Rambler

Newsletter of the Ottawa Valley Mobile Radio Club Incorporated

OTTAWA VALLEY MOBILE RADIO CLUB INCORPORATED
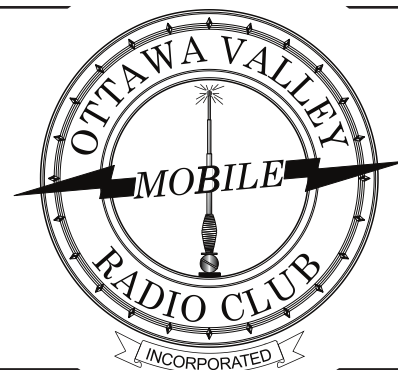
President's Ramblings

February, already! Where does the time go? The January meeting was well attended despite the cold. It was a frigid walk from the parking area to the entrance door but there was banner attendance at the meeting. The February meeting is Wednesday Feb 20. Don't forget, free parking at the rear of the building. Attendance at the meeting also buys you yet another "free" ticket for the year end draw for the Antenna Analyzer.

I was caught off guard at the beginning of the meeting by three club members who asked if they could show their recent projects/discoveries. Show and tell! Of course, let's see what our members are up to: Pete VE3XEM with his 3D printed power pole box, Douglas VE3YDK with the digital scope option and Steve VA3MPS with his home automation options. There was special interest after the meeting with the home brew 2 M beam Hugo VE3KTN brought in for testing (that went as well as expected for testing an antenna indoors)!

Maybe there needs to be a new section at monthly meetings: Show and Tell! Note to all: don't be shy, if you have something of interest, please share it with the rest of us at the next meeting. What an active club we have!

The interest level on the balloon project was very high and the club has decided to proceed with the

project proposal as presented by Michael, VE3WMB. There has been a lot of information provided on the OVMRC groups.io page. So please check this out if you are a member of the group or even better, if you are not yet a member, please consider joining the group. There is an abundance of information developing on the site covering a variety of different topics. Michael will be providing an update on the balloon project at the February meeting.

Well on to the power pole project. So many of you indicated you wanted to buy into the project, the cost just keeps coming down on a per unit basis. I don't want to publish a price just yet since every "i" is not dotted and every "t" is not crossed, but I can however assure you that the final price will be in your favour.

What you will end up with for a single price (the balance funded by the club) are shown:
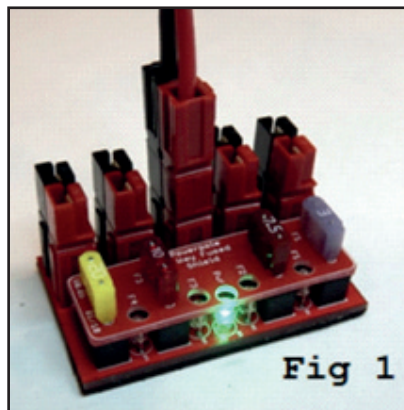
Fig 1

Meeting Date

Wednesday
Feb 20th
7:00 P.M.

for Meet & Greet

Science and Technology Museum Studio 6

AGENDA

- **Building & Operating a Remote HF Station by Chris Allingham, VE3FU;**

- **Barry, VE3NA – Club coax purchase – Other Club Projects; and**

- **Michael, VE3WMB – Update for balloon flight project.**

OVMRC Executive and Officers
2018-2019

President: Barry Allison, VE3NA

ve3na@rac.ca

Vice-President: Norm Rashleigh, VE3LC

ve3lc@rac.ca

Treasurer: Nicole Boivin, VE3GIQ

ovmrc.treasurer@gmail.com,

Secretary: Ron Smith, VE3LBU

The above four positions are "Directors" and officers in charge of running the Corporate affairs of the Ottawa Valley Mobile Radio Club Inc.

Standing Committee Chairpersons

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John McGowan, VA3JYK

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Sponsors

The OVMRC acknowledges the following organizations for their support of our activities:

- **KENWOOD ELECTRONICS CANADA INC.**,
  Mississauga, ON

- **MAPLE LEAF COMMUNICATIONS**
  Web site: mapleleafcom.com/

- **METAL PROS,**
  "The Small Quantity Metal Shop"
  Ottawa, ON
  Web site: www.metalpros.com

- **RADIOWORLD TORONTO**
  Web site: www.radioworld.ca

Visit the OVMRC Store

at

http://www.cafepress.ca/ovmrc

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

www.ovmrc.on.ca

OVMRC Life Members

Ernie Jury, VE3EJJ

Maurice-André Vigneault, VE3VIG

Ralph Cameron, VE3BBM

Doug Carswell, VE3ATY

Doreen Morgan, VE3CGO

OVMRC Repeater

VE3TWO

147.300 Mhz (+) 100 Hz tone
FM & Yaesu System Fusion Digital Operation

OVMRC Call Signs
VE3JW
VE3RAM

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.
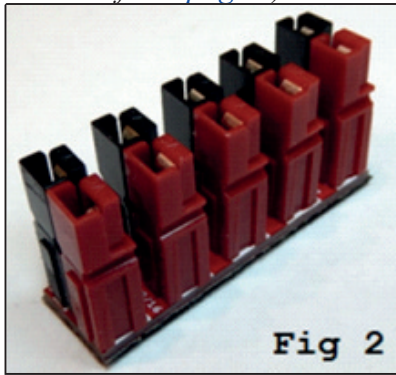
Submit articles to the editor or by e-mail to:

