

SCCARA-GRAM

Santa Clara County Amateur Radio Association

Volume 11, Number 6

June 1995

President's Prose

The May program was very informative, our own Alonzo Dallas, N6XME owner of Dallas Solar Power, a solar energy equipment supplier, provided us with some very good information. Alonzo invited KM6OH Kim Robinson of Electronic Associates. Kim also made additional comments on solar power systems. Thanks Guys!

Many thanks to Alonzo for the use of the solar power for Field Day the last couple years. Thanks again Alonzo! Remember, when it's SOLAR, Think "DALLAS SOLAR POWER & MORE" buy from "our man Dallas" call (408) 437-5478 or 294-5848.

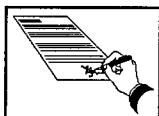
Our deepest sympathy to: KC6TDK, Pat Itatini and family on the passing of Pat's mother. She passed away April 26, 1995 at the age of 100 years, 9 months, 11 days.

Many thanks to all that helped at the Flea Market on May 13. A special thanks to our own Lou Steirer WA6QYS and Scott Hensley KB6UOO of the Red Cross for working beyond the call of duty.

The June SCCARA meeting will be a Field Day meeting. Many HAMs have never been to a Field Day in their life! Make this one. Your husband, wife, or friend will be happy to let you go or bring them and a few friends or relatives to F.D. with you. So plan on Field Day 1995. You may operate a rig or just have fun talking with others in the clean air of Mt. Madonna. We can also use help setting up and tearing down when it's all over. Just think, you will also have a chance to eat in the great outdoors! Be a part of this great event. I can't wait, can you? Our volunteer Field Day Chairman is past president KO6HH Don Hayden. Thanks Don for taking on another big one...

C U at the meeting!

73, Mike Marneris K8ERL



Calendar

- 6/3 Field Day Committee Meeting
- 6/10 Foothill Electronic Flea Market
- 6/12 SCCARA General Meeting
- 6/24-25 Field Day
- 6/26 SCCARA Board Meeting--(San Jose Red Cross, 7:00p, all are welcome)
- 7/10 SCCARA General Meeting

Next General Meeting

Day: Monday, June 12, 1995
Time: 7:30 PM
Place: United Way Building
Agenda: Field Day, Don KO6HH

The United Way Building: 1922 The Alameda, San Jose, (about one mile South West from the San Jose Air Port). From I-880: take the Alameda turn-off going South, then turn left immediately on McKendrie. From the South: go North on the Alameda, 1/2 block past Hedding turn right on McKendrie.

As soon as you turn onto McKendrie (heading East), turn right into the parking lot just behind the small church on the corner. Park at the far end of the lot. The main entrance is up the steps at the South East corner of the building. There is wheelchair access at another door at the North East corner, but for security reasons, only one door is open at a time--someone will have to notify the guard if you need wheelchair access. Also, try not to be too late--the doors may be closed with nobody around to let you in.

The San Jose Red Cross: South-West corner of North 1st and Plumeria Dr. Plumeria is two lights North of Trimble and South of Montague Expressway. From the South on I-880, take the 1st Street exit, go North. From the North on I-880, take the Montague (Trimble) exit, go West to Trimble then turn right (North) on 1st, (if you miss Trimble, just follow Montague then turn left (South) on 1st). From the South on US-101, take the Trimble (De La Cruz) exit going North, then turn left (North) on 1st. From the North on US-101, take the Montague exit going North/West, then turn right (South) on 1st. The main entrance faces Plumeria (North). **Board meetings are open to all.**

The **SCCARA-GRAM** is published monthly by the **SANTA CLARA COUNTY AMATEUR RADIO ASSOCIATION**, PO Box 6, San Jose CA 95103-0006. Permission to reprint articles is hereby granted, provided the source is properly credited.

SCCARA was formed as a general interest amateur radio club in 1921 and became a non-profit corporation in 1947. SCCARA is an affiliate of the American Radio Relay League.

The club station, W6UW, is currently homeless (out of service).

Articles for the SCCARA-GRAM must be submitted to the editor by the last Monday of the month.

OFFICERS and DIRECTORS

President	Mike Marneris, K8ERL	243-9042
Vice President	Hugh Collis, KD6EFL	246-9374
Secretary	Gary Mitchell, WB6YRU	265-2336
Treasurer	Rex Skiver, N6BUO	263-5277
Station Trustee	Stan Getsla, WA6VJY	275-0735
Director	Dan Dietz, WM6M	458-3460
Director	Don Apte, KK6MX	629-0725
Director	Imre Takacs, KD6MZM	251-9686
Director	Don Village, K6PBQ	263-2789
Director	Lou Steirer, WA6QYS	241-7999

STAFF

Editor	Gary Mitchell, WB6YRU	265-2336
Facilities	Don Village, K6PBQ	263-2789
Historian	Jean "Doc" Gmelin, W6ZRJ	973-8583
Mailman	Tony Sanchez, K6MOB	296-6676
Photographer	Bob Keller, KB6OHO	725-1034
Good & Welfare	Ed Rawlinson, WD6CHD	264-2988

COMMITTEES

Repeater	Keith Butts, KN6K	248-3849
Youth Group	George Brady, AB6OZ	729-9012

SCCARA REPEATERS

SCCARA owns and operates two repeaters under the call W6UU:

2 meter:	146.385 + PL 114.8 (none for basic use)
70 cm:	442.425 + PL 107.2

Phone patch capability is available with a small subscription fee. The two meter repeater is located in the Mt. Hamilton foothills, Alum Rock area. The 70 cm repeater is located at the Alexian Brothers Hospital, North of 280 and 101.

SCCARA NETS

On our two meter repeater: Mondays at 7:30 PM, (not the second monday--it's our meeting night). Net control: Joe WA6DXP.

On ten meters, 28.385 MHz USB, Thursdays at 8:00 PM. Net control: Wally KA6YMD.

Visitors welcome to join in on the SCCARA nets.

IMPORTANT TELEPHONE NUMBERS

SCCARA HOTLINE:	249-6909
ARRL CLASS HOTLINE:	971-1424
ARRL LICENSE (VEC) HOTLINE:	984-8353

Good & Welfare

Your editor is most pleased to bring to the attention of all SCCARA members the marriage of Hugh Collis, KD6EFL and Paula J. Taylor, April 22nd at Pacific Grove in the Wedding Chapel. Best friend, Doug Eaton, WN6U, served as best man. Children: Chris, Paula, Andrew, and the newly joined couple will reside in Santa Clara.

SCCARA heartily wishes them a long and happy marriage!

de Ed, WD6CHD

Field Day

The antenna trailer equipment check-out and repair meeting was held Saturday, June 3, up at my place.

