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# THE VWS RELAY

**THE VIENNA WIRELESS SOCIETY, VIENNA, VIRGINIA.**

**DECEMBER, 1992**

## FROM THE PRESIDENT'S SHACK...



At the November 13th meeting the new members of the Board of Directors were voted in. The race was very close with the last three candidates within a single digit's difference. I would like to congratulate Mark Murray, AA4WB and Mel Woods, KN4ZT. I think both of them will be great additions to the board.

We have only one meeting in December, it is on the 11th. We will start out the meeting with the installation of the new officers. The main topic of the meeting will of course be the 1993 Budget. The 1992 business will be completed once a Budget has been approved. With the business done the only thing to do is to have a bit of a party and bid our farewells until the New Year.

Over the past year I think the VWS has done a good job serving the amateur community. We have seen a number of new hams come from Paul, AB4CY training class. Many of his graduates have become active member's of the club. Paul's class continues to provide the club with younger members to keep the club going, hopefully into the next century. It's very good to see some parents getting tickets because they have to drive the kids anyway!

We had all the usual events this year and they continued to be of the excellent quality everyone in this area has come to expect. We should be thankful to those who took leadership roles for all of the hard work they put in. The only reason we can have so many really good events is because of the active participation by so many members.

I think one of the biggest achievements of the club was getting on the air in packet. Packet is becoming a more important part of ham radio. With the K4HTA mailbox the VWS is keeping up with the times and being a leader not a follower. It is important for our club to be a leader not a follower.

I have enjoyed my year as President and hope that the years to come will be even better than this year was.

See you at the next meeting!

73

Margy Patterson, N2JRG  
President

## **TRAINING ACTIVITIES...**

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By Paul, AB4CY - Training Coordinator

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The 1992 fall Novice training class will end December 1st. There have been some ups and downs in attendance and two went off and took the exam early.

I've had a little activity on the slow speed CW net on 28.390 MHz at 8:30 each evening. Upcoming upgrade exams always spark a little extra interest. Over the two years that the net has been on the air there have been a total of 76 hams who have checked in one time or another.

The school program is waiting for approval to install an antenna on the roof of the school. Since it's considered electrical, there are all kinds of safety requirements like having it where no one can accidentally come in contact with it. It also must be anchored to brickwork so nobody can throw it off the roof into the parking lot. (Aren't some kids fun!).

## **"LEADING EDGE"**

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By Paul, AB4CY

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Volume 5 of the "LEADING EDGE", our Club's annual Journal, will be distributed at the December 11th meeting. A few kind souls sat down to put together an item for publication and a few more will drift in before the deadline, ~~December 5th~~. I stretched out the deadline since there aren't a great number of articles this year. You still might make it, call (703)560-2779.

## **THINK METRIC!!!**

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By Paul, AB4CY

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The United States has resisted the conversion to the metric system of measurement for upwards of 120 years despite the fact that the U.S. Congress in 1888 officially defined the foot, yard, and pound in terms of the meter and kilogram of the metric system.

A lot of the metric system of units are used in amateur radio; wavelength in meters, the prefixes micro, milli, kilo, mega, etc. Foreign hams all use kilometers and don't have a good idea of what a mile is. Incidentally, a statute mile is 5280 feet which was the distance covered by one thousand paces of the marching gate of the Roman Legion stationed in England in 600 A.D.

If you work DX, you hear the temperature in degrees Centigrade (zero is freezing, one hundred is boiling). Mr. Fahrenheit put his zero at the lowest temperature he thought you could reach. Using his scale, freezing is 32 and boiling is 212 degrees.

Everyone outside of the U.S., Canada, and England uses metric, you should know it!!!

## TECH TOPIC - "WHERE DID THE SHINE GO?"

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By Paul, AB4CY

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You begin by hanging a shiney copper wire antenna or some bright aluminum tubing for a vertical. In about a year it isn't shiney anymore, it's grey or greenish. It has corroded due to contact with oxygen, moisture and other gases in the atmosphere. If you drive a copper ground rod into the soil, it may be eaten away in a few years by corrosion because you have moist, chemically active soil. Most corrosion is the result of electro-chemical activity due to the reactions between a metal, and oxygen, promoted by moisture.

Back in the days of quarter inch copper tubing tank coils, they would polish the tank with steel wool in getting ready for a contest. That would remove the oxidation layer and reduce the "skin-effect" losses. Today we use Formvar enamel or silver plating.

