The Official Newsletter of the Stanislaus Amateur Radio Association

Field Day Site on Stanislaus River near Escalon in June

The setting for this year's SARA Field Day site is the McHenry Avenue Recreation Area on the banks of the Stanislaus River near Escalon. Part of the Stanislaus River Parks System which stretches from Knights Ferry to Escalon, the site is an improved campground maintained by the U.S. Army Corps of Engineers.

The site is one mile west of McHenry Ave. just off River Rd in San Joaquin Co. It's approxmately 10 miles NW of Modesto and 5 miles SW of Escalon. It is an ideal spot for Field Day with plenty of picnic tables with barbecues at each table and plenty of trees for shade and antenna supports. There are permanent restroom facities with running water.

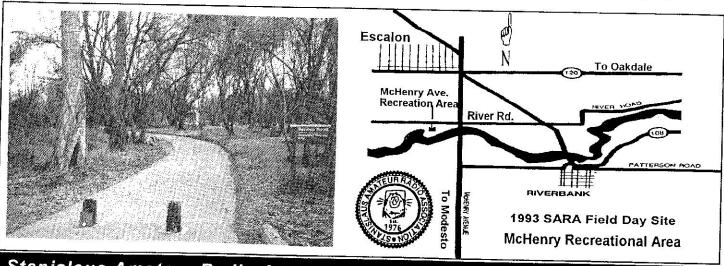
Thanks to Bob Elliot, the man-

ager of the Corp of Engineers headquarters in Knights Ferry, we were able to reserve a nice area for SARA. There are some restrictions, which we will detail in the June issue of The READOUT.

This site is comparable to the site the club enjoyed at Caswell State Park near Ripon several years ago. So, make your plans now to take part in this year's Field Day activities. Everyone is welcome, with or without equipment. If you don't have equipment, you can volunteer to operate one or more of the stations. The most pressing need we have right now is for generators. If you can help contact Ernie, K6UVI, 838-2921. More next month.

In This Issue

Ham Plagues Neighborhood 2
The READOUT Facts 2
1993 SARA Fund Raiser 3
SARA Minutes 4
Interim FCC Chief Named 5
Editor's Notes 5
From The Desk of N6ZUC 6
SARA Technical Report 7
Old Habits Are Hard to Break 8
Oakdale Ham Killed 8
V.E. Schedule 8
New Six Meter Repeater 8
Buying & Selling on the air 9
FCC Drops Station Location 10
No One Would Come Back 10
Technology Update11
Digital Cable Radio11
Video Surgery11
Calendar12



Stanislaus Amateur Radio Association PO Box 4601 Modesto, CA. 95352

The READOUT is published monthly by the Stanislaus Amateur Radio Association. © COPYRIGHT 1993 by the Stanislaus Amateur Radio Association, Modesto, CA. All Rights reserved. Permission is granted for reproduction in whole or in part provided credit is given to The READOUT and the authors of the reproduced material.

1993 SARA Officers President

Sandra Ingram, KC6TBK, 575.4765

Vice President

Elizabeth Eyre, KD6GIW 667-5299

Secretary

Ernie Rader, K6UVI 838-2921

Treasurer

Andy de Groot, KD6MOD 892-3459

SARA VHF Net

Thursdays @ 8 P.M. (Except Holidays)

2 meters 145.39 MHz WD6EJF 220 Band 224.14 MHz WD6EJF

10 Meters 28,440 kHz USB Tuesdays at 730 P.M.

ARES Net Wednesday 800 P.M.

Contributions to *The READOUT* are always welcome and may be submitted to the editor by mail or via packet at KD6JZZ-BBS on 144.79 MHz, or directly at my PBBS, WA6ZLO-1 on 144.97 MHz. The deadline for articles is the 15th of the preceding month. Articles regarding religion or politics are not accepted.

Editor

Bob Pinheiro, WA6ZLO 1221 Mist Flower Ct. Modesto, CA. 95355 209-523-5880

An ARRL affiliated club!

ARRL membership may be paid through SARA with the club retaining a \$2.00 commission. Please send your ARRL membership form along with your check made payable to SARA. We will deduct the \$2.00 and send a check to the ARRL.

Salida Ham Plagues Neighbors Civil Suit Considered

By Bob Pinheiro, WA6ZLO

A ham radio operator is continuing to plague the citizens, of the small community of Salida in Northern Stanislaus County, with RF interference.

According to an article in a Ripon Record newspaper dated February 17, 1993, "A sensitive issue surrounding a Ham Radio operator on Adams Street was discussed by the council (Municipal Advisory Council, MAC). Many citizens are complaining about the disruption of their telephones, televisions and radios.

"According to MAC Chairman Bob Crayton, many attempts to talk with the radio operator resulted in comments like: he (the radio operator) will do "anything he wants, when he wants and no one is going to stop him," and that he "Doesn't care who he bothers!"

"These comments are clear indications that it will take official action to resolve the problem. A petition has been sent to both the FCC and Gary Condit's office in Washington where it will get federal attention. This situation needs to be resolved!"

The ham in question is Victor Garcia, KN6BT, an Advanced Class operator first licensed as a Technician in August, 1990.