We still need:

- HEAVY DUTY extension cords (fifty feet long more)
- IBM type PC's (preferably lap-tops) for logging
- Someone to man our visitor/info stand & check-in.
- Wire for dipoles and radials.

This year we will be classified as 2A and will run full power (up to 150 watts). The stations and their managers are:

- CW - Don K6BPQ, using the club Kenwood 520 rig and wire antennas.
- Phone - Gary WB6YRU, using his Yaesu 757 and the antenna trailer with a beam plus Gary's long wire.
- VHF - Gary WB6YRU, using Gary's Yaesu 225 and antenna.
- Novice - (needs a manager) using the club's Yaesu 757 and Don KO6HH's multi-band vertical antenna.
- Packet - (no manager or equipment except TNC).

The club has two computers and we will need at least two or three more, plus one for packet. These will be used for contact logging and duplicate checking.

There are no plans to try any satellites, but the phone and VHF stations have the ability work RS-10/11, we may give that one a try. In recent years, RS-10/11 has been VERY busy during Field Day.

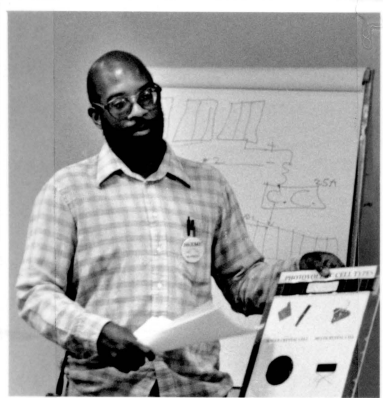
Frank Glass will give a contesting demo at Field Day (Sat. afternoon).

Last, but not least, the June meeting will be on Field Day. See you there.

Don KO6HH, Field Day Chairman

Thank You

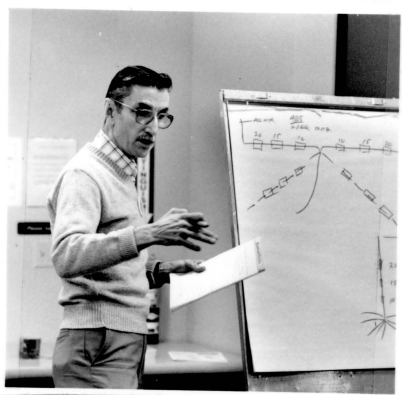
SOLAR POWER TALK BRIGHTENS MAY MEETING



Alonzo Dallas
N6XME



Kim Robinson
KM6OH



Don K6PBQ also gave a brief talk on antennas for the newer members/amateurs.

Our thanks to Alonzo Dallas N6XME, of the Dallas Solar Power & More Co. and Kim Robinson KM6OH for an informative and interesting talk on solar power. Kim described the process of installing a solar system to keep batteries charged to run his rig. He went through the procedure step by step including some things he learned the hard way. They had some great photos of Kim's installation and Alonzo had a solar panel, charge regulator and some other things on display. He also donated a raffle prize.

This year, as in past years Alonzo has very graciously offered to donate the use of a solar panel and battery for field day. There is a 100 point multiplier for running a solar station, so this donation is very helpful indeed. Once again a big thank you for Alonzo Dallas N6XME and Kim Robinson KM6OH.

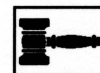
Thanks guys!

Hugh, KD6EFL, Vice President



Meeting Minutes

General Meeting, May 8, 1995



Meeting called to order 7:37 PM, President Mike K8ERL presiding. 40 in attendance.

Self introductions.

Historian, Doc W6ZRJ: Shared some letters, photos, etc. from the early days of SCCARA. Doc visited Hank Brown, W6HB, the last living of the original members of SCCARA. Hank was secretary of SCCARA in 1927, when SCCARA put on the first ever Pacific Division Convention. He will be 90 in Aug. and is still on the air.

Don KO6HH: SCCARA contest logs must be in (to him or K6PBQ) by May 15th.

Don K6PBQ: Gave a brief presentation on antenna basics for the newer and younger members.

SPEAKER: Alonzo Dallas, N6XME and Kim Robinson, KM6OH. Alonzo discussed solar cell basics. Kim described his solar power installation at home.

Lou WA6QYS: We will host the Foothill Flea Market this Saturday--we will need some more volunteers.

Bob W6OOY: Motion to pay the parking fee incurred by volunteers at the flea market. Motion seconded and passed.

Recess at 9:04, Resume at 9:14

John K6EJF: move to accept minutes as published. WD6CHD had a minutes correction: the address published in his newsletter column for W6DHO is incorrect, (this actually was never part of the minutes). Motion passed unanimously.

Barbara KD6QEI: People need to get their food orders in for the Field Day. Forms must be in my hands by June 21.

Al W6VZT: Offered to let the club meet at a theater in Campbell for \$75 including coffee. This will be discussed at the next board meeting.

President Mike K8ERL: Salvation Army has a place at Homestead & Kiely were we might be able to meet. Discussion about meeting place followed.

V.P. Hugh KD6EFL: If anyone has ideas for presentations, please tell me.

Barbara KD6QEI: Will custom embroider hats for \$20-30 (including hat).

Secretary Gary WB6YRU: I have individual rosters (not in a newsletter) and Elmer sign-up forms available.

Treasurer Rex N6BUO: Total treasury is \$18069. \$1055 income, \$1669 outlay. The income from the flea market will make up for the losses.

Mike K8ERL: People who help with Flea Market maybe could get a free meal at Field Day. WA6QYS: flea market volunteers will get a free lunch at the flea market. Discussion followed. Dan Dietz WM6M hasn't been in town--we need a Field Day Chairman. WA6CHD moved that Barbara KD6QEI and Wally KA6YMD get free meals at Field Day for taking on the duty of Field Day food.

W7MVT: At San Jose State will be a big event June 3 and they are looking for anyone interested in helping out with 2 meter HT's.

Raffle
Adjourned 9:58 PM

Board Meeting, May 22, 1995



Meeting called to order at 7:35 PM, V.P. Hugh KD6EFL presiding. Attendance: Hugh KD6EFL, Don KO6HH, Don K6PBQ, Lou WA6QYS, Gary WB6YRU, Rex N6BUO, Keith KN6K, George AB6OZ, Doug WN6U, and Clark KE6KXO.

V.P., KD6EFL: Next meeting is on Field Day. July meeting features Roy K6VIP.

Secretary, WB6YRU: We have 134 dues-paying members and 35 honor members.

I thought it would help attract people to Field Day if they didn't have to worry about the park fees. I called up the County Parks Dept. (where we make our Mt Madonna reservations) to find out if we could pay a flat rate for the camp site rather than have individuals pay their own way as they show up. Evidently, this is the way it normally works--the flat rate is \$96 per night and the camp site has a 30 vehicle max. They said we should have paid that flat rate when we made our reservations. However, according to Stan WA6VJY, we are allowed 8 vehicles for the reservation fee and that does not include any day use fees. We have been telling people they must pay the "day use" fee themselves or the per-night camping fee. Stan has the reservations paperwork, but hasn't gotten back to me yet. Hopefully this will get cleared up before the next SCCARA-GRAM goes

out.

