

# The SPARK GAP

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**PRESIDENTS CORNER**

by Gale, WD9HFT

**CVARC MEETING MINUTES**

by Ron, W9RJW

**NEXT CLUB MEETING**

The **CLUB PICNIC** will be July 16, 2005 at 4-?? PM at W9SWL's residence. (S7434 Homestead Rd). Hwy 93 South of EC abt 3 miles. Turn LEFT (East) on WALNUT – Turn RIGHT (SOUTH) on HOMESTEAD RD. Second house on the right. Bring a dish to pass and all your stuff (food, drinks, chairs, dishes, etc) Gas Grill will be provided to do your own cooking.

**CLUB HAPPENINGS****CVARC Tailgate Swapfest.**

July 9, 2005 8-12AM in the Eagles Club parking lot – Lake Hallie. Cost \$5 for Sellers and Buyers. Bring your gear and make some money. **FREE COFFEE. FOOD Service from 9-12.** Children 12 and Under FREE with paid Adult admission. For additional information see the EVENTS page on <http://www.W9CVA.org>.

**440 FOX HUNT – July 16, 2005 8-12 AM**

0800-0900 – Check in Hardees (North 53 and Eddy Lane)  
0900-1100 – FOX HUNT  
1100-1200 – Discussion and snack at Hardees North.

**AMATEUR RELATED NEWS BITES**

by John, W9SWL

Always check the Newline page on W9CVA.org for the lates in ARRL News happenings. It is published weekly and will keep you informed about what the ARRL is involved with.

**ARRL News****AREA HAMFEST ACTIVITIES**

by John, W9SWL

**July**

**9 - CVARC Tailgate Swapfest 8-12 Eagles Club in Lake Hallie.**

9 - Oak Creek, WI

12 - Wheaton, IL

16 - Brainard, MN

16 - WI Assoc Repeater WAR - Eau Claire Airport  
1100-1500**Aug**

13 - Baraboo, WI 0700-1200 608-356-2313

[www.qsl.net/ytarc/hamfest.htm](http://www.qsl.net/ytarc/hamfest.htm)

20 - Madison, WI AM Jamboree

20 - Young America (MSP)

**Sep**

9-11 Dakota Convention - Fargo, ND

10 - Rush City, MN

16-18 Peoria, IL

**17-18 Grayslake, IL Radio Expo****CONTEST BUZZ – by John, W9SWL**

ARRL Contest Calendar can be found here:

<http://www.arrl.org/contests/calendar.html> a more complete list follows. **July 2005:**

RAC Canada Day Contest	0000Z-2359Z, Jul 1
Venezuelan Ind. Day Contest	0000Z, Jul 2 to 2359Z, Jul 3
World Lighthouse Contest	0600Z, Jul 2 to 1200Z, Jul 3
Original QRP Contest	1500Z, Jul 2 to 1500Z, Jul 3
DARC 10-Meter Digital Contest	1100Z-1700Z, Jul 3
RSGB 80m Club Championship, CW	2000Z-2130Z, Jul 4
MI QRP July 4th CW Sprint	2300Z, Jul 4 to 0300Z, Jul 5
VK/Trans-Tasman 160m Contest, Phone	0800Z-1400Z, Jul 9
IARU HF World Championship	1200Z, Jul 9 to 1200Z, Jul 10
FISTS Summer Sprint	1700Z-2100Z, Jul 9
ARCI Summer Homebrew Sprint	2000Z-2400Z, Jul 10
RSGB 80m Club Championship, SSB	2000Z-2130Z, Jul 13
CQ Worldwide VHF Contest	1800Z, Jul 16 to 2100Z, Jul 17
North American QSO Party,	1800Z, Jul 16 to

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RTTY	0600Z, Jul 17
RSGB Low Power Field Day	0900Z-1600Z, Jul 17
RSGB 80m Club Championship, Data	2000Z-2130Z, Jul 21
Great Lakes Sweepstakes	0000Z, Jul 23 to 2359Z, Jul 24
VK/Trans-Tasman 160m Contest, CW	0800Z-1400Z, Jul 23
RSGB IOTA Contest	1200Z, Jul 30 to 1200Z, Jul 31
ARS Flight of the Bumblebees	1700Z-2100Z, Jul 31
RAC Canada Day Contest	0000Z-2359Z, Jul 1
Venezuelan Ind. Day Contest	0000Z, Jul 2 to 2359Z, Jul 3
World Lighthouse Contest	0600Z, Jul 2 to 1200Z, Jul 3
Original QRP Contest	1500Z, Jul 2 to 1500Z, Jul 3
DARC 10-Meter Digital Contest	1100Z-1700Z, Jul 3



