



# SHORT SKIP



*Sonoma County Radio Amateurs, Inc.*

APRIL 1995

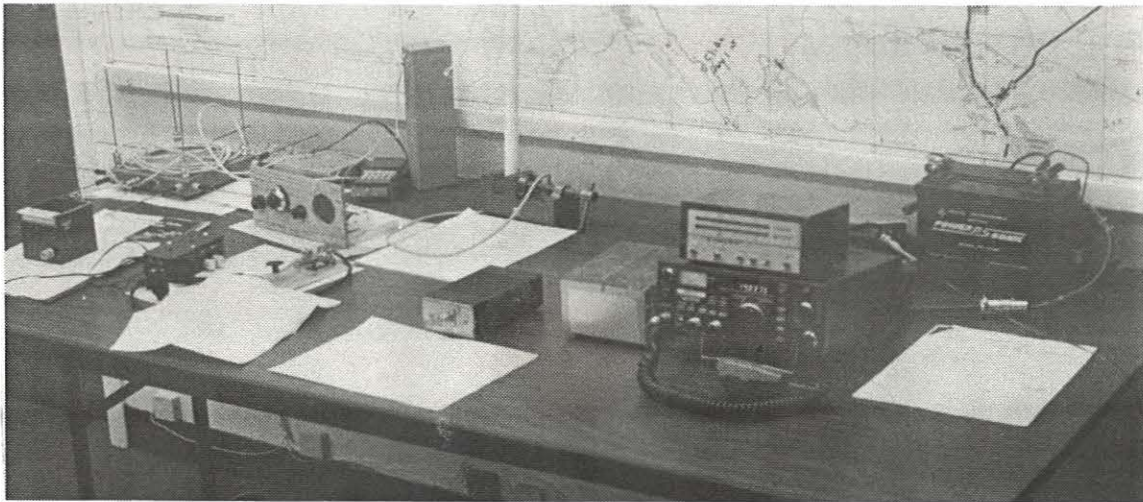
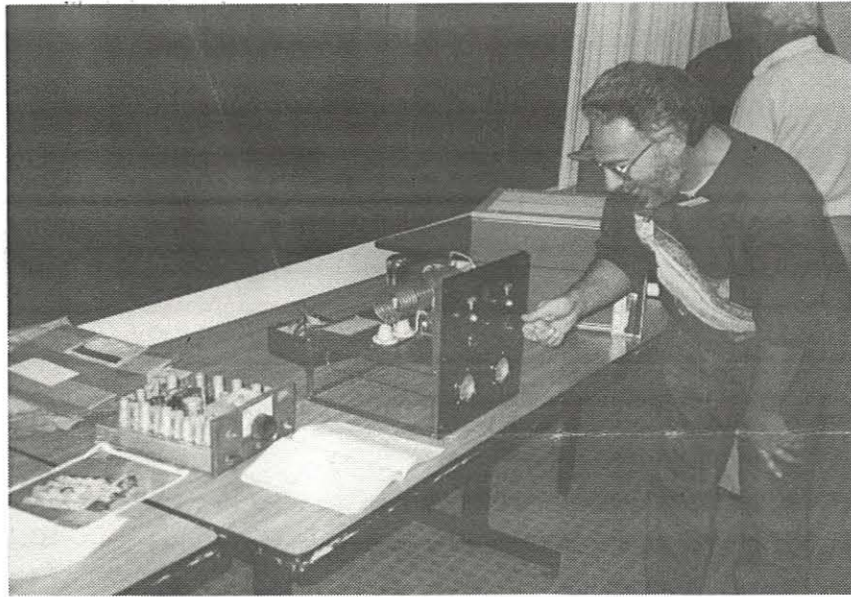
Club Station  
W6LFJ

P.O. Box 116  
Santa Rosa, CA 95402

Repeater Station  
WB6PVS

VOL 20 #4

## Homebrew Contest! (Article page 4)







**OFFICERS FOR 1995**

PRESIDENT:	Kelly Cureton	KD6CJQ	837-9434
VICE PRESIDENT:	Dave New	AA6YX	829-6608
SECRETARY:	Alan Bloom	N1AL	538-7115
TREASURER:	Angela Dickey	KC6OCD	795-1269
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	Marie Mappus	KI6QY	664-1978
REPEATER CHAIRMAN:	Jim Rutherford	WB6PER	526-2972
ACTIVITIES CHAIR:	Joel Nadler	KJ6LF	545-1782

**SHORT SKIP STAFF:**

EDITOR:	Alan Bloom	N1AL	538-7115
1578 Los Alamos Rd, Santa Rosa 95409 alanb@sr.hp.com			
AX.25 packet address: n1al@wx3k.#nocal.ca.usa.noam			
SWAP SHOP EDITOR:	Greg Cowles	KE6FKX	829-1583

QRV: Jim Durkin KE6FSK BBS: DonnKing KD6ZVG CIRCULATION: June Linnehan KD6LSU  
 AUDIO TAPING: John Breckenridge WB6FRZ, Laurel Meyer KC6FKX, Bob Phillips N6RMW

**Activities Committee:**

- Pub. Service: Marie Mappus KI6QY 664-1978
- Pub. Relatns: Steve Carniglia KK6VY 579-9608
- QSL Mgr: Fred Leoni N6YEU 431-8202
- TVI/RFI: Al Bloom N1AL 538-7115
- Antennas: Joe Senft KM6TN 578-5824  
 John KM6LI, Shep NH6ZY, N1AL
- Awards: Steve Lund WA8LLY 823-4544
- VEC Exams: Claude Jones AB6OL 527-8593  
 N1AL WX3K WW6D AC6ET  
 WB6FRZ N6PHP AB6XR KK6XT  
 AA6YX KC7VS WA8LLY
- Education: Steve Carniglia KK6VY 579-9608  
 N1AL WB6FRZ KC6RHA KK6VY  
 WB6TMY K6XZ K6ZWB KC7VS
- Refreshmnts at meetings: Bob Olsten WD6DPE
- Field Day: Steve Carniglia KK6VY 579-9608
- Raffle at meetings: Dave Willey KD6KWM
- Membership lottery: James Cureton KD6GSF
- RACES RO: Jim Pelmulder N6PTM 823-7947
- Badge Chair: Fred Leoni N6YEU 431-8202
- Packet BBS: John WX3K and Jim KC6PJW

**Repeater Control Op's:**

- WB6PER Jim 526-2972 N6PTM Jim 823-7947
- WD6CKP Hoppy 542-6750 N6VUC Merl 584-3898
- KD6CJQ Kelly 837-9434

**Club Meetings:**

7:30 PM, 1<sup>st</sup> Wednesday each month at the Hewlett Packard plant in Santa Rosa. (See map below.) All are welcome.

