



## HANK'S SWAP SHOP

Greg Cowles KE6FXK 252 Hutchins Ave  
Phone: 829-1583 Sebastopol CA 95472  
Noncommercial ham ads printed free. Please  
call when item is sold. Ads run 2 months.

QST BINDERS, pre-1976 size, 3 for \$10.  
HAM RADIO BINDERS, post-1976 size, 2/\$10.  
HP2645A terminal, good for packet. Clean,  
with manuals and cables. \$25 delivered.  
RCA PERSONALFONE 450 MHz crystal-control  
HT's, condition unknown, w/manual, 2 for \$5.  
AEA ISOLOOP, original 14-30 MHz version,  
control box, manual, 50 ft cable plus 50 ft  
extension cable \$175. AI N1AL 538-7115.

2M 4ELEMENT BEAM \$40.00. Bob WA6YTW  
938-2033.

YAESU FT-470 dual band HT, 2M & 440MHz,  
ICOM 735, and CUSHCRAFT R5 ant. All three  
items like new. Make offer!!!! KC6WTE  
Gary 575-9119.

232 MBX TNC. Sale or trade for an HT.  
KD6WIS Jim 584-3423.

HEATHKIT SB200 HF amp, new tubes \$300.  
MOBILE PWR SUPPLY for HW101 xcvr \$35.  
AMERITRON RSC-4 4-pos. ant. switch \$90.  
HYGAIN BEAM 10/15/20M. \$100.00.  
CODE TAPES By Jerry Ziliak. \$16.00.  
WB6NOV Ken 792-2634.

UNIDEN HR2600 10m mobile. \$125.00.  
HYGAIN BEAM 10/15/20M \$100. WD6EVL  
Gary 823-9324.

KENWOOD 922A KW amplifier \$1100.  
HEATHKIT SB220 KW amplifier \$350.  
ATLAS 210X mobile all band HF radio \$150.  
MOBILE ALL BAND HF ANT \$100. K6UKB  
Joe 526-7731.

YAESU FT101EX HF transceiver, 40M only  
need crystals for others. \$200.00.  
YAESU 757GX2 HF transceiver, has been  
modified \$700. KO6AP Mark 544-4267.

HEATHKIT HB101 w/manual make offer!!!!!!  
KO4YS Bob 765-9550.

(Continued page 11)

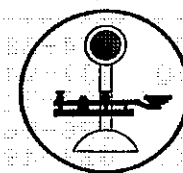
DATED MATERIAL:  
PLEASE DO NOT DELAY

JOHN BRECKENRIDGE  
WB6FRZ  
574 WILD OAK DR  
WINDSOR, CA 95492

ADDRESS CORRECTION REQUESTED

BULK RATE  
U.S. POSTAGE PAID  
SANTA ROSA, CA  
PERMIT NO. 658

Sonoma County Radio Amateurs, Inc.  
PO Box 116  
Santa Rosa, CA 95402



# SHORT SKIP



Sonoma County Radio Amateurs, Inc.

