Rambler

Newsletter of the Ottawa Valley Mobile Radio Club Inc. (**OVMRC**) *Volume 49, Issue No 10*



All Aboard! On April 29 and 30 The OVMRC operated "Railway Mobile" from a 1907 CPR Division Superintendent's Business Car. On short notice three members OVMRC participated with the Bytown Railway Society(BMS)in an Open House with the Ottawa Central Railway, VIA Rail and the Capital Railway (O-Train). The BRS brought out five units of their collection (caboose, Business car, work car, Steam Wrecking Crane and a diesel-electric yard switcher) from their regular home at the Canada Science & Technology Museum. Graham VE3GBD, Larry VE3WEH and Steve VE3SBC made about fifty contacts from Los Angeles to Greenwood on two metres using repeaters VE3CRA and VE3TWO to publicize the event. They used a desk-mounted IC T7A, gel cell and a mag-mount antenna while en route to and from rail yard and in a static mode at the rail yard. Additional interest was provided by operating VE3SBC's 1910 vintage Bunnell telegraph key and sounder. The BRS fired-up their 1919 50-ton wrecking crane to impress everyone. Hopefully next year we will have a little better weather 73's. Steve, VE3SBC



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Reminders...

Club Meeting · · · · · · May 19 7:30 P.M.

Club Exec. Meeting · · · May 26 7:00 P.M.

Rambler Deadline · · · · June 3

June Club Meeting · · · June 16 7:30 P.M.







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Treasurer Ernie Jury, VE3EJJ

Amateur Radio Exhibit

Amateur Radio Training

Accredited Examiner

Field Day

Historical

Flea Market

Membership

Newsletter

2

728-3666

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Bill Wilson

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VE3NR

The OVMRC Rambler is available on-line at the club Web

site:

http://www.ovmrc.on.ca/rambler.htm

Sponsors

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Bytown Marine, Ottawa, ON Elkel Ltee. Trois-Riviéres. OC

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The OVMRC Web site is hosted by Magma Communications Ltd.

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147.300 MHz(+) 444.200 MHz(+) 53.030/52.030 MHz



http://www.ovmrc.on.ca Webmaster: Elias Zaydan,

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Amateur Radio Exhibit VE3JW Web Site

http://ve3jw.tripod.com

Canada Science & Technology Museum



Next meeting May 19 **Rambler Deadline** June 3

The Rambler is the official newsletter of the Ottawa Valley Mobile Radio Club Inc. and is published 11 times a year (monthly, except for July). Opinions expressed in the Rambler are those of the authors and not necessarily those of the OVMRC Inc., 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: va3wmh@rac.ca.

Miscellaneous



April Meeting presenters.

At the **May meeting**, look for two contests: the best mobile radio setup / best amateur radio gadget contest, and a CW contest. Elkel will be visiting us to talk about the latest in amateur products, and will also judge the best mobile radio / best amateur radio gadget contest. If you would like to be a judge for the CW contest, please contact me.



Railway Mobile Station

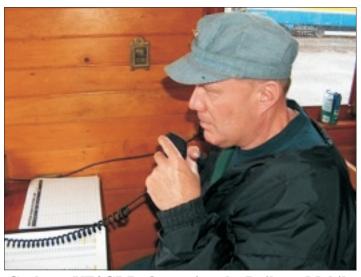
Doc Haycock's daughters have established a Web site to honour him! Many of us got to meet the daughters at the QCWA breakfasts during the sale of his paintings several years ago! A nice tribute and is especially appreciated by those of us that knew Doc personally!

http://imaginationseverything.com/solution/haycock/biog
raphy.htm

vy

73

Ed VE3GX@rogers.com



Graham, VE3GDB, Operating the Railway Mobile Station

Excerpt from The ARRL Letter, Vol. 24, No. 16, April 22, 2005

* ARRL Field Day 2005 publicity information available: Field Day 2005 is the weekend of Saturday and Sunday, June 25-26. Per rule 7.3.2, 100 bonus points are available to FD stations in all classes for bona fide efforts to obtain publicity for your Field Day operation from local media. ARRL Field Day 2005 publicity information now is available on the ARRL Web site:

http://www.arrl.org/pio/contact/2005/04/fddocs

for public information officers and clubs. The page includes sample news releases and information on publicizing your participation in Field Day 2005. It also reviews publicity information for "National Take your HT to Work Day" June 21, when hams are encouraged to clip their handheld transceivers on their belts or place them on their desks to raise awareness and prompt inquiries about Amateur Radio from co-workers. Amateur Radio Week 2005 is June 19-26.

