

December Meeting

On Wednesday, 12 December, 15 SARC members and visitors braved the cold and fog to gather for some holiday cheer at the Blood Center. They discussed club business, including an interference problem with our repeater, which appears to be headed towards a successful resolution, thanks to the efforts of Les, Keith and Stan. Possible 1998 special event operations were discussed, along with the fate of the USS Hornet.

Club members also unanimously elected a new slate of club leaders for 1998:

President: Gary Bryant
Vice-President: Vacant
Secretary: Jim Rich
Treasurer: Steve Cates
Board of Directors:
Tom Preston Herb Bennett
Glen Hartzell Stan Harter
Jim White Les Ballinger

The Board will try to fill four important appointed positions at the next meeting: Trustee, Mike and Key Editor, Public Information Officer, and Technical Coordinator. Keith Crandall is willing to continue to serve as SARC Trustee. Contact any of the officers or directors if you are willing to fill any of the other positions, or if you would like to be Vice President. That vacancy will be filled according to the Club Bylaws.

Members and visitors (which included our President-elect's charming mother) then enjoyed pizza and holiday deserts. The meeting concluded with a white elephant raffle, featuring many previously-owned items donated by Keith, K6QIF, and a 1998 ARRL Handbook, a \$30 value which was donated by the fine folks at the Radio Place. -

by Jim Rich, N6SZQ

USS Hornet in Peril

In 1942 Col. Jimmy Doolittle led 16 B-25 bombers on a surprise bombing mission against Tokyo. They took off from the USS Hornet. Later that year the USS Hornet was sunk during the Battle of Santa Cruz. To replace her the US Navy launched a new USS Hornet in 1943. This aircraft carrier saw extensive action during World War II. Her aircraft bombed and strafed Truk, Iwo Jima, Saipan and helped provide air cover for the Okinawa invasion, which Jim Rich's Dad participated in. The USS Hornet earned seven battle stars and a Presidential Unit Citation.

Later, the USS Hornet saw action during the Korean War and the Cold War. She was modified for anti-submarine use and was also used to recover some of the Apollo astronauts. Finally, she was decommissioned in 1970. She was designated a National Historic Landmark in 1991.

The USS Hornet is now at Alameda NAS. N6SZQ's Dad saw her in October, and talked with one of the leaders of the Hornet preservation effort. The Hornet Foundation is raising funds to begin restoration work, to save it as a floating museum, rather than have it cut up and sold for scrap iron. They hope to begin restoration work soon.

At the December meeting Jim, N6SZQ, passed around a Hornet brochure and a fund-raising letter from the Hornet Foundation. Our President, Les, WA6EQQ, is a Navy veteran. He agreed to contact the head of the Foundation, and get more information about how our club could help. Perhaps we could take up a tax-deductible donation from among the SARC members, and some of might want to spend a day or two on Board the Hornet, helping to restore the radio room. Then, when the Hornet is finally restored, SARC members would be among those who would operate a Special Event station from the USS Hornet. If you would like more information or want to volunteer to help, just contact either Les Ballinger or Jim Rich.

- by N6SZQ

November Meeting

Our President, Les, WA6EQQ, began the November SARC meeting by welcoming the 17

members and visitors. After a brief discussion of club business he introduced our speaker, Vern Dawson, K6RRC. He talked about mobile HF antennas. He showed how even an electric screw driver can be used to raise and lower a mobile HF antenna. Stan Harter then discussed Pacificon 97, and its session on emergency communications. Les opened the nominations for next year's SARC officers. The meeting concluded with a White Elephant raffle.

High-Tech Emergency Communications

WASHINGTON December 18, 1997 -- Responding to the dire needs of Guam residents devastated by Typhoon Paka, the Federal Emergency Management Agency (FEMA) dispatched personnel and emergency equipment to assist in the clean up and repair of the island. Typhoon Paka lashed Guam on Dec. 16 with torrential rains and wind gusts up to 190 miles per hour. . . .