Club Station

P.O. Box 116

Repeater Station

OCTOBER 1994 W6LFJ

Santa Rosa, CA 95402

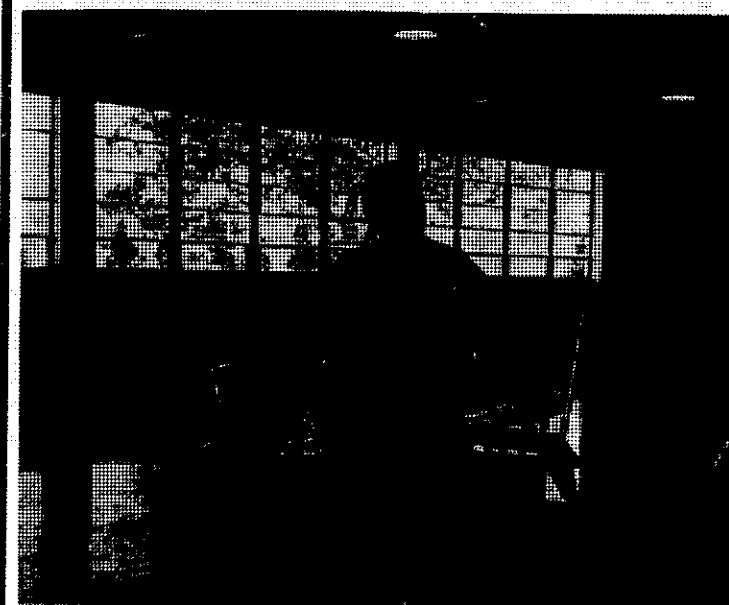
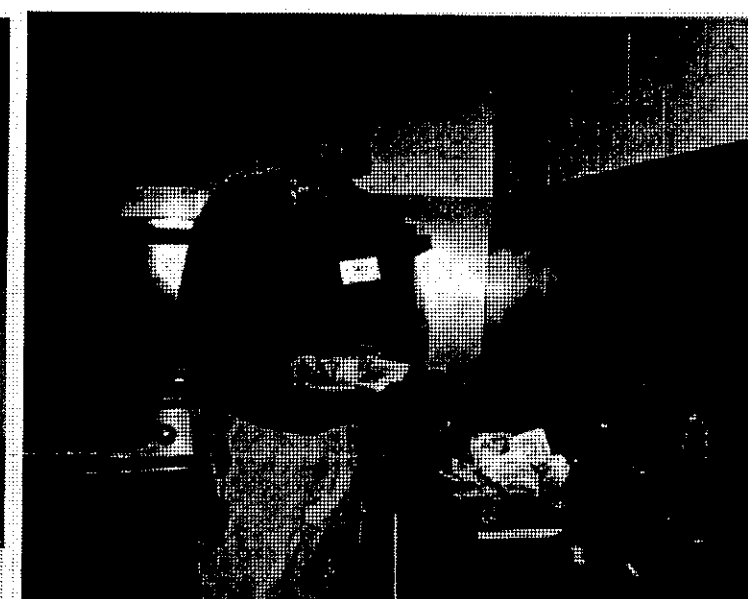
WB6PVS

VOL 19 #10

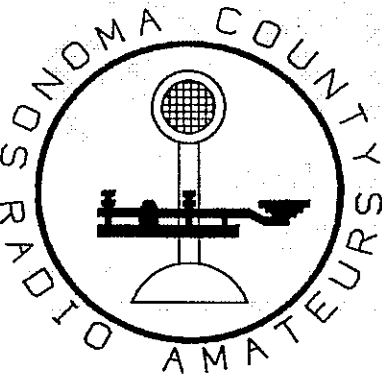
## 1994

## Flea Market

Rumor has it that our illustrious  
honest-as-the-day-is-long Treasurer is  
vacationing in Rio this year.....



Photos tnx Kathy KC6UXJ



BBS EDITORS: Pete Sourek KC6UXM, and Allan Chapman W6MEO  
AUDIO TAPING: John Breckenridge WB6FRZ, Laurel Meyer KC6FKX, Bob PhillipsN6RMW

Activities Committee:

Pub. Service: Maris MappusKI6QY 664-1978  
Pub. Relatns: SteveCarnigliaKK6VY 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: Dave New AA6YX 829-6608  
N1AL WX3K WW6D WB6FRZ  
N6GHG AB6OL K6UXO AA6UY  
KC7VS KK6VY KK6XT WA8LLY  
Education: Steve Carniglia KK6VY 579-9608  
N1AL WB6FRZ KC6RHA KK6VY  
WB6TMY K6XZ K6ZWB KC7VS  
Refreshmnts at meetings: Bob Olsten WD6DPE  
Raffle at meetings: Dave Willey KD6KWM  
Membership lottery: Jim Andrews KC6PJW  
RACES RO: Jim PelmulderN6PTM 823-7947  
ARRL Liaison: Alan Bloom N1AL 538-7115  
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  
WD6CKPHoppy 542-6750 N6VUC Merl 584-3898  
KD6CJQ Kelly 837-9434

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

OFFICERS FOR 1994

PRESIDENT: Merlyn Pfeiff N6VUC 584-3898  
VICE PRESIDENT: Kelly Cureton KD6CJQ 837-9434  
SECRETARY: Alan Bloom N1AL 538-7115  
TREASURER: Mike Michlig KN6JQ 526-9655  
MEMBERS-AT-LARGE: Kathy Mahan KC6UXJ 823-4980  
Marie Mappus KI6QY 664-1978  
REPEATER CHAIRMAN: Jim Rutherford WB6PER 526-2972  
ACTIVITIES CHAIR: Mike Knope KD6LYU 762-3236

