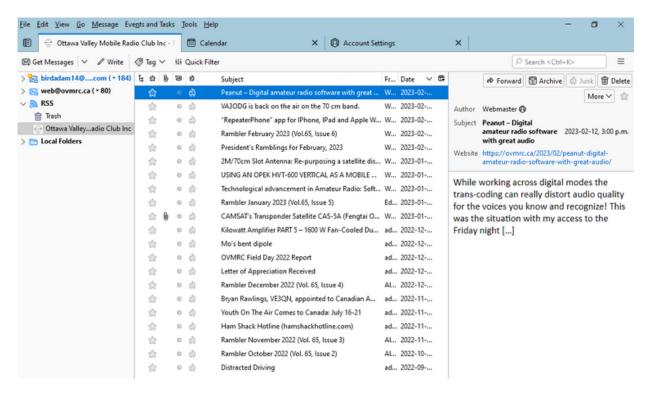


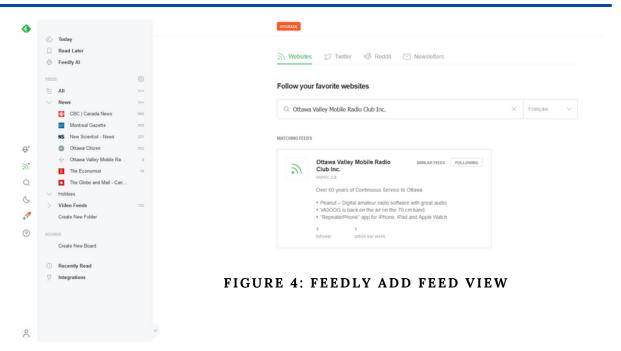
FIGURE 2: THUNDERBIRD RSS READER VIEW

#### Dedicated RSS Readers

for those who prefer web applications, Feedly is a dedicated RSS reader with extensive features. It runs in your browser. https://feedly.com







**Browser Extensions:** Feedbro is a browser extension which allows users to subscribe to, and follow RSS feeds directly in their browsers. It supports Chrome, Firefox and Edge browsers. https://nodetics.com/feedbro/

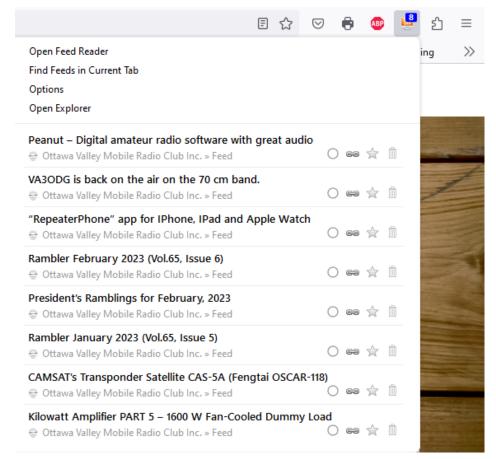


FIGURE 5: FEEDBRO DROPDOWN MENU IN BROWSER

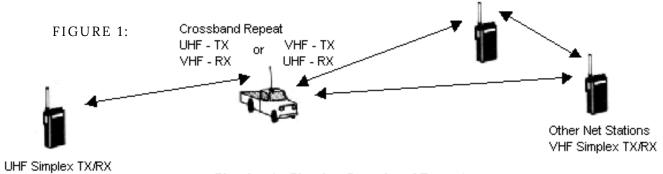
RSS is alive and well! Regardless of the client you chose, RSS offers a convenient and open-source way to stay up to date with content from OVMRC contributors, news organizations, blogs, video feeds, and podcasts. 73, Adam VA3IRD



