



# THE AIRWAVES

April 2009

SIERRA AMATEUR RADIO CLUB

An ARRL Special Service Club

RACES ARES

P O Box 1442

Ridgecrest

California

93556-1442

<b>BOARD</b>	President	Greg Roush	WA7IRW	446-4383
	First VP	John Andrus	KC6UWM	371-2190
<b>OF</b>	Second VP	Fred Moses	KG6STR	371-3582
	Secretary	Paula Herr	N6VGW	375-5324
<b>OFFICERS</b>	Treasurer	Ed Czajka	KI6PSP	384-4726

## SARC OWNED AND MAINTAINED REPEATERS

Randsburg	WA6YBN 145.34 MHz (-), PL 100.0 Hz, Wide Area, Emergency Power
Ridgecrest	WA6YBN 146.64 MHz (-), Translator, No Squelch Tail, Emergency Power
Ridgecrest	WA6YBN 147.00 MHz (+), PL 107.2 Hz
Ridgecrest	YBNBBS:WA6YBN, 145.050 MHz, Bulletin Board, 1200 Baud
Ridgecrest	#YBNSW:WA6YBN-4, 223.580 MHz, Node, 1200 Baud
Ridgecrest	#YBNSW:WA6YBN-4, 439.025 MHz, Node, 9600 Baud

### SARC Committees

<b>Technical Assistance:</b> Greg, WA7IRW 446-4383	<b>Public Relations:</b> John, KC6UWM 371-2190
<b>Program:</b> Fred, KG6STR 371-3582	<b>Airwaves Editor:</b> Mike, WA6ARA 375-5324
<b>RF Interference:</b> Bill, WA6QYR 375-8566	<b>Emergency and Public Service:</b> Mike, W6PM 793-0541

## THE AIRWAVES CALENDAR

<b>Every</b>	<b>ARRL Audio News</b> 1910 (7:10 p.m.) on 146.64 MHz	<b>04 April</b>	<b>SARC Fox Hunt – 9:00am Heritage Inn parking lot</b>
	<b>IWV Emergency Net</b> <b>Visitors Welcomed!</b> 1930 hrs (7:30pm) WA6YBN Translator 146.64 MHz (-)	<b>11 April</b>	<b>100 Mile Git-R-Done Horse Ride</b>
<b>Monday</b>		<b>27 June</b>	<b>Field Day!</b>
<b>Night</b>	<b>East Kern County Emergency Net</b> <b>Visitors Welcomed!</b> Rand repeater 145.340, pl 100 2000 hrs (8pm)	<b>AMATEUR RADIO LICENSE EXAMS</b> <b>Every Even Month, Second Saturday</b>	
<b>08 April</b>	<b>SARC Board Meeting 7:00pm</b> <b>Heritage Inn</b>	<b>11 April Volunteer License Exam Session</b> Location: Guns 4 Us, basement classroom 417 East Ridgecrest Blvd, Ridgecrest CA No handicapped access Pre-reg by 8 April. Limited to 8 applicants All must register at 9 AM Contact Elvy Hopkins NØLV 760-384-3589 E-mail <a href="mailto:lvrh7589@iwvisp.com">lvrh7589@iwvisp.com</a>	
<b>08 April</b>	<b>SARC General Meeting 7:30pm</b> <b>"Electronic Compensation for Old Ears"</b>		

## From the President's Shack

The hardest part of being President, for me, is to come up with something for this column. Should I say something about past or future club events, projects I'm working on, public service, emergency preparedness, ham classes, or what? Should I be serious or be humorous (engineer's humor is different from normal humor, of course)?

One of the concerns in ham radio is how to attract young people to the hobby. I've had a couple of folks respond to my request for ideas. One suggestion is to create a short video about ham radio. This would be similar to the one with Walter Cronkite, but aimed at young people. I know a fellow who is willing to shoot the video clips and do the editing, but we need a script of what to shoot, ideally from the viewpoint of someone who is actually young, rather than young at heart. I come from you the various ham activities that got you excited enough to get your license. I would like a volunteer to make this video project a reality.

The other suggestion is to have an outreach program for either 8<sup>th</sup> grade or high school students. The video project would be shown at schools to generate interest for an after-school, or Saturday, or summer session. The goal would be to earn their ham ticket by the end of the session. This will be pretty time-consuming, but should be rewarding. The person coordinating and interacting with the students should be fairly young, too. I need a volunteer for this also.

73,  
Greg [WA7IRW@arrl.net](mailto:WA7IRW@arrl.net)

PS: Don't forget to bring in your new toys each meeting for a show-and-tell session.

## Meeting Minutes

**Board Meeting:** All the board members were present. The routine business was discussed in preparation for the SARC general meeting. Most of the different committee chairs had nothing to report. Upcoming events were discussed, along with any new business.