Crayton, who lives directly behind Garcia, says he has been plagued with severe RF interference to his personal and business telephones and cannot use his telephone when Garcia

is on the air. He said he had even purchased top of the line telephone instruments in hopes of eliminating the interference. The interference continued and Crayton has had Pacific Bell technicians out to his home repeatedly installing filters in his phones and on his line in an effort to stop the interference. Nothing has worked.

According to Crayton, Garcia is apparently running such high power that nothing can stop the interference. He said Garcia is also interfering with several neighbors' electronic equipment in the Adams Street area and regularly disrupts religious services of a nearby church overriding their public address system during services. Crayton has even received reports of interference from citizens as far as a mile from Garcia's home. "The neighbor's have had it and are ready to take the law into their own hands." according to Crayton.

Crayton said the FCC finally responded to their complaints and conducted an inspection of Garcia's station last month. The FCC has not made the results of their investigation public and at this time and will only confirm they conducted a physical inspection of Garcia's station. Prior to this the FCC had written to Garcia regarding the interference complaints.

Garcia continues to operate and Crayton said the neighbors are now talking to an attorney considering filing some type of nuisance complaint against Garcia through a civil court.

Radios on Airplanes

Airlines apparently have thrown in the towel when it comes to preventing passengers from using radios while on board. Since the local oscillators in lesser-quality transistor radios do not have adequate shielding, they wreak havoc on the sensitive navigation equipment in the cockpit. Trying to keep fliers from listening to a radio is not easy. The solution appears to be giving the customers what they want, but not the way they want

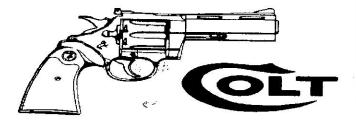
it, however. Logic decrees that they want radio and they will get it from radios owned and operated by the airlines. That way passengers, can listen to their music and the airlines can rest satisfied in the knowledge that the FCC-FAA-approved radios won't foul up the flight computer.

The ABC Radio Network has teemed up with the Harris Corporation to provide the service, using satellites and ground stations to beam dedicated FM broadcasts to these specific receivers kept on board the airplanes. w5YI

SARA's 1993 Fund Raiser

□□□ Grand Prize □□□

Colt .357 Caliber Revolver



\$500 Cash

Drawing June 27, 1993 during Field Day

Tickets availabe from SARA members

\$1.00 donation



1993 SARA Fund Raiser

The club's 1993 fund raiser is underway and by now, each *SARA* member should have received a packet of 10 raffle tickets. As with previous fund raisers, you can sell them (ask for donations) or you can keep them for yourself and take your chances at winning the grand prize.

This year we are offering a Colt .357 Python or \$500.00 in cash. If for some reason the winner does not qualify by law to own a gun, then the cash will be awarded. The club opted for the gun as the grand prize because of it's wide appeal which we learned in our most successful ever raffle we conducted a few years ago. We quickly learned that this particular gun is a very popular weapon and much in demand.

Of course, it makes no difference what we are offering as a prize if we don't get out there and ask for donations for tickets. Please keep in mind that gambling in California is prohibited by law. So, you can not "SELL" tickets, you can only ask for a donation of \$1.00. The tickets are officially free and you can not insist on a \$1.00. You can only ask for a donation of \$1.00. This way we comply with the law.

Please make sure you fill out the stubs with the name, address and telephone number of the person who made the donation. Then return them to the club's post office box, 4601, Modesto, CA. 95352. All stubs and money must be received by June 27, 1993 at 12 noon. The drawing will be held after Field Day exercises at the McHenry Recreation Area near Escalon. The winner does not need to be present to win. He/she will be notified by phone or mail.

We would like to thank Ed Washington, owner of Modesto Armory for offering the gun at wholesale to SARA. Also a big, thank you, to Jim, KB5FB, owner of Mail Boxes Etc. in Turlock, for designing and printing the raffle tickets at his cost. This was a substantial contribution for which we are very appreciative. Thank you for your support!

Remember, return your completed stubs and the money no later than June 27, 1993. If you wait until June 26th or 27th, you will have to deliver the stubs and money to the Field Day site in order to get the stubs into the barrel in time for the drawing. If you would prefer not to participate, you may return the tickets to with the club. Please don't throw them away, we need to account for all of them and we can give them to someone else who may need them. The money obtained from the raffle helps **SARA** pay its bills, and keeps the treasury afloat. Thank You!



SARA Minutes

By Ernie Rader, K6UVI, Secretary

The regular monthly SARA meeting was called to order by President Sandy, KC6TBK, on April 20, 1993 at 7:32 PM. While the sign-in sheet was passed around, 18 members and guests introduced themselves. The club treasurer was absent, but his report follows.

 Beginning balance as of 04-22-93
 3,145.21

 Expenses
 146.85

 Deposits
 74.00

 Ending balance
 3,072.36

The minutes, as presented in The READOUT were accepted by unanimous vote. A portion of a letter from Mike Siegal, KI6PR, was read by the Secretary. It referred to procedures for registering the club for Field Day, and Special Event status. Brad, KC6TDH, was asked to head up a Field Day committee, but he never accepted the position.