Robert Cherry, VA3AOD
cw527@ncf.ca

OVMRC Affiliations

Fig 2

Soldering is required to complete the kit, but the task is not that difficult. I don't think we'll need a workshop soldering project of some sort to complete the project as they are not really complicated to assemble. If anyone does need help though, the club will not let you down and we'll work something out.

The coax has arrived for the new year and I am still working on the "shortened 80 M antenna project". The plan is to have something available in kit form, to build and put up as soon as the weather turns around in the spring.

Costing on the coax project is as follows:

LMR 400 Cost $1.23 per foot (plus GST).

LMR 195 Cost $0.73 per foot (plus GST).

Connecters: PL259 (male uhf type) $ 2.00 ea (tax in) including heat shrink tubing for environmental sealing.

Anyone interested in trying your hand at installing your own connectors, remember to contact Pete VE3XEM. He retains the club

tool kit and we now have the proper crimp tools to install connectors on both the LMR 400 and LMR 195 coax cable.

One last note: Ken VE3EKN is still soliciting ideas for something special to commemorate the 60th Anniversary of the Pot Hole Net. Please contact Ken directly should you have an idea of interest for the occasion.

That's about it for now. Hope to see you at the February meeting, and chat with all who check in to the local 2 M nets between then and now.

73
Barry, VE3NA

For Sale, Maurice-André, VE3VIG's famous Go-Box.

Several years ago, Maurice-André built up a "Go-Box" that facilitated his mobile and portable operations. It was really well done!

He now wants to sell it less radio equipment.

It includes:

- Box – SKB –XRACK4 Shallow Roto Rack – cost new $200

- Shelves – 2, RAXXESS UNS1 Universal Rack Tray - cost new $50

- DC Distribution – RigRunner RR-4005 with Power Pole Connectors – cost new $75

- Signal Link SL1+USB – cost new $120

He's asking $200 (less than half of his initial investment of $450)

If interested, contact Maurice-André at: fs882@ncf.ca

Contest Calendar

For all contest information goto:
 http://www.hornucopia.com/contestcal/

Feb 16 – 17 — **ARRL International DX Contest, CW**
http://www.arrl.org/arrl-dx

Mar 9 – 10 — **RSGB Commonwealth Contest**
https://www.rsgbcc.org/hf/rules/2019/rberu.shtml

Mar 18 — **Run for the Bacon QRP Contest**
 http://qrpcontest.com/pigrun/

Mar 30 – 31 — **CQ WW WPX Contest, SSB**
 https://www.cqwpx.com/rules.htm

The Wednesday evening Cross Canada Weekly C4FM is again hosted on VE3TWO

OVMRC members can again check into the Wednesday evening Cross Canada C4FM net on Club repeater VE3TWO 147.300 (+ offset) thanks to a remote Wires X connection provided by Steve VA3MPS. Steve will be engaging his node station onto the repeater Wednesday Evenings at 9:00 PM. The Net can also be accessed in the west-end of town using the Fusion repeater VE3DRE on 146.805 (– offset) owned and operated by Denis VE3BF who is the Net Control Station. All check-ins are welcome using the Yaesu C4FM digital voice mode.

Emergency Measures Radio Group: (EMRG)

Monthly Repeater Tests are conducted by Dave VE3KMV on the first Wednesday of each month at 8 PM on VE3OCE 146.880 MHz – (136.5 Hz tone). From initial contact on VE3OCE, you'll be asked to test VE3EMV/East 146.985 MHz – (100 Hz@ tone), VE3EMV/West 145.210 MHz – (123.0 Hz tone), VE3OFS 146.670 MHz – (136.5 Hz tone), VE3OCE 443.8000 MHz + 5 (136.5 Hz tone) and VE3EMU 444.9500 + 5 (136.5 Hz tone).
It is advisable that all the EMRG frequencies be programmed into your radio. All check ins are welcome.
See: http://www.emrg.ca/repeaters.htm

OVMRC Repeater VE3TWO :

147.300 MHz +600 kHz, 100 Hz Tone
 and Yaesu C4FM Digital Voice

VE3TWO Scheduled Nets:

• **Thursday Evenings, 8 PM**, Club Net on FM conducted by Ken, VE3EKN.

• **Sunday Evenings, 8 PM**, Ottawa C4FM Digital Voice Round Table Net.