SHORT SKIP STAFF:

EDITOR: Alan Bloom N1AL (e) 538-7115  
1578 Los Alamos Rd, Santa Rosa, CA 95409 (d) 577-3981  
CIRCULATION MGR: June Linnehan KD6LSU  
SWAP SHOP EDITOR: Greg Cowles KE6FXK 829-1583

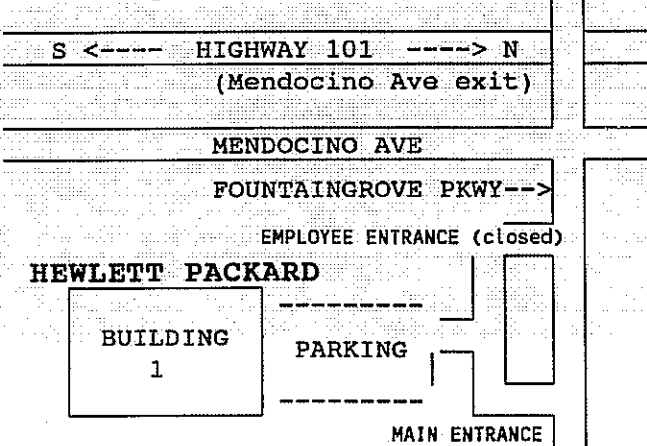
Club Meetings:

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: October 5, 1994

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 ...



Hank's Swap Shop

(Continued from page 12)

5 1/4" EXT. FLOPPY DISC DRIVE for Apple.  
Free to good home. N6RMW Bob 542-5209.

PALOMAR TUNER \$70 o.b.o. KE6FXK  
Greg 829-1583.

HEATH HW-101 10-80M \$250 o.b.o.  
HALLICRAFTERS 10-80M receiver \$50.00.  
2M FOX-HUNT RECEIVER, home-made \$35.  
MFJ ANTENNA SWITCH, 4 position \$50.  
BAYCOM MODEM TNC packet, w/man &  
program \$40. Will take in trade a dual band  
HT for all 5 items. KD6TYL Lynn 584-3423

WANT: HYGAIN HIGH TOWER 18HT antenna.  
W6MZ Jack 526-6769.

WANT: HEATH SB-644 external VFO.  
KD6POC Adam 573-0277.

WANT: TNC, inexpensive, basic type.  
KE6FSK Jim 431-2439.

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.

Application for Membership in SCRA

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

Dues: \$12/year, \$18/year family. New members also pay a \$6/person initiation fee. Dues for  
new members *only* are pro-rated \$1 (\$1.50 family) per month, starting at renewal time, March 1.

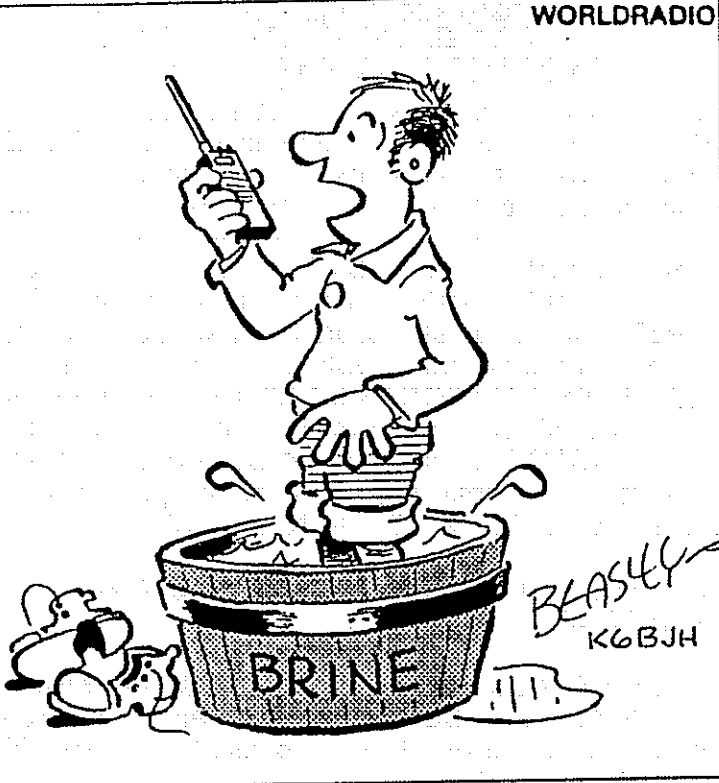
I WOULD LIKE TO PARTICIPATE IN:

- ( ) 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 class
- ( ) Teaching a Novice 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.