Ernie said he'd call ARRL headquarters and get the final information on registering our club as a Special Event station during the Graffiti activities later on in the year.

It was announced homeowners in a Salida neighborhood held a meeting on April 19, 1993 to discuss interference problems with a ham in the area who refuses to help solve the interference problems. *SARA* was invited to send a representative, but was unable to do so. Loyd, KD6JWE is to report back with the sub-

stance of that meeting.

The ADA Tour de Cure was briefly summarized, and the meeting with Tuolumne/Calavares counties on May 1st was announced. All hams interested in helping with the communications during the fire season were asked to attend. LeRoy, NV6S, reported that the battery backup for the KA-Node on the hill has failed and will need to be replaced. He said we really need a 35 Amp. power supply to replace it. The KA-Node is ready to be taken back to the hill, and some discussion was offered regarding a possible frequency change since a new node of Fowler Peak (FOWLER) is up and running on the same frequency. Ernie reported that the communications trailer repairs were at a standstill since Denis RV is at the peak of their repair season. It was suggested that we not bother them at this time since their work will be at such a little cost to the club.

There is to be a "thank you" barbecue put on by The M.S. Society to benefit those that volunteered to help during their event. More on this later.

The fund raiser raffle tickets which were designed and printed by Jim, KB5FB, were brought to the meeting and several members took the time before the meeting to get them all stapled together in

books of 10. Those at the meeting received as many books as they thought they could sell, the rest will be distributed by mail.

Ernie accepted the job as net control for the upcoming March of Dimes bike-a-thon. Break time between 8:10-8:20 PM.

The program for the evening was presented by Ernic and Loyd, KD6JWE. It centered around the club's desire to put together a "HAMPOSIUM." Dave, WA6GUO, acted as recorder and organizer as he drew a grid on the blackboard consisting of 12 squares. In each box a particular subject of interest was inserted. Each subject was included in a track according to category. Four tracks, three subjects each.

Most subjects could be taught by local experts, and the variety was diverse ranging from basic introductory information about ham radio, to technical subjects like satellite packet, and low band propagation. This "HAMPOSIUM" and it's organization will be worked on more and again presented to the club at the next meeting. Everyone is offered a chance at the next meeting to give their input both in terms of subject and content.

It was moved and seconded to close the meeting at 9:03 PM.

Respectively submitted, Ernie K6UVI, Club Secretary.



SARA 1993 Membership Application

Dues: Pay in May \$15.25; June 13.25; July 11.45; Aug. 10.00; Sept. 7.65; Oct. 5.75; Nov. 3.80; Dec. 1.90.

Mail	your check or money order paye	able toSARA
and r	mail it to the club's post office bo	x. Thanks.

	Aug. 10.00, Sept. 7.03, Oct. 3.73, Nov. 3.80,	DG. 1.30.	Date	
Name			Call	
Address			Member of ARRL?	
City	State	Zip	Home Phone	
Business Addi	ress	***	Business Phone	
Occupation			Date of Birth	
Class of Licen	se		Year first Licensed	



Editor's Notes

By Bob Pinheiro, WA6ZLO

Welcome to a new SARA member. Carl Barnett, KD6JHE, of Oakdale. Carl is a new Technician and makes his home on Orangeblossom Rd. east of Oakdale. SARA member Ed McWain has received his Technician call. He is KD6TBA.

—The argument as to whether or not cellular phones can cause cancer continues to rage. The argument escalated following a January 14th Larry King Live talk show on CNN. During a segment of the program, the husband of a woman who died of brain cancer alleged that her use of a portable cellular phone contributed to her death. The media picked up the story and shortly thereafter cellular stocks plummeted and Congress was calling for hearings on the subject.

To this point in time, virtually all scientific studies have come to the conclusion that there is no evidence drawing a link between hand-held portable cellular phones and tumors of the head. The FCC, FDA, EPA, National Cancer Institute and manufacturers and providers of cellular phones and service have concurred in these findings.

Cellular phones operate in the 800 and 900 MHz band with hand-held units transmitting with less than 1 watt, which is less than a very small light bulb according to industry sources.

According to an article in The National Association of Radio and Telecommunications Engineers, Inc. "the nature of cellular drives a variable transmission based on the power of the cell site, the distance from that transmission source and the relative transparency of the target object, which in this case is the human body. The human body absorbs very little radiation at 900 MHz. No communication transmitter, particularly a cellular phone. operates at frequencies that can be absorbed or cause heating of water. The 60-70% water content of the human body is transparent to, or more precisely, reflective, to cellular transmissions."

Meanwhile, the FCC has released a Notice of Proposed rule making to update guidelines and methods used for evaluating the environmental effects of radio frequency radiation, based on new RF exposure standards adopted by the American National Standards Institute, in conjunction with the Institute of Electronic and Electrical Engineers, in 1992.

In 1985 the FCC adopted 1982 ANSI guidelines, which resulted in some transmitting facilities being required to prepare anenvironmental assessment if they would expose humans to RF levels greater than those recommended by the guidelines. Under the 1985 guidelines many low-power, intermittent, or normally inaccessible RF facilities were excluded from the FCC's rules, including Amateur radio stations.