FEMA is moving two Mobile Emergency Response Support (MERS) units from Bothell, Wash., and Maynard, Mass., to Guam. MERS is an advanced transportable telecommunications system that is capable of providing communications needed for various levels of disaster response requirements.

The Department of Defense (DoD) is providing airlift support for the movement of MERS units, as well as movement of personnel and equipment and FEMA's Mobile Telecommunications Systems (MATTS). MATTS provides satellite and telephone switch capability with supporting power systems for emergency communications usage.

- from a recent FEMA news release

Question: Who was the first American President to be sworn into office by a woman? The answer appears later in this issue.

January Meeting

On Wednesday, January 14, the SARC will meet at the Blood Center at 7 p.m. We are working to arrange for a speaker from the OES Fire Division, who would talk on the Incident Command System.

We will also discuss club business, including possible special event operations. See you there!

SARC Board Meeting

The SARC Board met on Tuesday, December 23, at Keith's house. We discussed possible alternative meeting sites for a few months in 1998, interference to our repeater, future programs and special events, club finances and filling vacant club positions. The Board decided not to raise dues.

Help Wanted: Mike & Key Editor

Doug Barbe, who edited our newsletter, has moved away. We need someone to take his place. The SARC Secretary is putting out *SARC News* until a new Editor can be found to revive *Mike & Key*. So if you miss *Mike & Key's* cartoons, photos, jokes, letters, reprinted articles and advertisements, why don't you volunteer to be Editor or Co-Editor? Most of the articles are written by others. All you need is a PC or Mac, an Internet connection, and some spare time. If you are interested, contact a Club officer.

The Telecommunications Revolution

On September 25, 1996, Dr. Thomas Hazlett, UC Davis, talked to the Sacramento Economics Roundtable on "Roadblocks on the Information Superhighway". This article summarizes the most interesting and relevant points of his talk.

Dr. Hazlett, former FCC Chief Economist, recently visited Guatemala, which he believes has "the most progressive spectrum allocation policy in the world", one which lets the market forces allocate frequencies in the radio spectrum. In the 1950's Dr. Coase, Nobel laureate, began calling for auctions of the radio spectrum, including TV and microwave frequencies. He was met with ridicule then. However, our government began deregulating

. . . Revolution (continued page 2)

telecommunications in the 1980's. And since 1994 the FCC has received more than \$20 billion from auctioning FCC licenses.

From about 1920 until 1984, AT&T had a

monopoly on telephone service in this country. This was by design, as part of a system of "regulatory apartheid". For instance, in the 1950's a company began manufacturing vinyl covers for phone books, until the FCC ruled that was an illegal encroachment into AT&T's market. And although cellular phones were invented in 1946, the FCC did not allocate any spectrum for them until 1968. However, when they realized this could threaten AT&T's monopoly, they quickly suspended their action. Spectrum allocations for cellular phones did not begin until 1984, when AT&T was broken up.

The landmark 1996 Federal Telecommunications Act is a very complex law. It should mean more competition. Cable TV and other segments of the telecommunications industry were also strictly regulated for many years, and AT&T could not enter the computer or TV business. However, in the telecommunications industry today, "everyone wants to get involved in everyone else's business".

Dr. Hazlett cited two segments of the telecommunications industry that are "extremely profitable" today: long distance phone service (where there is "tacit collusion"), and cable TV. So many companies are itching to enter these industries. For instance, recent sales of cable TV systems indicate a value of about \$2,000 per subscriber. However, in most cities a new cable TV system can be installed for only \$500 per subscriber.

Dr. Hazlett downplayed the future of "voice communications on the Internet". There are "severe [technical] problems with this." And if it ever becomes too popular, "you'll have to price Internet access". However, Dr. Hazlett was quite optimistic about the future of PCS, the next generation of cellular phone service. That industry should grow rapidly.