KO6HH: Motion (assuming Gary is right and club pays flat rate which covers everything) that the club pay the flat rate and allow everyone to show up without paying the park fees. Motion passed unanimously.

Repeater, KN6K: Some people have signed up for auto-patch who live in the 415 area code and the repeater won't allow numbers outside our area code. We can put specific numbers in unused auto-dial slots. I propose we either 1) tell them they can't dial those numbers and refund their fee, or 2) offer each of them an auto-dial slot with a 415 or 510 number. There is an used auto-dial bank of 100 slots.

KO6HH: Motion to approve option 2 with the condition that we reserve the right to cancel them out if they add more than \$10 to the phone bill during the year. Motions passes unanimous.

WB6YRU: Auto-dial or auto-patch codes have been sent to all who ordered them except for about half a dozen; they haven't sent in a copy of their license and their call could not be verified. A reminder letter was sent out May 2, 1995. This business of verifying calls is adding difficulty to the process. We should we have a stated policy of requiring a copy of people's license to be handed in with the auto-patch order and people should not rely on the existence of a file containing previous year's copies. (this club has a problem maintaining files.) Discussion followed. Stan WA6VJY came up with the requirement. KN6K asked if we should maintain the requirement.

KO6HH: motion to table this issue until Stan can be consulted. Motion passed unanimously.

Youth Group, AB6OZ: The kids have problems coming to meetings, including transportation, school, and other activities. There have only been about a dozen survey responses so far (out of 70). QST has an ad for video tapes for General class upgrades (\$99, tape set, includes book). I propose the club buy the tapes; if the board approves, I'll teach a general upgrade class. Discussion followed. WA6QYS: Motion to buy the tapes. Motion passed unanimously.

Flea Market, WQ6QYS: The gate receipts and food sales was about half of normal because of the weather. Our total was \$1812.95, not including the \$400 fee to host the flea market. This breaks down as \$1320 for the gate and \$492 net on the food. We have lots of stuff left over for Field Day and whatever.

Treasurer, N6BUO: We received \$58 in dues last month, which brings our total savings to \$19,939.95.

Editor, WB6YRU: The copying cost for the newsletter has gone up 33%, (\$0.03 to \$0.04 per copy).

Field Day, KO6HH: We will be classified as 2A this year and will run full power (up to 150 watts). KD6EFL:

Alonzo will again loan the club a solar panel and battery. The CW station manager will be Don K6BPQ, they will use the club Kenwood 520 rig and wire antennas. The phone station manager will be Gary WB6YRU using his Yaesu 757 and the antenna trailer with a beam plus Gary's long wire. The VHF station manager will also be Gary WB6YRU and will use Gary's all-mode two-meter rig and antenna. The Novice station needs a manager and will use the club's Yaesu 757 and Don KO6HH's vertical antenna. We are still looking for other rigs, etc. The packet station is in a state of flux. We still need some wire for antenna radials and dipoles. We need long heavy-duty extension cords. The club has two computers and we will need at least two or three more and one for packet. We also will need someone to manage the visitor's table. Dan WM6M has the club generator. Stan WA6VJY has one and will bring it if he can get his motor home up there. Wally KA6YMD also has a generator in his motor home. There are no plans to try any satellites, but the phone and VHF stations have the ability work RS-10/11, we may give that one a try. The antenna trailer and equipment check-out will be on June 3. Frank Glass will give a contesting demo at Field Day (Sat. afternoon). Discussion followed about alternate sites for Field Day.

Old Business: The meeting about the radio room at the Red Cross was canceled. Discussion followed about the club station and antenna possibilities.

Adjourn 9:23 PM

Gary, WB6YRU, Secretary

Secretary Says

If you would like to keep a copy of the roster separately without tearing up your last SCCARA-GRAM, the Secretary has copies of the roster available free at any meeting. These generally have a little more information than is published in the SCCARA-GRAM.

Also, if you would like to add yourself to the SCCARA Elmer list, see me for an Elmer survey form.

On a more sour note... As most of you know, SCCARA exchanges newsletters with several other clubs. I have been putting out other club's bulletins at the general meetings for everyone to brows. At the April meeting, every single one had disappeared! At the end of the last (May) meeting, some of them disappeared and I noticed two in the waste basket! Technically, these are the property of SCCARA. You are free to look them over, but they are not to be taken and certainly not for you to throw away. We have only one copy of each--*PLEASE DON'T TAKE THEM*. If you want to *borrow* one, that's fine, just let me know.

Gary WB6YRU, Secretary

SCCARA Contest

Timothy Brady KE6MEA won the SCCARA spring two meter contest with 110 points--many more than the next runner up! Tied for second place with 25 points each are: KO6HH, K6PBQ, and WB6YRU. Other entries were: AB6OZ, KD6QEJ, and N6BUO.

Don Hayden, KO6HH

New Members

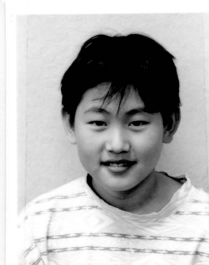
SCCARA would like to welcome these new amateurs to the club:



Timothy, KE6MEA



Eric, KE6NBP



Albert, KE6OJS

Do you have any questions, ideas, or comments about SCCARA or any activities? Please don't hesitate to ask. There is a list of club "higher-ups" in each SCCARA-GRAM.

We would like to extend a similar welcome to all new SCCARA members. Please see the club photographer, Bob Keller KB6OHO, at any meeting.

Repeater Report

Did you order auto-dial or auto-patch repeater codes? With a few exceptions, everyone should have received them. We are still waiting on few people to send in a copy of their license: Frank WA6BYB, Richard KE6FTZ, George WA6MYU, Patrick KE6OUN, and Jack KE6OUP. Aside from those mentioned, if you ordered repeater codes, but haven't received them, please see me at any meeting or drop me a line (I'm also on packet, home BBS N0ARY).