Other Local 2 Metre Repeater & Simplex Nets: *(all check-ins welcome)*

• **Rubber Boot Net**, VE3MPC 147.150 ++, (100 Hz tone) mornings at 7:30 AM conducted by Mike, VA3TJP

• **Phoenix Net**, VE3MPC 147.150 Mhz +, (100 Hz tone), Tuesday evenings at 8:00 PM conducted by Pete VE3XEM

• **QCWA Chapter 70 Net**, VE3MPC 147.150 MHz +(100 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 Mini Net**, VE3STP 147.060 MHz -, (114.8 Hz tone), every evening at 6:45 PM.

• **Upper Frequency Net**, Simplex 144.250 MHz using USB, Tuesdays 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.

OVMRC HF Nets

• **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**, 3620 kHz, every Sunday morning at 11 AM conducted by Roger, VE3XRR.

Informal Amateur Radio Restaurant Gatherings (All are welcome)

•   **QCWA Chapter 70** breakfast gathering every **Tuesday** morning at 7:30 to 10:00 AM, Summerhays Grill, 1972 Baseline Rd., Nepean

•   **Orleans Coffee gathering** every **Friday** morning at 9:00 AM, McDonalds, 2643 St. Joseph Blvd, Orleans

•   QRP **Group Dinner** meeting, **2nd Wednesday** every month, 5 PM, Newport Restaurant, 322 Churchill Ave N., Ottawa

•   **Phoenix Net monthly Breakfast** gathering, usually the **second Saturday** every month at 9 AM, T-Basil Restaurant, 2440 St Joseph Blvd, Orleans. (get on Pete VE3XEM's mailing list for monthly reminder VE3XEM@RAC.CA)

Notice: VE3MPC 70 cm Repeater is off-the-air.

Due to equipment re-arrangements at the shared radio site housing VE3MPC and the Club's Repeater VE3TWO, the VE3MPC UHF System Fusion repeater on 444.4000/449.0000 MHz has been taken off the air indefinitely. The equipment and frequencies may be redeployed elsewhere. This repeater was not used much in recent times due to the less than stellar coverage compared to the VHF repeaters at the site. We regret any inconvenience this causes the few regular users of the repeater in the Orleans area.

-    *Norm ve3lc*

Radio Equipment Regulatory Standards and Certifications

As most radio amateurs know, nowadays, there is a flood of very inexpensive broad frequency range VHF and UHF two-way radio products originating primarily from China that are sold on-line directly to customers from Asian vendors as well as imported and sold by some Canadian and US retailers. This equipment has become very popular with radio amateurs for use on the 2 m and 70 cm bands. However, it seems this equipment is also being purchased and used by the general public many who have no appreciation for radio spectrum allocations and licenced frequency assignments. This indiscriminate use of these products poses a great potential for interference to authorized users of the spectrum that these radios are capable of operating on. It is common to hear such intrusion into our amateur allocations. As well, these radios can be easily programmed to operate on land mobile and fixed services assignments used by police,

ambulance and fire departments as well as UHF FRS and GMRS channels and VHF frequencies used by railway and maritime operations. Most of these "cheap" radios are not tested and certified under one of a number of Canadian "Radio Standard Specifications" and as a consequence are not legal under the provisions of the Radiocommunications Act of Canada for importation, sale and use in this country except as may be tolerated for sale to the amateur radio market, for which, ideally, the products in question should be designed to confine operation to the amateur radio bands.

In Canada, there can be monetary penalties for the importation and selling of radio equipment that requires certification under the appropriate Innovation, Science and Economic Development Canada (ISED) Radio Standard Specification (RSS) for the category and capability of the equipment in question. These penalties are specified in the Department's document CPC-3-24-01, Issue 1 entitled "Administration Monetary Penalties (AMPS) Under the

Radiocommunication Act – Guidance to Stakeholders". See Table 2 for Type II violations that includes: "Manufacture, importation, distribution, leasing, offering for sale, or sale of any radio apparatus, interference-causing equipment, or radio-sensitive equipment that does not comply with standards established by Industry Canada" Here it states penalties for individuals can be up to $25,000 for a first violation and up to $50,000 for subsequent violations. For corporate entities these monetary penalties can be $10 M for a first offence and up to $15 M for repeat offences.

CPC-3-24-01 is available at: https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf10972.html

The same situation exists in the United States where there are also strict FCC rules for certification before equipment can be imported legally for selling of these products in the USA. The actual interference to authorized services has become so serious south of the border that last September the FCC issued "Public Notice DA 18-980" on the subject in an attempt to curb

the importation and public sale and use of these products.
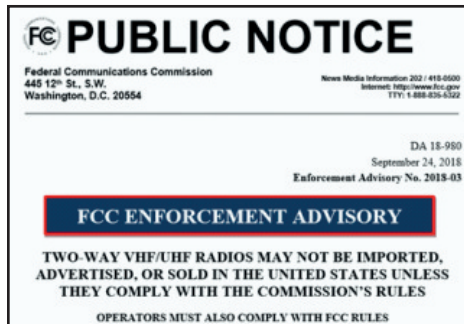
The entire notice is available at: https://docs.fcc.gov/public/attachments/DA-18-980A1.pdf

The FCC notice includes the warning that:

"Violators of the Commission's marketing rules may be subject to the penalties authorized by the Communications Act, including, but not limited to, substantial monetary fines (up to $19, 639 per day of marketing violations and up to $147, 290 for an ongoing violation."