**From the ARRL Website:
FCC Issues RF Safety Supplement B to OET
Bulletin 65**

Hams now have basic guidelines and tools to evaluate their stations for compliance with the FCC's RF exposure guidelines that go into effect January 1, 1998. On November 18, the FCC's Office of Engineering and Technology issued the long -

anticipated Amateur Radio Supplement B to OET Bulletin 65. The FCC worked closely with the Amateur Radio community in developing the new supplement. Several ARRL Headquarters staff members and Technical Advisors were involved in reviewing preliminary drafts of the supplement. Lab Supervisor Ed Hare, has been the League's point man for RF safety and exposure issues.

Supplement B, subtitled "Additional Information for Amateur Radio Stations," contains detailed information specific to ham radio stations. It is designed to be used in conjunction with the FCC's OET Bulletin 65 (Version 97-01) (<http://www.fcc.gov/oet/info/documents/bulletins/#65>), Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields. The revised Bulletin 65 was issued earlier this year.

Supplement B covers definitions of RF radiation and discusses the FCC exposure guidelines and their applications, methods of predicting human exposure, estimating compliance distances, and controlling exposure to RF fields. The supplement runs approximately 60 pages. Among its noteworthy highlights are numerous easy-to-use tables based on various frequencies, power levels and antenna configurations to help hams determine whether their stations comply with the FCC's published RF exposure guidelines. Most of the tables show compliance distance, the distance that an antenna needs to be located from areas of exposure to be in compliance. The January, 1998 issue of QST features an article, "FCC RF-Exposure Regulations -- the Station Evaluation," by Ed Hare, W1RFI, that describes Supplement B and tells hams how to use it to complete their station evaluations. . . .

RACES Corner

MC101 Floods and Changes 2/4 For release
10/13/96 Continuation:

The new Response Management Information System (RIMS) worked in a way that was unprecedented. Essential data was successfully entered and quickly shared with a wide group of agencies - a first ever of such magnitude. This computer-based system used Standardized Emergency Management System (SEMS) forms and

put then on the computers in scores of locations. Critical data could be replicated as needed, either on-line or remotely using LAN, WAN or Modem connections. It did the job it was designed to do, and did it well. Yes, there were areas that needed to be improved, but for a new system that was still being implemented when the floods burst into a full disaster, it worked better than expected.

Another form of new-age information was that of Internet Web pages. While these were not without problems, there were many successes. Web sites that went public, while a vital operational and information tool, frequently became overloaded. For example, a Web site used by city officials for the interchange of vital information between themselves, quickly became overwhelmed when it was opened to the public. It had not been designed for that massive volume of callers. To solve that problem they had to use multiple servers to spread out the load, along with selective protocol addresses. Yet, even so, it was a valuable information source for city citizens and their friends around the country.

At the 1997 Emergency Response Institute, Sacramento, CA. in May, interesting uses of wired digital systems for flood response were detailed by those in from the front lines. Things like voice override on Cable TV, and Automated Phone Dialers. Phone Dialers usually do not need an appliance to be turned on by the user, as does a radio or television set. As long as the phone system is operative a jurisdiction can use an automated dialer to phone residents with a situation alert so long as anyone is at home to answer the phone. The City of Roseville did that for those in potential flood areas.

Do You Have E-Mail?

Are you on the SARC e-mail list? If you want to join the other SARC members now on our e-mail list, just send an e-mail to JWRich9@aol.com, and you'll be added to the list. You will receive notices of general and Board meetings a day or two before they occur, plus the latest club news and happenings. And as a bonus, everyone on our list will get a long list of useful websites related to Amateur Radio, emergency communications and disaster response.

Preview of Coming Attractions

Here are some of the meeting programs the SARC Board is working to bring about in 1998: A visit to the new City or County Communications Center. A talk on the new tax law, by a tax accountant. A discussion on new developments in HF digital radio. An antenna program featuring a local antenna expert. A talk in February by an FCC official. And a program on "Amateur Radio in the Former Soviet Union", featuring a Russian ham.

Our new President, Gary, KB6KZZ, has declared that increasing SARC membership is his top priority for our club in 1998. Our past president, Les, is talking of organizing an SARC entry for the ARRL's 2-meter contest in June. And members of the Board are working on a Special Event operation during 1998. We will continue to support the Sacramento Blood Center. Finally, we will probably have a new location for Field Day. So renew your SARC membership, and join in the fun.