The new 1992 ANSI guidelines in many respects are more restrictive in the amount of RF permitted and they also extend the frequency range under consideration from 3 KHz to 300 GHz. The new guidelines also specify two sets of exposure recommendations, one for "controlled environments" (usually involving workers) and one for "uncontrolled environments" (usually involving the general public). Hand-held devices are treated for the first time in the new ANSI guidelines. The 1982 guidelines included exclusions for devices that did not exceed a "specific absorption rate" (SAR) or whose input was 7 watts or less. The 1992 guidelines also contain low-power exclusions, but they are more stringent and could require manufacturers to demonstrate compliance with SAR requirements. The comment date in this docket, ET 93-62, is August 13, 1993. The reply comment date is September 13, 1993.

—Former FCC Chairman Robert E. Lee died April 6, 1993, and was remembered by the commission as its longest-serving commissioner. Lee, who was born in Chicago in 1912, was a Commissioner

from 1953 to 1981, having been appointed by President Eisenhower and reappointed by Presidents Johnson and Nixon. He served briefly as Chairman of the Commission, from February 5 to May 18, 1981, in the initial days of the Reagan administration. Before joining the FCC as an auditor, Lee was an FBI special agent, an administrative assistant to FBI director J. Edgar Hoover, and a director of surveys and investigations for the appropriations subcommittee of the House of Representatives.

—The FCC has denied a request for a waiver of the Amateur 1,500 watt power output limitation. Dale Gagnon, KW1I, of Bowe, NH, had asked for the waiver earlier, as well as a reconsideration of the FCC's original denial. The FCC said that Gagnon's latest request for a waiver "has not shown that his circumstances are unique nor has he presented any facts that would warrant a waiver." Gagnon wanted the waiver for his own use, to legally operate at a PEP power more than 1,500 watts output.

—FCC issued call sign update in the Sixth and Seventh call districts as of April 1, 993.

Group A Group B Group C Group D

Extra Advanced Tech/Gen Novice

AB6SI KN6JQ ++ KD6TZG

AA7VC KI7LZ ++ KB7TOM

++All call signs in this group have been issued in this area. Group D calls are being assigned instead.

—The North Hills Radio Club will be holding "Hamfest '93" May 22nd. \$1 Raffle tickets and admission. Food/refreshments. Free parking. Door prizes, raffle, auction, commercial vendors. "Biggest swap in the valley"! Talk-in on the K6IS repeater-145.190(-) PL 162.2 or

224.400. The hamfest will be held at the Carmichael Elks Lodge. For more info contact Dick, W6IAP at (916) 481-5125 or Bud, WA6NED at (916) 372-5904.

—That's it for this month. Hope to see you at Field Day. 73, Bob

Tim Low, N6ZUC

Last month I outlined for you what procedures the Federal Communications Commission uses in its rulemaking process. We learned that YOU have a say in the Commissions actions, and this month, we will learn just how to respond to a notice from the F.C.C.

Again, I want to stress how important it is for YOU to get involved in this decision making process. The pressure for our spectrum is increasing, and will do nothing but get worse. We as Amateurs must be a force at the Commission. As our ranks increase, our united voice will be loud and clear to the Commissioners, but only if you use the process to our mutual advantage. "The squeaky wheel" does get the grease.

There are two ways to respond to an NOI (Notice of Inquiry), or NPRM (Notice of Proposed Rulemaking). It can be done either formally by filing an original and five copies, or informally by filling only one copy. If you file informally, your copy will be included in the docket as a public comment. Formal filings are normally filed as expert comments, or from someone who has relevant facts or special insight on the subject, rather than just personal opinion. Either is fine, and important to the process, so don't feel intimidated, YOUR opinion does count.

When filing comments with the Commission, the important term to keep in mind here is "Public Interest". Any rule is supposed to reflect what the Commission deems as in the best overall interest of the general public. According to law, the airwaves are public property, and any rule must keep in mind what is in the "Public Interest". Your job will be

to convince the Commission that what you propose with regard to the rulemaking, is in the public interest.

When filing your comments, let the Commission know who you are. Not just name an address, but in the case of rules pertaining or effecting Amateur radio, that you are a licensed Ham, how long you've been licensed, and if relevant, what other experience or special knowledge you hold that will help give weight to your comments.

"The squeaky wheel does get the grease"

Perhaps you are involved in RACES or ARES, and have seen first hand how important the Amateur is in times of disaster. If this is a NPRM regarding spectrum allocation, your experiences would show the need for protection of this vital national resource.

Make sure that your comments are specific. Don't ramble on. You don't have to write a dissertation, just state the facts as you know them, and why you are qualified to make your comments. Use as much space as you reasonably need, but be concise. Tell the Commission what you like and dislike about the proposal. If there is only one sentence in the proposal that you object to, tell them why. Maybe you think something should be added, or perhaps the whole thing should be tossed out. If you are all for the proposal, tell them so. Remember, why does your opinion serve the public interest?

Before writing your comments to the Commission, it is always wise to have all the facts at hand. This would suggest that you obtain a copy of the proposal, or at least read it. You can do this by simply making a trip to your local public library. All commission notices are published weekly in the Federal Register. Many trade and special interest newsletters and magazines publish them also.

