W9JOZ

Volume 3, Issue 4 April 2011

The President's Corner

April is here and this brings up severe weather. Most of us attended spotter classes this year and those of you that are in ARES/RACES are prepared to handle the weather warnings that will be coming. Everyone listen to the KN9OX repeater during the warnings to hear what is going on.
Soon the INQSO party will be upon us. Hugh, W0OP has volunteered his QTH for the INQSO party. Please bring a dish if you're attending.
Field Day is already on our minds and a BIG thank you to Don, KC9QFS for taking on the chairman position for this year's Field Day.

See you at a meeting
73
Tony W9AL

Inside This Issue

Meeting April 21st

Time is 7:00 p.m.

Dues are due. Discussions on various topics.

Meetings are at the Henry F. Schricker Library on the third Thursday of each month, with the exception of December.

The library is located on west Culver Road, two blocks west of Highway 35.

From the Vice Presidents Computer (used to be the desk!)

Well another month has come and gone. And April fool's day has been here hope no one fell for anything crazy. It is time for antenna building tower repairs and anything radio related. I have gathered up most of the parts for a tape measure antenna for fox hunting all that is left is cutting up a perfectly good (new) tape measure and putting all the parts together. Next fox hunt is coming up at the end of the month. Hope we have another good turn out and someone new wins!
The Indiana qso party is also fast approaching as is Field day. All members who want to belong to the ARES/RACES group need to get your nims stuff done is100, is200, is700 and last but not least is800 all they take is time to complete.
Once they are done they are done we just need a copy of the certificates.
Well I think I have said enough for now except go make some contacts!
73'S and all that stuff
Randy
Kc9isj

Upcoming Events

Birthdays in April

April 5th Paul N9QYK
April 7th Levi WB9CAO
April 9th Joe KC9NFD

EVENTS

SCARC Meeting
Next meeting is April 21st.

Foxhunt
April 30 at 1:00 p.m. from the Five Star Parking Lot
Cost is 1 dollar per person.

Peru Hamfest April 16th

WINMOR Made EASY for Winlink 2000

WINMOR is a radio transmission protocol intended to be used in the Winlink 2000 Global Radio E-mail System by amateur radio operators, marine radio stations, and radio stations in isolated areas. WINMOR will complement the PACTOR modes in the high frequency portion of the Winlink system. WINMOR debuted at the 2008 ARRL / TAPR Digital Communications Conference. Unlike PACTOR II & III, only a simple computer soundcard-to-radio interface is required, as compared to PACTOR's relatively expensive external

terminal node controller. It is fully documented and without restrictions or license issues preventing anyone from using the protocol in other software.

Give it a try.
W9AL

http://www.hamradiocenter.com/filemgmt_data/files/A_Winmor_Primer_03-09-2010.pdf

http://www.cruisersforum.com/forums/f13/winmor-software-virtual-tnc-for-winlink-2000-ham-radio-email-34227-2.html

http://www.winlink.org/ClientSoftware

http://www.greg-hand.com/versions/

RMS_Express_Setup_1105.zip

Major Dealer showing up for Indianapolis Hamfest

You have seen their ads in the pages of your favorite Amateur Radio Magazines and on the Internet at QRZ.COM. Now come July 9th and meet the representatives from GigaParts in the Air Conditioned Commercial Building.

For more information: http://www.indyhamfest.com/

Measuring Ground Rod Resistance

The following notes have been compiled from several articles Refer to HAM RADIO May 1980 for a similar article.

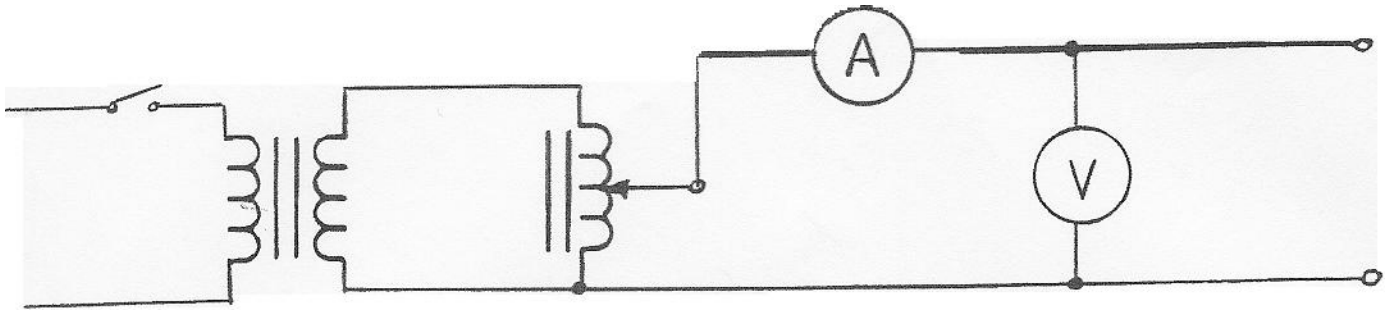
A good ground system makes as good a contact as possible with the earth. A large surface area (plate or cylinder shape), as well as depth to moist earth, is essential. Several ground rods 5/8 inch dia. driven 6 to 8 feet into soil should meet these requirements for lightning protection.