On behalf of Keith KN6K (chair) and the Repeater Committee, Gary WB6YRU, Secretary

A River Runs Through It

a.k.a. SCCARA's Foothill Flea Market

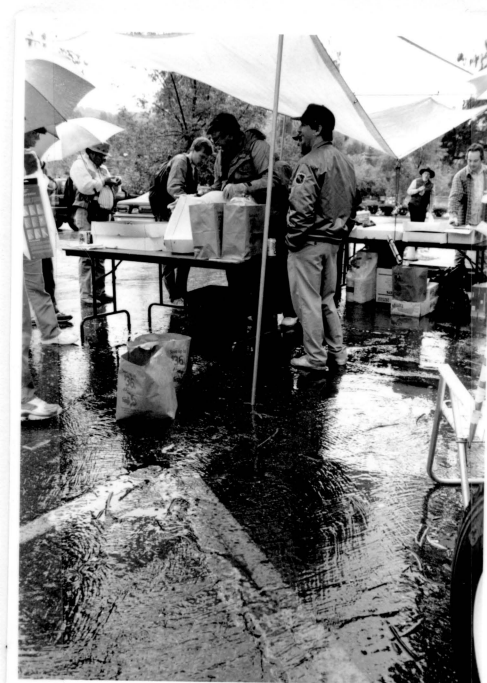
Thanks to all who turned out to help with SCCARA's sponsorship of the Foothill Electronic Flea Market of May 13, 1995.

The previous two flea markets were low in attendance due to rain in March and blustery/threatening weather in April. Surely it would be a nice day in the middle of May. Optimistically, we were geared up for a BIG DAY. It never came to pass. Mother Nature had other plans. She is well versed in Murphy's Law. The rains came down and an observation was made about our food booth that *"A River Runs Through It."* Water indeed was flowing under our tables and through the booth.

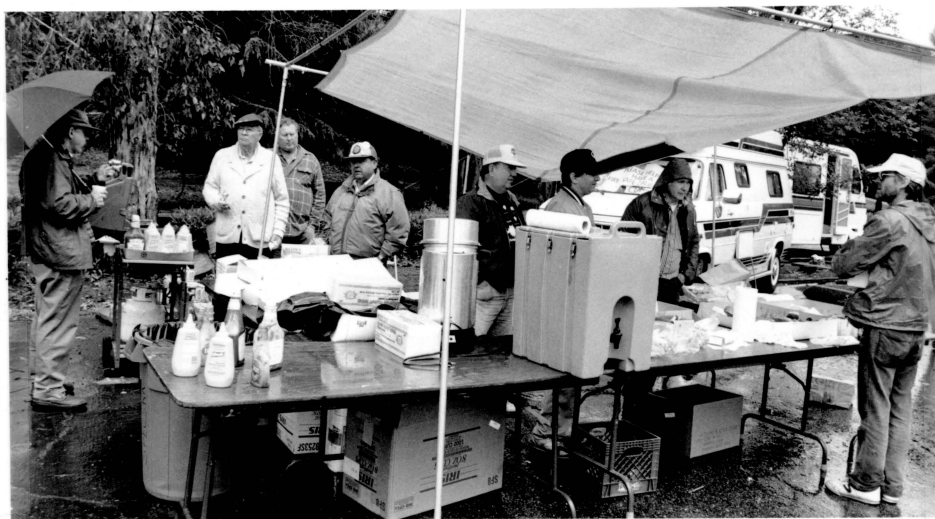
Approximately half the vendor spaces were occupied, but we had less than half the usual number of food customers. Needless to say, anticipated profits were way down. All in all, it was a boost to SCCARA's coffers and a character building experience for the hardy volunteers.

Thanks again to all SCCARA members who came out braving the elements to participate in this club function.

73, Lou WA6QYS



Yes, that is a torrent of water running under our concession stand! It seems we were exactly positioned to catch the runoff from one of the parking aisles.



SCCARA's Flea Market concession stand on an unusually wet day for May.

Packet Pieces

Downloaded from the packet network:

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Date: 23 May 95 13:02

From: W5QXK@N5WYN

To: ALL@ARRL

Subject: ARLX023-EMF Cancer link studied

QST de W1AW From ARRL Headquarters Newington Ct
MAY 19, 1995

To all radio amateurs

EMF Cancer link studied

The council of the American Physical Society (APS) has issued the results of a study entitled "Power Line Fields and Public Health," concerning the potential dangers of cancer from electromagnetic fields that emanate from common power lines and electrical appliances.

The APS concluded that "the scientific literature and the reports of reviews by other panels show no consistent, significant link between cancer and power line fields" and "the preponderance of ... research findings have failed to substantiate those studies which have reported specific adverse health effects from exposure to such fields.

"While it is impossible to prove that no deleterious health effects occur from exposure to any environmental factor, it is necessary to demonstrate a consistent, significant, and causal relationship before one can conclude that such effects do occur. From this standpoint, the conjectures relating cancer to power line fields have not been scientifically substantiated."

The APS said that billions of dollars are being spent by states and municipalities to mitigate and litigate this perceived problem and "the burden of cost placed on the American public is incommensurate with the risk, if any."

A background report on this issue by David Hafemeister is available on the internet through the APS World Wide Web Homepage at: [HTTP://APS.ORG](http://APS.ORG)

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Date: 2 May 95 20:37

From: W1AW@W1AW

To: QST@ARRL

Subject: ARLB047 HF auto digital detailed

QST de W1AW From ARRL Headquarters Newington CT
May 2, 1995

To all radio amateurs

HF auto digital detailed

The FCC has released its Report and Order in PR Docket 94-59, concerning HF digital communications in the Amateur Radio Service. The new rules, effective July 1, 1995, permit automatically controlled HF RTTY and data stations to communicate with one another in the following segments: 28.120 to 28.189, 24.925 to 24.930, 21.090 to 21.100, 18.105 to 18.110, 14.095 to 14.0995, 14.1005 to 14.112, 10.140 to 10.150, 7.100 to 7.105, and 3.620 to 3.635 MHz.

The new rules also permit manually controlled stations to initiate communication with automatically controlled HF RTTY and data stations. In this case the automatically controlled station may use any frequency authorized for such emissions, but may occupy a bandwidth of no more than 500 Hz.

Automatic control must cease upon notification by an FCC engineer in charge that the station is transmitting improperly or causing interference to other stations.

The FCC said it recognized the concerns of those who opposed the proposal on grounds that such operation could interfere with other amateurs, but that it believed the provisions adopted would be adequate to minimize such interference.

More information is on page 71, August 1994 QST.

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Date: 29 Apr 95 19:59

From: N8WML@KB8JNM

To: PUZZLE@ALLUS

Subject: LOGIC PROBLEM

The Problem

A couple of months ago I was having breakfast with four friends. We were having a good time talking about future contests and hamfests. When suddenly the discussion turned to who was the best operator. As the discussion continued with no end in sight, I suggested maybe a small contest would resolve the problem. I told them we would flip a coin to determine who would use what radio, antenna, and starting time. And they would each get an hour of operating time. That way nobody would have an unfair advantage and the best operator would prevail.

I volunteered to keep track of the details. But after finding my notes recently I discovered I had failed to organize the information. Maybe you can help me. I need to know what operator used what radio with what antenna and his starting time. I know there is enough information in my notes. Good luck.