# A Guide to HT Range Extension With the Anytone 578 - Daniel VA3GLB

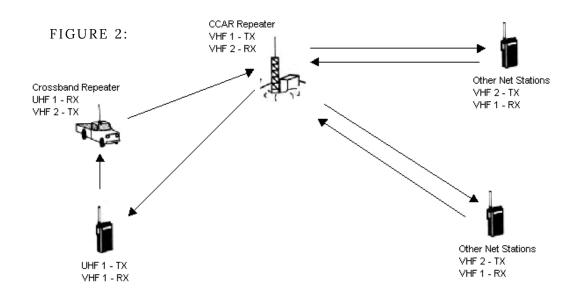
**Introduction:** The Anytone 578 (AT578) mobile radio can be configured as a "crossband" repeater. As the name suggests, crossband repeaters operate much like other repeaters with one important difference: the uplink and downlink frequencies are on different bands.

A common deployment scenario for crossband repeating is the "simplex-to-simplex crossband" or "adhoc" repeater configuration depicted in Figure 1. The repeater is in range of all deployed HT. Appropriate VHF and UHF simplex frequencies are selected for the repeater's uplink and downlink frequencies. This configuration is easy to deploy in the field so long as there are VHF and UHF simplex frequencies available for use.



Simplex-to-Simplex Crossband Repeat

Another useful mode is "range extension". Shown in Figure 2, the AT578 is configured to extend the range of a low power HT unable to reach a local repeater. This setup assumes the HT can hear the local repeater without difficultly.





This article describes how to program and configure an AT578 for range extension. Specifically, we'll extend the range of a low-power HT so it can reach the VE3OCE repeater.

#### Assumptions

Some prerequisites are necessary to make this all work:

- 1. You are familiar with the menus and programming of the AT578 and your HT;
- 2.AT578's CPS is already installed on your PC and you are familiar with basic functions such as creating channels and zones;
- 3. You have access to a dual band HT (such as the Anytone 868) and are familiar with its operation and programming; and
- 4. Your HT is in VE3OCE's coverage area. (You can hear the repeater but may not be able to reach it.).

#### Preparation

Before diving in to deeply, we need to plan the frequency assignments. First, document the parameters for the repeater we wish to reach. In our case the VE3OCE repeater operates on the following frequencies and CTCSS tones:

VE3OCE	TX	RX
Frequency	146.88000	146.28000
CTCSS	136.5	136.5

TABLE 1:

The next step is to choose a UHF frequency for use as an uplink from the HT to the AT578. Eight simplex UHF frequencies are available for use between 446.000 MHz and 446.175 MHz at 25 kHz spacing. We'll use 446.000 MHz so the HT will transmit and receive on the frequencies shown in Table 2 below.

HT	TX	RX
Frequency	446.00000	146.88000
CTCSS	(Optional)	136.5

TABLE 2:

Finally, the crossband repeater's frequencies must complement those of the HT. Table 3 lists the AT578's operating frequencies.

AT578	TX (VFO A)	RX (VFO B)
Frequency	146.28000	446.00000
CTCSS	136.5	(Optional)

TABLE 3:



#### Programming the AT578

### Avoiding a "gotcha"

In theory at least, one only needs to tune the AT578 VFO's to the frequencies listed in Table 3 and enable crossband repeat. This is sufficient to achieve range extension but more is required to protect the AT578.

Enabling crossband repeat on the AT578 enables it for both VFOs. In our example, the AT578 repeats what it hears on VFO B to VFO A. But it will also repeat what it hears on VFO A to VFO B. Careless setup and transmissions on either of VE3OCE's operating frequencies could activate the crossband repeater and significantly increase the repeater's duty cycle. The AT578 is not designed for high duty cycle and should not be operated this way except at low power. We can overcome this problem by blocking reception on VE3OCE's uplink frequency by choosing a squelch control unused by VE3OCE (e.g. DCS D777I).

#### The case for a code plug

All of the above can be accomplished through the AT578's front panel but I prefer to do as much programming as possible with the CPS. Here's why:

- The configuration of any channel or zone is easier to review on the CPS;
- It is easier to dial in channels and zones than reprogram a radio in the field:
- I can put the entire code plug file under version control and track the changes; and
- I can rollback to an earlier code plug version if I made changes in the field I want to reverse.