The ground rods should be copper or copperclad steel 8 to 10 feet long. DO NOT USE ALUMINUM. Avoid galvanized steel if copperclad is available. Do not connect the tower or mast ground to the station ground bus or utility ground. This could introduce large voltages into the home or station on direct strikes. * code now requires all grounds to be tied together.
Remember, the NEC requires a minimum of two (2) rods 6 feet apart with 60% of the rods in conducting soil. It is also Indiana law now.

To test the effectiveness of the ground system, follow the steps outlined below. The tower or mast should not be connected to the station ground or utility ground and during the tests, should be disconnected from the ground system so you are testing only the ground rods.
Note: with the test equipment called out below, there is a very good possibility of electrical shock or electrocution. Keep children and pets away. Do not connect wires that are powered - turn off power when moving connections. Be alert during these tests.

Material needed: an isolation transformer 120 Vac pri. / 120 Vac sec. with 2 to 3 amperes rating; a Variac or variable voltage transformer with 1 to 2 amperes rating; an AC Ammeter 0-3 amperes minimum; an AC Voltmeter 0-150 volts; one or more small ground test rods (3/8 diam. 6'to 8' long) several lengths #10 gauge copper wire - insulated 300V or more; and clamps to secure the wire to rods or test device.

Connect up the transformers per sketch. Place devices on dry, clean plywood or board lumber.



Measuring Ground Resistance

Sheet 2

If the tower / mast grounding consist of more than one rod, make sure all the rods remain connected together even if you have to run a short piece of #10 gauge wire between them as a bridge. If only one rod, plan for a second one soon so you are in compliance.

Carefully measure out from the rod/system ten (10) feet and drive a short small rod so 4 to 6 feet is in the soil. This rod should be in the clear and not near known buried wire or pipe.

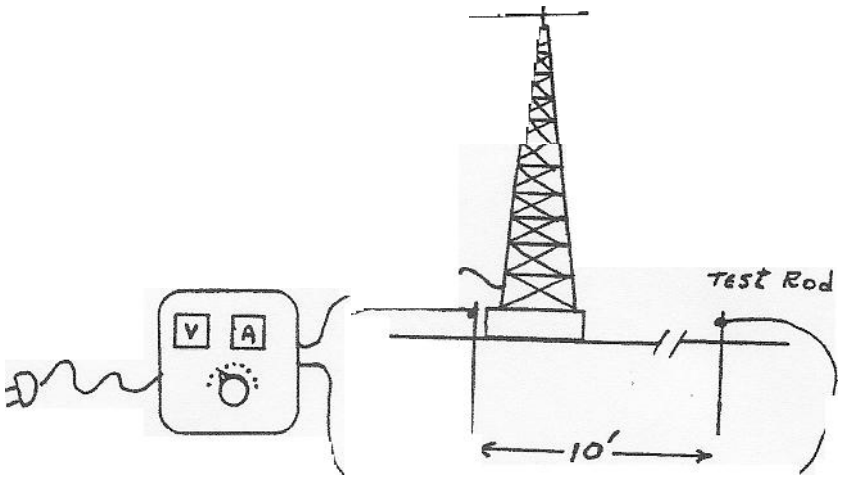
Connect a length of #10 gage wire to the remote rod and carry back to the main rod/system. Connect this wire to the one terminal of the test power unit and another short insulated piece from the second test terminal to the main rod.

Turn the power on and adjust the Variac until 1 ampere is flowing between the rods. The value of the voltage then will be equal to the resistance in ohms between the rods. Record the value and turn power off.
If you want, several small rods could be driven at different directions (say every 120 degrees) and several readings taken with averaging of the total number of readings to get a better feel for the ground conductivity.

If you only have one rod for lightning protection and the reading is less than 25 ohms, you have good soil. Just remember we are required now to have 2 rods minimum and your system will perform better.

If you already have two or more rods and the readings are more than 25 ohms, you may need to replace the rods or drive longer rods. Chemical treatment of the soil is not suggested since this is not always dependable and requires maintenance.

After the tests are done, remember to reconnect the tower / mast to the ground rod(s). Make sure all connections are clean and tight.
L. B. Mayes 1992



Until next month,
73
John, W3ML