Remember, generally you only have 30 days to respond. So be quick about it. Make sure in all correspondence with the Commission, you include the rulemaking or docket number. Never, ever, reply to more than one notice in a single letter. All correspondence should be in a typical business format, and of course it goes without saying to make sure all your grammar and spelling are correct. A poorly structured letter is an immediate turn off. You must convey that you are a considered, intelligent person, capable of addressing the issue. All comments should be addressed to: Secretary, Federal Communications Commission, 1919 M Street, Washington, D.C. 20554. Again, make sure you are timely.

That's it. Easy, isn't it? You can do it. Just follow the guidelines contained here, and YOU will become an important part of the process. YOUR comments will be considered, and opinions evaluated. Get involved. Don't let inaction cause regret.

Question? Comments? Answers? Send me a packet at N6ZUC @ KC6NZN.#SOCA.CA.USA.NA, or write me in care of *The READOUT*.

73 -Tim.

Make Your Plans For Field Day June 26-27 and Have Some Fun!



I haven't been up the hill for a few weeks now, but Alex, K6LPG, has done some work up there. He has discovered that the battery for the digital site has died and will have to be replaced. We will take care of that on the next trip up the hill and hopefully get the two meter KA-NODE up and running. He has tuned the 440 repeater and has it working fairly well but it still is in dire need of a set of duplexers. Andy, KD6MOD, is looking for a set but I've not heard from him. If he is unable to come up with a set, we will have to buy a new set which has been approved by the club.

The six meter repeater still has not arrived so nothing has been done there. The two meter repeater is suffering with some interference. San Joaquin Co. has been heard in the output. That is bad news since their transmitters are practically touching our antennas.

I plan to set up a work party soon and clean up all that joints on the antenna system as well as add some grounding. We can only hope that will solve the problem. We have not been fortunate enough to see the interference on the service monitor when we have been there so a lot of guessing is still our best effort.

I must give thanks to Alex, K6LPG, for his help. He has done most of the work and it is really appreciated. I hope to find a few volunteers soon for a trip up the hill to do some tower work. 73, LeRoy.

Court Rules Against Ham **Operators in Florida**

David and Sharon Brower, WA4NST and N4XLF, of Vero Beach. Florida, recently lost a two year legal battle over their 68 ft. radio tower and antennas. In the final judgment for the plaintiffs (seven households), Judge Charles E. Smith of the 19th Judicial Circuit in and for Indian River County, Florida, found the radio transmissions from the Brower's to be "a noxious and offensive activity." He also ruled the appearance of the tower and antennas " an annoyance and nuisance to the neighborhood." He called their tower and antennas an "eyesore" to the subdivision.

The judge also ruled that the tower was a "building" and that it exceeded the two story limitations for buildings in the deed restrictions of the subdivision. Pending appeal, Judge Smith has stayed his order to remove the radio tower and antenna but has enjoined the Browers from further radio transmissions from their home. If the Browers are not successful with the appeal, this case will set a dangerous precedent for any ham who has a neighbor who does not like the appearance of his exterior antenna and alleges interference to home electronic appliances. Al Smith, NR2K via Worldradio

FCC To Allow Electronic Filings

The FCC on April 1 changed its rules to allow for the eventual"electronic" filing of license applications in the private radio services. Currently all license applications must include a handwritten signature. Last October Congress amended the Communications Act of 1934 to allow electronic filing of applications, applications signed "in any manner or form, including by electronic means, as the commission may prescribe by regulation." Implementation date has not been set by the FCC.

North Hills Radio Club Swap Meet May 22

The North Hills Radio Club will be holding "Hamfest '93" May 22nd. \$1 Raffle tickets and admission. Food and refreshments, with plenty of free parking. Door prizes, raffle, auction, commercial vendors. "Biggest swap in the vallev"! Talk-in on the K6IS repeater-145.190(-) PL 162.2 or 224,400 Mhz.

The hamfest will be held at the Carmicheal Elks Lodge. From Hwy 50 take Watt Ave. to Manzanita, Manzanita to Cypress, etc. For more info contact Dick, W6IAP at (916) 481-5125 or Bud, WA6NED at (916) 372-5904.

ARRL Supports FCC In Lawsuit

The ARRL has filed a motion to support the FCC in a lawsuit filed by broadcasters who seek to over-turn the way the FCC enforces indecent broadcast prohibitions through financial penalties. ARRL says that a decision in favor of the broadcasters could harm the FCC's ability to combat indecency on amateur radio frequencies.

The ARRL said it was concerned that it might also have the effect of harming FCC efforts to enforce rules in the Amateur Service that have been strongly supported by radio amateurs. ARRL has requested to be permitted either to intervene in support of the FCC, or alternatively, to submit a brief Amicus Curiae in support of the interests of radio amateurs.



I finally got our neighbor to get rid of that old style TV that I've been bothering on 15 meters!

Old Habits Are Hard to Break

By Kim Elmore. N5OP

I worked as a gopher in an automotive garage for several summers back in the '70's. The mechanics there swore that a normal automobile battery set on concrete would quickly discharge, but my dad and I, who were on good terms with them, disagreed and challenged them to a \$10 bet which they accepted.