**Next Meeting:** April 5, 1995  
**Program:** Homebrew Contest  
**Also:** Net Control class starts around 7pm

**ARE YOU NOT AN SCRA MEMBER?**

If so, then this is a complimentary copy. Our club is involved with almost every area of Amateur Radio: Repeaters (13/73), Field Day, license classes (Novice through Extra), volunteer exams, RACES, DX programs, packet radio, hidden xmtr hunts -- you name it. We invite you to attend our next monthly meeting (see below) or check into the Tuesday night SCARS net on the 146.13/73 repeater at 7PM. You will hear the latest Amateur Radio Newsline broadcasts, announcements of SCRA activities and a Swap Shop. Membership in SCRA is open to anyone interested in Amateur Radio. If you would like to join, there is a membership application on page 11. Hope we can have an "eyeball" QSO with you at the next meeting! 73 ...

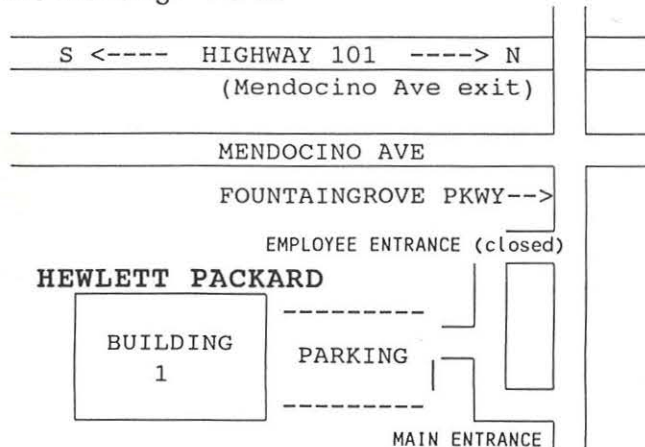
**SHORT SKIP ADVERTISING RATES:**

Business cards: \$10

\$11 First 1/4 Column  
 \$3 Additional 1/4 Columns  
 (\$32 Full Page, 1 side)

Pre-printed inserts: \$32/sheet

Guaranteed circulation: 200/month  
 AD DEADLINE: 10th of previous month





## Third Annual SCRA Campout!



by Kathy Mahan KC6UXJ

Well, we're going to do it again this year and we hope you will join us for the 3rd annual SCRA campout. Please join us on Saturday, May 6th and Sunday, May 7th for a *camping get-a-way!*

As in the past two years, we'll all rendezvous at *Sugar Loaf Ridge State Park* on Adobe Canyon Road off Highway 12 in Kenwood on Saturday afternoon (or earlier). There are always those camping enthusiasts who camp out both Friday and Saturday and please feel free to do so. *Remember* though to bring your own dinner on Friday if you plan to camp.

Saturday's **POTLUCK DINNER** is a culinary extravaganza. Everyone is invited to attend just the potluck dinner on Saturday and enjoy the fun and frivolity even if you don't plan to spend the night. Chicken for the barbecue will be provided and everyone is asked to bring a food dish for dinner that evening. We'll let you know what we need or if you have a favorite dish just let us know. (*Warning:* There may be a \$5.00 vehicle fee if you plan to just come for the meals Saturday and/or brunch on Sunday.) *Beverages will not be provided* — Please be sure to bring your own.

**SUNDAY BRUNCH** is just as delicious as Saturday's potluck and again you may want to only attend the brunch. We just ask that everyone who comes to the brunch contribute either eggs, bacon, juice etc. (Again, we'll let you know).

**FACILITIES** provided at Sugar Loaf are flush toilets, water faucets, drinking fountains, hiking trails and picnic areas. There are no showers!

**RESERVATIONS:** To place your reservation call MISTIX 1-800-444-7275 and they will give you all the information you need. Their hours are 8AM - 5PM Mon - Sun. Be sure to inquire about how many vehicles to a campsite so that you can double up with friends and save a few dollars.

**IMPORTANT:** Please RSVP to Kathy KC6UXJ (823-4980) or Jim WB6PER (526-2972) so we know who is attending and also to plan on food for dinner on Saturday and brunch on Sunday.

**THINGS TO REMEMBER:** Campout May 6 & 7, mark it on your calendar. Call Mistix to make your reservations and be sure to make them early. Call Kathy or Jim so we have an idea of number attending and also plan food. Come and enjoy the great outdoors! ■

MEMBERSHIP RENEWAL LABEL		
REGULAR	EXTRA	PRIMARY
NAME AS MAILING ADDRESS		
<small>THIS LABEL IS VALID FOR ONE YEAR FROM DATE OF ISSUANCE. IF YOU CHANGE YOUR ADDRESS, PLEASE NOTIFY THE CLUB IMMEDIATELY. THE CLUB WILL BE RESPONSIBLE FOR MAILING LABELS TO THE MEMBER'S CURRENT ADDRESS.</small>		
<small>SONOMA COUNTY RADIO AMATEURS, INC. (SCRA) 116 PO BOX 116 SANTA ROSA, CA 95402</small>		

## Next SCRA VE Test Session

by Claude Jones AB6OL

The next Santa Rosa VE Session will be held Saturday, April 8 at the Santa Rosa Hewlett Packard site. Registration will begin at 9:00am. Come to the building 1 lobby and you will be escorted to the testing room, which due to heavy demand will not be the usual meeting room.

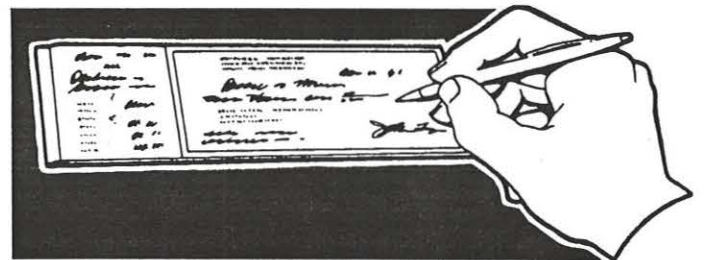
### What to Bring:

1. A photo ID or two non-photo ID's
2. Your original and a *photocopy* of your current license
3. Any original CSCE's and *photocopies*
4. Calculator (not programmed) and pencils
5. Test fee is \$5.90 (cash or check made out to ARRL/VEC)

\*Novice exam (element 1A and 2) is free

Talk-in frequency will be 146.730 if you need directions. For questions or more information contact Claude AB6OL (707) 527-8593. ■

## No More *Short Skip* !



This is your last issue of *Short Skip* if you haven't renewed! Check your mailing label: If it says "dues are due," then our records show you haven't paid yet. Preferred method of payment is to send your check to SCRA, POB 116, Santa Rosa, CA 95402. You may also pay in person at a club meeting. If your address, callsign or license class has changed, let us know so N1AL can update the roster. The application on page 11 is ideal for the purpose. ■

**RENEW YOUR ARRL MEMBERSHIP THROUGH THE CLUB AND THE CLUB GETS TO KEEP \$2** (no expense to you). Make out your check to SCRA, and send it with your ARRL renewal form to SCRA, PO Box 116, Santa Rosa, CA 95402 or give it to the Treasurer. ■



## Packet Users' Organizing Meeting

by Al Bloom N1AL



The first organizing meeting of the packet BBS users was held at 7 PM on Friday, Feb 24 at the HP Santa Rosa plant. 24 people attended. Jim Andrews KC6PJW opened with an overview of the current status of packet radio in the county and with the question "Where do we go from here?" In particular, how do we obtain a maintainable and supportable BBS without putting an undue financial burden on a small number of individuals?