Canadian Regulatory Radio Standards

In Canada, the rules and requirements for radio and related equipment testing and certification are specified in various "Radio Standard Specifications" (RSS) published and updated from time to time by Innovation, Science and Economic Development Canada (ISED). There are specific RSS standards for the various categories of radio service and related equipment. Some examples of interest to radio amateurs are:

•   **RSS-119** specifies the requirements for Land Mobile and Fixed Radio equipment in the range 27.41 to 960 MHz. All radios sold and used and licenced in the land mobile service must be certified under this standard.

•   **RSS-210** specifies the requirements for " Licence-Exempt Radio Apparatus" that includes sections on FRS and GMRS radios, ISM band equipment such as WiFi routers and the like, speed radar equipment, etc. All FRS and GMRS radios must comply and be certified under the provisions of this standard.

•   **RSS-182** specifies the requirements for "Maritime Radio Transmitters and Receivers in the Band 156-162.5 MHz". All VHF marine service equipment must be certified under this standard that specifies operation on the maritime VHF frequencies and other operating provisions such as a maximum of 25 watts and power reduction capability to 1 watt for in-harbour operation.

•   **RSS-215** specifies the requirements for "Analogue Scanner Receivers". **** Many amateur radio transceivers show a Certification ID number related to this standard. ****

In Canada, Radio equipment covered under RSS standards listed above are classified as "Category I" equipment. Since many of these standards are harmonized with the USA, testing by a recognized Certification Body laboratory usually involves one series of prescribed tests that qualifies the product for appropriate certification in both countries. Nevertheless, labelling with both the FCC and ISED (IC) certification ID numbers will be required on the product for marketing in both countries.

In addition, there is also "Category II" equipment that is defined as radio apparatus or devices that are exempt from the formal process of certification but nevertheless must comply with certain Department Standards. Included is equipment that is likely to cause radio interference if not properly designed and compliant with specific "Interference Causing Equipment Standards" (ICES) published by ISED. Testing and compliance is accepted based on a "Supplier's Declaration of Conformity" to the standard. The following are ICES standards that currently apply:

•   **ICES-001** pertains to the limits of radio interference that may be generated by Industrial, Scientific or Medical (ISM) and domestic equipment excluding applications for telecommunications. As an example, a microwave oven must comply with this standard.

•   **ICES-002** pertains to the limits of radio interference that may be caused by vehicles, boats and equipment powered by Internal Combustion Engines and/or by Electrical means. All automobiles must comply with this standard.

•   **ICES-003** pertains to the limits of radio interference that may be caused by IT and Digital Apparatus such as computers, modems, printers, and related equipment.

•   **ICES-004** pertains to the limits of radio interference that may be caused by Alternating Current High Voltage Power Systems.

- **ICES-005** pertains to the limits of radio interference that may be caused by "Lighting Equipment". Residential lighting devices (such as LED lighting) must comply with this standard.

- **ICES-006** pertains to the limits of radio interference that may be caused by AC Wire Carrier Current Devices.

All of the standards can be obtained with a simple Google search and downloaded from the ISED site.

As already indicated, for RSS and ICES standards, labelling is a requirement on the product, packaging or within the equipment manual showing the RSS certification number or ICES standard for which there has been made a declaration of conformity. If the equipment shows no such labelling, this likely indicates the equipment has not been tested for conformity to the applicable standard and is likely not legal for importation and sale in Canada. All equipment that uses radio spectrum under one or more Canadian ISED RSS standards will be registered and searchable on the ISED "Radio Equipment List (REL) web page. The Department's REL search form is found at:

https://sms-sgs.ic.gc.ca/equipmentSearch/searchRadioEquipments?execution=e1s1&lang=en

If there is a radio or radio related product being sold into the Canadian marketplace that is a device or type of equipment requiring compliance to one or more of the Department's

Standards and is not properly labelled or by way of testing or operation does not meet the standards required, this can be reported to Department's Certification and Engineering Bureau by way of their Non Compliance Report Form available at:

https://www.ic.gc.ca/eic/site/ceb-bhst.nsf/frm-eng/EABV-AGDHBL

Amateur Radio Equipment, does it require certification?

