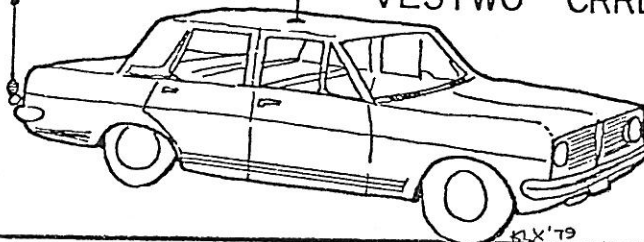


# OVMRC's RAMBLER

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The Ottawa Valley Mobile Radio Club Inc.,  
P.O. BOX 5530, Station "F",  
OTTAWA, Ontario K2C 3M1 CANADA

VE3RAM CARF  
VE3JW RSO  
VE3TWO CRRL



VOLUME 22

NUMBER 10

DATE December 1979

EDITOR MIKE GRAHAM VE3KMG (825-2972), Assistant to the Editor Dave Coultts VE3KLX (829-2537)

ALL contributions to this bulletin gladly accepted.

Membership in the OVMRC is open to all those interested in Amateur Radio. Regular Club meetings are held on the third Thursday of every month (except July and August) at 8:00pm unless otherwise posted.

## OTTAWA VALLEY MOBILE RADIO CLUB - 1979 - EXECUTIVE

PRESIDENT	TOM HAYES	VE3ABC	822-2811
VICE-PRESIDENT	MIKE SHACKLOCK	VE3LAR	523-1571
TECHNICAL ADVISER	RUSS PASTUCH	VE3FSN	741-5637
SECRETARY	LLOYD CARR	VE3FHC	825-1070
TREASURER	MIKE HUGHSON	VE3DVH	224-2376
P.R. CO-ORDINATOR	GEORGE MORGAN	VE3JQW	731-4829
PAST PRESIDENT	MERV LEMKE	VE3CV	839-5577

### CLUB SPONSORED ACTIVITIES:

Pot Hole Net - OVMRC Net - every Saturday and Sunday, 10:00 a.m., local time 3.760 MHz SSB

All Radio Amateurs welcome to check in and participate.

VE3JW - Amateur Radio Station of National Museum of Science and Technology. The OVMRC, Inc., maintains this station, schedules operation; and in co-operation with the Ottawa Amateur Radio Club, provides operators for the station as part of an Amateur Radio public relations display.

Monitoring Facility - Barb VE3AHV monitors the club repeater VE3TWO 147.90/.30. Stations requiring assistance are asked to repeat VE3AHV's call several times, then wait for a minute or so for a reply. Stations with touch tone pads are asked to precede their calls with touch tone digits 2-4-6 and wait 15 seconds before calling. A touch tone paging unit will be left on 24 hours each day to help provide emergency assistance at any time.

### LOCAL AMATEUR RADIO NET ACTIVITIES:

Pot Lid Net - Sponsored and conducted by Ed, VE3GX - Informal slow speed CW net meeting every Sunday (except July and August) at 11:00 a.m., local time, on 3.620 MHz, to promote interest in CW and CW procedures.

Capital City FM Net - Sponsored and operated by the Ottawa Amateur Radio Club, meeting every Monday at 20:00 (local time) on VE2CRA repeater 146.34/.94.

Swap Net - Sponsored and conducted by Ed, VE3GX. Meets every Sunday (except July and August) as part of Pot Hole Net and every Monday as part of Capital City FM Net. Inquiries: Ed, 733-1721.





NOV General Meeting Minutes - The meeting commenced at 2004 hrs 15 Nov, at the S&T Museum with 23 in attendance. 3KLK, 2AYZ/3, 3AIA and Jean Luneault were visitors. The Oct minutes were accepted with a motion by 3CV and 3DVH.

A motion by 3CV and seconded by 3FHC to accept the "Life membership amendment" for the Constitution, was made and Carried. 3FN gave an update on the Club dinner for 17 Nov. 3LAR debriefed everyone on the letter sent to DCC for the Amateur exams. 3BDO advised that candidates have been selected for the new Exec positions. 3LAR presented a proposal for the Club to purchase a duplicating machine. 3CV made a motion to purchase a duplicating machine for \$292.18. Seconded by 3JQW. CARRIED.

The Snowarama will be on 19 Jan 80. 3KMG stated the problems with the Nov Rambler page errors was an office machine problem (should be eliminated with our new duplicating machine). 3DVH stated Club books will close 30 Nov. Stan 3GYF will audit Club books. 3LAR explained why Dec meeting was moved ahead to 11 Dec. 3CV suggested we advertise for donations for the Spring Club auction. 3FSN will be central contact for any donations to the Club.

