

Squelch



Volume 48 ~ Number 3

May 22, 2009

**Official Publication of the Anaheim Amateur Radio Association ~ An ARRL Affiliated Club
Squelch is published bimonthly on the Friday preceding the General Meeting**

~ Upcoming Events ~

Anaheim Amateur Radio Association
Post Office Box 2242
Anaheim, CA 92814-0242

AARA Club Officers and Volunteers

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Jim Edds, KA6G

Margaret Signorelli, WA6PZO

Web Master:

Bob Krause, KI6K

June 6: Club Breakfast at Keno's, 8 AM

June 18: Board of Directors Meeting 6:30 PM

June 20: Elmer Workshop 10 AM
Club Picnic following at 2 PM

June 23: General Membership Meeting 7 PM

June 27-28: Field Day Weekend

Following Months Calendar on Page 3

JUNE 2009

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				



~ Membership Corner ~

By Margaret Signorelli, WA6PZO

RENEWAL TIME FOR AARA MEMBERS

MAY is quickly coming to end and JUNE is our RENEWAL drive. Please print out the renewal form and send it in (with the dues) as soon as possible.

This has been a very interesting year. We are happy to add Joe (K0OV) and April (WA6OPS) to our roster and Steve (W6JBO). We are really glad to have you back with us.

This year is going to be a key year for us. We need not only the renewal dollars but we also need more club participation by the membership. Volunteering to do a program, or help with the Elmer session and planning club activities would go a long way to spark interest in the club again.

Please respond to the membership drive as soon as possible.

We will close out the roster on July 1st.

Hope to see everyone at the next meeting

Margaret WA6PZO

~ Prez Ses ~

Note: This months General Meeting has been canceled. We are continuing to negotiate with the UOC for a key to open the gate as they have gone from key pad access to an electronic key card.

The article for this month comes from an online book that was purchased from the Antennex web site. The online book features 10 chapters on the subject of antenna tuning.

The first Chapter in the book describes how to design and build a simple HF probe using only 3 parts, a capacitor, resistor and a diode which when assembled will be connected to a digital voltmeter. Having the ability to measure RF voltage in the high frequency bands takes the guesswork out of many building and troubleshooting jobs. Measuring RF voltage on an antenna under test can help us discover its resonant frequencies. In conjunction with the HF Bridge, we can use the RF probe connected to a digital voltmeter which can be used to determine how much power is going to the antenna. The RF probe constitutes a detector stage with the digital voltmeter as its load. The measurement range is from 1 to 25 RF Volts read directly from the Volts scale on the digital multimeter. The reading will be in RMS volts, equal to 0.7 of the peak value for a sine-wave signal. The HF probe will measure FR voltages from 20 KHz to 200 MHz with the upper limit actually dependent on the RF characteristics of the diode and the low end of the range limited by the RF characteristics of the capacitor.

Dennis KI6IPH

~ Monthly Events ~

CLUB BREAKFAST: 8:00 AM First Saturday of each month at Keno's Restaurant, 2661 W. La Palma Ave, Anaheim, CA 92801.

BOARD MEETING: 6:30 PM Thursday before General Meeting of each month (except December) International House of Pancakes Restaurant — 2250 Lincoln Avenue, Anaheim, CA.

ELMER (Mentor) WORKSHOP PROGRAM: Third Saturday of the month (except March and December) Lutheran Church, 12301 Magnolia St, Garden Grove. (in North Hall) Time: 10AM. Visit <http://www.aara.org> for more information & Map.

MONTHLY GENERAL MEETING: Fourth Tuesday of the Month. (except December) Guests are always welcome. Meeting starts at 7:00 PM.

~ Upcoming Events ~

JULY 2009						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

~ AARA Repeaters: K6SYU/R ~

2M Repeaters 146.19/146.79
 Long Beach, PL-1A/13 - 103.5 HZ
 St. Jude, Fullerton PL-2A/16 - 114.8 HZ

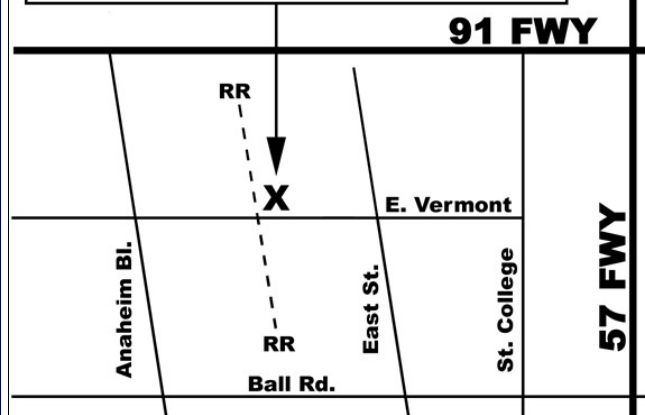
220 Repeaters 222.9/224.5
 Long Beach, PL-5A/25 - 156.7 HZ
 St. Jude, Fullerton PL-5B/26 - 162.2 HZ

Notes:

2M Repeaters Transmit a 103.5 CTCSS Tone on the output. Long Beach 2M & 220 Repeaters are linked.