Programming Step 1 - create a TX only channel for VE3OCE We set the receive and transmit frequencies to that of VE3OCE's input frequency (Figure 3) and we disable receive by using a DCS code (Figure 4).

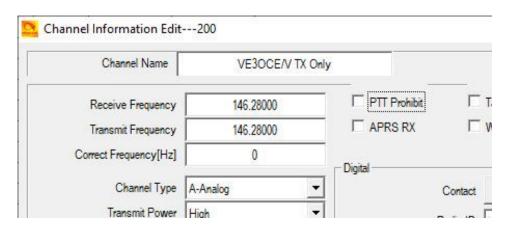


FIGURE 3:



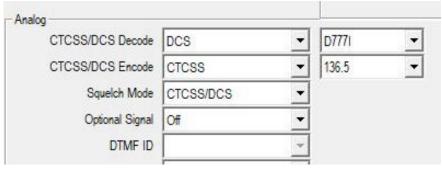


FIGURE 4:

Programming Step 2 - create a RX channel for the UHF uplink frequency We create a simplex channel for the UHF analog frequency (or frequencies) to be used as input to the crossband repeater (Figure 5).

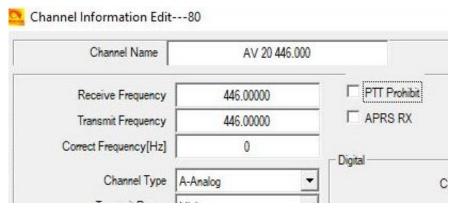


FIGURE 5:

## Programming Step 3 - create a Zone to group crossband repeater channels

We create a new Zone, "X-BAND REPEAT", and assign newly created channels to that zone. See Figure 6.

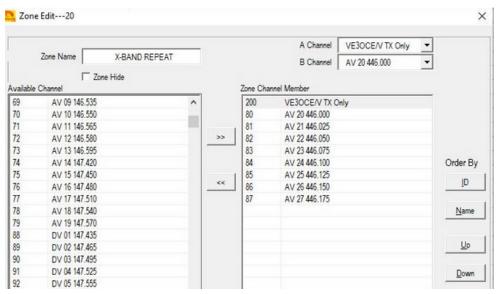


FIGURE 6:



#### Programming the HT

No special programming is required for a dual VFO HT such as the AT868. All you need to do is:

- 1. Select the UHF simplex frequency in VFO A and the VE3OCE repeater in VFO B.
- 2. Enable VFO A as the main VFO (the one capable of transmitting).

If your HT is dual band but only has a single VFO, not all is lost. Create a new channel that will receive on VE3OCE but transmit on a UHF simplex frequency. An example is shown in Figure 7.

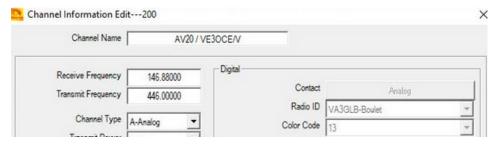


FIGURE 7:

#### Conclusion

Range extension is just one way to use the crossband repeat feature built into the Anytone 578. With careful planning, other crossband repeater configurations can be deployed enhancing the usefulness of the AT578 and handhelds.

#### 73, Daniel VA3GLB





## Space Weather Update - Hugo VE3KTN

Aficionados of HF DXing will know that solar flux levels have been rather high over the last 3 months leading to exceptionally good propagation on 20 metres and the higher frequency HF bands. Just today, March 6, while configuring a new FT8 setup, I threw out a CQ on 15 metres at 5 Watts from the radio, going through a tuner and 250 feet of coax and finally reaching my extremely compromised 80 metre dipole and got two rather decent signal level responses from the US mid-West.