3ABC gave an interesting talk on the installation of HF mobile rigs and showed and explained his HF DF antenna.

The meeting adjourned at 2125 hrs with a motion by 3CV and 2nd by 3AHV.

### NOMINATION SLATE FOR 1980 EXECUTIVE

The annual election meeting of the OVMRC will be TUE 11 Dec. The following individuals have indicated agreement to stand as candidates for the positions indicated. Additional nominations will be accepted at the meeting.

President - Mike Shacklock	3LAR	Treasurer - Dave Coutts	3KLX
Vice Pres - Ray Perrin	3FN	Tech Advisor- Russ Pastuch	3FSN
Secretary - Barb Bareham	3AHV	PR Co-ord - George Morgan	3JQW

### DEC CALENDAR

	<u>Event</u>	<u>3JW</u>	<u>PHN</u>
Dec 1			3KLX
2		3GYP & friend	
5	OARC General meeting		
8		3JDJ	3FHC
9		3EKA	3FHC
11	OVMRC Gen meeting (ELECTIONS)		
15		3EKP	
16		3JLP & 3JLL	
25	Xmas day check-in (3760 KHz)		10:00 local

### ANNUAL BANQUET

For those that were unable to attend, a good evening was missed. A total of 24 pers met at the L'Esplanade restaurant and had a great evening. The food was good (and reasonable) and the entertainment was excellent.

### 2 METER NET

The Executive discussed establishing a 2Meter evening net on VE3TWC during the week.

We would appreciate hearing from members as to whether they would be interested and, if so, what night would be preferred.

Please give your views to Lloyd, VE3FHC, as soon as possible.

### A REMINDER

Don't forget to take your Club Membership card, with you, to the Dec General meeting. Prizes will be available and those who drop their cards in the hat will have a chance to win them. -- no card -- no prizes! !

Mike's interest in Amateur Radio originated during his Engineering days at Carleton University. At that time some of his Engineering buddies were Hams. There were many afternoons spent in the shack in the old field house where VE3CCU put its sigs out thru the homebrew cubical quad. A year or so after graduation from mechanical engineering, Mike took a course at Fanshawe college in London Ont in preparation for the Amateur exams; but a move back to Ottawa foiled that first attempt. Interest floundered for the next ten years and the "HRO" was set up from time to time for listening.

Finally, in the fall of 1977, the Amateur Radio bug bit and Mike embarked on another course in preparation for the Amateur ticket under the direction of Gerry VE3GK. After months of code practise and studying, the ultimate moment came in May 78. Mike failed CW but passed everything else. He went back one week later and passed the CW portion.

During the next 12 months, he operated 80M CW with his apache/HRO combination and a dipole up in the maples around his Heart's Desire home. Also in this time period, Mike joined the OVMRC and became the Rambler Editor in Jan 79.

In Feb 79, Mike got into a crash course again with Gerry VE3GK and the Advanced Amateur licence. The beginning of May was exam time at the Civic Centre. Lots of tension, but we knew our regs and theory -- but whoops! - the CW again. This time Mike had to wait until 13 June, when anticlimactically, the CW was a breeze.

Mike now operates 2 metre mobile with his HW202 and HF mobile with his IC701 (20M).

The home station consists of the IC701 and an inverted vee farm, with a converted CB beam for 10 meters.

Future considerations at Mike's place are a 20 metre tower (that's height, not wavelength!) and a stack of mono-banders.

Modification to Kenwood TS-520/820 Transceiver to increase talk power and increase the input and output by 30% - Credit: Windsor ARC - Groundwaves.

Place radio bottom side up. Remove the three self tapping screws that hold the side panel with 5 pots.

Now locate the bias potentiometer (second from right). Locate the lug with the grey wire (lug farthest to the right) and remove the wire from the lug. Once removed, solder one end of the 12K half watt resistor to the vacant lug. Slip the piece of insulation over the aforementioned wire and trim the wire until the lead dress meets the open end of the 12K resistor. Solder the wire to the resistor and slide the insulation over the solder joint.

