

Sierra Signals

Sierra Foothills Amateur Radio Club

Auburn, CA

An ARRL Special Service Club

<http://sf-arc.org>

February 2005

P.O. Box 1005, Newcastle, CA 95658

SFARC MEMBER OF THE MONTH

George Simmons, KG6LSB

Sierra Signals caught up with George over a sandwich at the Quizno's in Auburn on a bright, almost warm sunny day, where, notebook out, he disclosed his interesting and sometimes humorous life story. George, the creator of the name "Sierra Signals," was born in Boston in 1938. He grew up in the Northeast, and attended St. Lawrence University. As now, entrance to the military academies was controlled by one's legislators, but unlike now, at that time they nominated you to a pool for each academy. George applied, and ultimately received an appointment to the US Naval Academy from which he graduated in 1961. In the summers, the midshipmen went on, shall we say "Field Trips," with regular Navy units. On his way to Europe on a cruiser on one such trip, he received word that his Father had died, and he began a trip home, first to a nearby aircraft carrier, and then to Africa, the Azores, and

Nova Scotia before managing to get home. He never did make it to Europe.

His goal was to become a helicopter pilot, and he entered flight school upon graduation. On active duty, he flew several aircraft, and George is full of interesting stories and adventures. One began on an over-water patrol in the Atlantic. He was always fooling around with the radios on the aircraft, and this time, he switched one of the radios to 2.182 MHz, one of the maritime distress frequencies. There was a mayday call in progress from a nearby fishing boat that had picked up a pilot who had crashed. Breaking in, George advised the Coast Guard of their position, and headed for the boat. (continued on page 1)

At the Key of S.F.A.R.C.

OFFICERS

PRESIDENT

Casey McPartland, W7IB
w7ib@arrl.net

VICE PRESIDENT

open

SECRETARY

Paul Alford, KB6NYB
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dhodge2644@aol.com

DIRECTORS

Kevin Reid, K7TST
kevin_r89@netzero.net

George Simmons, KG6LSB
grsim@mindspring.com

Larry Hodge, AE6CE

REPORTERS

Satellites: Greg, KO6TH

History: Gary, KQ6RT

Digital/VE: Rob, WW6G

WEBMASTER

Marc North, W6SQL
marc@marcnorth.com

RESOURCES

REPEATERS

145.430 (-0.6 MHz/PL 162.2)
440.575 (+5.0 MHz/PL 94.8)
223.860 (-1.6 MHz/PL 100.0)

CLUB NET

All welcome to check in
Thursdays, 7:30PM, K6ARR/R
145.430

CLUB MEETINGS

Second Friday of the month,
7:30PM at the Auburn Library,
350 Nevada St,

CLUB BREAKFAST

Last Sat of the month at Susie's
Café, Cirby at Riverside, Roseville
- 8:00 AM

NET CONTROL OPS

Dave Jenkins, WB6RBE
Gary Cunningham, KQ6RT
Joe Sylvia, KF6OQY
Casey McPartland, W7IB

EDITOR

Fred Jensen, K6DGW
530.885.8251
k6dgw@arrl.net

2005 Calendar of Events

(Operating Events in Italics)

Feb 7	<i>Spartan Sprint (QRP CW Contest)</i>
Feb 11	Regular Meeting
Feb 11-13	<i>CQ WPX Contest (RTTY)</i>
Feb 13	<i>North American Sprint (CW)</i>
Feb 18-20	<i>ARRL DX Contest (CW)</i>
Feb 26	Club Breakfast
Feb 26	<i>North American QSO Party (RTTY)</i>
Mar 5-6	<i>ARRL Intl. DX Contest - SSB</i>
Mar 11	Regular Meeting

We encourage members to receive Sierra Signals via email to save the Club the cost of reproduction and mailing

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The fishermen feared that the pilot might have broken his back so they had strapped him down to a mattress. This, and the pilot's other injuries prevented them from hoisting him into the helicopter, but fortunately, their aircraft was fitted with pontoons so they could land on the water. Breaking out a raft, they hooked it to the hoist line and the crew chief

let the rotor wash blow him over to the boat where the pilot, still on the mattress, was loaded into the raft. Then, using the hoist line, they pulled the raft back. By this time, the raft was half-full of water, and the mattress was soaked and way too heavy for the crewman to lift into the helicopter. Ultimately, George jumped into the water and the two of them managed to get the injured pilot into the chopper and on the way to a hospital.