Notes:

Operators.....Stan,Bob,Ron,Alan
Radios.....Yaesu,Kenwood,Icom,Alinco
Antennas.....J-Pole,Yagi,Dipole,Quad
Start Times.....1pm,2pm,3pm,4pm

1. The four operators are Stan, the Kenwood operator, the 1pm operator, and the amateur that used the Quad.

2. Alan operated just after the amateur using the Yagi.

3. The last operator of the day is using the Icom.

4. Stan operates just before the amateur using the Dipole and just after the operator using the Yaesu.

5. Bob is not using the J-Pole.

There you have it send me your answer and how you liked the problem. If you need another clue just ask, but there is enough information here. And if you just want to throw in the towel and get the answer send me a message.

Hope you enjoyed the puzzle. 73.....Rodney
N8WML@KB8JNM.#EOH.OH.USA.NOAM

Newsletter Notes

If you have been thinking about getting started in packet or some aspect of it, you won't want to miss any SCCARA-GRAM issues in the near future...

Those of you familiar with packet may know of Larry Kenney, WB9LOZ, of San Francisco, the author of *Introduction to Packet Radio*. He is a member of the NCPA (No. CA. Packet Assn.) and a sysop. The booklet covers basic installation and usage, how to work most BBS's, how to use nodes, and even a section on TCP/IP. The book has been available at Pacifcon (at cost) and on many packet BBS's. He has recently updated this work and sent it out on packet again. Larry WB9LOZ has put a lot of work into this fine booklet and asks nothing in return--we all owe him a big debt of gratitude for this contribution to amateur radio.

So, it is with great pleasure and Larry's enthusiastic approval that *Introduction to Packet Radio* be presented here as a new column. The text will be reproduced here just as he originally sent it out. There are twenty parts, but each varies greatly in length (some are divided into multiple packet messages).

This will take at least a year to finish. If anyone is impatient, you can get it all at once from some BBS's or give me an IBM PC compatible floppy disk and I can make a copy for you.

73, Gary WB6YRU, editor

Need Help?

Amateurs have a long history of helping each other. An experienced amateur who helps another is traditionally called an "Elmer." If you have a question or problem, you are encouraged to ask one of SCCARA's Elmers. Below is a list of topics including who to contact for each.

If you consider yourself to be reasonably competent in at least one area of amateur radio and would be willing help others, please get an Elmer survey from the secretary.

Antennas, feed-lines, tuners:

WB6EMR, AC6FU, K6PBQ, K6RQ, WB6YRU

Lightning protection, grounding: WB6YRU

Station set-up, equipment: AC6FU, K6PBQ, K6RQ

TVI/RFI: WB6YRU

Homebrew projects, construction: AC6FU, WB6YRU, KD6FJI

Computers: KB6NP; IBM PC: WN6U, WB6YRU

Packet Network (BBS, forwarding): WB6YRU

Other digital modes (AMTOR, RTTY): WN6U

Code operating and installations:

WB6EMR, AC6FU, K6PBQ, K6RQ

DX (long distance/propagation): WB6EMR, K6RQ

Emergency operating/preparedness: WA6QYS

FM (VHF/UHF, repeaters): WA6VJY

HF operating techniques (SSB, CW):

WB6EMR, AC6FU, K6PBQ, K6RQ

Mobile operating: WN6U, K6RQ

QRP (HF low power, all modes): WN6U

TEN-TEN (10 M only): AC6FU

Classes/license upgrading: AC6FU, W6ACW

Legal/FCC rules: WB6YRU

SCCARA (club inner workings):

K06HH, K6PBQ, WA6VJY, WB6YRU, WA6QYS

Math applications: AC6FU

Children's Discovery Museum, volunteer operator: K6PBQ

W6ACW, Ed Hajny, (408) 739-6105

WB6EMR, James D. Armstrong, Jr.,

day: (408) 995-0621, evening & msg: (408) 945-1202

KD6FJI, Lloyd DeVaughns,

day: (408) 299-8933, evening: (408) 225-6769

packet: home BBS KB6MER

AC6FU, Jack L. Ruckman, (408) 379-4846

K06HH, Don Hayden, (408) 867-4643

packet: home BBS NOARY

KB6NP, Jon Dutra, day & msg (408) 428-2058

evening (408) 867-8654

packet: home BBS NOARY

internet: jad@aol.com

K6PBQ, Don Village, (408) 263-2789

WA6QYS, Lou Steirer, (408) 241-7999

packet: home BBS NOARY

K6RQ, Frank Glass, (408) 356-1026

WN6U, Doug Eaton, (408) 377-3736

packet: home BBS NOARY

internet: deaton1@1x.netcom.com

WA6VJY, Stan Getsla, day: (408) 738-2888 x5929, evening & msg: (408) 275-0735

WB6YRU, Gary Mitchell, msg (408) 265-2336

also (408) 269-2924

packet: home BBS NOARY

Introduction To Packet Radio

**by
Larry Kenney, WB9LOZ
Part 1**

Packet Radio is one of the latest major developments to hit the world of Amateur Radio. If you haven't already been caught by the "packet bug", you're probably wondering what it's all about and why so many people are so excited about it. Well, continue reading, because you're about to find out.

Packet seems to offer something different from other facets of Amateur Radio, yet it can be used for everything from a local QSO to a DX contact thousands of miles away, for electronic mail, message transmission, emergency communications, or just plain tinkering in the world of digital communications. It presents a new challenge for those tired of the QRM on the low bands, a new mode for those already on FM, and a better, faster means of message handling for those on RTTY. Packet is for the rag chewer, the traffic handler, the experimenter, and the casual operator.

A ham can get involved very easily with relatively small out-of-pocket expenses. All you need is a transceiver, a computer or terminal, and a TNC. If you use a computer rather than just a terminal, you can use a packet modem and special software instead of a TNC. A two-meter rig is preferred, since that's where most of the packet activity is located. You probably already have the rig and a computer of some kind, so all you need to buy is the TNC, which costs just over \$100, or the modem and software, which sell together for about \$50.

A TNC is a Terminal Node Controller, the "little black box" that's wired between the computer and the radio. It contains software for controlling the outgoing and incoming transmissions for your station and a modem that converts the data from the computer into AFSK tones for transmission and changes the tones that are received by the radio into data for the computer. The TNC modem works much like a

modem that's used to connect your computer to the telephone lines. It's a simple matter of wiring up a plug and a couple of jacks to become fully operational on packet. If you prefer to use the small modem instead of a TNC, you'll need special software for your computer to replace the software in the TNC. Either method works equally well.