It is generally accepted by most administrations that amateur radio equipment is exempt from certification when used by duly authorized and qualified persons operating the equipment in the amateur service. This gives the duly qualified radio amateur permission to design and construct and test their own radio transmitting and receiving equipment for the purpose of self-training and technical investigations. As such, radio amateurs must take responsibility for the proper operation of their station equipment in order that it does not cause interference, especially to other radio services.

That said, we are led to believe that commercial amateur radio equipment does indeed require certification, at least in the United States before it can be offered for sale. We often see new transceivers advertised but not quite available for sale pending "FCC" approval. What standards must this equipment be tested and certified?

By evidence of most current Amateur Radio equipment from Yaesu, Icom, and Kenwood, the FCC ID number affixed on equipment labels indicates certification under the testing and compliance requirements of Part-15, Subpart B, Class B for an "Analogue Scanner Receiver". It seems this is necessary because the receivers are "General Coverage" and fall into the definition of a scanner receivers for which certification is necessary. The required testing has to do with insuring limits are met with regard to radiated and conducted spurious emissions from the various oscillators and digital circuitry of a receiver that may cause interference. In the case of the Canadian testing and certification regime, the certification ID on amateur radio equipment indicates compliance with ISED document RSS-215 titled "Analogue Scanner Receivers" which specifies the same tests be performed. There is no evidence in any of the Testing Lab reports conducted on amateur radio transceiver equipment of any transmitter testing even for spurious emissions. Presumably, this is because commercial amateur radio equipment as marketed and sold by the big three manufacturers will not transmit outside of the amateur radio allocations and therefore the transmitter section is exempt from certification testing. This was confirmed by way of correspondence with Ed Hare, W1RFI who is the ARRL Laboratory Manger; he writes:

" With the exception of HF and 6M amplifiers, Amateur transmitters do not have to be certified.

The radios we see with Part-15 certification are certified because they contain a scanning receiver."

So there lays the issue with the marketing of inexpensive Chinese radios into the amateur radio market in the US and Canada. Indeed these products are typically not tested and therefore are not deemed compliant with any relevant US or Canadian standards that apply and therefore are not certified. Even if they were restricted to transmitting in the amateur allocations while able to receive over a broad frequency range with scanning capability, compliance and certification would still be necessary under FCC Part-15 and likely ISED RSS-215 in Canada. If the transmitter frequency range includes operation

on the land mobile service, the products would require compliance and certification under FCC Part-90 rules and ISED RSS-119 in which there are strict compliance requirements for transmitter spurious emissions as well as controlled operational limitations to the end user.

Although not part of any certification requirement for amateur radio transmitters in the US or Canada, it is made clear in the FCC Part 97 rules governing the amateur service in the US, section 307, that for HF operation, transmitter spurious emissions must be at least 43 dB below the mean power of the fundamental and for VHF operation, at least 60 dB below the fundamental for 25 watts power output or at least 40 dB below fundamental for a transmitter of less than 25 watts.

For Canada, there are no explicit rules for amateur transmitters spurious emissions except as implied and stated in the ITU Radio Regulations rules that recommends at least (43 + 10log(power of tx)) dB or 50 dB below the fundamental (PEP), whichever is less stringent. It is therefore expected of the individual radio amateur to take responsibility to ensure their transmissions are clean and compliant with these standards of operation. However, this may be difficult to ascertain without a good quality and calibrated spectrum analyzer; not something the average amateur has in their tool kit.

- Norm Rashleigh, VE3LC@rac.ca.

Examples of Equipment Tags showing ID Numbers for FCC Part 15 and ISED (IC) RSS-215 Certification and ICES conformity Labels
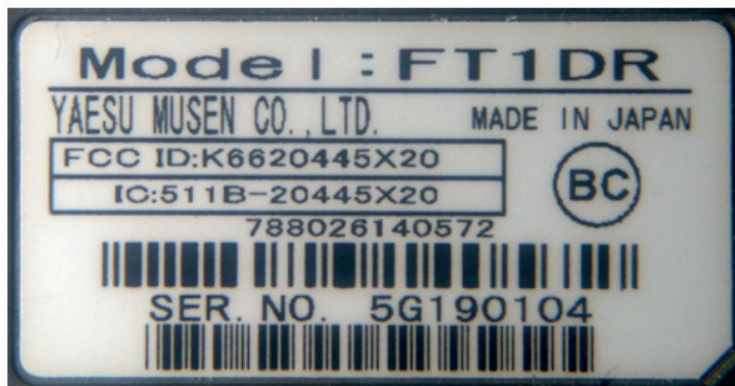
Yaesu FT1DR Digital Voice Dual Band Portable

Kenwood TS-590S HF & 6 m Base Station

Yaesu FTM-3200DR VHF C4FM Digital Voice Mobile/Base Radio

- This label also shows a conformity declaration to ISED Interference Causing Equipment Standard (ICES-003) for Digital Equipment

Hyundai Ioniq Car

Note Label showing conformity to Interference Causing Equipment Standard ICES-002 required for Automobiles sold in Canada

Meeting Minutes

Date / Time: Wednesday, January 19, 2019. 19:30

Location: Canada Science and Technology Museum, Ottawa, Ontario.