We have been fortunate to benefit from the packet BBS system installed by WX3K. John has been a "Johnny packet-seed," setting up systems in the 4 states he has lived in. Glenn N6GN has designed a number of 230 kbaud 900 MHz data radios, and is now working on a 1200 MHz spread spectrum TNC/radio. Dale WB6TMS has about \$3200 invested in the Sonoma Mt. nodestack. Jim currently has about \$3000 invested in the KC6PJW BBS, which is the official gateway for the north coast area. A second BBS is now on-line with Dave KD6KWM as sysop. Matt KC6ZKA has shown great interest in helping sysop.

When WX3K announced his imminent departure, it was decided that the nodestack on Sonoma Mt. would be replaced by Dale WB6TMS and SMRS, and the KC6PJW BBS would be purchased by SCRA so that Jim would be financially able to expand and improve the system. Since then, opposition to the latter idea has surfaced.

The rest of the meeting was a round-table discussion of the issues. Of the people who spoke to the subject, I counted 15 favoring an independent users group separate from SCRA, and only 4 in favor of making it part of the club. Many felt that club involvement would mean too much politics and bureaucracy. However, several people pointed out that there will inevitably be politics in any users group.

Most thought that the BBS equipment should be located at the sysop's house for best accessibility. Most were against the idea of special features for contributors — the entire

BBS should be open to all. Ideas for fund raising were all over the map. Some favored dues, some contributions, some donations from clubs, and some fund raising events.

The meeting adjourned at 9:45 PM with no definite decision on time and place for the next meeting. ■

## Next Packet Meeting

The second meeting of the Packet BBS Users Group will be Thursday March 30, 7-9 PM, at the Santa Rosa Hewlett Packard plant (same room as club meetings.) The tentative plan is to alternate meetings on Thursdays and Fridays so the maximum number of people can attend at least some meetings. ■

## HOMEBREW CONTEST

APRIL MEETING!



All club members are invited to bring in their "pride and joy" projects for the annual SCRA Homebrew Contest, which will take place at our April meeting. Here's your chance to see what your fellow hams have built up in their shacks and workshops, and to show others what kind of activities interest you.

This is a good time to find other club members with interests similar to yours. For this to work, though, you need to bring in YOUR project. You don't have to be building the next Space Shuttle to participate! Antennas, computer software, mechanical items, modified or improved gear, kits; in fact everything related to the hobby is encouraged.

Since we'll be looking at several aspects of the entries (for example, how well the work was documented, workmanship, utility, etc.), the most complicated project won't have an unfair advantage.

This year, there will be two entry categories. "Large" projects are those that took more than 15 hours to complete. "Small" projects are less than 15 hours. Photographs, printer listings, and QSL cards are all good to bring, especially if your tower is too big to move!

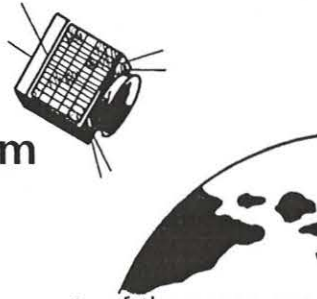
Remember, a clever weekender project often has more interest to other club members than a very specialized long-term effort, and it has just as good a chance in the contest.

So look around your station -- I bet there's something right now up on the shelf that would appeal to others. Bring it to the meeting! ■



## The Global Positioning System

by Bill Waters WA6OLW



One of the most useful developments of the space age has recently become fully operational: the *Global Positioning System*. This is the radio-navigation system of the future, and is rapidly replacing all predecessors. This system of 24 earth-orbiting satellites radiates digital signals down to a user on or near the earth's surface, permitting him to obtain a position fix in latitude, longitude, and altitude, 24 hours a day, with an absolute error of less than about 300 feet! A simple system add-on called "differential GPS" can provide fix errors as low as 4 to 6 feet.

GPS satellites move in circular orbits, approximately 12000 miles high. There are three orbit rings around the earth, each containing eight satellites, approximately equally spaced. The orbits have an inclination close to 62 degrees, and cross the equatorial plane 120 degrees apart. There are two downlink frequencies used only by the ground stations that maintain the GPS, and there are two others received by users wishing to obtain a fix; these are at 1228 and 1575 MHz, in the low microwave region. Both user downlinks convey the same navigation information to a user, and either may be used to obtain the fix. However, the downlink signals necessarily pass through the earth's ionosphere, which causes an unpredictable navigation error of about 1 to as much as 800 or 900 feet. By using two frequencies, GPS can correct for the ionospheric effect.

The user downlinks are constant in amplitude and frequency, and are phase-shift modulated (PSK) by the digital navigation information. The *information* rate is only 50 bits per second. Each satellite sends down information allowing the GPS receiver (in part, a rather considerable little computer) to compute the location of that satellite at some particular time in the near future. Each vehicle has a "name" consisting of a carefully chosen 511-bit digital sequence, structured to be as different from the name of all the other satellites as possible. Spread spectrum techniques are used to increase the modulation rate to 10 Megabits per second.

From any place on earth there are always at least six, and as many as ten satellites above the horizon at all times. The user needs only four to obtain a fix, but a fifth and sixth are used by the more elaborate receivers to improve the accuracy. To obtain a fix the user places his receiver's antenna where it has a clear look at the sky, turns on the receiver, and waits for typically 30 to 60 seconds while the receiver initializes itself on the downlinks, a process somewhat analogous to a computer booting itself up. After the initial wait, the fix is continuously updated as the user moves around, even if "he" is an intercontinental missile traveling at 5000 miles an hour.

Amazingly enough, some GPS receivers can be had for low prices, especially at discount marine supply houses, for as little as \$249. Such a receiver is about the size of a small hand-held, weighs about a pound, and will operate 6 to 12 hours on a set of batteries, or continuously from an auxiliary power supply.

Each user downlink is about 20 watts actual radiated power. The satellite transmitting antenna is a 16-element phased array with right-hand circular polarization. From 12000 miles up, the earth subtends a horizon-to-horizon angle of some 36 degrees, and the array is designed to radiate 90% of the power within a cone of this size (10 db gain). The antenna also radiates a 2 db weaker signal to the subpoint directly below the satellite than to a point near the satellite's radio horizon; this is to compensate for the longer path to the horizon, and provides all users within view of the satellite with almost the same received signal strength.

The GPS was developed by the US Air Force, the driving requirement being a need to help navigate intercontinental ballistic missiles. The system is currently operated by the USAF, with the help of contractors, but the Air Force may eventually withdraw from operations.