We placed two identical new batteries on the floor. One supported by piece of wood and the other exposed and set directly on the concrete.

On a daily basis we took specific gravity and voltage measurements on the batteries and graphed the results. We discussed load testing, but everyone felt that voltage along with the specific gravity of each cell was quite sufficient for the test.

We did this for two or three weeks after being assured by everyone there that the exposed battery on the concrete would be dead in about a week. Needless to say, we won the bet, the two batteries were indistinguishable in their characteristics.

Mystical tales explaining the unknown often take on nearly immortal lives of their own. But, here we are in the 90's and if you go to any garage you will notice that when mechanics remove a battery they inevitably set it on a piece of wood. Old habits are hard to break.

V.E. Test Turlock May 8, 1993 9 AM Call Chet, 883-2968

Oakdale Ham Killed in Tuolumne County Accident

Nick Chames, K6ACN, died March 1, 1993, from severe head injuries suffered in a head-on traffic accident February 23, 1993 on the Twain Harte grade in Tuolumne County. Nick was a native of Corning, CA. and had lived in Oakdale for the last several years. He worked for several radio and television stations throughout the state and in recent years was a cab driver in San Francisco. His age was not given, but he had been a ham for over 40 years. He leaves four children. He was active in the Tuolumne County Amateur Radio & Electronics Society (TCARES). TITX TCARES Nuggets Newsletter

V.E. Examinations Schedule in Northern California

This is a listing of the scheduled ARRL Volunteer Examinertest sessions in the Pacific Division except Hawaii. To take a test you must show two means of ID; have the original of your license and a copy of it, if you are licensed; have the original of any CSCE to prove your passing a test before any VE group. Alltests are walk-in unless noted below. Fee is \$5.60, except no charge for Novices. No-coders welcome.

Bishop, Ca	May 13, August 12	619-873-4777
Glen Ellen, Ca	August 7, November 16	707-996-6461
Merced, Ca	October 9	209-383-2166
Modesto, Ca	June 12, Sept 11, Dec 11	209-883-2968
Novato, Ca	June 5, September 11	415-883-9789
Oakhurst, Ca	June 12, September 11	209-683-8772
Redding, Ca	May 8, July 10	. 916-243-6339
Ridgecrest, Ca	May 29, June 26	. 619-375-7245
Turlock, Ca	May 8	. 209-883-2968
Yuba City, Ca	May 11, July 13	. 916-673-0868
Groveland, Ca	June 22 (No Walk-ins)	. 209-962-7146
Sonora, Ca	Sept. 18, November 20	. 209-962-7146

New Six Meter Repeater On Mt. Oso

According to Jon, KB6SJT, of Pittsburg, he has receently installed a Six Meter repeater on Mt. Oso. The machine operates on 52.900 MHz with the input at 52.400 MHz. The PL frequency is 114.8 Hz.

It's an open machine and those of you with Six Meter equipment are invited to use it. If you have any questions, contact Jon at 510 427-0244.

Using Amateur Radio to Buy and Sell What are the rules?

By Wm. Carl Cockrell, AB6FC

Lets look at the rule regarding Swap Nets and negotiating sales and trades using the amateur bands. The majority of radio controversy revolves around the question..."is the communication business?" This above all else is the basis of what Part 97 is trying to prevent; not whether the price is stated, or if the item for sale is on the Ham bands, or if the person



making the listing is making it for himself or for a friend, ham or not, or a widow of a ham.

Persons running swap nets occasionally make the comment to persons trying make legal listings that he or she is in violation of the rules and "going to lose your license" and then later allows clearly Illegal listings on the net.

Lets look at some commonly asked questions and answers on this subject.

—Q. Is stating a price or negotiating price on the air legal? A. YES Part 97 does not prohibit stating prices or on the air negotiating.

—Q. Can I sell an item for a friend on the air? Does my friend have to be a ham for me to do so?

A. Yes, you may sell an item for someone else, Ham or not, as so long as it is something that is normally used in an Amateur station and you are not seeking to derive a profit.

—Q. I hear a certain swap net controller tell the participants: "all items listed must be used on the ham bands or you can lose your license" Can I lose my license for such a listing?

A. NO! Part 97 states the item must be normally used in an amateur station. This leaves the door wide open, (I normally use a chair and a desk as part of my station but I probably would not make such a listing even tough I have not tuned them to any ham band yet). In my opinion, one of the most commonly found items around the shack is.... almost anything.

—Q. Can someone make a profit by selling an item over the air?

A. Yes. This will shock many but, Part 97 states an amateur on the air sale or trade is prohibited to any person seeking to derive a profit by buying or selling apparatus on a regular basis. If you bought a radio on a swap net for example, for one hundred dollars and one month later you decided you didn't like it, or whatever and sold it on a swap net for two hundred dollars, you have made a profit, but... you do not do this on a regular basis and

you did not buy the radio originally to make a profit.

—Q. I hear a few of the same Hams on the swap nets every week with different gear but always listing, and some that only list for trade. Is any of this legal?

A. There is a fine line, but it is not legal if the person is seeking a profit in money or better equipment AND it is on a regular basis.

—Q. Can I tell another Ham on the air where to buy an item and how much it sells for?