1. Call to order:

The President, Barry Allison, VE3NA called the meeting to order at 19:18. There were 36 in attendance including three new hams.

2. Approval of minutes from previous meeting:

MOTION: Moved by Steve Middleton, VE3RUU and seconded by Bill Henderson, VA3HWA, that the minutes of the previous meeting held Wednesday, November 21, 2018, be approved.

VOTE: All in favour.

CARRIED.

3. Greetings:

New Amateurs included: Andy Halbach VA3NAH, Ron Bell, VE3RKB and Stuart Ollerhead, VA3SIO. Barry welcomed everyone.

4. Announcements, Projects and Events:

Agenda and Meeting Content:
Barry Allison, VE3NA outlined the agenda for the meeting.

A) Haves: Barry Allison VE3NA, reminded the Members that LMR 195 and 400 Coax has been purchased by the club for sale to Members. Please let Barry know if you want a quantity. Coax comes with specified connectors.

Barry also provided a 4-foot section of cable with adapters for auction tonight. Rob Haddow, VE3RXH, won the auction with a bid of $22, toward the club's coffers.

B) Wants: Peter Carss, VE3XEM, is looking for a part for his satellite antenna. Please contact Peter for details. Barry VE3NA, indicated he may have what Peter needs under his shed. Springtime will provide the answer.

C) Contacts: Brian Rawlings, VE3QN, made several DX contacts in the past days on 17, 12 and 40M. Countries included Argentina and Japan.

D) Executive Update: 2019 Field Day – Norm Rashleigh, VE3LC, Vice President, advised Members that the Canada Space and Aviation Museum has again been secured for Field Day in June. Ken Evans, VE3EKN, Operations Manager for the OVMRC updated Members on the Club Nets including the Thursday 2M Net at 8:00 PM on VE3TWO and the Sunday morning Pot Hole 80M Net at 10:00 AM. (3760 Mhz). A celebration of 60 years of the Pot Hole Net will be observed in May. Members who are capable and interested are encouraged to join the Net Sundays.

E) Projects: Barry VE3NA reviewed the Power Pole Breakout Modules project. There will be two versions available, a Deluxe and a Basic configuration; 1 input, and 4 outputs on the Deluxe module with 30-amp power pole construction. The Deluxe version is estimated to cost $25. The Basic version will be $15, but if you buy the Deluxe version, the Club will provide the Basic unit, free. This is a special deal for members. Barry is working to reduce the price based on volume of sales. Please advise Barry VE3NA of your wishes.

F) Announcements:

i. Barry Allison, VE3NA, had several reminders for Members. Check out and enrol in Groups IO. Log in to keep up to date on ham activities within OVMRC. He also advised that a Transmitter Hunt will be scheduled this spring.

January 26 and 27th is Winter Field Day. The OVMRC Tool Crib (Specialty Tools) is noted in The Rambler. Crimper tools are available for Member use for a variety of connections on LMR 195, RG8X, LMR 400, and more. Bill Henderson VA3HWA, suggested adding a cable/coax splice tool to the crib.

ii. Year-End Draw - Members are reminded of the year end attendance draw for the MFJ Antenna Analyzer valued at $450.00. The President also asked members for meeting and guest speaker ideas. Contact Barry Allison at VE3NA@rac.ca.

iii. Barry VE3NA on behalf of Dave Parks, VE3AV, also advised there is a special meeting at the Barley Mow on Merivale Road, Saturday February 2nd at 12 noon. Several topics will be covered with guest speakers including contesting and FT8. Details will be posted on Groups IO. No membership with CCO is needed and the event is free.

iv. Volunteers - Jeff Arcand, VA3PEW, outlined requirements for radio amateur assistance with the Annual Women's Ottawa

March on Saturday, January 19th. Volunteers are needed for Net Control and operating portable HT along the March route from Parliament Hill to Lansdowne Park between 11:00 AM and 1:00 PM. VE3OCE, the Emerg Repeater will be used with VE2CRA as the backup.

v. 3D Printer - Pete Carss, VE3XEM, demonstrated his 3D mini printer that anyone can build. Details available on-line. See Peter for more information.

vi. Home Automation - Steve Petruska, VA3MPS, demonstrated a low voltage Wi-Fi relay (5v – 10 amps) he obtained from China. The relay is compatible with Amazon's 'Alexa', Google Home and IFTTT. There are also other models that operate on 12 to 30V DC. The relay comes with an app to control it remotely from a cell phone. The jog inching relay can be used to power on a computer, or operate a garage door opener by voice command. When in locked mode the relay can be used to light a gas fireplace by voice command. On Wednesday nights, VA3MPS uses the relay to remotely start up his Wires-x dedicated computer to link the Cross-Canada Wires-x weekly net to our VE3TWO repeater.