In some big cities, delivery companies are now giving their trucks a GPS receiver and latitude/longitude coordinates instead of an address for making a delivery. There is no need now for airplanes, boats, hikers, motorists, or hams to ever get lost again. ■

## Board Meeting Minutes

March 8, 1995

The meeting was called to order by President Kelly Cureton KD6CJO at 5:35 PM in the meeting room at the Northbay Savings Bank. Other officers present were Vice President Dave New AA6YX, Secretary Al Bloom N1AL, Treasurer Angela Dickey KC6OCD, Repeater Chairman Jim Rutherford WB6PER, Activities Chairman Joel Nadler KJ6LF, and Member-at-Large Jim Andrews KC6PJW. Also present were four other SCRA members.

As WB6PER had to leave, he brought up his several issues first. The CAMPOUT is May 6/7 at Sugarloaf Park. We need to find a replacement for Al as SHORTSKIP Editor. What was the result of the Packet organizing meeting? [See article in this month's *Short Skip*.] The club should be more involved with TRAINING new hams in proper operating procedures. Correcting improper operating on the air is appropriate. However KH6GJV pointed out that the '73 machine has a reputation in some quarters as being unfriendly because of its strict operating standards.

AA6YX feels we need a VOLUNTEER GAME PLAN to find a new *Short Skip* Editor as well as a replacement for Bob WD6DPE who would like to retire after many years as Refreshment Chairman at meetings. KJ6LF will search out a replacement.

PACKET BBS DONATION checks have been duly returned by Treasurer KC6OCD. Angela asked when the new Autopatch code sheets will be available. We got a note from the bank stating there has been no activity in the savings account in 2 years. (Continued next page)



# SCRA MINUTES

March 1, 1995

Submitted by Secretary  
Al Bloom N1AL



The meeting was called to order by President Kelly Cureton KD6CJQ at 7:36 PM. Other officers present were Vice President Dave New AA6YX, Secretary Al Bloom N1AL, (later) Treasurer Angela Dickey KC6OCD, Activities Chairman Joel Nadler KJ6LF, Repeater Chairman Jim Rutherford WB6PER, and Members-at-Large Marie Mappus KI6QY and Jim Andrews KC6PJW.

**VISITORS AND UPGRADES:** We had 5 visitors and 2 upgraded licenses this month.

N1AL apologized for the late **SHORT SKIP** this month, due to a printing problem at the copy center. Al will be stepping down as Editor as of next month.

**REPEATER:** KE6FSK asked about some weird interference on the repeater lately. KD6CJQ replied that's why the sub-audible tone access (P/L) has often been turned on lately. WB6PER spoke to the need to train new licensees in proper repeater operating techniques. The club should be more involved in such training. As an example, KE6FSK noted a recent emergency call that was answered by a mobile station not in a position to help.

**PUBLIC SERVICE:** Marie KI6QY listed upcoming events: The Windsor Road Race April 1 and the Super Cities Walk for the Multiple Sclerosis Society April 2.

**EDUCATION:** Steve KK6VY introduced our instructors: John WB6FRZ's code class is "down" to about 22 people. There is an on-the-air practice session on the '73 repeater meeting on Sundays from 6 to 7 PM.

Rick K6ZWB has tried out the kit chosen for the construction class. The good news is that it is very easy to put together. The bad news is that it is very hard to get it working! Instead, we will use the "Neophyte" receiver. Classes will probably be on Monday nights. Call Rick at 542-6907 for more info.

Jim WA2EWE is still willing to do a Technician class if he can get five interested students. His number is 573-0277. Bill WA6OLW would like to teach an Extra class, again if he can get five students. Bill is at 838-0543.

AA6YX and KK6VY will run a short class on how to be Net Control Station for the Tuesday night club net, a half-hour or so before the April club meeting.

**FIELD DAY:** KK6VY is still looking for a location, although the Coast Guard base is still available. KC6PJW may be busy taking care of a harmonic (the flesh-and-blood kind), so we may need a volunteer to handle the satellite/packet station.

**ACTIVITIES:** KJ6LF introduced Brian N6IY to talk about the Homebrew Contest next month. The Campout has been moved to May 6/7 so as not to conflict with Mother's Day. For the campout, WB6PER and Kathy KC6UXJ are planning a pot luck dinner Saturday night and Sunday brunch. The location is Sugarloaf Park.

**MEMBERSHIP DIRECTORY:** Rick only has about a 10% return rate so far. Many were handed in at the meeting.

The next **VE EXAM SESSION** will be April 8 here at HP. Claude AB6OL is the Coordinator.

An Special Service **PLAQUE** was presented by RACES RO Jim Pelmulder N6PTM to Anthony Neong KE6EIO for his cool-headed response to an emergency situation not long ago. (See December 1994 *Short Skip*, page 4.)

**PACKET BBS:** Jim KC6PJW reminded the members that they voted at the last meeting to purchase the BBS equipment. There was not much discussion at the meeting, but there has been considerable discussion since then. A meeting of packet users was held Feb 24 [see article this issue] to gather opinions. While a final decision is still pending, it appears that less club involvement is desired. AA6YX announced that checks sent in to SCRA for the BBS will be returned.

**DUES:** Someone noticed that the constitution specifies that the club must vote on dues each year. After discussion, we voted to keep dues at \$12 for 1995. m/s N6PTM/WB6TMY

A new **REFRESHMENT CHAIRMAN** to bring the coffee and donuts to meetings is needed. Bob WD6DPE has been doing it since Hector was a pup.

The **NOSTALGIA LOG** is a reproduction of a 1936 radio logbook, reconstructed by Tracy WB6TMY. It is available from the Quarter Century Wireless Assn. for \$6 postpaid.

**RADIO SITES** will be needed for an upcoming 2-way pager system. Al WA6MXI gave a brief talk on the possibilities.

The **PROGRAM** was a lively presentation on the art and science of contesting by Northern California Contest Club President Bruce Sawyer AA6KX.

The **TREASURER'S REPORT** was given late, since KC6OCD had a superseding commitment. We have \$3887 in assets.

KD6KWM's **RAFFLE** had prizes thanks to HSC and Ardco.

The **MEMBERSHIP LOTTERY**, ably supervised by James KD6GSF, was won by none other than AA6YX.

The meeting adjourned at 10:18 PM. m/s KJ6LF/AB4C

Respectfully submitted by Al Bloom N1AL. ■

## Board Meeting Minutes

(Continued from page 5)

The **EMERGENCY AUTODIALER** time-out has now been set for 5 minutes, according to KD6CJQ.

N1AL will have some new **MEMBERSHIP APPLICATION** sheets printed up, as well as new autopatch code sheets.

**PACKET FUNDRAISING:** N1AL and KC6PJW reported on the packet users meeting, which concluded that the users group should be an independent organization. Member Joe Senft KM6TN noted that many SCRA members are not into packet. It sounds like the packet users want SCRA money, but not SCRA control. KC6OCD felt that even if the SCRA contributes no money from the treasury, that as an organization, we have fund-raising ability that could be used to benefit the packet BBS. The consensus of the Board was that SCRA should help with fund-raising activities. KJ6LF will try to get a fund-raising committee organized. The board voted to contribute up to \$250 seed money to finance a mailing to county Radio Amateurs soliciting funds, if the committee decides that is advisable, and if the Treasurer finds sufficient funds in the club treasury. m/s N1AL/AA6YX

Meeting adjourned at 7:20. m/s N1AL/KJ6LF

Respectfully submitted by Secretary Al Bloom N1AL. ■



# AUTOPATCH CODES

Sonoma Mt. Repeater - 146.73 MHz - WB6PVS

## EMERGENCY AUTODIAL - AUTOPATCH - AUTOSLOT OPERATING INSTRUCTIONS 3/1/95

The Sonoma Mt. Repeater WB6PVS is equipped with an Emergency Autodialer, an Autopatch & a programmable Autoslot dialer.