NOTICE TO ALL OVMRC MEMBERS

Bob Sharp VA3RCS

In accordance with OVMRC BY LAWS this is notice that the Nomination Committee Chair has been appointed by the Current Executive.

The chair of this committee is Bob Sharp VA3QV.

- 1- If any club member wishes to assist Bob with the committee he may be reached by email at va3rcs@rogers.com
- 2-Nominations will be accepted for the following executive positions:
 - * PRESIDENT
 - * VICE PRESIDENT
 - * SECRETARY
 - * TREASURER

3-Nominations will also be accepted for the positions as Chairman of the following Committees:

- * AMATEUR RADIO EXHIBIT (VE3JW)
- * AMATEUR RADIO TRAINING
- * FIELD DAY
- * FLEA MARKET
- * HISTORICAL
- * MEMBERSHIP
- * NEWSLETTER (RAMBLER EDITOR)
- * PUBLICITY AND PROGRAMMES
- * RADIO OPERATIONS (OVMRC NET MANAGER)
- * EMERGENCY PREPAREDNESS
- * TECHNICAL
- 4- Any club member wishing to take on any of the above mentioned positions should contact the chair of the nominating committee as soon as possible.
- 5- Any club member wishing to nominate a club member for any of the above mentioned positions should contact the chair of the nominating committee as soon as possible.
- 6- Any members of the current executive and chairs of the standing committees if they wish to stand for re-election should contact the chair of the nominating committee as soon as possible.
- 7- The chair of the nominating committee will accept nominations from the floor up until the time of elections at the June meeting.
- 8- The chair of the nominating committee will be reporting to the Club executive at the April and May executive meeting to keep them informed of the progress.
- 9- If there are any questions or you wish to either stand for election of one of the positions or nominate someone for the positions please contact Bob Sharp VA3QV by email at: va3rcs@rogers.com I may also be reached by phone at 613-733-4475 which has voicemail. Please remember that I am a shift worker and all messages either phone or email will be returned as quickly as possible depending on my work restrictions at the time.

73 Bob, VA3QV

VA3RCS

Nominating Committee Chair OVMRC

Tuner Vs. Coupler

http://www.sgcworld.com

The question of 'tuner' and 'coupler' and the distinction between them is a point on which you will find quite a bit of confusion and contention. All for no reason. The words are often used interchangeably, so many people equate them in their minds. People who use the words to represent different things make the distinction based on what each thing does.

If you want to use the terms distinctly, then a TUNER is something which TUNES just after the output of your transceiver. It's purpose is to match the feedline to the transceiver. What it tunes is the system composed of the feedline and the antenna to provide a 50 Ohm connection (or whatever impedance is needed for the match) for the transceiver. A COUPLER is put at the feed point of the antenna. It's purpose is to match the antenna to the 50 ohm feedline (or whatever other impedance is needed, but usually it's 50 ohms). A coupler keeps the SWR down along the whole feedline, while a tuner does not.

Which is better? There you'll find lots of opinion, but in general, most experts would consider the antenna feed point as the proper place to insert some sort of coupling device. Books like the Antenna Handbook or others usually have collections of matching sections for antennas run at a specific frequency. A coupler does the same thing, but it does it across a wide range of frequencies.