Packet is communications between people either direct or indirect. You can work "keyboard to keyboard" or use electronic mailboxes or bulletin board systems to leave messages. Due to the error checking by the TNC, all of it is error free, too. (That is, as error free as the person at the keyboard types it.) As the data is received it's continuously checked for errors, and it isn't accepted unless it's correct. You don't miss the information if it has errors, however, because the information is resent until it is correctly received.

The data that is to be transmitted is collected in the TNC and sent as bursts, or packets, of information; hence the name. Each packet has the call sign or address of who it's going to, who it's coming from and the route between the two stations included, along with the data and error checking. Since up to 256 characters can be included in each packet, more than three lines of text can be sent in a matter of a couple of seconds. There is also plenty of time between packets for several stations to be using the same frequency at the same time.

If all of this sounds confusing, don't let it bother you, because the TNC or special packet software does everything for you automatically. Packet radio might seem very confusing at first, but in a day or two you'll be in there with the best of them. In this series I'll be telling you all about packet--how you get on the air and how to use it. We'll talk about that little black box, the TNC, and tell you about all its inner-most secrets. We'll discuss mailboxes, bulletin board systems, and the packet networks that allow you to work stations hundreds, even thousands, of miles away using just a low powered rig on 2 meters, 220 or 450. The world of packet radio awaits you!

ARRL Pacific Division Update

June 1995

ARRL President George Wilson, W4OYI, continues his recovery

As previously reported, on Feb. 11, George Wilson, W4OYI, suffered a stroke in Washington, DC, while on business for ARRL. George was moved on May 1 from the hospital near his home in Owensboro KY to a rehabilitation facility near Evansville, IN. All information indicates that he is recovering well, but it appears that the recovery period will be a long time. Please hold good thoughts for George and his family. Messages can be sent to George's address at 1849 Griffith Ave, Owensboro KY 42301. Get well, George!

Vanity "Preferred" Call Signs

The "sequentially issued" club call signs part of the "Vanity" Call signs Program is underway with club call signs being received already in the 4th and 6th call areas. No starting date has been announced by the FCC thus far for the remainder of the program. However, the long-awaited form 610-V is very nearly ready: it was finally approved by the Office of Management and Budget on May 2, and copies should start going out within the next few weeks.

There is a new twist to the program. It has now been determined that a second form 1070-V, will have to be filed with each 610-V as a transmittal for the \$70.00 fee.

There are two routes to follow to obtain the necessary 610-V and 1070-V forms: direct from the FCC or via ARRL. In order to obtain forms from the FCC, call 1-800-418-3676 and follow instructions. This number, which is open 24 hours per day, hooks you into an automated form ordering system. After making your way through the usual maze of control numbers, input from your touch-tone telephone, you'll be given the opportunity to leave a recorded request. If you wish to obtain your forms from ARRL, send a self-addressed, stamped envelope (SASE) to ARRL HQ, 225 Main St, Newington CT 06111, and ask for a 610-V. A 1070-V will automatically be included with each 610-V request.

The club call sign procedure has started with the issuance of sequential calls from the Group D call sign blocks. The first new club call sign I have learned of in the Pacific Division was issued to Del Norte ARC - KE6SWU. Congratulations!

There is to be a new form 610-B. In the meantime, to apply for a club call sign you can use the existing Form 610-B dated March 1992 and write "NEW" in the call sign box at the top of the form (item #1). Form 610-B can be obtained from the ARRL/VEC for an SASE. Mail the

completed club call sign application form 610-B (with a copy of the trustee's license) to FCC, 1270 Fairfield Rd, Gettysburg, PA 17325-7245.

In order to apply for a "vanity call sign" for a club, you must already have a club call sign or have obtained one under this new program. A club trustee would then apply for a vanity call based on the "gate" for his or her license class.

A Club Call Sign Application Fact Sheet by FCC has been released to fully define the process. The ARRL-VEC also has an information sheet available to answer questions if you will send an SASE to ARRL-VEC 225 Main St, Newington CT 06111-1494.

On the matter of what call signs from what call areas are to be available, the ARRL and several individual hams have filed Petitions for Reconsideration of paragraph 10 of this Docket. The petitions are to insure the availability of call signs from ONLY the call sign area of residence as proposed by ARRL and QCWA originally and currently rejected by FCC. The FCC plan currently makes any available call sign in any call sign area -- KH6, KH0, KL7, KV4, W6, W7, et al -- available to any applicant. There is no date known by when the FCC will make a decision. However, this aspect of the call sign assignment will not be applicable until later in "gate 2". See May 1995 QST, page 95 for more details.

The cost for any "vanity call sign" will be \$70 for the ten year license based on the current statutes.

Some additional thoughts for those of you concerned with recovering Silent Key call signs of close relatives, please be ready. Be sure that you or some close relative is licensed at some level.

13 cm Band--WE WIN BIG TIME!

On Feb. 7 it was announced by the FCC that the Amateur Service not only retained our 2390-2400 MHz and 2402-2417 MHz spectrum, but we were upgraded from Secondary Allocation to Primary Allocation! There was NO reallocation of 2300-2310 MHz as it was not involved specifically in this matter although some commenters wanted to pair up this segment with 2390-2400 MHz. The battle over 2300-2310 MHz will appear again very soon in 1995 to meet NTIA's schedule of transfer in Aug. 1995. Be prepared again!

While celebrations are in order for now, please remember that we were in a very similar position a few years ago in the battle for 22 -222 MHz. May 1995 QST on page 94 contains a "2400 MHz Honor Roll" honoring those organizations and individuals who contributed to this win.

For more information and background on this entire effort, please see April 1995 QST, page 24.

We get new Spectrum - 219-220 MHz

On Mar. 17, the FCC issued a Report and Order on ET Docket 93-40 awarding operating privileges in the 219-220 MHz band effective April 26, 1995. The Amateur

Service has been awarded, on a secondary basis, permission to use the band for a point to point fixed digital message forwarding service. As we will be sharing this spectrum with other services, ARRL, acting as a "national contact point" for "local amateur coordinators," will provide information on known current licensees in these other services. Those who are interested in using the new band should contact ARRL HQ for an information sheet and application form.

FCC Amends HF Digital Rules

The FCC has announced rule changes covering HF Digital operations. The new rules will become effective July 1, 1995. Subject to a bandwidth limitation of 500 Hz, automatic control will be permitted when connected to another station that is under manual control, or when transmitting in certain frequency segments designated for automatic control operations. Any band from 50 MHz and higher may also be used. The frequency segments available are 28.120 to 28.189, 24.925 to 24.930, 21.090 to 21.100, 18.105 to 18.110, 14.095 to 14.0995, 14.1005 to 14.112, 10.140 to 10.150, 7.100 to 7.105, and 3.620 to 3.635 MHz.

See July QST for full details.