Use of any of these features, including the emergency autodialer, is limited to members of the Sonoma County Radio Amateurs Inc. Do not discuss these instructions or access codes with anyone, especially on the air. Call a Control Operator by telephone if you need assistance. The names and telephone numbers of Control Operators can be found on page 2 of any issue of *Short Skip*.

Do not attempt to use any of these features unless you have a full-quieting signal into the repeater. Noisy signals cause wrong numbers and may result in your not being able to disconnect from the telephone network.

Always give your call sign before using any of these features. After you have finished, give your call sign and the word "clear".

- A P/L tone of 88.5 Hz is required to
- access any of these features. -

## EMERGENCY AUTODIAL

TT Code	Emergency Service Agency	Audio Response
910	Sonoma Co. AAA Road Service	AAA
911	911 (Any Emergency)	911
912	CHP (Any Highway Emergency)	CHP
913	Cloverdale Fire/Police	CLPD
914	Santa Rosa Fire/Police	SRPD
915	CDF Dispatch	CDF
916	Petaluma Fire/Police	PPD
917	Sonoma Fire/Police	SNPD
918	Sebastopol Fire/Police	SBPD
919	Rohnert Park Fire/Police	RPPD

### INITIATING EMERGENCY AUTODIAL CALLS:

Example: Announce your call sign, Enter 911, all in one transmission. The autodialer will call the 911 dispatcher.

### DISCONNECTING EMERGENCY AUTODIALER:

Enter #

Example: Key transceiver, HESITATE, Enter #.

## AUTOPATCH

The Autopatch should never be used solely to avoid telephone toll charges or when normal telephone service can be used. Autopatches in which the operator has a pecuniary interest or on behalf of an employer are illegal.

### INITIATING AUTOPATCH TELEPHONE CALLS:

The autopatch is now available 24 hours a day. Simply announce your call sign, and Enter 12 followed by the seven digit telephone number.

Example: Announce your call sign, Enter 125551212, all in one transmission. The autopatch will dial the number 555-1212.

### DISCONNECTING THE AUTOPATCH:

Enter #

Example: Key transceiver, HESITATE, Enter #.

## AUTOSLOT DIALER

Your most frequently-used telephone numbers can be programmed into autoslots. Apply for your autoslots by contacting the Repeater Chairman listed on page 2 of *Short Skip* or mail him the enclosed form.

### INITIATING AUTOSLOT TELEPHONE CALLS:

Announce your call sign, Enter 14 followed by the autoslot number.

Example: Announce your call sign, Enter 1419, all in one transmission. The autoslot will dial the telephone number assigned to slot number 19.

### DISCONNECTING THE AUTOSLOT:

Enter #

Example: Key transceiver, HESITATE, Enter #.

Tnx Jim N6PTM

## Personnel

3/1/95

### OFFICERS FOR 1995:

President:	Kelly Cureton KD6CJQ	837-9434
Vice President:	Dave New AA6YX	829-6608
Secretary:	Alan Bloom N1AL	538-7115
Treasurer:	Angela Dickey KC6OCD	795-1269
Members-at-large:	Jim Andrews KC6PJW	795-2163
	Marie Mappus KI6QY	664-1978
Repeater Chairman:	Jim Rutherford WB6PER	526-2972
Activities Chairman:	Joel Nadler KJ6LF	545-1782
President Emeritus:	Merlyn Pfeiff N6VUC	584-3898

### SHORT SKIP STAFF:

Editor:	Alan Bloom N1AL	538-7115 (e)
	1578 Los Alamos Rd, Santa Rosa, 95409	577-3981 (d)
Circulation Manager:	June Linnehan KD6LSU	
BBS Editors:	Donn King KD6ZVG	
QRV column:	Jim Durkin KE6FSK	
Audio Taping:	John Breckenridge WB6FRZ, Laurel Meyer KC6FKX, Bob Phillips N6RMW	

### ACTIVITIES COMMITTEE:

Public Service:	Marie Mappus KI6QY	664-1978
QSL Manager:	Fred Leoni N6YEU	431-8202
Public Relations:	Steve Carniglia KK6VY	579-9608
TVI/RFI:	Al Bloom N1AL	538-7115
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	+ John KM6LI, Shep NH6ZY, Al N1AL	
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	+ N1AL WB6FRZ KC6RHA KK6VY WB6TMY K6XZ K6ZWB KC7VS	
Refreshments at meetings:	Bob Olsten WD6DPE	
Greeter at Meetings:	Shelly Sourek KD6AFZ	
Raffle at meetings:	Dave Willey KD6KWM	
Membership lottery:	James Cureton KD6GSF	
ARRL Liaison:	Alan Bloom N1AL	538-7115
Badge Chair:	Fred Leoni N6YEU	431-8202
Field Day:	Steve Carniglia KK6VY	579-9608
Flea Market:	Rick Reiner K6ZWB	542-6907

### REPEATER CONTROL OP'S:

	Jim Rutherford WB6PER	526-2972
	Jim Pelmulder N6PTM	823-7947
	Hoppy Bravin WD6CKP	542-6750
	Merlyn Pfeiff N6VUC	584-3898
	Kelly Cureton KD6CJQ	837-9434



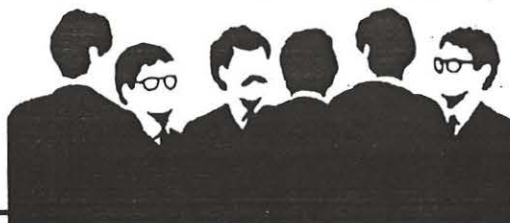
# Sonoma County Radio Amateurs, Inc. Membership Information Packet Update