SO which do you want? A tuner built into your rig is there to protect the transceiver, not to give you the best signal. It's convenient, simple, and at most HF frequencies, losses will be fairly minimal on a practical level. A coupler at the antenna feed point will maximize your energy flow into the antenna, giving you the best signal possible with that physical antenna. Most matching sections though, are only for a single frequency and a small band around that frequency. The Smartuner (SGC's product), automates the tuning by selecting the best match at the feed point to maximize energy flow. This minimizes SWR across the whole of the feed line which also minimizes energy loss. Since the Smartuner is completely independent with its own internal intelligence, it operates completely without attention once it's properly installed. Many of our customers have had one for 5, 10, or more years and never even bother to look at it since it just sits there and does its job. Should you use both? Generally not, simply because they're usually not needed. It shouldn't make any difference if you do, though. The transceiver might change power levels or do something else to confuse the remote coupler. Most people simply turn off the internal tuner and rely on the external one, since they can usually get demonstrably better signal reports when using the remote coupler.

Borrowed from the WARC "The Newscaster" May 05.

Revisiting the Tetra-Slinky Dipole for Operating Indoors in 80 Meters

José Campione VE3PCJ

A home-brew dipole made of four slinkies for operating indoors in 75-80 meters is not a new idea. Neither is what follows intended for electronic wizards or seasoned hams (no pun intended), but rather for fellow new-ham "lids" puzzled about the fact that their participation in some of the club nets may require antennas longer than their houses and backyards will ever be able to accommodate... The actual purpose of this article is to propose to new HF certified hams a cheap and fun way to get started in 80 meters and for rallying them to call and be heard at the club's 80-meter Pot-Hole Net in 3760 KHz (LSB) on Sundays at 10:00 am (local time), and, if their CW has continued to improve, to participate on the 80-meter CW Pot-Hole Net in 3620 KHz (CW), also on Sundays at 11:00 am (local time).

The antenna is easy to make and is very low in cost (the coaxial being the main investment). Experience shows that this antenna, albeit not a perfect performer, when used together with a tuner, permits reasonable operation along the 75 – 80 meter band even when deployed inside a house (actually, from the ceiling of a basement...). Furthermore, the antenna can also be easily tuned to low SWR values throughout most of the radio-amateur HF bands. Operating an ICOM 706 MKIIG at 25-50 W from his shack in Ottawa (FN25ej), the author was able to use this antenna to join local nets, to connect to VE1YZ (Halifax NS) and other Winlink PMBO stations via Pactor, and to hold QSOs in phone and PSK31 (3.580 MHz) modes with stations as far as New Jersey and New Hampshire.

What is a "slinky" and where to find them...

The slinky is a toy designed by an engineer after he saw his children and friends play with a coil he had brought home from work. The "original" slinky is sold as a coil of flat steel wire 1/32" thick and 3/32" wide. Each loop has a mean diameter of 2.75" and each slinky comprises 88 loops. Since the last loop is attached to the previous one, the actual electric length of a slinky is of 86 loops. When two slinkies are attached together three loops (i.e., two at the ends and two others becoming one at the junction) are short-cut and hence the electric length of the entire wire is made of 173 loops for a total of 124.6 feet or 38.0 meters. In the Ottawa area, the only place where the original metal slinkies seem to be available is the Toys Section at Wal-Mart.

A proven way to make a Tetra-Slinky Dipole

Materials

- * -4 slinkies (but buy five, as you'll want to keep one for playing with...).
- * -A 50 ft braided dacron rope.
- * -Three planter hooks for ceilings or walls.
- * -Two 1 ½" x 1" ferrite chocks (the "square" kind).
- * -A few feet of insulated electric wire (18 GA).
- * -Electric tape.
- * -Scraps of ply-wood 1/4" thick.
- * -Carpenter glue and a couple of carpenter clamps.
- * -Eight 6-32 ½" bolts, and 6-32 nuts and washers.
- * -Two banana plugs and banana-plug sockets.
- * -25 ft. coaxial RG 58U with a suitable connector to connect to the SO-239 terminal of the tuner (i.e., usually a

PL-259 connector or a BNC connector with a BNC-PL 259 adaptor).

- * -Electric drill.
- * -Soldering iron (suggested for attaching balun to coaxial, but not absolutely required).

