



SQUELCH TALES

**Newsletter from the Merrymeeting Amateur Radio Association for
December 2001**

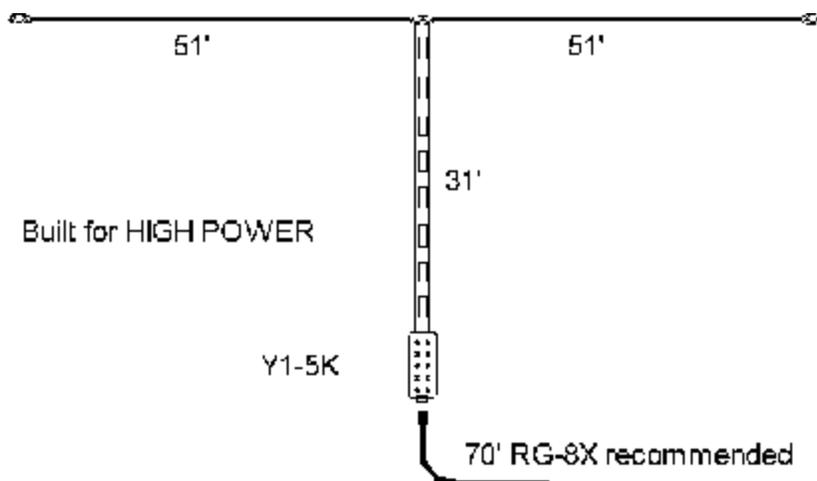
G5RV AND HIS SIMPLE HF ANTENNA

By Bruce Randall W1ZE

You do not have to be in Ham Radio hobby long until you hear the callsign of G5RV bantered about when the topic of simple multi-band HF antenna are discussed. The way you hear some people talk about this antenna it is the best antenna ever made. If you are one of those folks, I have some gain coax I want to sell you. If you are new to HF, or just not familiar with the antenna I will give you a little description of what it is. In fact I will make it easy for you. It is a dipole, or better yet a doublet fed with a mix of balanced and unbalanced transmission line.



History: Lou Varney, G5RV (SK in June of 2000) was a ham in England who was skilled in antenna building. Several years ago Lou was trying to make a simple wire antenna that would provide gain on the 20 meter and provide a close match to a 50-ohm. What he came up with was an antenna configured as a 3/2-wave doublet on 20-meters. And in the process he noted it works as either a shortened dipole, or a collinear-fed long wire on the other bands. In this configuration, the overall length is 102 ft, with a 28 to 34-foot matching line made from 450-ohm ladder-line or high quality 300-ohm TV twin-lead. The balanced line then transitions to 50-ohm coax to the rig and tuner. The antenna exhibited a moderately close match to 50 ohms on 20-meters but on the other bands between 3.5 and 29.7 MHz a transmatch (antenna tuner) was needed to match the antenna to the transceiver.



In some cases, this is still too large to fit in one's yard, and not everyone can convince their neighbors to allow one to stretch the wire across property lines. In this case, a 1/2-size version, covering 7 to 28 MHz is useable. Conversely, some amateurs would like to have 1.8 MHz capability, and have the 204-ft length necessary for this array. The following are dimensions for both the regular, half-size and double-size G5RV antennas.

<u>Band</u>	1.8-30MHz	3.5-30Mhz	7-30MHz
<u>Flat-top</u>	204 ft	102 ft	51 ft
<u>Matching Lines</u>			
Open wire	67.3 ft	34 ft	17 ft
Ladder line	62.4 ft	31.5 ft	21.2 ft
"TV"lead	56.9 ft	28.5 ft	14.4 ft

[All of the above-mentioned antennas will work on the 6-Meter band, sometimes without an ATU.]

At the transition between the balanced line and the coax some G5RVs employ a 1:1 current balun. Others use a RF choke made from the coax wound into eight 10-inch diameter turns taped together at the transition. I have even seen installations where no balun or choke was used and the antenna worked fine.

The antenna work well but they are not the best thing since sliced bread. The G5RV is effective multi-band for people who can not string out a big full-size doublet. However, if you have room to string out a doublet +/- 130-foot long you will find another simple wire antenna that works just as well or on some bands even better than the G5RV. **73, W1ZE**

Saturday December 8th is the MARA year-end dinner

Mark 7:00 PM, December 8th on your calendar, so you can join your fellow MARA hams at the China Rose on Old Bath Road in Brunswick for our year-end dinner. Bring the XYL or OM, or bring a friend for a good dinner and some good conversation. The management advises that buffet is \$13.50 or order from the menu. **Hope to see you there.**

MARA sponsored VE team gives test to 14

Our MARA's VE team gave a special exam to Boy Scouts, their parents and a few others on November 14th. Out of the 14 people who took the exam, ten passed their Technician Class, one passed the General Class and MARA's own Dan Lindsley, N5AGG upgraded to Extra Class. Kudos to them all for their success, with a special At-A-Boy to Dan.

Robin Walls N1NFK who has been running the MARAs VE program for these past years is looking for someone to take over as VE coordinator. If you are a VE and would be interested in taking over this three of four times a year event, please contact Robin at 725-5165. We want to keep this program running in the mid coast area.

MAIL DISRUPTIONS LEAD TO VANITY PROCESSING SUSPENSION

Recently announced changes in how the FCC's Gettysburg office is receiving and handling mail have effectively halted processing of Amateur Radio vanity call sign applications. The ARRL has learned that the FCC has processed vanity applications received through October 14 and that vanity applications received after that date remain on hold for the time being.

"We understand that mail directed to the FCC Gettysburg office beginning October 15 was being held pending the start of special handling precautions to address any biohazard contamination concerns," said ARRL VEC Manager Bart Jahnke, W9JJ. On a positive note, Jahnke said, the FCC is tracking the receipt date for each piece of mail.

Because the FCC gives equal priority to paper and electronic vanity applications, Jahnke explained, all vanity processing was being suspended until the mail situation is resolved. Citing a need for heightened security measures, the FCC announced November 14 that it had moved the Gettysburg office's mailroom offsite, to the rear entrance of 35 York St, Gettysburg, PA 17325.

The FCC did not announce, however, that mail received at Gettysburg starting October 15 had not yet been opened, pending arrangements to handle it without the possibility of endangering personnel. Jahnke said vanity processing should resume once the FCC begins to open its mail backlog. Just when that might happen is not yet known. Vanity processing typically takes 18 days.

Jahnke said the mailroom situation also could affect some Amateur Radio renewals. He said amateurs who filed timely renewal applications may continue to operate beyond a license's expiration date, if the mail delays cause the license to lapse before the renewal occurs. "For persons filing for renewal near the end of their two-year grace period, their applications will be accepted for processing if they arrive at FCC before the grace period expires."

The FCC said the US Postal Service will continue to accept and will divert all mail addressed to 1270 Fairfield Road, Gettysburg--the office's physical location--to the off-site mailroom. Until November 30, the FCC itself will divert overnight courier deliveries for 1270 Fairfield Road to the off-site mailroom.

MERRY CHRISTMAS, HAPPY HANUKKAH & HAPPY 2002