**General Meeting:** The meeting was commenced at 7:30 with a welcome for our president, Greg Roush, WA7IRW. It was a great turnout with 31 in attendance. There were three visitors, Mr. & Mrs. Jim Kurshner and Ed's (KI6PSP) grandfather. Tom Ryan, N6NPG, gave a DX report.

For show & tell, we had Dennis, W6DWF, show his fuse blocks that were discussed in March's newsletter. Greg, WA7IRW, modeled his T-shirt, and showed off his little ACER notebook, a SWR meter, a SWR analyzer and a Bird watt meter. Steve, N6MVX, reported on his new Yaesu VX8R with GPS.

Bill, WA6QYR, gave a report on the 20 Mule Team horse ride that happened Feb. 28, 2009. He said it went well. There were no lost horses or people. There was a lost dog, and the ride went until about 2 a.m.

An issue put to the club was regarding the 147.000 repeater with respects to the autopatch. There

was a motion by Bob, K6WAG, and seconded by Fred, KG6STR, to terminate the phone line. After some discussion along with some alternative ideas, it was unanimously voted to terminate the phone line.

A short break for goodies and eyeball QSO, was taken before the program was presented. The program was presented by Gene, previously KI6LO. It was Part 2 of "Setting up your HF Station".

After the program, the 50/50 drawing was held. Lorilyn, KG6LEW, was the winner. Mike, WA6ARA and Paula, N6VGW supplied the homemade chocolate cookies while Greg WA7IRW did the store bought Oreos. The meeting was adjourned at 9:06 p.m.

## Treasures Report

No update available

## April Meeting Program

For the April Program "Electronic Compensation for Old Ears"

## Badges Available!

KI6BBB	Diana
W6BST	Mark
WD6DVR	Susan
K6PQ	Tik
KI6PTD	Eddy
N6SR	Skip
KG6TXJ	Cameron

## Transmitter Hunt!



The grand transmitter hunt of 11March went with too much of a hitch. We were all lost, wandering around aimlessly whilst swinging antennas in the air and muttering to ourselves. Eventually we found the quest of our nightmare, the little transmitter sounding off every 4 minutes or so. The winner was Milt, AF6MY. Good thing too, as there were more than one local spectator who

was wondering about our relative sanity in such cool weather.

The next transmitter hunt will occur on April 04. The start point is the parking lot of the Heritage Inn, same spot as the SARC meeting. Start time will be 0900, and will last about an hour. If you don't have any T-Hunt gear, come along anyway. We will hook you up with someone who does and join the fun.

## 147.00 Repeater Autopatch

The autopatch on the 147.00 machine has been shut down. Basically it was not being used and was costing quite a bit to have it available.

## Technician Class

The Sierra Amateur Radio Club Technician Class is plugging right along, up now to 12 members. We will be concluding shortly in April. Wish us luck!

## Communication Event!

The next communications event is the Get'r Done 100 mile horses ride on 10 and 11 April from Inyokern north to about Little Lake. Communicators will be needed to help keep the horses and riders from becoming too lost on the trek. Contact Bill, WA6QYR 375-8566

## Silent Key K6JLZ

Another long time member and supporter, Jack McMillan, K6JLZ of Kennedy Meadows passed away on 8 March. Jack served in the Army in the 50's. "Mac" worked at several aircraft contractors in the LA area before moving to China Lake. He worked in the fuse area while at the lake. He retired in Ridgecrest and eventually moved his home into the Kennedy Meadows area of the Sierras. Mac was an avid VHF'r. He was 81. From the editor...

I also knew Mac. He was a fine individual and a great ham. More than once SARC had it's Field Day event at his place in Kennedy Meadows. Once in a while, late at night, I would find Mac on 160 meters where we would chat away. Mac, we will all miss you.

## Ask Elmer!

**Ask Elmer!** is a chance for anyone, both new and old hams, to ask a question and get, hopefully, accurate and useful information. This can be a basic question of operating or a detailed one on a new mode. Send the editor your questions and I will distribute them to a group of local hams who will come up with the answer. If they don't know, I'll go out and find the answer to the amateur community outside of the IWV.

The Question...

**Ladder line is supposed to be better than coax for feeding multi-band antennas. How far away from metal should the ladder line be kept? How do I keep the ladder line from blowing around and up against a metal mast?**

### The Answer...

Generally, twin lead and ladder line should be kept away from metal by at least twice the width of the line. For example, ladder line is about 1" wide, so should be at least 2" from metal. Both wires in the line should be equal distance from the metal so that the effect on the fields surrounding each wire are about the same. More stand-off distance is better, up to 12". Stand-offs are used to support the ladder line at a fixed distance from the metal mast. A stand-off can be made from PVC pipe or other plastic material. An example of a PVC stand-off can be found in the July 2005 QST Hints and Kinks section "Heavy-Duty Stand-off Insulators for Ladder Line". Use a 12" stand-off every 8-10 feet along the length of the mast to keep the line from blowing about. Shorter stand-offs would need to be closer together.