Putting it all together

- * -Cut and sand two 4 1/2" squares of plywood.
- * -Cut and sand two strips 4 ½" x 1" (these will keep the two squares apart).
- * -Drill a hole in the center of each square (about 1 inch in diameter).
- * -Position the slinky on each square and mark four equidistant points touching the outside of the slinky.
- * -Drill in each point a small hole (for the bolts).
- * -Close to one of the angles in each square drill a larger hole for the banana plug socket.
- * -Glue the two squares to the separator strips thus making a $4\frac{1}{2}$ " x $4\frac{1}{2}$ " x $4\frac{1}{2}$ " box open on two sides.
- * -Install the banana plug sockets.
- * -Attach the first closed loop of a slinky to each of the square faces of the box with bolts with washers and fasten with nuts on the inside of the box.
- * -With a piece of non-insulated wire connect the inside of the banana plug socket to the closest bolt holding the slinky (hint: the wires from both sides should not touch each other!).
- * -To attach two slinkies together, carefully pry open the clip that holds together the last loop and slide it up the wire in order to free the end of the slinky. Do the same with the second slinky and carefully align the last loops of both and glide the two clips as to fasten both loops to each other. With a pair of pliers tightened both clips. The two slinkies should be solidly attached to each other.
- Repeat the operation on the other side. Now, you should have two slinkies "in series" attached to each side of the box.

The hanging of a long slinky

- * -Fix two of the planter hooks to suitable places in opposite walls (i.e., at least 6 ft high and 30 ft. apart).
- * -Fix the third one on the ceiling above the mid-portion of the dipole antenna.
- * -Pass the rope through the inside of the slinkies and through the holes at the center of the box.
- * -Make a small bowline knot at the end of the rope and hang attach from one of the hooks on the wall while leaving the free end long of a few inches.
- * -Use the free end to attach to the end loop of the slinky on that side.
- * -Slip the other end of the rope through the other hook across the room and tighten the rope. Attach with the free portion to the rope by making alternative passes through

Tetra-Slinky Dipole (Cont'd)

the hook on both sides of the horizontal rope. Make a loop around the last loop of the slinky to hold it stretched and finish with Swedish furling.

* -Use a small cord to hang the center-box from the hook on the ceiling.

How to make an "emergency" 2:1 balun

Note: this balun can overheat if the radio is operated at high power. The author has only operated it up to 50 watts and has noticed that the transformer warms up after prolonged transmission as is often required in digital modes.

- * -Take two square ferrite chokes and remove the ferrite cores from their plastic covers
- Place the two chokes (each made by two square arches) side by side and carefully tape them with electric tape only along the four faces on the outside
- * -Wind the first coil (9 & ³/₄ turns) leaving 5-6" at the ends
- * -Wind the second coil (6 & 3/4 turns) again leaving 5-6" at the ends
- * -Apply electric take to the outside to keep wires in position
- * -Attach the banana plugs to the ends of the coil with the 9 & 3/4 turns
- * -Attach the coaxial cable to the ends of the coil with the 6 & 3/4 turns (solder if possible and proper insulate the cables at the junction)

Results

All measurements were made with an RF Analyzer model RF-1 from Autek Research.

Figures 1-3 show actual values obtained with the dipole in location (one foot from the ceiling of the basement of a town-house and 6 feet from the floor, stretched to a total length of about 30 ft.).

That's all folks! No more slinking around...

By José VA3PCJ

The author has been a registered ham (Basic and Morse) since January 2004. He can be contacted at va3pcj@rac.ca

Although this article was written to the best of the author's abilities and intentions, no claims are made with respect to the safety and performance of this antenna or its components. Users make use of this information at their own risk.