Inside electrical plug and sockets and in PC card solder joints you eventually get corrosion between dis-similar metals, especially if one side is hotter than the other (e.g. heat sinks) and moisture is present. The K4HTA repeater has experienced some corrosive "separation" of solder joints. Galvanized bolts and nuts used on aluminum towers corrode very quickly. Stainless steel corrodes more slowly and aluminum screws not at all, but they are weak. Aluminum is generally protected by anodizing which creates a tough film on the surface that keeps oxygen and moisture away. Drilling through this flim will allow corrosion to proceed. Other metals are electroplated with silver, nickel or chromium because these materials corrode more slowly than the base metal. Any scratch in the plating will initiate corrosion.

## THE SECRET "PERIOD" REVEALED?

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By Art, AB4CG

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Well now agents, counter agents and of course those wonderful double agents, you have by now solved the Secret "Period" caper! However, those who maintain secret rings and still believe that the Green Hornet will return, I owe a revelation. The secret period is professionally known as the Micro-Dot.

You will recall that Collodion was used to set the Dot on paper. Great stuff Collodion, but like most stuff it has a weakness. It is very sensitive to light. To determine if a Dot is used, hold the paper up to natural light at eye level. Adjust the paper horizontally and observe the difference in light reflection off the paper. If collodion was used it will reflect light in a singular manner. If no natural light, a good flash light will bring it up. However this method takes longer.

Like anything else it takes training and a bit of skill. Is this method used today? Why not?

## QRP EQUIPMENT THE EASY WAY

By Jack, K4GIO - QRP Coordinator

Anyone looking for QRP equipment will have no trouble getting it. However, Qrp equipment these days is mostly in kit form, with very few ready-made items. About the only ready-made Qrp transceiver on the market at this time is the "Integrated CW Station" being sold by MFJ Enterprises, comprised of a 20M transceiver, antenna tuner, and power pack. Ten Tec has always been a good source of QRP transceivers, but their latest product, the Argonaut II which is a high-tech and high-priced item, had problems and has not been advertised lately. Some QRPers have been getting a ready-made transceiver capability by modifying their higher powered transceivers, such as Kenwoods and ICOMS with a power range of 10 W to 100 W, so that power output can be reduced to 5 W or less. Of course, such larger equipment can hamper portability. Another possible source of ready-made QRP equipment are used items found at hamfests or offers in ham-ads of radio amateur magazines. Some of the old items are still great performers even though they may use vacuum tubes.

Several complete kits for transceivers are on the market from sources such as Tejas RF Technologies, Townsend Electronics, Oak Hill Research, and A & A Engineering. These outfits are not as well known as the big advertisers, but apparently their products are gaining good reputations. All operate on a single band, and require a separate power source (electrical or battery). Costs are in the \$150 to \$200 range. Their individual capabilities vary and their specs should be closely studied before purchase. Several of these kits have had recent product reviews in national ham radio magazines.

Articles for constructing QRP equipment can be found in the well-known amateur radio handbooks and magazines. Offers for the parts and kits to build some of these items may be listed in an original article, or elsewhere in the same issue of a magazine. For example, in the August 1992 issue of QST, there is a new product offer of a kit to build a QRP transceiver described in the 1992 ARRL Handbook and August 1980 issue of QST, and also a footnote of an article in the same issue offers parts for constructing a very small receiver.

A more economical alternative is to build your own QRP transmitter and use an on-hand separate receiver, or also build a receiver of simple design so that you have complete portability. Several vendors offer kits for a receiver or a crystal controlled transmitter, and ham-ads frequently include offers of kits to build such equipment.

There are many easy choices available for you to have equipment for QRP operation. Pick one out and give it a try.



I SEE YOU'VE BEEN WORKING GUYS ON YOUR DUMMY ANTENNA, AGAIN

## HUMOR(US) CORNER

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By Old 6:1 (Working the World QRP)

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Well they say there are only three certain things in life: death, taxes and change. By my reckoning the last is the one that affects most of us most of the time, the second being something we all deal with once a year and the first is essentially a Single Op (Unassisted) happening. Well, Change it is then.

The annual elections are over and some have suggested they were a beauty contest. Based on the outcome, that explains the results in some cases but maybe not in others. Congrats to the winners. Remember, its only a hobby.

Change can be very good, but one should be suspicious of change for change sake. The VWS Budget meeting is coming up and things like picnics, jackets and hats, the *LEADING EDGE* and training exercises are relatively inexpensive traditions which, as we see it, are worthy of being maintained. While the Banquet is abit on the pricey side, maybe it too can be saved. Those of us who have influence in Vienna might be able to come up with alternatives or at least a deal. "Hey, Ray, can you get us a discount at the country club?"