Callsign \_\_\_\_\_  
First Name \_\_\_\_\_  
City \_\_\_\_\_



AM I HITTING THE REPEATER ANY BETTER?  
I THINK I GOT A BETTER GROUND

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Rich, WA9WYB, Mgr.  
I-880 at 23rd Ave. ramp

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(619) 560-4900  
(800) 854-6046  
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Claremont Mesa

SUNNYVALE, CA 94086  
510 Lawrence Expwy. #102  
(408) 736-9496  
(800) 854-6046  
Tom, KB6LUC, Mgr.  
Lawrence Expwy.  
So. from Hwy. 101

VAN NUYS, CA 91411  
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(818) 988-2212  
(800) 854-6046  
Jon, KB6ZBI, Mgr.  
San Diego Fwy.  
at Victory Blvd.

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RT.13 1/4 mi. So. I-295

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from Hwy. 5 & 217

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(800) 444-9476  
Joe, KD6GA, Mgr.

PHOENIX, AZ 85015  
1702 W. Camelback Rd.  
(602) 242-3515  
(800) 444-9476  
Gary, WB7SLY, Mgr.  
East of Highway 17

ATLANTA, GA 30340  
6071 Buford Highway  
(404) 263-0700  
(800) 444-7927  
Mark, KJ4VO, Mgr.  
Doraville, 1 mi.  
no. of I-285

WOODBRIIDGE, VA 22191  
Washington D.C. area  
14803 Build America Dr.  
(703) 643-1063  
(800) 444-4799  
Curtis, WB4KZL, Mgr.  
Exit 161, I-95, So. to US 1

SALEM, NH 03079  
Boston, MA area  
224 N. Broadway  
(603) 898-3750  
(800) 444-0047  
Chuck, KM4NZ, Mgr.  
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28 mi. No. of Boston

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2M/440 Dual Band  
40 Mem Channels  
DSQ, Dual Display  
CTCSS Enc./Dec. Built-In  
Cross Band Full Duplex

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SPECIAL  
LOW PRICE**

**YAesu**

**HANDHELDS**



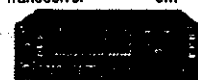
**FT-530**  
2M/440MHZ

2W Standard; 5W opt.  
82 Mems, Dual In-band RX  
DTMF paging + coded Sqr. std.  
Built-in VOX & CTCSS  
Auto tone search  
Built-in clock • Backlit Keyboard  
**SPECIAL PRICING!**

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**TS - 50S/TS - 60S**

HF Transceiver 6M



TS-50S - World's smallest HF Transceiver  
100W out. (90W TS-60S, 50mHz only)  
SSB, CW, AM, FM  
12V Gen. Cov. RX, 6.4 lbs., 7.16 x 2.4 x 9.32"  
105db dynamic range, 100 Mems.  
Opt. ext. ant. tuners available (TS-50S only)

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**IC-D1A**  
2M/440/1.2 Tri-Band

**IC-W21AT/IC-V21AT**  
2M/440 2M/220

**IC-2GXAT, 2M**

**IC-T21A, 2M**

**ALINCO**

**DR - 600T**

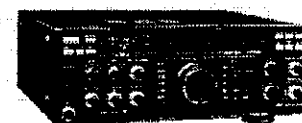


45W/35W + Airband RX  
Detachable/Removable Head  
Keyboard freq. entry from microphone!