**FIELD DAY – 2005**

Field Day 2005 Operations were held at Hallie Park. The event was treated as an Emergency Notification. Stations were not told of the location until 1100. Those hams attending were Gale(WD9HFT), Ron(W9RMA), Fred(KC9NN), John(KC9VCO), Ron(W9JRW), Duke(W9GDW), Nolene(N9MNA), and Lou(K9ALP-Ohio). Many of the wives were there as well.

The event was to be more of a social gathering than a all out contest. It was designed to show how we would setup in an Emergency situation. Operations started at 1100 and ended at 2000 hrs. (more pictures on the website)



## ANTENNAS

by John, W9SWL (If you would like to know about a specific type of antenna - drop me a note)

### **Antenna Rules – KK6MC/5**

Every now and then somebody asks the list for antenna suggestions. Quite often these people asking are beginners who are afraid of making the wrong choice. In order to help QRPers choose antennas wisely I have compiled a few "rules of thumb". As with any rules of thumb, these are general and there are some exceptions to them. A few may be somewhat controversial and I am sure alternate views will be given by those with opposite views. However I intend these guidelines to point one in the right direction rather than providing a detailed map of what to do.

1. Any antenna is better than no antenna. Rather than agonizing over an antenna choice, just put one up and operate. After operating with it for a while you will become aware of your operating habits and the shortcomings of the antenna you have erected. That will give you some hints as to which direction you should go with another antenna. You can lose 1/2 of your power in poor antenna system efficiency and only be down an S unit or so. I hear lots of S9 QRP stations. They would still make fine QSOs at S8. I am not advocating antenna inefficiency, but you can live with it. It is better than no antenna at all.

2. Higher antennas generally out perform lower antennas. A vertical on the roof of a one story house is probably a better choice than one on the ground in the backyard. A dipole whose end is tied to a 5 or 10 ft mast on top of the house will out perform one whose end is merely fastened to the eaves.

3. Most people will be happier with a low dipole than with a vertical. Verticals require a bit more attention to work effectively and beginners can become frustrated in dealing with ground issues.

4. It pretty much doesn't matter what kind of copper wire you use in an antenna. Thick or thin, insulated or bare, stranded or solid, they will all perform fairly well. Any effects due to these characteristics will be "second order". The old formula for cutting a half wave dipole,  $468 / \text{frequency (in Mhz)}$ , may be a bit different for various combinations, but this formula is only an approximation anyway.

5. Whatever antenna you chose, if it is fed with coaxial cable you should use a choke balun. This will prevent the feed line from becoming part of the antenna which can cause all sorts of problems. There are many designs to chose from. My favorite is an air core balun wound from coax.

## TECHNICAL TIDBITS

by John, W9SWL

### **Safety Grounds vs. Radio Frequency (RF) Grounds – from a KF6GDJ article**

First of all realize that there are two discreet types of ground systems and reasons why a Ham might desire to provide a "**station ground**". These are for the most part mutually exclusive! In other words one does one job for which it is specifically designed, and one does a different job. You must design your grounding system with this in mind, or one function may inhibit or nullify the other!

One of these grounding systems is what I will generally describe as a "**safety ground**". This safety ground is installed to reduce the risk of electrocution or radio equipment damage by short-circuited "**power mains**", or from lightning strikes to the antenna or "**feedline**" system. A safety grounding system is certainly a good Ham Radio "**engineering practice**", although it is usually considered as of secondary importance to an "**RF ground**"! In portions of our country where dramatic lightning storms are common this preference is probably reversed. I can tell you that even in the portion of Southern California that I live in, lightning strikes from annual spring storms, or even the thought of accidental "**short circuit**" electrocution are enough of a concern that I have a safety ground system for my station. I have designed it though to operate in conjunction with the RF grounding system I use! Lets talk about the considerations of properly designing an RF grounding system. Through the course of this discussion I will explain how an RF ground can be utilized as a safety ground, and also that a safety ground **should never** be used as an RF ground!

## ASK ELMER ??

by John, W9SWL

## CVARC OFFICERS

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