He was discharged from the Navy in 1971, and his first civilian job was at a century-old textile mill in Griswoldville, MA that had the unique feature of still being water powered. A second division of the same company took him to Athens, GA where they made a variety of textile items such as airplane pillows, bandages, gauze, and the like. While in Georgia, he attempted to join the Navy Reserve, however they had no slots, so he ended up in the Army Reserve there. From Georgia, he and his family moved to Enterprise, AL, however he still commuted once a month back to Athens for his Reserve Drills. This was followed by a helicopter maintenance job in Texas, where he met and married his wife Pat, a registered nurse in the Air Force at Wilford Hall Hospital at Lackland AFB in San Antonio. They finally moved out to McClellan AFB in 1986, and decided to settle in Auburn a year later.

Ham radio entered George's life fairly recently, but as early as the 60's, he was interested in CB radio (KBS6109). As a pilot, he had learned the code ("several times" he says), but never became proficient with it as a means of communicating, so he sort of ignored ham radio. In early 2002, he heard about the SFARC, attended a class, did a lot of study on the Internet, and passed his Technician exam in June of that year. He currently operates VHF and UHF FM with an FT-7100 mobile, an ICOM, a TH-F6A, and 2 FT-817's. He also has an old Swan 250.

His interests within the SFARC center on the club's activities, and he has a strong interest in ARES and emergency communications. He likes the fact that the SFARC is a "general interest" club because it provides something for everyone. George was a Director last year and is on the Board again this year. He is also coordinating the MS Walk in April (see the notice in this issue). George is also a member and officer in the Auburn Veterans of Foreign Wars.

You'll hear George on the K6ARR 2m repeater, and active on the ARES and club nets, and he makes most meetings.

Meeting Minutes *Board Meeting and General Meeting* *14 January 2005*

Minutes of the Sierra Foothills Amateur Radio Club meeting held on Friday, 14 January, 2005, at the Auburn, California main library.

1845: Board of directors meeting. Attending: Casey McPartland, W7IB (President); Kevin Reid, K7TST, (Director); and Larry Hodge, AE6CE (Director).

1930: Meeting was called to order by SFARC President Casey McPartland, W7IB. He led all 27 members, attending, in the pledge of allegiance to the flag. He also introduced new club officers to attendees of the general meeting.

The Treasurer's report was made by Donna Hodge, KD6PJN.

The VE Report was made by Larry Hodge, AE6CE.

Debbie, KF6LXN, provided tasty cookies and coffee.

The ARES Report was given by Casey McPartland, W7IB. He discussed the up coming ARES pot-luck dinner at the Vets Hall, Sunday, 23 Jan. 2005 @ 5:00 PM. Coffee and eating utensils will be provided; bring your own beverage and napkins. Casey also mentioned we have a new repeater: 146.640 (-600 / PL=156.7). He said for this first gen'l. meeting it would be one of open discussion.

2020: Break.

2052: Meeting resumes. Raffle held.

2103: Meeting adjourned.

Respectfully Submitted

Paul Alford KB6NYB

Secretary

(The Best of) *Forty & Thirty Years Ago* *Reported by Gary, KQ6RT, SFARC Historian*

As I gaze back through the minutes of the club meetings from forty years ago, I find no entry for either February 1965 or 1975. So as a special treat this month we will take another look at the minutes of the very first meeting back in 1958. Next month we will continue with the minutes of March 1958. Gary

A Club is Born

8:15 P.M. July 16, 1958. A group of Auburn Amateur operators and other non-licensed people met at the U.S. Naval Reserve Electronics Facility to discuss the possibility of organizing an Amateur Radio Club.

Response among those present strongly indicates the desire to organize such a club. Aside from the social aspect of such a proposed organization, the following

reasons were stated for the need for a club:

1. So that the Auburn area hams can help each other in improving their equipment, operating techniques, TVI problems, etc.
2. So that Civil Defense and other public service functions may be carried out more effectively.
3. So that new prospective Amateurs may be encouraged and assisted in obtaining their licenses.
4. So that Field Day and transmitter hunt activities may be more effectively planned.
5. So that some sort of message handling plan can be worked out for the Auburn area.

It was determined that after the first three meetings, the regular meetings would be held once a month (on a Wednesday). The next three meetings will be held on July 30, August 13, and August 27. The Constitution and by-laws will be formulated for adoption and club officers elected during the next two meetings. The name for the club will be decided upon at the July 30 meeting with WN6PMF (Walt Dowdy) donating a prize for the person suggesting the name to be adopted.