Frequency format is: input/output

Anaheim Utility Service Center
909 E. Vermont, Anaheim, CA
 (Formerly the Anaheim EOC)



General Meeting Location Map

Squelch is published bimonthly (in odd numbered months) and is delivered via e-mail attachment. Please keep your Editor updated on any change of e-mail address you may have.

Submissions for Squelch are welcome. The Editor reserves the right to refuse to publish any articles deemed as not suitable and articles will be edited if required.

Send Articles and address updates to the Editor at: waltrqt@earthlink.net

All submissions are due not later than the 3rd Tuesday of the month in which Squelch is published but may be submitted at any time prior to that day. Submissions submitted late may be used in the following issue. An e-mail reminder will be sent to the membership one week prior to the due date.

~ Doing is Learning ~

As all of you may remember, I rebuilt my Alinco DJ-580T 12 volt battery pack with Maha cells. After an all-night charge in the O.E.M. Alinco charger, the handheld worked for 3 hours then shut down! Hmm, I checked the current consumption of the Alinco, squelch closed was ~100ma., receiving a signal at medium volume ~180ma. Key down current runs 1.3 amps max. If the cells were 2,700maH, it should run for some 20 hours, not 3. I went online and learned that these cells should charge at 0.27 to 1.0 amps, so that's the issue. I abandoned the Alinco charger, and used my Lambda 17 amp, 7-18 volt dc supply, and 2 DVM's. I discharged the cells entirely with a 4 watt Malibu light bulb (240ma. at 13V), then began a recharge at 500ma., watching the voltage, initially set at 13.2v. Discharging through my 'calibrated' Malibu light load took 7 hours this time. Recharging again, starting at 14.0 volts, 1,400ma, tapering to 70ma. in 9 hours. This time discharge took nearly 15 hours. I'm happy with the great increase in discharge capacity, apparently these cells need some exercise from new. Also as I had feared earlier, the O.E.M. wimpy 70ma charger is not enough. I have replaced the charger's wall wart with a 14 volt, 1/2 amp, unregulated unit. That should be perfect for a timed charger. If it's not, I have a 15V 1,500ma.wart also waiting my junk box. Now I know why I save these things.

Lessons learned for everybody:

1. These high capacity cells need to be used a bit when new to get them to fully charge.
2. They also need at least 1/10 their rating in charge current, and 1-1/2 times their rating in time-current. The AA cells at 1/2 amp will need 8 hours.
3. When charged fully, their internal resistance drops a bit, then they just get warm. The temperature rise is the best way to detect "End of Charge".

FYI, the Maha "D" cells are 11,000 maH, about 4 times the "AA" cells. The "AA" cells could throw over 24 amps shorted and not fully formed yet, so I would figure the "D" cells, fully formed have more capacity than a 10 amp/hour lead gel cell, and weigh 1/2 as much.

If you experiment with these cells, the "AA" size can get a 18 gauge wire red hot in a second or so, and the insulation to flame. The "D" cells you could easily weld wires with. Be careful how you hook things up.

JML
AF6AU

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Sat. 9:00 AM to 5:00 PM

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Anaheim Amateur Radio Association

P.O. Box 2242

Anaheim, CA 92814-0242

Membership Application and Renewal Form Date Submitted:

Name:	Call sign:	Class:
Address:		
City:	State:	Zip:
Phone Number: ()	Please <u>Do Not</u> list Phone Number in Roster <input type="checkbox"/>	
Email:	Please <u>Do Not</u> list Email Address in Roster <input type="checkbox"/>	
ARRL Member? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Life If Yes, Exp. Date (if known)		

Family Members you wish to include (must live in same household)

Name:	Call sign:	Class:	ARRL Member: <input type="checkbox"/> Yes
Name:	Call sign:	Class:	ARRL Member: <input type="checkbox"/> Yes
Name:	Call sign:	Class:	ARRL Member: <input type="checkbox"/> Yes

Important Note: If your email address changes Please let us know. The Newsletter Squelch will be delivered by email attachment and we don't want you to miss out. Squelch will ONLY be sent by US Mail if you can not receive email.

Annual Dues (Prorated Quarterly)	\$20.00	<input type="checkbox"/>	
Family Members @ \$5 each	\$5.00 x	<input type="checkbox"/>	Repeater Donation (optional) \$ _____
Student Membership	\$9.00	<input type="checkbox"/>	Total Enclosed \$ _____
Club Badge Order	\$9.00	<input type="checkbox"/>	

Please tell us your Special Interests:

Field Day
 T-Hunt
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 DX
 Public Service
 Special Event Support
 Other (including being an AARA Volunteer)

Constructive Comments and Suggestions:

Please, fill out this form and send it with your dues payment to our Membership Chairman Margaret Signorelli, WA6PZO. P.O. Box 2242, Anaheim, CA 92814-0242. **Please do not send Cash.** Please fill out form even if you are paying in person at meeting.