vii. Shack Tool - Douglas King, VE3YDK, demonstrated the "Pokit" wireless multimeter, DSO and logger. This multiuse tool links to your smartphone and retails on line for $80 US.

viii. Wireless EV Charging – Brian Rawlings, VE3QN, brought Members an update on this matter scheduled to be discussed at a preparatory meeting in February in Geneva. Bryan will then be attending the World Radio Conference in Sharm el-Sheik Egypt in November of this year. A fuller description follows and can be seen on the RAC web site at:

https://wp.rac.ca/amateur-radio-issues-under-discussion-in-geneva-in-advance-of-wrc-19/

"While much of the work of WP 5A and of Working Group 5A-1 in particular has been on the working document covering Amateur Service spectrum needs and sharing studies with incumbent services in the 50 – 54 MHz band, WG 5A-1 also completed a liaison statement to Working Party 1A (spectrum engineering techniques) and Working Party 3L (ionospheric propagation and radio noise) highlighting Amateur Radio concerns with respect to Wireless Power Transfer (WPT) systems, outlined in the Preliminary Draft New Report addressing issues affecting 100 – 148.5 kHz. The primary unease involves spurious and harmonic emissions — which require additional study, attenuation due to walls and building penetration levels, and separation distance between WPT devices and Amateur Radio antennas. Fears have been expressed that WPT charging for electric vehicles might cause substantial interference on the Amateur bands".

G) Feature Presentation – Michael Babineau, VE3WMB/VA2NB.

Michael VE3WMB outlined his Club Project Proposal, 'High Altitude Balloon (HAB) Launch' called 'Project Aries'. Modelled after the Pico balloon launches by Dave, VE3KCL in Toronto, the OVMRC project would involve launching a 32-inch mylar party balloon with a payload of less than 40 grams, comprised of a 10 milli watt HF WSPR beacon transmitter. The proposed club funded budget is $260, including a cushion, to launch 2 balloons. The beacon would use the OVMRC Club call VE3RAM. Tracking would be online via WSPRnet data. v Beacon technology. The board uses an Arduino Pro Mini 8Mhz 3.3v (running custom open-source firmware), with a GPS module and Si5351a clock breakout module (TX). Power would be supplied by a solar cell using a single ~ 200 mA LIPO cell (3.7V) charged by 7 cell (0.5V each) solar array (~ 240 mA output). A Multi-day flight expected and under ideal conditions global circumnavigation is possible.

Next steps would be to create a Balloon Subgroup on Groups.io to continue discussions (under existing OVMRC group), then produce a list of tasks that need attention and group them into Roles Plan a kick-off meeting for those interested in participating. Future OVMRC meetings would include short (10 to 15 minute) updates. The launch opportunities are late spring through early fall, 2019. There are several education and public relations/media benefits associated with this project for the Club.

The full presentation is viewable on Groups.IO under OVMRC. Once logged in, the link is available to view.

https://ovmrc.groups.io/g/main/files/Aries%20HAB%20Proposal%20de%20VE3WMB/Project%20Aries%20-%20OVMRC%20Proposal%20V2%20brief.pdf

H) Demonstration and Presentation – 'Jumbo Hot Spot' – Norm Rashleigh, VE3LC

Norm shared his set up and kit construction, of the digital hot spot device called 'Jumbo Spot'. The device allows wireless internet connection and interoperability with Yaesu Fusion, DMR, PS25 and more. The kit pieces were ordered on line and assembled in a compact case mounted on a Pi Zero board available at Buy A Pi on Colonnade Avenue or on-line. Norm shared a series of slides showing the Jumbo Spot configuration and the various reflectors/rooms that allow ham contact via the internet, world wide. The Jumbo Spot is demonstrated on You Tube in many places such as the following…

https://www.youtube.com/watch?v=UBDqPFzDH5g

Norm's Jumbo Spot presentation is found on Groups IO here…

https://ovmrc.groups.io/g/main/attachment/54/0/Presentation%20_%20Jumbo%20Spot.pptx

I) Event Activities for the Year – Check the Rambler on line or refer to your email for the monthly newsletter. There is a link in the Rambler for upcoming contests and event activities. Please log in and review. The Emergency Repeater Frequency tests happen on the 1st Wednesday of every month on VE3OCE. The necessary CTCSS Tones are also available in the Rambler.

After tonight, there are 5 remaining get togethers. Special meeting activities to come will include Check Your Rig, Mini Flea Market, Transmitter Hunt, Field Day organization session, Lighthouse on the Air, Satellite contacts, and ARISS.

5. Prizes and Draws:

Various door prizes were drawn and the 50/50 draw for $47.00 was won by Rob Haddow, VA3RXH.

6. Upcoming contests:

For detailed information on upcoming contests, see the WA7BNM Contest Calendar at

http://www.hornucopia.com/contestcal

7. Adjournment:

MOTION: Moved by Tom Mercer, VA3LJS that the meeting be adjourned.