The following persons were present at the first meeting:

T.M. Woods, W6ANX
 W.C. Bauman, K6CBP
 Ed M. Glass, KN6SYJ
 Earl Wilson, K6GPB
 Katherine Woods, W6HDG
 Arlene Murch, W6UAS
 L.W. Waterman, W6ILR
 R.H. Hicks, K6VSS
 Gerald Murch, W6LTR
 Carl Rolufs, W6QKO
 Walter Dowdy, WN6PMF
 Don Richier, K6SMK
 Siegfried Goepner
 Jay Peat
 Van Bulf (age 13)
 Charles Waterman (age 10)
 Robert Neil
 Bob Richier
 Frank Perry, K6TWQ
 Vistor from Camarillo

Arlene Murch
 Secretary

MS Walk

Thanks to George, KG6LSB

All volunteers for the Auburn MS walk on April 2nd must attend a volunteer training session on Saturday March 12 at 1 PM at the Auburn Veterans Memorial Hall, 100 East St. It should only be 2 hours long.

Please contact me either at 530.888.0860 or kg6lsb@arrl.net to confirm your "reservation" for the meeting. To date I have received only 2 replies. Thanks Paul and Birton.

At the last ARES meeting we talked about how we can best use our dead time while the walk is going on and the radios are silent.

The plans are to practice:

1. Some frequency switching including use of simplex and other repeaters.
2. Some band switching 2 meter and 70 cm
3. Some message traffic handling.

For message traffic there will be some traffic for each station to send and also to receive. We all need practice and this will be a great time for that. Plus we get to use the message forms that Kevin and Joe got Placer County to buy for us. I hope to have a play scenario not related to the walk for us to use during the walk.

We anticipate having the following stations manned: NCS, 4 rest stops, 2 mobile vehicles, a "shadow" for the Site leader using a handheld or other type portable radio (backpack?)

For radios I think it would be best to have a mobile radio, but if you only have a HT that will work too. Some people are working on portable mobile stations and this would be a fine chance to utilize them. BUT please don't be intimidated what someone else brings just bring what you have and wish to exercise.

73,

George, KG6LSB

PCSat Back in Sunlight

Amateur Satellites Reported by Greg, KO6TH



For the next few weeks, PCSat, the little satellite that seemingly won't give up, will be bathed in full sunlight and is expected to be operational. This satellite was built by graduate students at the U.S. Naval Academy as a project to give aerospace students some hands-on experience designing and operating a real spacecraft. It was launched in September of 2001, and was expected to last only for a few months due to the use of commercial (non-space hardened) components. But, with some special care, PCSat has been kept alive, and continues to amaze and instruct its builders (and the rest of us as well!).

PCSat is an APRS relay satellite. It listens on 145.825 mhz for standard terrestrial 1200 BAUD packet, and repeats what it hears back down to Earth. The satellite is part of a complete network of APRS relay nodes, and is linked to the Internet website at <http://www.findu.com/cgi-bin/pcsat.cgi> through ground stations around the world. To appear on the map, simply re-tune your APRS station to 145.825 during a pass and announce your location in APRS format. The satellite will hear your message, relay it back down to a ground station, and from there it will be passed on to the Web. Please, to keep PCSat healthy, the management requests no unattended operation; see the user agreement at <http://www.ew.usna.edu/~bruninga/pcsat.html>. There's also a great history of the satellite at that site.

PCSat is in a polar orbit that is not Sun-synchronous. What this means is that the plane of the satellite's orbit (the imaginary disk that the satellite path is in) rotates slowly around the Earth's axis. At times this disk is broadside to the Sun, keeping the satellite powered up continually. At other times it is edge-on to the Sun, which puts the satellite in the Earth's shadow every orbit. Those commercial components on the bird include the batteries, which are not in very good shape. They are not strong enough to power the transmitter when not helped along by the solar panels. In fact, the solar panels themselves are not strong enough to power the satellite continuously. So it takes some time to charge things up between packet bursts, and care to not use the satellite when in shadow, in order to keep it running.