Latest Pacific Division Appointments

It is my pleasure to announce four new appointments within the Pacific Division:

Guy P. D. Archer, WH6SE, and Leland H. Dibble, Jr., KE6EAQ, have been appointed as Volunteer Counsels in Honolulu HI and Santa Rosa, CA, respectively.

Gerhard Straub, WB6ESF, and James Long, N6YB, have been appointed as Volunteer Consulting Engineers in Sonoma and Sunnyvale, CA, respectively.

Thanks, Guy, Gerhard, James and Lee -- welcome to the team!

Antenna Ordinances and related matters

Rusty Epps, W6OAT, continues to lead a Pacific Division-wide effort to develop a database of antenna ordinances and related materials. Rusty reports that data is coming in from all parts of the Division -- thanks! Send all the material to Charles K. (Rusty) Epps, W6OAT, 651 Handley Trail, Redwood City, CA 94062.

Ken McTaggart, N6KM, Volunteer Counsel, and John Wallack, W6TLK, Immediate Past San Francisco Section Manager continue to lead the charge on the potentially very explosive proposed Sonoma County antenna ordinance. The latest information indicates that Sonoma County may not adopt an "RF intensity at the property boundary line measurement" criteria. If such a proposed ordinance involving RF intensity measurements were to pass, it would be the first such in the US. Keep up the good work, Ken and John, and thanks to all others working locally on this challenge!

The antenna ordinance effort in Fresno Co. will

likely come to a head in June. The Fresno ARC and other groups in the county have put forth a major effort to have a more "reasonably accommodating" ordinance passed by the Fresno County Council. Good luck!

Scholarships and Awards

There are many scholarships and awards covering a wide range of situations available to licensed Amateurs. The ARRL Foundation, The Dayton Amateur Radio Association, The Foundation for Amateur Radio, to name only a few, will be announcing their dates for applications for their 1995 scholarships. Watch QST and other amateur radio publications for details. Nominations for 1995 awards can be submitted starting now.

Coming Events

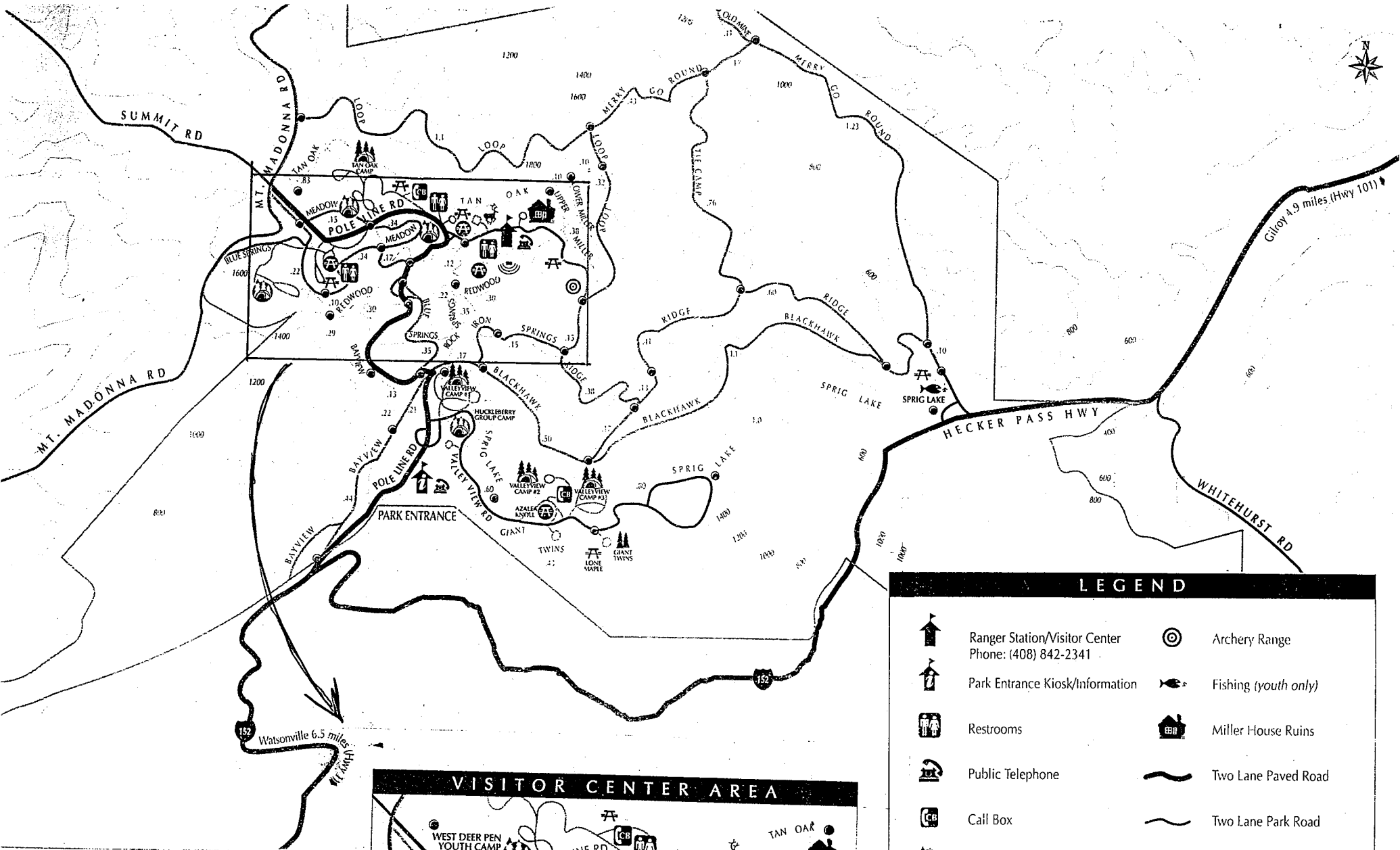
- Livermore Swap Meet - 1st Sunday of each month at Las Positas College in Livermore, CA, 7 AM to Noon, all year. Talk in 147.045 from west, 145.35 from the east. Contact Noel Anklam, KC6QZK, (510) 447-3857 eves.
- Foothill Flea Market - 2nd Saturday of each month from March to September at Foothill College, Los Altos CA.
- North Hills ARC Hamfest, May 21, 1995, at Carmichael Elks Club on Cypress Ave. at Hackberry, Carmichael CA.
- Reno Hamfest at Reno Stead Airport Facility north of Reno, Aug. 12, 1995. Contact Sierra Nevada ARS Bob Davis, KG7IY, (702) 856-2826.
- HAMCON '95 (Southwestern Division Convention), Sept. 1 - 3, 1995, at Long Beach CA. Contact Nate Brightman, K6OSC, (310) 427-5123.
- SCRA Hamfest/Swapmeet, Sept. 16, 1995, in Santa Rosa CA. Contact Rick Reiner, K6ZWB, (707) 575-4455.
- 2nd National Hamfest, Oct. 6-8, 1995, at Costerisan Lake in Bakersfield, CA. Contact the Kern Co. Central Valley ARC at PO Box 743, Bakersfield CA 93302
- Pacificon '95 at Concord, CA, Oct. 20-22, 1995. Contact Richard Schultze, AA6DL, at (510) 932-6125 on the Pacificon '95 Hotline.