A. Yes, as long as it is not your store or a store you work for that you are supplying information.

I hope this information has been helpful in settling questions you may have had about this part of Part 97.

Tnx The Internod, West Coast Amateur Radio Club



FCC Drops Station Location From Amateur License

The FCC has dropped the station location from amateur licenses, effective with new license Form 660, introduced in February. The mailing address now becomes the only means for the FCC to communicate with amateur licensees. Volunteer Examiner Coordinators are being told to ignore the station location information asked for on current FCC form 610s (Section I,Line 8).

"We expect this will improve the processing time at FCC for applications," ARRL VEC Manager Bart Jahnke, KB9NM said. Jahnke also said he expects that FCC will drop the station location box from future printings of the Form 610.

Tnx ARRL Newsletter

No One Would Come Back

- —The other day while in my shack, I called CQ, but no one came back.
- —I looked around, the switch was on, I did not know what could be wrong.
- —I switched the rig to another band, but, no one seemed to be at hand.
- I tried to check into a net, but, no responses could I get.
- —I tried the code, but, it was the pits, there were no dahs, there were not dits.
- —And to my shame and my chagrin, the AC plug was not plugged in. (Autor unknown)

Telephone Interference Solved with Perserverence

Sam Peck, W6COR. reports in Worldradio magazine that various chokes and filters failed to remove 7 Mhz RFI from his telephone system.

Suspecting that the telephone circuit itself might be resonant at that frequency, he persuaded the phone company to add fifteen feet of wire to their circuit. This resulted in detuning the telephone line and eliminating the RFI.

MOTTO— When regular solutions seem to fail, try something else. When all other solutions have been eliminated, the one remaining may work! Worldradio

Editor' Note: For your normal RFI problems, I have a very good handout on the subject prepared by Palomar Engineering in Escondido. If you would like a copy, send me a legal size SASE with .29 cents postage. My address is on page two of every newsletter. The last time we made this offer we received over 700 requests for the handout from all over the country and a few from overseas. RFI is a big problem.



Don't be nervous, it's only the VE Team.

Fire at 2,000 Feet Coax Destroyed

KCRA-TV, channel 3 in Sacramento, cooked 380 feet of transmission line March 3rd at the top of there 2000 foot tower at Walnut Grove.

The coaxial bullet at the input to the antenna matcher failed according to KCRA Chief Engineer Gerry Agresti. Agresti said the fact that the line just below the connection was unsupported and able to vibrate was a contributing factor in the failure of the bullet.

The failure forced the station to broadcast from their auxiliary site in downtown Sacramento for two weeks significantly reducing their coverage area. Repair work also forced KRBK-TV, channel 31, Sacramento, which is side mounted on the Channel 3 tower, off of the air during two of the all night repair sessions.

Trixs SBE Newsletter Sacramento Chapter

Work Slows on Communications Trailer

Work on **SARA's** communications trailer has slowed a bit as a result of the good weather. The trailer is currently at Denis RV in Turlock where the windows and misc repairs are to be made. However, with the improving weather, many folks are wanting to hit the road and do some traveling or fishing.

As a result, the mechanics are busy taking care of the money paying folks. So, we will have to wait until things slow down before they can work on our trailer.

We still need your monetary help. If you can help, please send your check to the club post office box and mark it "for trailer!" Thank you for your support.

Technology Update

Laser Radar Detectors

About to throw away your radar detector because the police are switching over to lasers? Hold on to it; it's not ready for mothballs yet. Thousands of mobile police units still use the RF method of speed traps, and the prohibitive cost of the new laser-based speed guns keep most departments from purchasing them for now.

The major radar-detector companies are already working on similar devices that detect those laser beams aimed at your car. Laser beams spread only a few feet, but that's enough for these units to detect them. Not only will they tell you about the speed trap up ahead, but they will also tell you exactly where it is located.

Video Surgery

"The knees are the first to go," football players are told. In the past, surgeons repairing torn cartilage were forced to cut open the layer of skin surrounding the knee. After the operation, the patients had to go through a long, painful series of rehabilitation training sessions to regain strength and dexterity.

Now, doctors are using a process that doesn't involve cutting open anything. Minimal Invasive Surgery (MIS) merely pokes a small opening through the skin, through which a thin cable can be inserted. At the end of the cable is a miniature video camera that relays what it sees to a monitor for the doctor to view while operating. The cable also includes miniature tools to actually perform the surgery, so the doctor can work and watch the results without cutting the skin.

New Type Capacitor

Surface-mount chip capacitors may get even smaller! Although already present inside every HT radio, the new technique designed to further decrease size and increase performance will allow even more circuitry to be packed within the same area.

Surface-mount chip capacitors per-

form the same task as ceramic bypass capacitors. They are in almost every new RF circuit built today. They are so small that over hundred of them could fit in a thimble. Close examination shows that a chip capacitor looks like an unwrapped Hershey's chocolate bar, a dark bar with silver ends. The metallic ends provide the means of soldering the capacitor to the circuit board, as that is the only mechanical contact.

The new thin-film chip capacitors are wider, but their metallic footpads are much thinner. This means more capacitance, and it also means that the average height of the chip capacitor will shrink.