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**YAesu**

**FT - 990**



100W HF Gen. Cov. Transceiver  
DDS, QSK • 500Hz CW Filter Included

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**KENWOOD**

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**TH-79A**  
2M/440HT

2.7W 2M, 2W 440  
5W Optional  
DTSS Built-In  
82 Memories  
DTMF Memories  
Built-in CTCSS Enc./Dec.  
User-Friendly Menu Sys.  
**CALL NOW FOR  
INTRO SPECIAL!**

**ICOM**

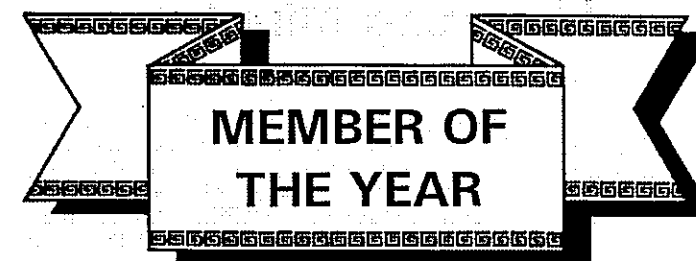
**IC - 737A**

HF Transceiver



12V 100W w/auto Ant. Tuner  
Built-in Gen Cov. RX, 101 Mems., VOX  
DDS, QSK, Passband Tuning

**Priced So Low, We Can't Print It!  
Call For Your Low Discount Price!**



by Kathy Mahan KC6UXJ

It's that time of the year again to send in those letters and make those phone calls to nominate your choice for "Member of the Year."

If you would like to nominate a person for Member of the Year, please write down the candidate's name and the reasons for nomination. Nominations may be mailed to the addresses below or nominations will be accepted by phone or FAX. Phil, WA6SEU will be the 2nd committee member. Phil and I will appoint a 3rd committee member who shall remain anonymous. The Member of the Year will be announced at the annual Christmas Party in December.

Suggestions for criteria to consider in making a nomination are: standards of operating ethics and practices, participation in club activities and amateur related achievements.

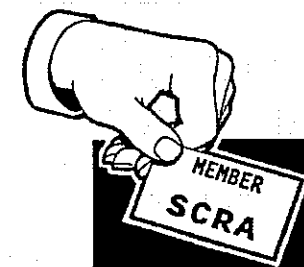
Kathy Mahan KC6UXJ  
540 Live Oak Ave.  
Sebastopol, CA 95472  
EVES: 823-4980 or FAX: 433-0353

or

Phil Richardson WA6SEU  
3613 Cypress Way  
Santa Rosa, CA 95405  
527-8324 or FAX: 664-2505

Please don't hold back....if there is an amateur radio operator out there that you feel deserves this award, please do not hesitate to let us know! Nominations will not be accepted after November 15, so get those letters in or give us a call. I love to receive FAXES so don't be bashful. It's up to all of you now, so please take a few minutes and let us know your nomination.