Slinky Clandestine Dipole by kd4cga:

http://www.qsl.net/kd4cga/slinky.htm

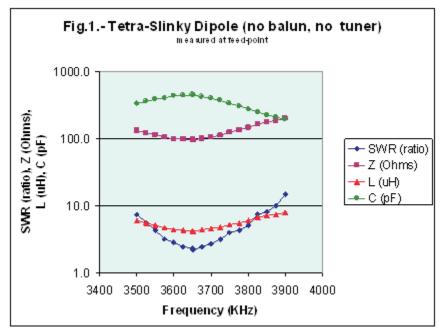


Figure 1 shows values obtained directly at the antenna. The antenna spontaneous lowest SWR (SWR = 2.2) in the 80-meter band occurs at 3653 KHz coinciding with the lowest Z at 100 Ohms. This finding prompted the use of the 2:1 transformer balun.

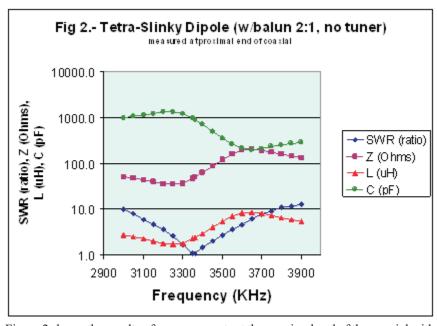
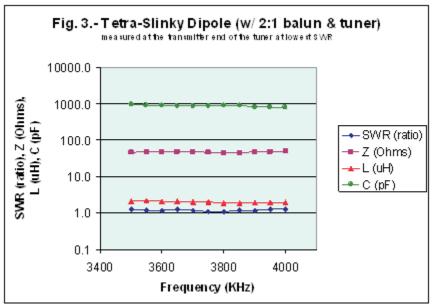


Figure 2 shows the results of measurements at the proximal end of the coaxial with the 2:1 balun installed. Although the balun did reduce the impedance at resonance to 50 Ohms, it also shifted the resonant frequency of the antenna 200 KHz down, outside the ham band (added inductance of the transformer balun without added capacitance?). This effect is not affected by the coaxial, as similar results are obtained when measurements are taken directly at the balun.

eHam.net Forum: Slinky Antenna Ideas Offered and Wanted!. http://www.eham.net/forums/Towertalk/3423

Tetra-Slinky Dipole (Cont'd)



Nevertheless, as shown on figure 3, the use of a small tuner (the tuner used was an MFJ-902 Travel Tuner) permits the SWR to be kept below 1.3 and the impedance around 50 Ohms through the entire span of the band.

Fig 4.- Tetra-Slinky Dipole (w/ 2:1 balun & tuner) measured at the transmitter and of the tuner at lowest SWR 10000.0 SWR (ratio), Z (Ohms), L (uH), C (pF) 1000.0 - SWR (ratio) 100.0 Z (Ohms) 🚣 L (uH). 10.0 C (pF) 1.0 0.1 5 10 15 20 25 30 Frequency (MHz)

Furthermore, Figure 4 shows that the antenna can be tuned also to low SWR and at impedance around 50 Ohms, throughout most of the radio-amateur HF bands. As an example, Figure 4 shows values obtained for the 10 to 80 meter bands using the central frequencies in those bands proposed for operation in the PSK31 mode.

Live Streaming Video Webcast from

Dayton, Ohio Hamvention May 18 - 22, 2005

This will be our 3rd year to broadcast live our drive to hamvention (550 miles) and then the 3 days outside in the fleamarket. This year we have a new addition. We have the helmet cam which will let people around the world get a view of all the things we look at as we walk around. The streaming cam page http://tmedlin.com/cam.html also has its own chat room and hams from around the world watched, chatted, and enjoyed it the past 2 years. There are no pop-ups or advertisements. Just something we like to do each year and have fun. It lets hams take part in ham radio if they are too

far away to travel or health does not permit it. -

The Canadian Amateur Radio Bulletin

Ottawa Valley Mobile Radio Club



P.O. Box 41145 Ottawa ON K1G 5K9

MEMBERSHIP FORM

- * The Membership year starts in July and runs to June 30th of the following year.
- * Regular membership is open to licensed amateurs.
- * Associate membership is open to all radio enthusiasts.
- * The family rate is for second and subsequent members of the same family living at the same address.
- * One form per member.

RENEWAL	New	CHANGE	OVMR	C NA	AME TAG (Cost \$7.00)	Yes No	
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