VWS has fewer repeaters, but those are working pretty well. So a change for the better there. However, the site of the 2 Meter repeater might be changed (an overdue change) and that could well obviate the need for more extensive and expensive changes, like remotes. Again, those with local connections could be enlisted (volunteer) to help find it a new and better home.

We could mention alot of other recent changes, but for a change we'll cut it short.

The final change is that due to lack of popular demand and the fact that this venerable 'rag' can't seem to get any paid advertising, Old 6:1 is going QRT. This will save space and let Dick, KD4DGV (Editor), whose yeoman service in these difficult times we all appreciate, save alot of weight and money.

The Humor(us) Corner of VWS was not always that but it was enlightening. Maybe a few cobwebs were knocked down and the shades opened a little to shed some light on who and what we are and what we might become. So be careful out there and try to be kind to each other.

God Bless, good DX, write if you get work and hang by your thumbs.

DE OLD 6:1 (WORKING THE WORLD QRP) AR SK

## VWS DUES REMINDER...

Members who have not paid dues for 1993 as yet, need to complete a renewal form and return it with the \$5.00 annual dues to the VWS, P.O. Box 418, Vienna, VA. 22183. You may also turn in your dues at the next meeting. A "92" on your mailing label indicates that your dues are indeed due! You may pick up a form at any VWS meeting.