Now, go to the bottom of the power transformer on the secondary side and locate the wire which runs from the 230 volt tap to D6 on the rectifier board. Remove the wire from the 230 volt tap and solder it to the 300 volt tap. Turn the transceiver over and remove the protective cage from the final amplifier. Remove the final tubes and replace them with the 6293 tubes. Replace the cage on the PA and apply power to the radio. Using a 50 ohm dummy load, tune the transceiver up on 21.225 MHz for maximum output as indicated on the RF meter scale or by watching an external wattmeter. Make sure that you have readjusted the PA bias to 60-65 ma in USB position with no excitation. Once this has been accomplished, reach behind the radio and turn the SG switch to the off position and neutralize in accordance with manual. Once neutralized, retune the transceiver for maximum output and check the increase in power output on a wattmeter. It should be noted that the plate current will now run somewhat higher, from 280 to 330 ma and the output will be up 25 to 30 percent.

parts required from this modification:

- 2 6293 tubes
- 1 12K half W resistor
- 1 insulation

The big day has arrived at long last, as you unpack your new Nerta SB-57 HF transceiver. Let's see; first all switches off, plug in AC cord, mike in, and now only the antenna needs be connected. You can already see yourself winning the worked-all-Tasmania contest tomorrow. You grab for the coax antenna cable and fumble for the PL-259 connector on the end. It promptly falls off the end of the cable and rolls under the operating desk. As you stand, staring at the mangled cable end, the barrage of four letter words begins. Why can't these stupid things ever stay on the cable!!!

Ah yes, and how many times has this happened to you. I'm certain that many of you wish that the inventor of the PL-259 connector could be hung up by his toes for a week. How can you be expected to solder a few strands of braid through those wee holes and expect a good connection. Or, the connector that does stay on, shorts out because of a few stray bits of braid that you nicked while cutting the jacket.

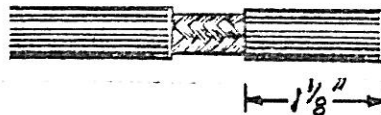
Now, I can't guarantee that what I'm about to say is particularly fantastic or original, but it does result in connectors that work and stay on the cable.

Amateurs normally use two types of cable, RG-58 (the small stuff), and RG-213 (the KW variety). The PL-259 connector is designed to accept the RG-213 cable directly, with the RG-58 cable requiring a screw-in adapter (another real gem to work with). I'll detail each type of cable preparation separately.

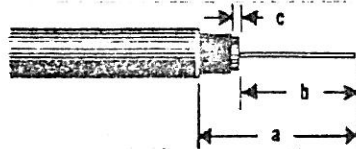
First thing you need are some tools; utility knife, ruler, flat file (RG-58 only), hacksaw (RG-58 only) and soldering iron (100 watt).

The RG-213 coax is the easier of the two types to fit with a connector, so I'll tackle it first.

- i) cut the end of the cable even;
- ii) cut around the outer jacket of the cable, 1-1/8" from the end, being careful not to nick braid. Slide the jacket back approx 1/2", but not completely off the braid.

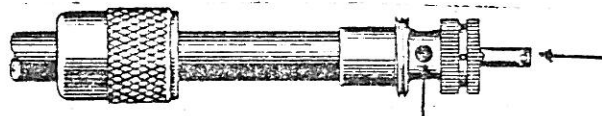


- iii) tin the exposed braid completely. Do not overheat. The object is to obtain a smooth, solid tube of tinned braid.
- iv) remove the 1 1/8" piece of outer jacket completely. Trim the cable as indicated. Do not nick center conductor. Tin exposed center conductor.



$a = 1-1/8"$   
 $b = 5/8"$   
 $c = 1/16"$

- v) slide the coupling ring on cable, proper side out. Set cable aside.
- vi) take the connector and pre-tin the four solder holes. Make certain you have sufficient heat to ensure a good job.
- vii) check again to make sure the coupling ring is on the coax!
- viii) screw connector onto the cable end. This is easier if the connector is still hot from the tinning procedure. Continue the screwing until the tinned braid is completely visible through the solder holes.
- ix) solder the braid through the solder holes. Solder the center cable conductor to center contact.

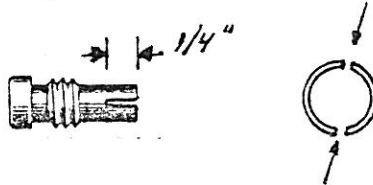


TECH FORUM (Contd) -

- x) remove any excess conductor protruding through the center contact.
- xi) screw coupling ring onto connector body.
- xii) PLEASE, use an ohmeter and make sure you have continuity where you want it, and nowhere else.

The RG-58 cable uses the threaded adapter and is handled in a different manner. Although the procedure is slightly involved, the connector put on in this manner, works.

- i) take the adapter, clamp in a vise, and slot as indicated using a hacksaw.



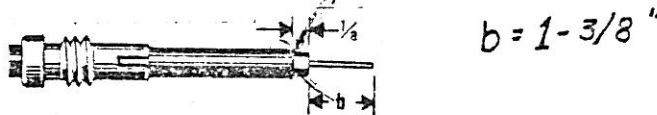
- ii) use a file and remove the nickel plating from the area around the two slots. This will make soldering easier.