After that experience, I thought to visit the IARU web site because it does report from time to time on the solar activity trend - https://www.iaru-r1.org/2023/. Yes, there is a new article on the current solar state of affairs and it's really looking like Cycle 25 is going to beat all predictions. I've not reproduced the IARU charts here to respect copyright but you can check it just by going to the aforementioned URL. Suffice to say that the 10.7 cm. solar flux levels are averaging anywhere between 150 and 180 these days which certainly promises good propagation at 10 MHz. and higher.

Hang onto your HFDX hats folks, it looks like it may be a heck of a ride from now until 2026.

Of course, there is a down side to this and that is daytime propagation on frequencies below 10 MHz. which suffer from D Layer absorption. The low frequencies will likely close up after sunrise both locally and along the path to your intended DX destination but it may be that night time propagation will improve with higher ionisation in the F Layers.

73, Hugo, VE3KTN



## BLAST FROM THE PAST! - Maurice-André VE3VIG

Witnessing the constant evolution of our OVMRC amateur radio club under the inspired leadership of amateur radio operators such as Norm VE3LC, Barry VE3NA, and many others, it reminds me of the Golden Years of the OVMRC in the late 90's when the club had a count of about 300 members in its fold.

This was the time of a new phase in amateur radio when amateur radio digital communications development was in its infancy.

We had abundant day-long, even weekend-long, building parties; we had regular Show and Tell nights at club meetings; we had mobile events and "Bunny Hunts".

We participated in the CSTM Technology Weekends; every year we hosted a week-long special event for the visually impaired at the museum VE3JW exhibit station; we hosted the yearly Jamboree on the Air (JOTA), the Girl Guides on the Air (GOTA), the St-John's Youth weekends, the Lighthouses and Lightships weekends and many other special events.

If you wanted a seat during our club meetings at the Science and Technology Museum auditorium which could accommodate 250, best you came in early. Members of other clubs attended also. At one time I was a member of five amateur radio clubs in the area: OVMRC, OARC, MARC, PARC and CRAO.

One of our engineer member, Wil Warren VE3XMT (now AB9U in Arizona) designed, engineered, built and put into function a complex direction finding antenna which he called the Willenweb. This was an array of sixteen 2m-antennas mounted on a platform to be carried on a car roof top with an electronic control box and indicator inside the car. It was useful in locating some badass interference on our repeaters.

Wil also devised a hand-held portable direction finding instrument, the Winkler, which we were given the opportunity to build during weekend sessions, and to be used for our Bunny Hunts.

Stalwarts of the moment were enthusiastic amateur radio operators such as Jerry Wells VE3CDS, Gerry King VE3GK, Doug Carswell VE3ATY, Ernie Jury VE3EJJ, Larry Wilcox VE3WEH, and plenty of volunteers.

At the VE3JW Amateur Radio Exhibit station we had a list of over 25 volunteers.



Here is a picture of one of these events in which OVMRC had participated in. This was taken inside the Lansdown Park arena where we had an amateur radio exhibit during the Eastern Ontario annual exhibition. Jerry Wells strung up an 80m antenna outside and we were demonstrating worldwide communications on HF bands, and also we had a small Packet communcations demo.

In the picture is Big Al, Allan Barnes VE3TYJ, Ed Strange VE3MPP now VA2XC, and yours truly.

Enjoy this short trip down memory lane and

Long live OVMRC!

Maurice-André VE3VIG



AL, ED & MAURICE-ANDRÉ





## OVMRC Net Activity, Check-ins for February, 2023

Prepared by: Hugo Kneve VE3KTN

OVMRC 2 Metre Net: VE3OCE 146.880+ 136.5 Hz. tone,

Thursdays 8 p.m. local.