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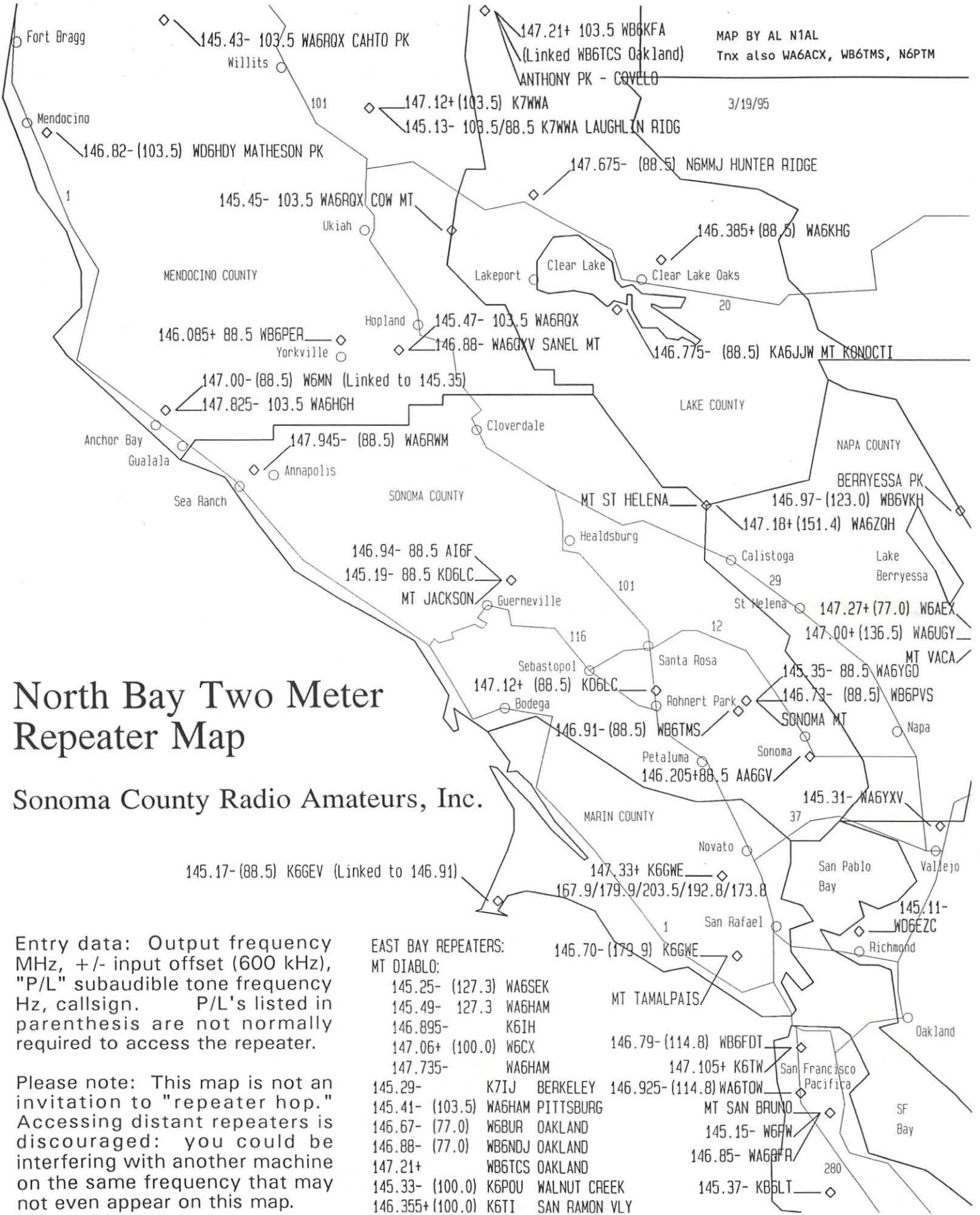
SCRA Information hotline	(Classes, exams, RACES, etc)	579-9608
Sonoma County RACES Radio Officer	Jim Pelmulder N6PTM	823-7947
North Coast Area Coordinator	Bob Sears AA6VS	785-3523
North County Area Coordinator	Jim Walden W6ESJ	431-1953
Petaluma Area Coordinator	Mike Knope KD6LYU	762-3236
Rohnert Park Area Coordinator	Mike Weihman N1DJE	795-1756
Russian River Area Coordinator	Alan Judd N6VUD	869-0600
Santa Rosa Area Coordinator	Lee Dibble KE6EAQ 526-562-3392	562-3392
Sonoma (City) Area Coordinator	Eran Glago KD6KVO	996-8933
West County Area Coordinator	John Gauger KK6XT	829-2599
OES-1 (Communications trailer)	Steve Carniglia KK6VY	573-3507
EOC Radio Room	Kelly Cureton KD6CJO	837-9434
Red Cross Communications Coordinator	Jim Goodman KD6JZJ	546-9117
CDF-VIP Secretary	Marie Mappus KI6QY	664-1978
ARRL Section Manager	John Wallack W6TLK POB 1115, Kenwood, CA 95452	833-1873
ARRL Section Emergency Coordinator	Dale Westerterp WB6TMS	762-9414
ARRL Section Technical Coordinator	Alan Bloom N1AL	538-7115
W6LFJ club station trustee	Steve Schaeffer KD6GC	
WB6PVS repeater station trustee	Alan Bloom N1AL	

## Contacts For Other Local Clubs:

Anchor Bay Amateur Radio Club	Floyd Luney WA6HGH, President POB 169, Gualala, CA 95445
Lake County Amateur Radio Society	POB 814, Kelseyville CA 95451
Marin Amateur Radio Club	Grant Pritchard KK6JJ, President 879-4082 POB 151231, San Rafael, CA 94915-1231
Redwood Empire DX Association	Steve Lund WA8LLY 823-4544 (after 7 PM) POB 476, Graton, CA 95444
Sonoma Mountain Repeater Society	Dale Westerterp WB6TMS 762-9414 POB 176, Petaluma, CA 94953-0176
Valley of the Moon Amateur Radio Club	Steve Marler KD6KVY, President 938-0876 171 First St. West, Sonoma, CA 95476-5655
Willits Amateur Radio Club	Len Gwinn WA6KLL, CEO POB 73, Willits, CA 95490
RAIN newsletter (5 Humboldt Co. clubs)	Clem Cantu WA6TVQ, Editor 1980 Flora Place, Eureka, CA 95501-2709







MAP BY AL N1AL  
Tnx also WA6ACX, WB6TMS, N6PTM

3/19/95

# North Bay Two Meter Repeater Map

Sonoma County Radio Amateurs, Inc.

Entry data: Output frequency MHz, +/- input offset (600 kHz), "P/L" subaudible tone frequency Hz, callsign. P/L's listed in parenthesis are not normally required to access the repeater.

Please note: This map is not an invitation to "repeater hop." Accessing distant repeaters is discouraged: you could be interfering with another machine on the same frequency that may not even appear on this map.