Since an effective ground station simply consists of standard 1200 BAUD packet equipment, and a small antenna (a ground plane antenna is fine), many hams are ready to become satellite operators. Again, set your transmitter to the satellite's uplink frequency, program your TNC to the APRS aliases of RELAY, WIDE, and wait for the bird to appear. If you don't have a satellite tracking program, look at the internet "jtrack" website (<http://science.nasa.gov/Realtime/JTrack/>) to see when the next pass will be. The website <http://www.ew.usna.edu/~bruninga/iss-faq.html> has some useful tips and tricks for a successful pass.

Good luck, and I hope to see your callsign on Findu.com!

73,

Greg KO6TH

ARES

Reported by Joe, WB6AGR

Potluck Meeting

On 23 Jan 2005, we had an ARES Potluck Meeting. We had about 18 or so show up at the Veterans Bldg in Auburn at 5 pm. After some small talk and large eating, we got down to business.

We discussed plans for the MS Walk in Auburn in April. During the event we will also do a little message handling practice. Looks Like we will need about 15 or so Operators, anyone interested contact George KG6LSB.

Susan, KG6UIE from Sutter Roseville Hospital was there and she has invited us to hold our next meeting at the Hospital, probably will do that in late March or early April.

Kevin K6KWD from Roseville Fire Dept. provided the group with a copy of the ARES Field Organization Manual, and a pad of NTS message forms.

During the month of February, during our Sunday night nets, we plan to try out our coverage on the 146.64 repeater and also do a simplex test on 146.52.

Thanks to Ralph W6RWL we have a new (used) 2m/440 Radio to replace the old Azden at Auburn Faith Hospital in Auburn.

As a reminder we hold our weekly 2m net on Sunday Night at 7:30pm on the K6ARR repeater.

On 5 and 6 Feb, there will be a Ham Swap and dedication of the new station at the ARC building in Yuba City, I think the Swap is on Sunday, I will have more details latter on the Thursday Night Net

Joe Park WB6AGR
EC Placer Co. ARES

Ham Radio To The Rescue (Yet Again!)

(The following account was written by Doug, WA6ATE, and appeared on the Cactus Intertie reflector. It is published here with Doug's permission)

On January 9th and 10th 2005, the last of three powerful storms slammed into the Ventura California Coastline, impairing or disabling repeater systems that are normally used by Ventura County ARES and RACES emergency communications groups. The Rabbit Radio Network Sea Cliff site, W6RRN-SC, was turned over to the Red Cross Ventura Chapter to provide communications between the Ventura County Emergency Operations Center, the Ventura Red Cross Chapter house and the three Red Cross evacuation shelters in Piru, Fillmore and Ventura.



The Sea Cliff site, itself solar powered, had not seen the sun for approximately four days prior to the emergency. The radio system was configured so that the remote base UHF repeater was used

by the EOC and Red Cross organizers, while the Two-meter remote radio was used to connect the WA6ZTX South Mountain 2m repeater (and simplex mobile users) to the emergency providers. The UHF repeater and the 2m Remote were tied together through the Remote Base control system. The remotely controlled Data Acquisition system that was installed during the last upgrade and connected to the remote base controller, monitored critical parameters including solar cell voltage, battery voltage, regulated DC voltage, charge current, battery temperature, outside air temperature and building interior air temperature. This capability was designed to assure that the power would be sufficient to supply the

communications systems in the installation without damaging the high-tech batteries due to a low-charge condition. We were fortunate that the frequent lightning strikes that were occurring in the thunder storms did not strike the facility.

When the Sea Cliff Remote Base was first built, the two-meter remote was programmed by Emmett Dunlap, WA6COT, to accept the ARES/RACES Ventura County designated 2m Amateur Radio Area emergency frequencies. The frequency list includes some of the ARES/RACES Area simplex frequencies as well as all of the designated repeaters, and a talk-around capability on the primary Emergency 2m repeater. The CTCSS encode/decode capability of the 2m remote provided additional noise reduction and security during the Emergency. Although I do not yet have a complete list of all of the Hams in ARES/RACES, Red Cross and the Ventura Amateur Radio Community that used /operated the Sea Cliff site, the following Rabbit Radio Network Members spent a sleepless and thoroughly soaked 48 hours participating in the Emergency.

Everett, WA6CRE, made the initial contact with Red Cross, designed the communications network, was Net Operator, configured the remote and later served as the control operator while the Red Cross used the remote base.

Matt, W6KGB monitored the batteries and covered Everett by monitoring the network and supporting the Emergency communications. It is a good thing that Matt doesn't sleep!