February 2	February 9	February 16	February 23
	·	·	· ·
VE3KTN - NCS	VE3KTN - NCS	VE3KTN - NCS	VE3KTN - NCS
New & Visitors	New & Visitors	New & Visitors	New & Visitors
		Charlie - VA3CPI	
Check-ins	Check-ins	Check-ins	Check-ins
VE3RUU	VE3RUU	VA3AIH	VE3RUU
VE3LBU	VE3GIQ	VE3ZZU	VE3ZZU
VE3NA	VE3NA	VA3GLB	VA3GLB
VE3LC	VE3LC	VE3OTW	VA3AIH
VE3KAE	VA3 IAH	VA2OJD	VE3NA
VA3IAH	VE3ZZU	VE3NA	VE3LC
VE3NPO	VA3EO	VE3LC	VE3KAE
VE3ZZU	VA2 OJD	VE3KAE	VA3IAH
VE3NPP	VA3CSG	VA3EO	VA3EO
VE3RXN	VE3DNU	VA2BBW	VA2OJD
VA3CQD	VA2EV	VE3VIG	VA2EV
VA3GLB	VE3LBU	VE3LBU	VE3DNU
VA2BBW	VA2BBW	VE3DNU	VE3LBU
VE3DNU	VE3KJQ	VE3KJQ	VE3KJQ
VE3KJQ	VE3KAE	VA3IAH	VA3GFY
VA2OJD	VE3OTW		VE3BF
VE3OKD	VE3LAF		VE3OTW
VE3VIG	VE3VIG		VE3VIG
VE3LAF			VE3LAF
VE3OTW			
VA2EV			



# OVMRC Pothole Net: 3760 kHz. LSB Sunday mornings at 10 a.m. local.

February 5 SFI:139 A:6	February 12 SFI:210 A:11	February 19 SFI:167 A:6	February 26 SFI: A:
VE3EJJ - NCS	VE3EJJ - NCS	VE3EJJ - NCS	VE3EJJ - NCS
New & Visitors	New & Visitors	New & Visitors	New & Visitors
Check-ins	Check-ins	Check-ins	Check-ins
VE3KTN VE3LC VA2EV VE3SYZ VE3NPO VE3OWV	VE3LC VA3BGO VE3NPO VE3KTN VA3IAH VE3OWV VE3CWM <sup>1</sup>	VE3LC VA3BGO VA3EO VE3KTN VE3OWV	VE3LC VA3BGO VE3NPO VA3EO VE3XRA VE3CWM <sup>2</sup> VE3KTN VE3OWV

The "SFI" and "A" values are the Solar Flux Index and Geomagnetic A-Index respectively as reported on the NONBH Space Weather web site: https://www.hamqsl.com/solar.html. Values are taken within 30 minutes prior to net start time.

- 1 Robert, VE3BE at the mic.
- 2 Eric, VE3DXP and Fred, VE3LAF at the mic.



#### General Links of Interest:

- 1) Check out the YOTA Camp on the RAC web site:
  --> https://www.rac.ca/youth-on-the-air/
- 2) See if you can hear Bernard Bastien's experimental 8M CYA373 station on-the-air for more see VA2CY on QRZ https://www.qrz.com/db/VA2CY
- 3) The University of Montana journalism students put together this video about "HAM Radio" for the Montana PBS station that may be of interest to a lot of club members. Thanks Barry VE3NA and Ralph, VE3BBM.

https://www.montanapbs.org/programs/ham/

#### Editor's Note:

The Rambler is the official newsletter of the Ottawa Valley Mobile Radio Club Incorporated and is published 10 times a year (monthly, except for July and August). Opinions expressed in the Rambler are those of the authors and not necessarily those of the OVMRC, its officers or its members. Permission is granted to republish the contents in whole or in part, providing the source is acknowledged. Commercial use of the contents is expressly prohibited. Submit articles and notices to: Alan at editor@ovmrc.ca

73, Alan VA3IAH

FOR DMR RADIOS, HOTSPOTS, ANTENNAS, QRP HF RADIOS AND MORE



\$15 DISCOUNT TO OVMRC MEMBERS ON \$300 OR MORE