# ANNOUNCING THE VIENNA WIRELESS SOCIETY WINTERFEST™ 1993

SHUTTLE BUS

RAIN SNOW OR SHINE  
SUNDAY, FEBRUARY 28th

7:30 AM

AT THE

VIENNA COMMUNITY CENTER

120 Cherry Street

Vienna, VA

SNACKS—DRINKS  
FOOD SERVICE

GENERAL ADMISSION

\$5.00 PER TICKET

XYL, UNDER 12 FREE

ALL YOUTH IN UNIFORM ADMITTED FREE

VEC EXAM 9 AM

SATURDAY

FROSTBITE  
TAILGATING

\$10 PER SPACE • OPEN 6 AM  
FIRST COME • FIRST SERVED

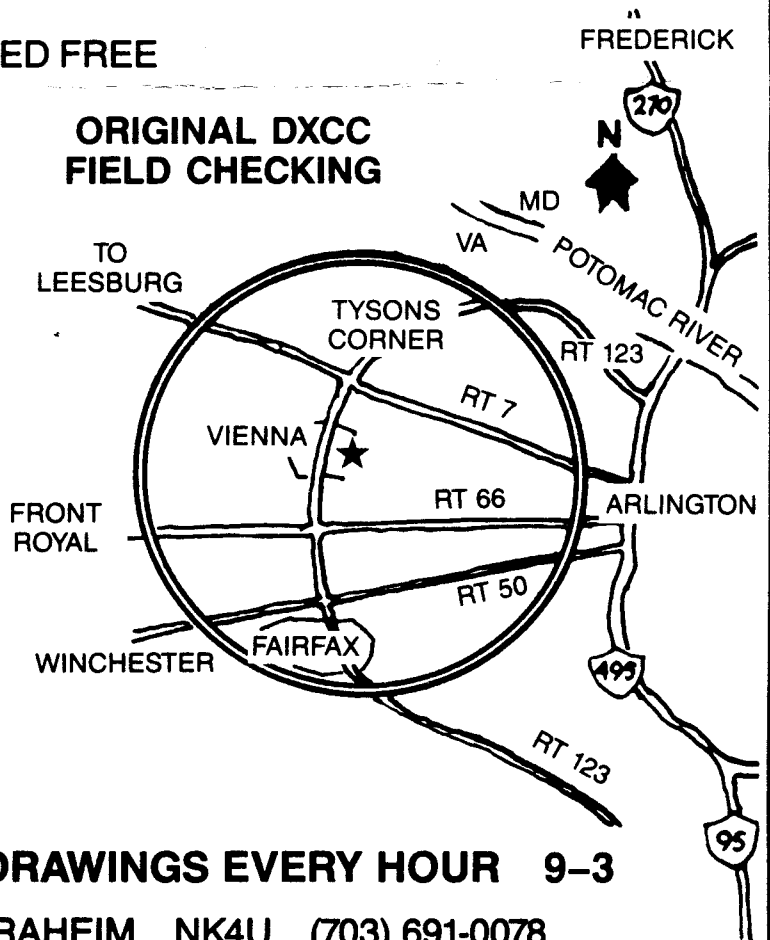
SHUTTLE BUS FROM  
VIENNA METRO KISS & RIDE

7:30 AM—2:30 PM

TALK IN K4HTA/R

146.085in	146.685out
146.190in	146.790out

ORIGINAL DXCC  
FIELD CHECKING



USUAL AMENITIES

DRAWINGS EVERY HOUR 9-3

FOR INFO . . . NANCY DRAHEIM NK4U (703) 691-0078

FOR TABLES CALL . . . HARRY KAKLIKIAN W4ACN (703) 978-4402

AN ARRL SANCTIONED HAMFEST

## SHACK SALES

### **\*FOR SALE:**

Fill-in-the Blanks QSL cards by W4MPY. New product from DX QSL Association. 50 for \$4. Also QSL direct with SASE's using foreign postage stamps and European-sized envelopes. Call Brian, WV4V at (703)938-1442.

### **\*FOR SALE:**

Mosley TA-33 Tri-Band Three element Beam Antenna. Hy-gain 402BA 40 Meter Two element Beam. Heath Model 10-4205 Dual trace factory assembled Oscilloscope. Marantz Model 2245 AM-FM Stereo Receiver. Heath 75 Watt 2 Meter Amp. Six 4CX300A Electron Tubes with two sockets. Call Frank, W4NUA at (703)273-0032

### **\*FOR SALE:**

Kenwood TS-930S/AT Transceiver \$900. Yaesu FT-109RH 220 MHz Handheld \$155. Antenna Tuners: MFJ-16010 \$30, MFJ-901B \$45, MFJ-945C \$70. Automatic Antenna Tuners: Kenwood AT-250 \$229, Heath SA-2500 (roller inductor, 2KW) \$295. Call Steve, N4UHO at (703)938-5454.

### **\*FOR SALE:**

Hayes 2400 Modem \$75. Logitech Mouse \$15. NEC Monograph Monitor \$200. PS/2 Model 30/286 and Monitor \$900. Two Fax Machines \$300 and \$200. Intercom \$20. Call Vicky, KC4VRX at (703)790-5730 (work).

### **\*WANTED:**

Manuals or help tuning a Kenwood TS900 and 900 VFO. Contact Bill, KB80JC at (304)754-9233 or his QTH is RT.3 Box 178-2, Hedgesville, WV. 25427.

### **\*WANTED:**

Inexpensive non-working Video Cassette Recorder, VHS or Beta. Call Steve, N4UHO at (703)938-5454.

### **\*WANTED:**

Desk Charger for Kenwood TR-2500. Call Jim, WA4LTO at (703)239-9234.

### **\*WANTED:**

IBM Selectric Typewriter in great condition. Call Vicky, KC4VRX at (703)790-5730 (work).

## VWS HAPPENINGS FOR DECEMBER/JANUARY

December 1 VWS Board Meeting, 7:30p.m., Vienna Community Center.  
December 7 VWS Repeater Meeting, 7:30p.m., Vienna Community Center.  
December 11 VWS Meeting, 7:30p.m., Vienna Community Center.  
December 25 NO VWS MEETING!!! "Merry Christmas".  
January 1 "Happy New Year"  
January 5 VWS Board Meeting, 7:30p.m., Vienna Community Center.  
January 8 VWS Meeting, 7:30p.m., Vienna Community Center.  
January 22 VWS Meeting, 7:30p.m., Vienna Community Center.

**Repeaters:** K4HTA/R 146.085in/146.685out, 222.340in/223.940out.  
448.250in/443.250out, 443.375in/448.375out.

**Nets:** Emergency Net every Thursday at 7:30p.m. 146.085/146.685  
"Pow-Wow" Net every night at 9:00p.m. on 28.444 MHz.  
Slow code every night at 8:30p.m. on 28.390 MHz.

	<u>Emergency Dials:</u>	<u>Non-Emergency Dial:</u>
<b>2 Meter</b>	60 - Vienna Police - Desk	61 - Fairfax County Police
<b>Functions:</b>	62 - Virginia State Police	63 - Fairfax Fire Department
	[Don't forget to # down to end call - twice in a weak signal area]	

*THE VWS RELAY is published monthly by the Vienna Wireless Society located in Vienna, Virginia. Questions, comments, articles and ad submissions should be sent to Dick Barto, KD4DGV; Editor, at 10207 Ranger Rd, Fairfax, VA. 22030 or call (703)385-0601. Please note: Issue submission deadline is the 2nd monthly VWS meeting.*



**THE VWS RELAY**  
Vienna Wireless Society, Inc.  
P.O. Box 418  
Vienna, VA. 22183