Rick, KQ6NO did triple duty, manning evacuation shelters, operating the emergency net and helping out at the EOC, and undoubtedly is now working on stacks of documentation required by ARES/RACES, the Red Cross and the FCC.

This is Rabbit Radio's second assist in serious emergencies. The first was two years ago during the terrifying Grand Prix fire that denuded the hillsides of Chatsworth Peak, and the resulting floods. We are proud to assist the local Community, but, "enough, already!"

You can view the Seacliff site on our Web Site, www.rabbitradio.org.

73,

Doug WA6ATE

A Little Background

Rabbit Radio is a club in the Thousand Oaks - Simi Valley - Ventura area. It's leader (and owner and designer of all the equipment) is Emmett Dunlap, WA6COT, and it is dedicated to operating and maintaining a group of linked 440 MHz repeaters and 2 meter remote base stations. Rabbit is an affiliate of the Cactus Intertie, a "system of systems" that provide UHF coverage from Tahoe/Reno, through the Bay Area, down to So. California, and across the Southwest. There are links from the system into Utah and Colorado as well. The Cactus Intertie meets the Armadillo Network (aka "The National Radio Network of Texas") between Dark Canyon, NM and No Trees, TX. That network (and another named Intertie Inc.) covers essentially all of the major cities and highway routes in Texas, terminating near Galveston.

Cactus is made up of 24 affiliate clubs, each maintaining their part of the overall system. Rabbit Radio, and in fact the entire Cactus Intertie have established a Memorandum of Understanding with the American Red Cross and a number of local public agencies for use of parts of the system during emergencies.

The truly amazing part of Cactus (and the reason that Rabbit was able to "reconfigure" their system for the emergency) is that the entire network of something over 150 sites can be fully controlled through any one of them using the DTMF pad on your radio. The links between sites are in a number of ham bands, including 420 MHz, 900 Mhz, 1.2 GHz, and microwave bands. All of the links are full-duplex, and all of the link audio paths have a flat frequency response.

Since any member of any Cactus affiliate is a Control Operator of the entire system, the requirements of Part 97 of the FCC Rules demand that the entire system be operated as a "closed" system so that control over the system usage can be maintained. Thus, to use any part of the system, you must be a member of one of the affiliates.

The local Cactus affiliate is the Sierra Radio Assn., and 3 of its 8 sites (Bald Mt east of Georgetown, Squaw Peak 9,000' at the top of Squaw Valley, and Incline NV) are reconfigured each year to support the Western States Endurance Run and the Tevis Cup Equestrian Endurance ride from Tahoe to Auburn. The SRA Web site is at www.k6sra.org and information on the Cactus Intertie can be found at www.cactus-intertie.org

National/International Ham News

Courtesy of the ARRL

Canada Will Likely Drop Morse Code Requirements

Radio Amateurs of Canada (RAC) reports that an Industry Canada (IC) analysis has found "overwhelming agreement" that Canada should move away from retaining a Morse code requirement as "the sole means of gaining access" to the HF amateur bands. IC has posted a summary of comments from the amateur community to RAC's Recommendations from Radio Amateurs of Canada to Industry Canada concerning Morse Code and Related Matters.

"Amateurs should note that while the responses heavily favored deletion of the Morse Qualification as a requirement for access to the HF bands, Industry Canada still has to make and announce a decision on Morse retention or deletion," RAC emphasized. IC reported 123 comments in favor of relaxing the code requirement in Canada and only 19 "clearly opposed." Another six comments were inconclusive.

Here in the US, the FCC has made no recommendation or decision regarding the future of the current 5 WPM (Element 1) Morse requirement for HF access. It's also reviewing several petitions, including one from the ARRL, that propose further Amateur Radio license restructuring.

SIERRA FOOTHILLS AMATEUR RADIO CLUB
2005 MEMBERSHIP APPLICATION

Name: _____ Call: _____ Class: _____ e-mail: _____

Address: _____ City: _____ State: _____ Zip: _____

Associate Name: _____ Call: _____ Class: _____

Phone Number: _____ Application: (Circle One) New Renewal

Member Dues: Circle Amounts That Apply. Applications received in the middle of the year will be pro rated. Contact the President or Treasurer for exact rate.

Membership:	\$22.00	Name Badge:	\$7.00
Associate:	\$ 7.00	Repeater Donation:	\$ _____
Auto Patch Donation:	\$ _____	Newsletter Booster:	\$ _____
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