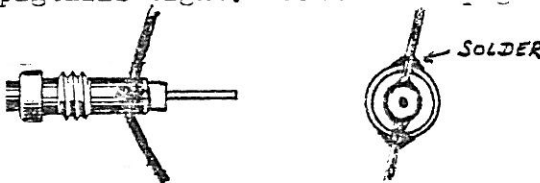
- iii) tin this filed area and the inside of the slots.
- iv) slide the adapter over the cable.
- v) cut the end of the cable even.
- vi) cut around the outer jacket of the cable, 1 - 1/2" from the cable end. Do NOT nick the braid. Remove outer jacket.
- vii) comb the braid out and form into two pigtails.



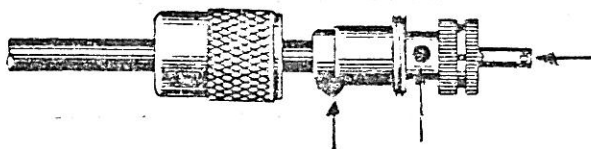
- viii) trim dielectric as indicated. Tin center conductor.



- ix) pull the cable into the adapter, causing the pigtails to enter the two slots. Pull the pigtails tight. Solder the pigtails to the adapter at the slot area.



- x) trim the excess pigtail off and file the area of the adapter (where it has been soldered) to ensure it will screw onto the body of the connector.
- xi) slide the coupling ring on cable, proper side out.
- xii) screw the adapter into the body of the connector. Solder center conductor to center contact. Tack-solder the adapter to the body of the connector. There is no need to solder through the solder holes.



TECH FORUM (Contd) -

- xiii) screw coupling ring onto connector body.
- xiv) again, USE an ohmmeter to ensure correct continuity.
- xv) this method has the advantage of yielding a connector that can be disassembled if necessary.

Although both methods, outlined above, take longer than the classic approach, I have never had a bad job result. Try them and if you think they don't work or that I'm crazy, let me know.

\*\*\*\*\*

VE3JW - no change, still working.

VE3TWO - The new machine has been on the air since about the first week in Nov. I apologize for the problems, I only wish things could work first time. Comments have indicated excellent sounding audio. The major problems are as follows:

- a) desensing due to paging service;
- b) intermod due to other repeater in the area;
- c) COR problems, TX keys but no or very weak audio on some signals.

My repeater committee, VE3LAR, and myself are trying to solve the problems. Please have patience, we will overcome.

Club Project - I have received some feedback on the suggestion of a power supply as a club project. It appears as though many people could use a 13.8 volt, 5 amp supply. I am currently investigating several approaches and hope to have exact cost and details next issue.

Ramblings - So ends another bit of twaddle. Keeps those cards and letters coming, thanks Lloyd. Now, if I could only design a circuit that would allow me to drink copious amounts of white wine at CVMRC banquets and not suffer the effects, hmmm . . . ., a 741 op-amp and . . . .

73 Russ 3FSN (TA)

CARF REPEATER LIST -

Do you have the latest repeater list? If not, contact Lloyd 3FHC, and pick up a copy.

RAMBLER EDITOR -

No one has stepped forward to assume these duties. It sure would be nice to start off the New Year with an Editor. If you recall, Mike is retiring in Dec. It doesn't take that much time and it's only done once a month.

Coffee committee

Thanks to Stan 3GYP for his willingness to continue his "much appreciated" job of supplying us with coffee and cookies each General meeting, in 1980.

NOTE OF THANKS

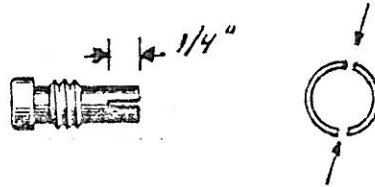
A vote of thanks is extended to Ray 3FN, on behalf of all the Club, for his efforts in organizing the Club banquet. A tip of the whip to you Ray.

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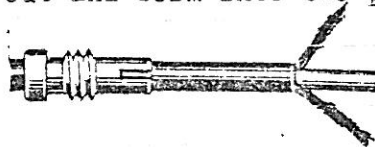
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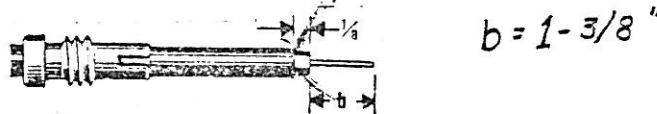
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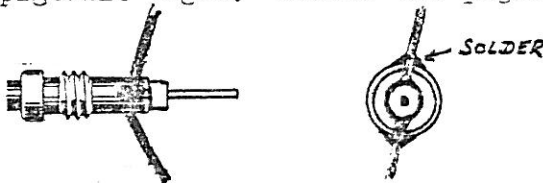
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