### EAST BAY REPEATERS:

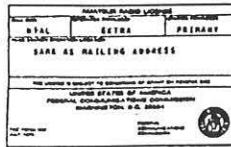
- MT DIABLO:
  - 145.25- (127.3) WA6SEK
  - 145.49- 127.3 WA6HAM
  - 146.895- K6IH
  - 147.06+ (100.0) W6CX
  - 147.735- WA6HAM
- 145.29- K7IJ BERKELEY
- 145.41- (103.5) WA6HAM PITTSBURG
- 146.67- (77.0) W6BUR OAKLAND
- 146.88- (77.0) WB6NDJ OAKLAND
- 147.21+ WB6TCS OAKLAND
- 145.33- (100.0) K6POU WALNUT CREEK
- 146.355+ (100.0) K6TI SAN RAMON VLY

### MT TAMALPAIS:

- 146.79- (114.8) WB6FDT
- 147.105+ K6TW
- 146.925- (114.8) WA6TOW
- MT SAN BRUNO
- 145.15- W6FW
- 146.85- WA6BFR
- 145.37- KB6LT



# Marin/Sonoma VE Council FCC Exams



Date	Time	Sponsor	Place
Apr 8	0900	SCRA	HP, Santa Rosa
Apr 29	0900	VOMARC	Sonoma Swap Meet
May 13	1700	SMRS	Petaluma Sr. Citizens
Jun 10	0900	MARC	Hamilton Field Novato
July 8	0900	SCRA	HP, Santa Rosa
Aug 12	0900	VOMARC	Sonoma Dev. Center
Sept 2	0900	MARC	Hamilton Field Novato
Sept 16	0900	SCRA	Sebastopol Flea Mart
Oct 14	1700	SMRS	Petaluma Sr. Citizens
Nov 11	0900	VOMARC	Sonoma Dev Center
Dec 2	0900	MARC	Hamilton Field Novato
Dec 16	1700	SMRS	Petaluma Sr. Citizens

**Warning:** Test dates subject to change or cancellation without notice.

### Contact Persons:

- SCRA: Sonoma County Radio Amateurs  
Claude (707) 527-8593
- MARC: Marin Amateur Radio Club  
Recording (415) 883-9789
- VOMARC: Valley of the Moon Am. Radio Club  
Jim (707) 996-6461
- SMRS: Sonoma Mt. Repeater Society  
Dale (707) 762-9414

### Willits VE Program:

10:00 AM June 10, Sept 9, Dec 9. Brooktrails Fire Dept. Don (707) 459-3980.

### Lake County VE Program

10:00 AM Apr 15, May 20, Oct 21, Nov 18. American Red Cross, 4434 Old Hwy 53, Clearlake. Ron (707) 994-1133.

### Coast VE Program

1:30 pm June 3, Sept 2 and 2:30 pm Dec 2. Ohlson Ranch Center, Sea Ranch. Bob (707) 785-3523. Talk-in 147.945 MHz and 147.825 MHz, P/L 103.5 Hz.

### Candidate requirements:

1. Photo identification or two non-photo IDs.
2. Original and photocopy of license, if any.
3. Original CSCEs and photocopies, if any.
4. Radiotelegraph license, if held.
5. Doctor's medical exemption, if applicable.
6. Fee is \$5.90, except Novice test is free.

### Directions to the Test Sites:

**Sonoma Developmental Center (VOMARC),** Glen Ellen. Talk-in 145.35-. AAA map Sonoma County G11. From the south, take Hwy 116 from Petaluma (or Hwy 37 to 121 to 116), then north to Arnold Drive. Go past El Verano, toward Glen Ellen. When you enter the State Hospital "Sonoma Developmental Center" in Eldridge, turn left at Wilson (one block before flashing light/stop sign). Go west on Wilson to the McDougall building.

From the north, go south on Hwy 12 to Arnold Dr. Turn right, go through Glen Ellen to the state hospital "Sonoma Developmental Center" in Eldridge. Turn right onto Wilson (one block past the flashing light/stop sign) and go to the McDougall building.

**Santa Rosa Hewlett-Packard (SCRA),** 1400 Fountain Grove Pkwy (same as club meeting.) Talk-in 146.730-. AAA map Sonoma County E9. Coming from 101 south, take Bicentennial off ramp, go east until it joins Fountaingrove Parkway. Enter the visitors gate (second gate). Coming from the north, take the Hopper Ave off ramp, follow the signs to Mendocino Ave, going over the freeway. After crossing the freeway, go straight onto Fountain Grove Parkway. Enter the visitors gate, second gate at HP.

### New Amateur License Class

by Gary E. Myers K9CZB

The FCC stunned the amateur world when it announced today that it is creating a new class of amateur radio operator license, the Exalted Class. Ferd Frobish, spokesman for the Commission, told this reporter that the license was developed to reflect the general feeling among the Commissioners that "Ham radio just isn't what it used to be."

Frobish said that the traditional Morse code test will be supplanted by a more modern criterion. In an effort to silence critics who claim that Morse is an obsolete requirement, Exalted Class applicants will be required to copy, by ear, 1200 baud packet, including unnumbered acknowledgement frames, on blotter paper using a two-inch paintbrush.

The written portion of the exam will include questions on quantum electrodynamics and unified field theory. Even more difficult, the applicant will be required to demonstrate the ability to make sense of Wayne Green's editorials.

No new privileges will be conveyed with the new license, but Frobish said that the FCC will honor successful applicants by issuing the license as a ROM chip. Tests will be given starting April 1.

[Downloaded from the Internet]



# Q Signals by Al Bloom N1AL

1	2	3	4	5	6	7	8	9	10	11	12	13
14			15							16		
	17		18					19	20			
	21			22	23		24	25		26		
	27			28						29		30
31			32		33			34		35		
36			37		38			39		40		
	41				42		43					
44					45					46		47
		48										

**Across:**

- 1 Gets blamed for a lot of repeater interference.
- 14 Your opponent in the contest.
- 15 Feedline shape.
- 16 Transistor.
- 17 Old timers' club.
- 19 Outside of a transistor.
- 21 What to call a YL or XYL.
- 22 QRM-free.
- 26 What to buy for 21 across.
- 27 Low-noise block downconverter.
- 28 QSB's.
- 29 What copper is to a printed circuit board.
- 31 The most common price in the Swap Shop.
- 33 Digital intermediate frequency.
- 35 ARRL Assistant Technical Coordinator.
- 36 Part of the QST on the club net.
- 39 QRN.
- 41 A QSO.
- 44 Electrocardiogram.
- 45 A snake.
- 46 Coax cable to use for QRO.
- 48 \_\_\_ \_\_\_ \_\_\_ antenna is still in use today.

**Down:**

- 1 Intermediate frequency.
- 2 What you get if you are a DX hog.
- 3 You need to understand it to get your ham license.
- 4 Electronics firm.
- 5 Ø-land state.
- 6 Peru.
- 7 Source of long-distance QSO's.
- 8 An unconnected packet frame.
- 9 Norway.
- 10 Prevents excessive transmitter modulation.
- 11 Prevent arcing.
- 12 It's the whole point of getting a ham license.
- 13 Q \_\_\_, the net control station.
- 18 The Internet's World Wide \_\_\_ has lots of information of interest to hams.

- 20 It keeps your receiver from QSY'ing.
- 22 Center frequency.
- 23 A male Novice.
- 24 American Expeditionary Force.
- 25 Q \_\_\_, slow down!
- 30 Double cotton-covered hookup wire.
- 31 British for "good buddy".
- 32 A type of receiver noise.
- 34 Often pressed into use on a two meter radio.
- 37 Legion of merit.
- 38 Pickup.
- 39 Spectrum analyzer.
- 40 Artificial intelligence. (Hint: no, not "CB") Sports organization.
- 43 Computer-aided design.
- 44 Emergency Coordinator.
- 47 The lowest amateur shortwave band.