## New Members & Corrections



WALTER MARTIN  
POB 734  
CLOVERDALE, CA 95425  
894-3727

HOPPY HOPKINS K6MUP  
3982 VINEHILL RD  
SEBASTOPOL, CA 95472  
823-7182

NIELS JENSEN NYØN  
2734 WESTBERRY DR  
SANTA ROSA, CA 95403

MICHAEL MCGOWAN KC6NDS  
POB 1163  
HEALDSBURG, CA 95448

JOHN ZANTEK WX3K  
309 OREGON AVE #A  
PETALUMA, CA 94952

NICK MARSHALL W6OLO  
2207 PEACHLAND AVE  
SEBASTOPOL, CA 95472  
823-5426

MARK FERNANDEZ KO6AP  
2621 NEOTOMAS AVE  
SANTA ROSA, CA 95405  
544-4267

CARL MERNER AB6RL  
659 MONTCLAIR DR  
SANTA ROSA, CA 95409  
538-5091

SUZENNE CONNELLY  
KC6BSQ  
5850 ANDERSON RD  
FORRESTVILLE CA 95436  
887-7950

DON CONNELLY N6SRH  
5850 ANDERSON RD  
FORRESTVILLE CA 95436  
887-7950

JOHN ROWBOTHAM KO6EF  
1143 LOMBARDI LANE  
SANTA ROSA, CA 95407  
526-5314

ROSS COLLINS KD6VBV  
1513 DEBRA DR  
PETALUMA, CA 94954

KURT IRMITER KA6EYN  
1068 WREN DR  
PETALUMA, CA 94954  
765-0191

LARRY GUSTAFSON  
KD6VUM  
549 IRWIN LN  
SANTA ROSA, CA 95403  
523-0266

JUDY IRMITER KE6JSM  
1068 WREN DR  
PETALUMA, CA 94954  
765-0191

SAL CARUSO KC6WTO  
3989 SHADOWHILL DR  
SANTA ROSA, CA 95404  
539-4661

CHRISTINE BUCHHOLZ  
KE6JSN  
1116 ST HELENA AVE  
SANTA ROSA, CA 95404  
526-3392

TONY KAMBY KD6WYH  
1641 SAN MARINO  
PETALUMA, CA 94954  
765-1581

JOEL NADLER KJ6LF  
609 BISHOP DR  
SANTA ROSA, CA 95405  
545-1782

ROBERT MOORE KD6ZYL  
2114 WEATHERBY WAY  
PETALUMA, CA 94954  
765-1960

JAMES HAMILTON KE6LPQ  
1220 MC MINN #240  
SANTA ROSA, CA 95407  
527-5423

ROBERT WILLOUGHBY  
WB8RQD  
535 LOMBARD AVE  
SANTA ROSA, CA 95409  
537-0834

We now have 287 members.

## Exploring the ARRL BBS



by Bill Edmondson N6OUW

Recently, while perusing *QST* magazine I discovered the ARRL maintains a land-line bulletin board system (BBS) in the 203 area code. One morning I arose early to explore the League's BBS while the phone rates were reduced. At my age it's easier to get up early than it is to stay up late. The BBS runs Wildcat software and the logon and new user registration went smoothly.

The initial screen states the BBS is devoted entirely to amateur radio, and after reading through more than 700 files available for download, I believe it. There were files to satisfy just about any amateur radio desire.

Each file listed on the ARRL BBS has a brief on-line description and a listing of the number of times that file has been downloaded. One file that calculates dimensions of HF wire antennas had more than 1,000 downloads. Other files with high download counts were a TS440 control program that operates a TNC, a windows-based graphical representation of ham bands, and a search program for Part 97 of the FCC rules. Several study programs were available for hams desiring to upgrade to Advanced or Extra class. Most of the programs were PC based; however, I did see some programs for the Macintosh.

Another impressive feature of the ARRL BBS is the Tomcat/QWK mail door. This enables the user with an off-line mail reading program such as Blue Wave to download large message files quickly and easily for off-line reading. In my case I downloaded a 58K file of 200 messages in less than 3 minutes. Total time on the BBS for my first exploration was under 9 minutes.

The ARRL BBS has 5 lines. One line with a dedicated number is for uploads only. The other 4 lines use the same phone number. With 4 lines available, callers are significantly less likely to receive a busy signal. Each of the 5 lines is equipped with a Practical Peripherals 14,400 modem which works at any baud rate between 300 and 14,400 bps.

The ARRL BBS telephone number is 203-666-0578. Happy modeming! *Tnx Willits ARC* ■

## Board Meeting Minutes

August 10, 1994

The meeting was called to order by President Merle Pfieff N6VUC at 5:30 PM in the meeting room at the Northbay Savings Bank. Other officers present were Vice President Kelley Cureton KD6CJQ Treasurer Mike Michlig KN6JQ, Repeater Chairman Jim Rutherford WB6PER, Members-at-Large Marie Mappus KI6QY and Kathy Mahan KC6UXJ, and President Emeritus Rick Reiner K6ZWB. Also present were SCRA members Jim Pelmulder N6PTM, Ted DeCroff KB6PTA Hoppy Bravin WD6CKP, and Joe Senft KM6TN.

**FLEA MARKET:** Rick K6ZWB reported that four commercial booths have been reserved so far. Kathy KC6UXJ will be coordinating the food booth. Kelly KD6CJQ has obtained yellow caution tape to restrict parking on adjoining private property. The County RACES Trailer OES1 will be used for talk-in and promotion of participation in Emergency Services activities. Rick K6ZWB will obtain a mobile rig for the main door prize. Jim N6PTM reported the club is paying the same rental rate for the Holy Ghost Hall as last year (a saving of at least \$50) based on our past performance of clean-up.

**PUBLIC SERVICE:** Marie KI6QY says only six people had indicated an interest in attending the SCRAPPS picnic so far. She may have to cancel. Marie reported a possible new event, the California Coast Cleanup, may require four or five people on the day of the Flea Market. The Waves To Wine will be on September 24, 25. Bill Splaine N6GHG and Marie KI6QY will co-chair.