Intelligent Batteries

Fed up with the battery pack in your HT dying off? We may soon have devices built inside batteries that tell us when it's really time to put them back into the charger. The cellular telephone industry wants to use intelligent battery chargers to monitor exactly how rechargeable batteries will perform.

Tiny micro controllers use an eight-bit serial data link to monitor between-charge cycles. They keep track of how many times the battery has been charged, their impedance, and if their temperatures increase. All that information is then stored within the micro controller's main memory. Each battery gets its own built-in micro controller! These devices work at low voltages, such as 1.8 V and 2.4 V.

Digital Cable Radio

You can expect to be hearing perfect radio quality in your home as digital audio expands into the consumer market-place! Time Warner Cable and Sony Corp. have recently bought a major stake in DCR - Digital Cable Radio. The \$20 million investment will be used to expand the DCR network. Time Warner and Sony, the world's two largest record companies. will receive a"licensing fee" from DCR. DCR wants to expand from 28 to 58 channels of digital audio programming next year - and eventually to 250 channels.

Delivered by cable, DCR is already available to some 5-million homes. (Only about 50,000 of that number actually subscribe at about \$10 a month.) A competitor, Digital Music Express, has about 120,000 subscribers.

But cable delivery won't be the only way the public will be able to receive digital audio. It will also be available over-the-air. The broadcast radio industry opposes the FCC's plan to allocate S-band spectrum to Satellite Digital Audio Broadcasting (DAB). They say it will destroy local AM and FM radio. The FCC proposed an allocation of 50 MHz (between 2310 and 2360 MHz) for DAB last fall.

Digital Audio Broadcasting is the audio version of DBS - Direct Broadcast Satellites - that ten years ago promised to beam TV direct to the home. The public is still waiting for television broadcasts from space.

If DAB must be implemented, the National Assoc. of Broadcasters wants it activated through local radio stations rather than by direct-to-the-home satellites. DAB providers, however, believe that the marketplace should decide how broadcast digital audio should be made available to the public.

One thing is certain. Crystal-clear CD-quality digital audio is on its way and what will happen to analog radio is anybody's guess

Rocket Advertising

You have heard of the Goodyear blimp, but what about the NASA Comet? For halt-a-million bucks, advertisers can purchase 58-ft of billboard space on the hull of an expendable NASA rocket. In exchange, they get about 30 to 60 seconds af live launch time coverage plus exposure during the prime-time news networks that always cover major space shots.

Advertisers are adding up the numbers (audience, ratings, ...exposure) and it is starting to make economic sense to some! NASA, in an attempt to attract ad dollars to help offset mushrooming launch costs, will embark on a novel fund raising venture code- named "COMET" ...an acronym for the COMmercial Experiment Transporter.

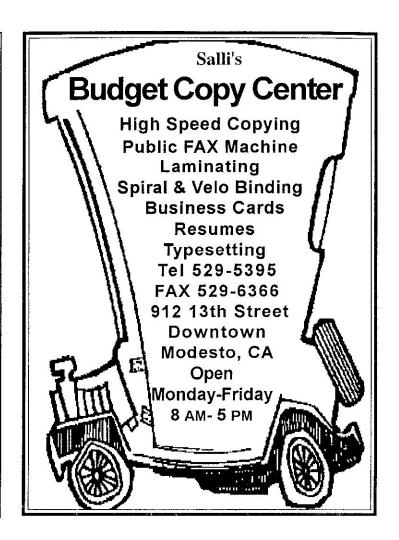
Trixs W5Y! Report



Calendar

May 2 Livermore Swap Meet	7 ам -12 рм
Los Positas College	
May 8 Foothill Swap Meet	All Day
May 8VE Testing in Turlock	900 а.м.
May 18 SARA Monthly Meeting	730 P.M.
Jun 12VE Testing in Modesto	900 а.м.
Jun 26-27 SARA Field Day	2 days
McHenry Recreation Area near Escale	on
July 20SARA Monthly Meeting	730 рм
Aug 17SARA Monthly Meeting	730 рм
Oct. 22-24 Pacificon '93 Convention	3 days
Concord, CA.	

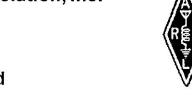
SARA meet the third Tuesday of each month (except holidays) at the Stanislaus County Administration Building 11th and H Streets in downtown Modesto. The meetings are held in the lower-level conference room at 730 pm. Visitors and interested persons are most welcome to attend. SARA is an ARRL affiliated club and is also affiliated with the Stanislaus County and City of Modesto RACES programs.



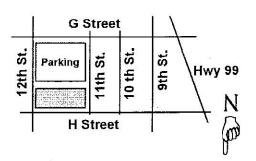
Get Ready For Field Day June 26-27th

Stanislaus Amateur Radio Association, Inc. P. O. Box 4601 Modesto, CA. 95352

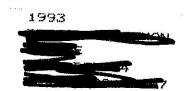
Address Correction Requested



Bulk Rate U. S. Postage Paid Permit 5 Modesto, CA.



TO:



SARA Meeting Location 1100 H Street, Modesto, CA Lower Level Conference Room. 730 pm third Tuesday of each month.