### Also...

It might be added that there should also be a twist of 1 rotation of the ladder line every 6 to 10 foot to help prevent common mode currents from developing in the 2 conductors (same reason the AC power lines cross themselves every so often) and the twist also helps break up oscillations due to wind.

### ==> FCC CLARIFIES WHAT CONSTITUTES AN AMATEUR RADIO REPEATER from the:

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The ARRL Letter  
Vol. 28, No. 12  
March 27, 2009  
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In December 2007, Gary Mitchell, WB6YRU, President of the Northern California Packet Association (NCPA), filed a Petition with the FCC, asking for the Commission to clarify the definition of a repeater. According to Part 97, Section 3(a)(39), a repeater in the amateur service is "[a]n amateur station that simultaneously retransmits the transmission of another amateur station on a different channel or channels."

Mitchell sought clarification on the word "simultaneously," asking if it referred to the signal information being retransmitted, or to the fact that the receiver and transmitter must both be active at the same time while acting on the same signal information. On March 23, 2009, the Commission clarified that even if there is a slight delay between what is received and what it transmits (as in the case of D-STAR and other digital repeaters), it is considered simultaneous if the receiver and transmitter are both active at the same time.

Mitchell pointed out in his petition that while the Commission's Rules specify on which bands amateur repeaters may operate, "some amateur repeaters are operating on bands other than set forth in Section

97.205(b) with systems that are essentially voice repeater stations, but that digitize and retransmit the user's voice, on the theory that because there is a small delay in retransmitting the signal of another amateur station, the signal is not 'simultaneously' retransmitted and, therefore, the system is not a repeater."

In its reply, the Commission pointed out that prior to 1994, a repeater was defined as "[a]n amateur station that automatically retransmits the signals of other stations." This, the Commission told Mitchell, was revised to clarify "that certain accommodations for message forwarding systems do not apply to other operating activities such as repeaters and auxiliary stations." The Commission proposed to define a repeater as

"[a]n amateur station that instantaneously retransmits the transmission of another amateur station on a different channel or channels," but ultimately replaced "instantaneously" with "simultaneously" because commenters noted that there is always a small propagation delay through a repeater. As one commenter explained, "The word 'simultaneously' in this case means that the repeater is receiving and transmitting concurrently, whereas each signal might be slightly displaced in time between receive and transmit."

To be able to repeat another station's transmission, the Commission said that a repeater "must be able to receive a transmission from another station and retransmit it. Because the word 'simultaneously' in the definition is used to modify 'retransmit,' we believe it refers to a repeater station's transmitter being active when retransmitting the signal received by the repeater station's receiver from another amateur station. We conclude, therefore, that 'simultaneously' as used in the definition of a repeater refers to the receiver and transmitter both being active at the same time."

### ==> Get Ready for the ARRL Field Day 2009 from the:

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The ARRL Letter  
Vol. 28, No. 12  
March 27, 2009  
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The official 2009 ARRL Field Day Web page is up and running <http://www.arrl.org/FieldDay>. This page includes a summary of available resources, with links to Field Day forms and rules, logos and reference links. The page also includes a quick link to the map-based Field Day Station Locator where users can search for public Field Day sites. "Field Day is the largest on-the-air operating event," said ARRL Field Day Manager Dan Henderson, N1ND. "The event draws tens of thousands of radio amateurs to the airwaves over a single weekend." This year, Field Day is June 27-28. According to Henderson, it has become a tradition to create a new logo each year to commemorate Field Day: "This year's logo evokes a sense of the 'great outdoors' in camp-like fashion. We hope the logo inspires even more participants to get active, get outdoors and get on-the-air." This year's logo was designed by ARRL Graphic

Arts Supervisor Sue Fagan, KB1OKW, and Senior Technical Illustrator David Pingree, N1NAS. The Field Day page also includes a link for ordering commemorative Field Day T-shirts, hats, pins and other supplies. All of the items are available for ordering now; many of the items are already in stock. Radio clubs are encouraged to order early.