**PATCHES:** Mike KN6JQ has sold 37 Patches so far.

Meeting adjourned at 6:15 PM. m/s K6ZWB/WB6PER  
Respectfully submitted by Jim Pelmulder N6PTM. ■

## October is Pacificon '94 Month:

October 21 - 23 is the date for the Pacific Division Convention at the Concord Hilton. Ticket sales are going full blast. The programs are set with "something for everyone." Members of the Mount Diablo ARC and others, including the Director and Vice Director, have been visiting clubs throughout the Division with advance publicity and brochures all across California, and into Nevada and Hawaii to support the Convention. Don't miss this event! For additional details call the hotline at (510) 932-6125. *Tnx K6WR* ■

Jim Pelmulder  
N6PTM

(707) 823-7947

### NOB HILL ELECTRONICS REPAIR

Amateur - Commercial - Scanners  
TV - VCR's - Audio

Sta. Lic. No.  
28191

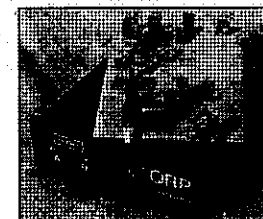
2801 Gravenstein Hwy. No.  
Sebastopol, CA 95472

# HSC ELECTRONIC SUPPLY

## GOODIES FOR THE RADIO AMATEUR:

### RAMSEY KITS:

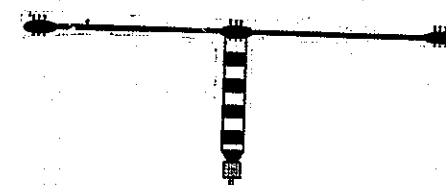
- 50/144/220/440 MHz  
Synthesized Transceivers
- VHF power amplifiers
- All-mode HF receivers
- QRP CW Transmitters
- Etc...



- MFJ accessories
- Code keys
- Wire Antennas
- Surplus Electronics
- Tools, parts, Etc...

### ARRL BOOKS:

- ARRL Handbook
- License Manuals
- Antenna Books
- Etc...



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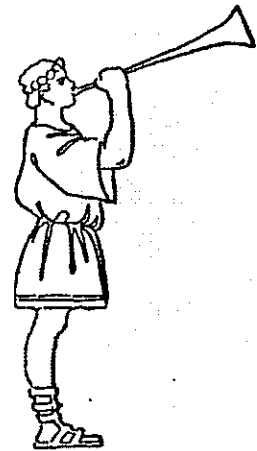
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KS6W

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## COMING EVENTS:

SCARS NET: 146.73 MHz  
Tuesdays at 7 PM.

NEWHAM HOTLINE:  
1-800-326-3942  
SCRA INFO HOTLINE:  
(707) 579-9608  
VE EXAMS HOTLINES:  
(408) 984-8353/255-9000

### OCTOBER:

- 2 - Livermore Flea Mart 510-447-3857
- 3 - RACES etc. Net 7:30 PM
- 5 - SCRA meeting 7/7:30 PM
- 7-9 - Bakersfield hamfest, POB 473, 93302
- 15 - Deadline for November *Short Skip*
- 15 - RACES/ARES training drill N6PTM
- 17 - RACES etc. Net 7:30 PM
- 20 - CDF/VIP Meeting 7:30 PM
- 21-23 - Pacificon '94 Concord 510-932-6125
- 29-30 - CQ Worldwide DX Contest, Phone