Billy Story

One day Billy's neighbor, Earl, heard a lot of commotion coming from little Billy's house: doors slamming, people shouting and running up and down stairs, going inside and outside the house. After half an hour of this, Earl saw a police car pull up in front of Billy's house, and a policeman go inside.

Earl was concerned now, so he phoned Billy's house. When Billy answered, Earl asked to speak to Billy's father. "Ah, Mister Earl, I'm afraid that Daddy can't come to the phone now - he's awfully busy," said Billy in a soft voice.

Billy Story (Continued from Page 4)

"Well, Billy" replied Earl, "May I speak with your mother?" "Ah, well, I don't think so, Mister Earl", said Billy. "She's very busy too."

"Okay, Billy," Earl continued. "What about the police officer? Can he come to the phone?" "No, I'm afraid not, Mister Earl," Billy softly replied, "He's also very busy now."

By now Earl had become quite worried. He asked, "Billy, what is going on over there? Why is everyone so busy?" In reply, Billy whispered, "They're looking for me."

- From a story by Pastor Ted Smith, First
Covenant Church

Propagation Predictions

The following is an example of part of a recent solar flux report that can be found at the ARRL website, at <http://www.arrl.org/>.

Propagation de K7VVV

Average solar flux was down and average sunspot numbers were up this week over the previous week. Solar flux on every day was above the ninety day average of 94, indicating a continuing upward trend. Look for good conditions during the ARRL 10 Meter Contest this weekend, although solar flux will not be as high as it has been lately. The predicted solar flux for Saturday and Sunday is 94 and 96, and stable geomagnetic conditions are forecast. Following the weekend the solar flux is expected to go above 100 for the rest of the month.

HF Digital: AMTOR, PACTOR and beyond

The January issue of *QST* has an interesting article (page 67) about the hottest area of Amateur Radio today: HF digital radio. New hardware and software, plus more HF/Internet connections, have fueled an increase in HF digital activity. The SBC staff and the CARES leadership are interested in using HF digital for emergency communications.

But isn't HF digital equipment expensive? It can be, but need not be. In fact, as the *QST* article points out, "You may already be the proud owner of an HF modem - your PC sound card!" Check out the current issue of *QST* for more information.- N6SZQ

Sacramento Amateur Radio Club: Est. 1914

SARC News is published by the Sacramento Amateur Radio Club, Inc., as a temporary replacement for *Mike & Key*. Our mailing address is SARC, PO Box 161903, Sacramento, CA 95816-1903. The SARC meets every second Wednesday of the month at 7 pm at the Sacramento Blood Center, 1625 Stockton Blvd. (just off of Alhambra). Doors open at 6:30 pm.

SARC Officers:

President: Gary Bryant, KB6KZZ, 646-1171

Vice President: Vacant

Secretary: Jim Rich, N6SZQ, 361-3542

Treasurer: Steve Cates, KC6TEV, 391-7341

Sacramento Valley Noon Net: Every day of the year at 146.91 MHz - 600 kHz, PL 100 Hz.

What on Earth is the HDSCS?

Since 1980, the Hospital Disaster Support Communications System has provided emergency and backup communications for hospitals in Orange County. Today this organization has trained Amateur Radio volunteers assigned to support 36 medical facilities. According to the December 1997 issue of *QST* (page 83), HDSCS members have been called out to respond to telephone failures and activations for earthquakes, floods and fires an incredible 60 times. The members use VHF radios to provide communications within and between hospitals. The HDSCS is organized as a special ARES unit, and maintains a liaison with CARES and the Blood Bank Net. They even have a website:
<http://members.aol.com/emcom4hosp/index.html>.

- by N6SZQ

Deep Philosophical Question of the Month:

If a man is talking in the forest, and there is no woman around to hear him, is he still wrong? - from the *Sacramento Bee*

Answer to Page 2 Question:

Lyndon Baines Johnson