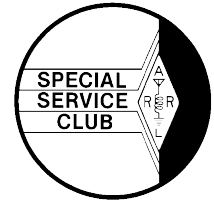




River City ARCS

River City Amateur Radio Communications Society



April, 2011

<http://www.n6na.org/>

Vol. 31 no. 4

SCIENCE AWARDS

Michael Binon, KI6QOC, earned 1st place in the Engineering category at the Sacramento Regional Science and Engineering Fair for his project to develop a better bicycle helmet. Michael enjoys Extreme Cycling (where the participants ride their bikes off of jumps and do aerial tricks) and worries that the standard bicycling helmet might not be good enough. Michael now progresses to the California State Science Fair.

Michael won 1st place two years ago for his analysis of various wire antennas for portable HF operation. That project also earned him a 2nd place award in the Electronics and Electromagnetics category at the State Science Fair.

Christina Soltero, KI6QLR, earned 3rd place in the Math and Computer Science category for her project on a Non-Contact Musical Instrument. The instrument is similar to a Theremin in that you move your hands in space to play it. The difference is that this instrument is all digital and uses ultrasonic sensors to sense hand position. Christina has also been offered a junior internship at Intel as a result of her project.

Madeline Frey, KJ6IMU, was given a special award by the Public Works Department for her study of Reinforced Truss Bridges.

Both Michael and Christina are in the 8th grade and will be graduating from Granite Bay Montessori School this Spring. Michael has been accepted to Jesuit High School while Christina will be attending Wood Creek High School next year.

Madeline is in the 6th grade and will be returning to Granite Bay Montessori School next year.

Brian Lloyd, WB6RQN/J79BPL

EDITOR NOTE

When you email me with articles please include RCARCS in the title. This will let my mail program put it in a separate folder. This makes it easier to keep track of it.

Ken Martin
KE6RMN

2011 SCHEDULE OF EVENTS

Membership Meetings: Apr 5, May 3.
For 2011 all membership meetings will be held on the 1st Tuesday of each month.

Board Meetings; Apr 26, May 24

CLUB INFORMATION

DUES: \$20.00 Per year

ADDRESS: PO Box 233692, Sacramento CA 95823

MEETINGS: Membership meetings are generally held on the first Tuesday of each month, 7:30 P.M., at the Sacramento County Corporation Yard, corner of Don Julio and Elkhorn Blvds.

Board of Directors meetings are held the fourth Tuesday at 7:00 pm. All members are welcome.

Contact a board member for location

Club Phone (Messages):

(916) 492-6115

Web Site: www.n6na.org

E-mail: n6na@arrl.net

N6NA Repeaters

145.250 MHz (-162.2)

442.600 MHz (+100) - Offline

(Due to Pave Paws issue)

Club Net - Members and Guests

Check In on 145.250 MHz

Wednesday at 8 PM

2011 OFFICERS AND COMMITTEES**Board of Directors**

President Andrew Stephens, W6AWS (916) 903-6637

E-mail: awstephens@surewest.net

Vice President Don Kunkel, KE6GMJ (916) 967-1343

E-mail: don_kunkel@hotmail.com

Secretary Larry Fibich AF6LF (916) 966-0266

E-mail: lfibich@sbcglobal.net

Treasurer Paul Grose, KG6KPV (916) 427-5676

E-mail: pgrose@pacbell.net

Membership Linda Cardoza KI6OLC (916) 972-0552

E-mail: bizebird@yahoo.com

Board Members:

2 year Term Bob Balthrope, KD6WTY (916) 682-9871

E-mail: kd6wty@yahoo.com

2 year Term Ed Siegner - WA6QYO (916) 723-2798

E-mail: esiegner@surewest.net

2 year Term Ray Smith- N6PGX (916) 483-4041

E-mail: n6pgx@yahoo.com

2 year Term Bill Mungaven - N6EF (916) 682-6891

n6ef@arrl.net

Appointments:

VE Liaison Need volunteer

N6NA Trustee Dane Westvik, KO6YD (916) 728-5965

Training Bob Balthrope, KD6WTY (916) 682-9871

E-mail: kd6wty@yahoo.com

Editor Ken Martin, KE6RMN (916) 726-6188

E-mail: kmartin537@surewest.net

Sound Paul Grose, KG6KPV (916) 427-5676

E-mail: pgrose@pacbell.net

Sales Mary Ann (916) 682-9871

E-mail: ke6est@frontier.com

Field Day Chuck Freas, W6FT (916) 332-0927

E-mail: cmfreas@sbcglobal.net

Andrew Stephens, W6AWS (916) 903-6637

E-mail: awstephens@surewest.net

Picnic Chair Need volunteer

OTHER NETS

Noon Time Net is on the W6AK/R at **146.910** (-) 100 PL.

LAST MEETING

Brian WB6RQN and Carol KP4MD gave a talk and demo on WSPR (Weak Signal Propagation Report) See www.wsprnet.org for more information on WSPR.

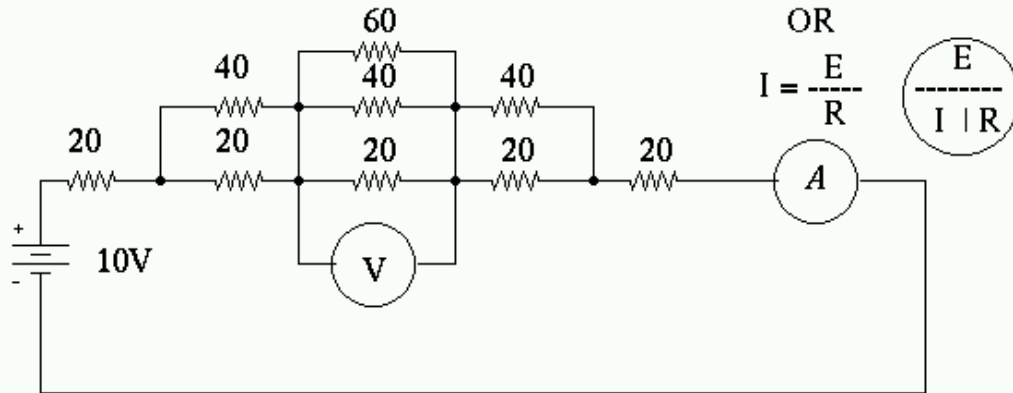
Carol has put her slide show on her page at:

<http://www.qsl.net/kp4md/wspr.htm>



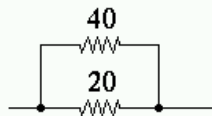
Here is an electrical problem submitted by Ed Siegner WA6QYO. He will have the answer at the meeting.

WHAT IS THE AMP METER READING?



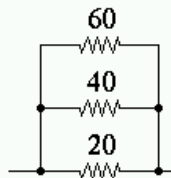
SOLUTION IS TO SIMPLIFY PARALLEL RESISTORS INTO EQUIVALENT SINGLE RESISTOR

EQUIVALENT RESISTANCE IS DEFINED BY $\frac{1}{R_{eq}} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3} + \frac{1}{R_n}$



$$\frac{1}{R_{eq}} = \frac{1}{20} + \frac{1}{40} = \frac{1}{R_{eq}} = 0.05 + 0.025 = 0.075$$

$$R_{eq} = \frac{1}{0.075} = 13.333 \text{ ohms}$$



$$\frac{1}{R_{eq}} = \frac{1}{20} + \frac{1}{40} + \frac{1}{60} = 0.05 + 0.25 + 0.167 = 0.0917$$

$$R_{eq} = \frac{1}{0.0917} = 10.909 \text{ ohms}$$

SOLVING ORIGINAL PROBLEM:

$$R_t = 20 + 13.333 + 10.909 + 13.333 + 20 = 77.575 \text{ ohms}$$



$$A = I = \frac{E}{R} = \frac{10}{77.575} = 0.129 \text{ Amps}$$

BONUS: WHAT IS THE VOLTMETER READING?