The meeting was adjourned at 22:00.

8. Next meeting:

The next business meeting of the OVMRC will be held Wednesday, February 20, 2019 at 7:30 at the Canada Science and Technology Museum, 1867 St Laurent Blvd, Ottawa, ON K1G 5A3.

Minutes recorded by: Ron Smith, VE3LBU, OVMRC Secretary

OVMRC Net Activity, Check-ins during the last month

Prepared by: Ken Evans, VE3EKN

OVMRC 2 Metre Net, VE3TWO 147.300+ 100 Hz tone, Thursdays 8 PM local

January 3	January 10	January 17	January 24	January 31
VE3RUU	VE3RUU	VE3RUU	VE3RUU	VE3RUU
VA3ZTF	VA3ZTF	VE3LC	VE3HVB	VA3ZTF
VE3LC	VE3NPO	VA3ZZW	VA3ZZW	VE3LC
VE3KAE	VE3LC	VA2EEK	VE3LC	VA3ZZW
VA3RLA	VE3LBU	VE3NPO	VE3KAE	VE3KAE
VE3LBU	VE3KAE	VE3LBU	VA3RLA	VA3RLA
VA3DEF	VA3RLA	VA3ORL	VE3KTN	VE3LBU
VA3BGO	VE3KTN	VE3SGG	VE3LBU	VA3DEF
VA2EEK	VA3ORL	VE2BJZ	VA3ORL	VE3KTN
VE3NA	VE3ZZU	VA3RLA	VA2EEK	VA2EEK
VE3ZZU	VE3NA	VE3KTN	VE3NA	VE3NA
VE3KTN	VE3GIQ	VE3NA	VE3ZZU	VE3BOE
VE3GIQ	VA3BIT	VE3QSO	VE2BJZ	VE3ZZU
VE2OCQ	VE3VIG	VE3BF	VA3GBZ	VA3BIT
VA3BIT	VE3SGG	VE3EJJ	VA3BIT/M	VE3GIQ
VE3VIG	VE2BJZ	VE3RXH	VE3YCB	VE3RXH
VA3ORL	VE3RXH	VE3VIG	VE3RXH	VA3BGO
VA3GBZ	VA2EEK	VA3BIT	VE3EPJ	VE3VIG
VE3EKN	VA3GNB	VA3GNB	VE3GIQ	VA3ORL
	VE3EKN	VE3EKN		VE3EKN

OVMRC POT HOLE NET 3760 kHz SSB Sunday mornings at 10 am local

December 30	January 6	January 13	January 20	January 27
VE3LC	VE3EJJ	VA3ZTF	VE3LC	VE3DZZ
VE3NA	VE3KTN	VE3LC	VE3KTN	VE3EJJ
VE3EKN	VA3ZTF	VE3KTN	VE3EKN	VA3ZTF
VA3BGO	VE3LC	VE3EKN	VA3BGO	VE3LC
VE3KTN	VE3NA	VE3NA	VE3MHP	VE3NA
VE3XRA	VA3BGO	VA3BGO	VE3RXH	VE3EKN
VE3EJJ	VE3EKN	VE3XRA	VA3ZTF	VE3KTN
	VE2HOG	VE3NPO	VE3NA	VA3BGO
	VE3XRA	VE3EJJ	VA2LGO	VE3NPO
			VE3EJJ	VE3XRA

MEMBERSHIP FORM

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

> ✓ The membership year starts 1 September, and runs until 31 August of the following year.
> ✓ Regular membership is open to licensed amateurs.
> ✓ Associate membership is open to all unlicensed radio enthusiasts.
> ✓ Membership includes a digital subscription to the club newsletter, the OVMRC Rambler.

NEW ☐   **RENEWAL** ☐   **UPDATE/CHANGE** ☐

Please print legibly

Call Sign	Surname	Perferred first name

Street		Apartment

City	Province	Postal Code

Home/primary phone	Work/other phone	E-mail address

Are you a member of Radio Amateurs of Canada (RAC)?   Yes / No

RAC ID: Expiry (YYYY-MM-DD):

Do you wish to order an OVMRC name tag? (+$12.00)   Yes ☐   No ☐

Callsign for name tag	Name for name tag

Full Membership (Not a Member of RAC) $35.00/yr ☐
Full Membership (RAC Member) $25.00/yr ☐
Associate Membership (Unlicensed) $25.00/yr ☐

Amount Enclosed
$ _____
Cheque / Cash

Circle your interests

Bands	Modes	Building	Other
Microwave	CW	RX	Teaching
UHF	Digital	TX	Speaking/Presenting
VHF	Phone	Antennas	DF/Fox hunting
HF	EME	Test equipment	Contesting
LF and below	Satellite	Other	DXing
	Experimental		Computers/IT
			Other

Signature   Date

Initials

By initialing this box, I confirm that I consent to receiving e-mail messages from the Club.