## On Calling "CQ"

by Sam Grider KJ8K

Over the years of my experience as a ham -- now nearing 20 -- I have noticed my own tendency to answer "CQs" in preference to calling. It appears this tendency is pretty much universal.

Other than timidity or lack of confidence, the reluctance to call "CQ" is unwarranted -- & in fact results in fewer QSOs.

Consider this: You select a band, say 15 meters, & after an empty twirl or two move on. I'll wager a surprising number of times a methodical "CQ" would bring results. How many others who adopt the same method is only a guess, but it must be a larger number than most would think.

Over the years I have made a practice of calling "CQ" & while I have not kept records, a goodly number of "dead band" contacts have been made.

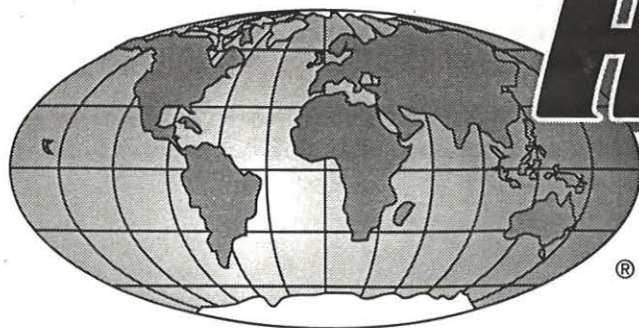
What is a methodical "CQ"? Well, it isn't 60 "CQs" sent in endless repetition! Most hams will move along before Long John (or Jane) gets around to giving a call sign. Some recommend 3 & 3: "CQ" sent 3 times followed by 3 call signs. I find 3 & 2 more comfortable. This has come about as a result of responses when the other party hadn't quite copied my call. Once contact is achieved, corrections can easily be made.

Most of the above, in my case, applies to CW operation (my favorite). However, I have noticed I practice the same tendencies on SSB.

Give the "dead band" CQ a try. You may be pleasantly surprised! From *Q-Fiver*, Oh-Ky-In AR, Cincinnati OH. ■



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(800) 854-6046  
Ken, K12KM, Mgr.  
Lawrence Expwy.  
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Joe, KD0GA, Mgr.

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(800) 444-9476  
Gary, WB7SLY, Mgr.  
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Mark, KJ4VO, Mgr.  
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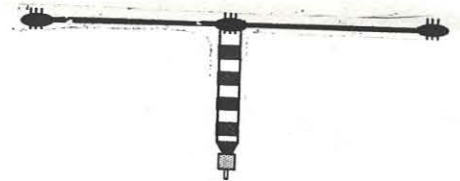
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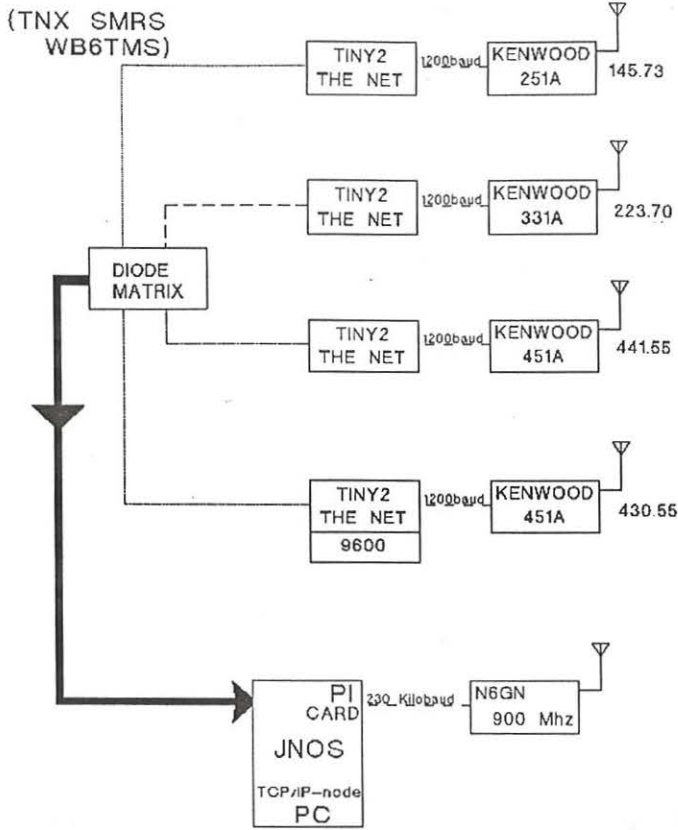
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Tnx KC6GCD Jim

# SONOMA NODE STACK



## Interesting Nicad recovery process

by Joe N9IFG

I have come across an interesting recovery process for dead nicads. Before I let it loose, please be advised that *this is extremely dangerous* and must be treated as such. I take no responsibility for anything that happens if you perform this procedure.

I had a few dead 1.2V nicad packs that would not take a charge at all. I attached them to a high amperage 12v supply for a short period of time (1-2 seconds). I wore goggles, protective gloves and shirt, and performed the procedure out of doors as the escaping gas was pretty strong, of course. Then I recharged them using normal means. So far I have a 100% recovery rate. This is a whole lot cheaper than the alternative (replacing the pack).

Downloaded by Donn KD6ZVG

## Application for Membership in SCRA

Name \_\_\_\_\_ Callsign \_\_\_\_\_ Lic. Class \_\_\_\_\_  
 Addr. \_\_\_\_\_ Phone Nr \_\_\_\_\_ ( ) New Mbr  
 \_\_\_\_\_ ZIP \_\_\_\_\_ Date \_\_\_\_\_ ( ) Renewal

**SCRA dues:** \$12/year, \$18/year family. New members also pay \$6/person initiation fee. Dues for new members *only* are pro-rated \$1 (\$1.50 family) per month, starting at renewal time, March 1.  
**ARRL dues:** \$25/year, \$20 over 65 with proof of age. (Under 17 rates require application form.)  
 Make checks payable to SCRA.

### I WOULD LIKE TO PARTICIPATE IN:

- ( ) Public Service Events
- ( ) RACES or ARES Emergency services
- ( ) Field day, other operating events
- ( ) Helping with SCRA Flea Market
- ( ) Acting as club Net Control Station
- ( ) Helping with *Short Skip* newsletter
- ( ) Taking a Novice or Technician class
- ( ) Teaching a Novice or Technician class
- ( ) Taking an upgrade class
- ( ) Teaching an upgrade class
- ( ) Other \_\_\_\_\_

### Badge (New Members only)

Fill in this section exactly as you want it to appear on your badge.

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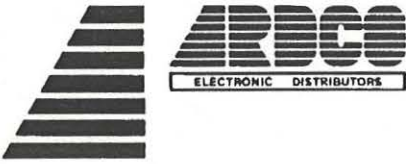
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STEVE BASHAM  
Manager

**New Short Skip Editor!**

As of next month, SCRA will have a new newsletter Editor. Claude Jones AB6OL has kindly agreed to take over the arduous but rewarding task. Please send all your articles and other submissions to him at 3612 Banyan St, Santa Rosa, CA 95403. 527-8593. ■

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