Brad Wyatt, K6WR
Director, ARRL Pacific Division

18400 Overlook Rd. #5
Los Gatos CA 95030-5850
(408) 395-2501

Packet: K6WR @ N0ARY.#NOCAL.CA.USA.NOAM
Internet: bwyatt@arrl.org

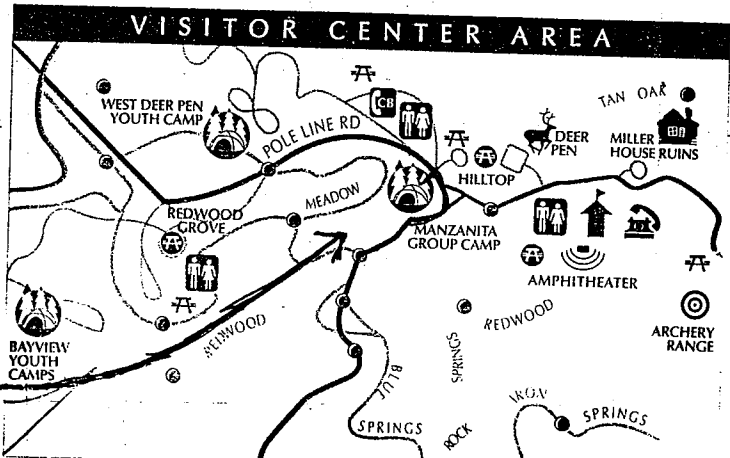




Watsonville 6.5 miles
Mc Camp

Enter the Manzanita
camp area at the upper
right.

WE WILL BE HERE



LEGEND

- | | | | |
|--|--|--|---------------------------|
| | Ranger Station/Visitor Center
Phone: (408) 842-2341 | | Archery Range |
| | Park Entrance Kiosk/Information | | Fishing (youth only) |
| | Restrooms | | Miller House Ruins |
| | Public Telephone | | Two Lane Paved Road |
| | Call Box | | Two Lane Park Road |
| | Reserved Campground | | One Lane Paved Road |
| | Campground | | Equestrian/Hiking Trail |
| | Reserved Group Picnic Area | | Footpath (hiking only) |
| | Picnic Area | | Elevation Contours (feet) |
| | Amphitheater | | Trail Distance (miles) |

Field Day is coming up!

Field Day contest weekend is June 24-25. Mark your calendars!

For those who are new to amateur radio: Field Day is one of the biggest radio contests of the year. The underlying idea is to give amateurs practice making contacts under disaster conditions. This means the participants are encouraged to set up and operate portable stations. You can operate at home, but it's better (worth more points) to "setup shop" elsewhere. For the past several years we have been going up to Mt. Madonna County Park (Southern end of the county). We usually have a variety of stations and antennas. The stations include phone, CW, digital, novice, solar, VHF, etc. The antennas include: couple of beams on towers (one is a sizable crank-up on a specially made trailer), a long wire, and miscellaneous dipoles and verticals. The more exotic the power source, the better. We usually use batteries, generators, and solar cells. We operate under a classification where several transceivers are on the air at one time. We are allowed a certain amount of time to set up--that's why some of us go up Friday afternoon. Once set up, we have 24 hours (starting at a specific time) to make as many contacts as possible. It's a lot of fun and a great way to hone those operating skills! Everyone is encouraged to participate. You can make a weekend of it or just show up for part of it, whatever you like.

The 1995 SCCARA Field Day weekend will again be held at Mt. Madonna County Park on June 24 & 25. When you are not working stations, the Park has plenty of places to hike, a visitor's center, and a small pond where kids 5-12 may fish.

The set-up group will be going up on Friday, June 23 in a caravan. This group often meets around noon and has lunch together before taking off in a pack. Our Field Day Committee Chairman is Don KO6HH. If you would like to join the set-up group, have equipment we might need, or just want information, contact Don at 867-4643.

The club will be serving a BBQ dinner at 1:00 PM on Saturday and breakfast on Sunday morning. The Saturday dinner will be your choice of steak or chicken, plus all the "fix'ns". Please indicate your choice on this sign up sheet. The cost of the dinner is \$10 per person and the Sunday breakfast is \$5 per person. You must pay for these meals in advance so that we know how much food to buy. All other meals are usually pot-luck or if you wish fend for yourself.

We're expecting a great Field Day this year, so please come join us!

Name _____ Call _____

Address _____

City _____ Zip _____

_____ Saturday steak dinner(s) @ \$10.00 / person: \$ _____

_____ Saturday chicken dinner(s) @ \$10.00 / person: \$ _____

_____ Sunday breakfast(s) @ \$5.00 / person: \$ _____

Total: \$ _____

Please fill out this sign up sheet (or a copy) and give it to me at the next club meeting or mail it with your check (payable to SCCARA) to:

Barbara Britten KD6QEI
585 S 14th ST
San Jose CA 95112

S.C.C.A.R.A. Membership Form for 1995

(Fill in name and address if there is no mailing label below; make corrections if the label is incorrect)

Name: _____ Call: _____ Class: E A G T+ T N

Address: _____ Licensed since (yr): _____

City: _____ State: _____ Zip: _____ - _____

Telephone: () _____ A.R.R.L. Member: Yes No

For family memberships (at the same address), please list other name(s) and call(s):

Annual membership dues are payable at the first of the year and expire the following December 31. New members joining on or after July 1, pay half the annual membership dues.

Annual Membership dues: Individual \$15 Family \$20 Student (under 18) \$5

Send the SCCARA-GRAM by first class mail for \$7.50 extra

I want _____ SCCARA badges @ \$3.00 ea. Badge name & call:

Please send the repeater Auto-Dial codes (no charge, circle):..... Yes

Please send the repeater Auto-Patch codes \$10.00 (\$15 if family membership).....

A COPY OF YOUR LICENSE IS REQUIRED FOR ALL REPEATER CODES

(Auto-Patch includes the Auto-Dial codes)

TOTAL: _____

Give this completed form (or copy) with payment to the Secretary or Treasurer at any meeting or mail to the return address below:

== PLEASE DO NOT TEAR ==

SANTA CLARA COUNTY
AMATEUR RADIO ASSOCIATION

PO BOX 6
San Jose CA 95103-0006

Affiliate of the American Radio Relay League

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