**Editor's Note...** Gene, W5DQ (formally KI6LO) has agreed to be the coordinator for SARC's 2009 Field Day event.

## FOR SALE

If you haven't heard, SARC and Amateur Radio lost a member, Jack McMillan K6JLZ in February. Chuck Swedblom, WA6EXV and I have been moving stuff out of his shack and bringing it to Ridgecrest. 60 years of collecting radio items and building HF and VHF hardware. Currently there are racks of various kinds., short and tall, bear frames and cabinets. Power supplies and transformers. Lots of "things". Chuck has the big collection of tubes, new in boxes. Chuck is checking out some military receivers built by Collins. One of them is a Collins R388 that goes from 500KHz to 30MHz. Model URR-23A s/n 190. Navy model CY-1235/URR. Put in service Nov 1952. Second one: E.H. Scott Radio Labs. Navy Radio (The label has been removed) S/N 3231 Put in service: 3-14-45. Covers 80KHz to 24MHz. Third one: Collins R390 A/URR. S/N 4666 No cabinet. No Date. It covers 10KHz to 32MHz. A mod has been made to bring out video to the back panel. Another radio found is a National Radio SW54 550KHz to 30MHz. No S/N Date: January 1946. AC/DC. There are more items to come. This is just the second load. If you would like to see or talk about the stuff, please contact Bill WA6QYR 375-8566 or [bburns@ridgenet.net](mailto:bburns@ridgenet.net).

## FOR SALE

Cushcraft 30 or 40 meter add on to the A3S or A4S Beams New and together. \$100. Contact Tom Ryan (760) 384-4842

For the collectors of old rigs – Galaxy GT-550 Transceiver (550 watts) Complete with power supply, speaker, external VFO and microphone. In their original boxes. \$200 Contact Tom Ryan (760) 384-4842

## FOR SALE

Yaesu FT-2800M 2 meter rig. virtually new. This has many features including internet connectivity, 65 Watts max out. with programming cable and software. Less than one hour time on it. Never mobile. \$150.00 Contact Ron WB6GKI (760) 375-2156

**Check out the SARC Web Page**  
**[www.qsl.net/wa6ybn/](http://www.qsl.net/wa6ybn/)**

**MEMBERSHIP APPLICATION**  
**SIERRA AMATEUR RADIO CLUB of the HIGH MOJAVE**

Please fill out this form. It is used to make the club roster and newsletter mailing list. This form must accompany all membership and badge payments. All renewals are due 31 March. Please mail this application and your payment to SARC, POB 1442, Ridgecrest, CA 93556-1442 or give them to the Secretary at a meeting.

**Membership – Please circle one**

Individual via Mail - \$20.00	Individual via Email - \$17.00
Family via Mail - \$30.00	Family via Email - \$27.00
Full time student via Mail - \$10.00	Full time student via Email - \$8.50
Active Duty Military via Mail - \$10.00	Active Duty Military via Email - \$8.50

**Individual or First Family Member**

Date \_\_\_\_\_

Name: Last \_\_\_\_\_ First \_\_\_\_\_ Call Sign \_\_\_\_\_

Novice \_\_\_ Tech \_\_\_ Gen \_\_\_ Adv \_\_\_ Ex \_\_\_ ARRL Member : Yes \_\_\_ No \_\_\_

E-Mail Address \_\_\_\_\_ (Note: Email address is not shared, for newsletter only)

Mailing address: \_\_\_\_\_ City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Phone: \_\_\_\_\_

**Second Family Member** (For more family members please duplicate)

Name: Last \_\_\_\_\_ First \_\_\_\_\_ Call Sign \_\_\_\_\_

Novice \_\_\_ Tech \_\_\_ Gen \_\_\_ Adv \_\_\_ Ex \_\_\_ ARRL Member : Yes \_\_\_ No \_\_\_

**DO NOT DETACH**

**BADGE ORDER**

**DO NOT DETACH**

The club badge shows your Amateur Call, your Name and Sierra Amateur Radio Club. It will identify you at club meetings and public service events. To order a badge, provide the information below and, include \$11.00, for *each* badge in Membership Application total above or with this form and mail to SARC, POB 1442, Ridgecrest, CA 93556-1442 or give it to the Treasurer at a meeting.

Name to put on my badge is \_\_\_\_\_ (What you like to be called)

Amateur call for my badge is \_\_\_\_\_

# **THE AIRWAVES NEWSLETTER**

## **April 2009**

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### **RACES, ARES and INDIAN WELLS VALLEY EMERGENCY NET MEMBERS**

In case of impending or current emergency, monitor the SARC translator on 146.64/04 MHz or the backup simplex frequency of 146.52 MHz. W6PM, Mike or AI6A, John, the local RACES ECs, will coordinate mobilization. An Emergency Net Control Station will direct radio communications. Check in. State your capabilities. Be prepared to go outside the IWV for at least three days. An E-Pac should contain: your RACES card, radios and accessories, batteries, charger, paper, pen, clipboard, flashlight with spare batteries, timepiece, headgear, sunglasses, spare glasses, your medications, your medical history, first aid kit, severe weather clothing, non-perishable food, 3 gal. water, sleeping bag.

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**SIERRA AMATEUR RADIO CLUB  
POST OFFICE BOX 1442  
RIDGECREST, CA 93556-1442**