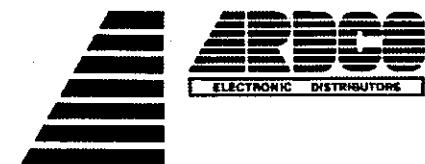
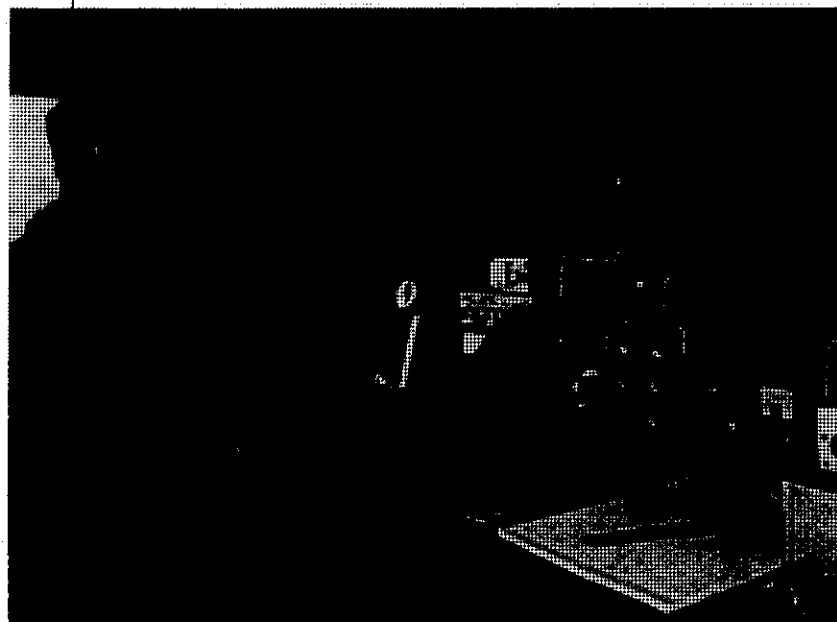
### NOVEMBER:

- 2 - SCRA meeting 7/7:30 PM
- 5-7 - ARRL Sweepstakes, CW
- 7 - RACES etc. Net, 7:30 PM
- 19 - Deadline for December *Short Skip*
- 17 - CDF/VIP Meeting 7:30 PM
- 19-21 - ARRL Sweepstakes, Phone
- 21 - RACES etc. Net, 7:30 PM
- 26-27 - CQ Worldwide DX Contest, CW

### DECEMBER:

- 5 - RACES etc. Net, 7:30 PM
- 7? - SCRA Christmas party
- 10-11 - ARRL 10 Meter Contest
- 15 - CDF/VIP Meeting 7:30 PM
- 17 - Deadline for January *Short Skip*
- 19 - RACES etc. Net, 7:30 PM
- 31 - ARRL Straight Key Night

From Field Day:



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## SCRA MINUTES

September 7, 1994

Submitted by Secretary  
Al Bloom N1AL



The meeting was called to order by President Merl Pfeiff N6VUC at 7:32 PM. Other officers present were Secretary Al Bloom N1AL, Treasurer Mike Michlig KN6JQ, Activities Chairman Mike Knope KD6LYU and Member-at-Large Marie Mappus KI6QY.

**VISITORS:** We had 8 visitors to the meeting.

The **TREASURER'S REPORT** was approved as read. m/s N6RIF/KM6XU

**REPEATER:** N6PTM says Jim WB6PER has been looking for the funny courtesy tone that appears on weak signals.

**PUBLIC SERVICE:** Marie KI6QY reported on the busy public service month coming up.

**EDUCATION:** K6ZWB reminded everyone of the SCRA hotline. WA2EWE will be running a Novice/Technician class soon. N6VUD will be teaching a class also. We need to find a bigger classroom.

**FLEA MARKET:** Rick K6ZWB passed around a sign-up sheet for volunteers. We will have quite a few commercial booths this year. An ICOM 281 2 meter rig with 440 MHz receive capability will be raffled off.

**FOX HUNT:** Phil KC6BSI was the winner last year so he is the "fox" this year, with help from Rick K6ZWB. The chase starts at 10 AM from the Piner High School parking lot. KD6KWM suggested the next hunt be on a Sunday.

**NOMINATIONS** for next year's club officers are needed. Rick K6ZWB is Chairman of the Nominating Committee. Please contact Rick if interested.

**CONSTITUTIONAL AMENDMENT:** Jim N6PTM discussed his amendments to the Constitution and Bylaws, as printed in *Short Skip* last month. After much discussion, the changes passed unanimously.

**PACIFICON '94** is again in Concord. John W6TLK says it should be a good one again this year.

Certain **ARRL AWARDS** can be certified by Steve WA8LLY so you don't have to send your cards to Newington. Steve is qualified for WAS, 5BWAS, VUCC, and RCC.

**PROGRAM:** Battalion Chief Rod Pederson and Training Chief Kim Thompson of the California Dept. of Forestry gave a fine presentation and video on how to protect your home from wildland and other fires. The video is available for free at many video stores.

The **RAFFLE** was able run by Dave KD6KWM. Thanks to HSC, Ardco and KE6FSK for the prizes.

The one meeting that Kathy KC6UXJ missed was naturally the one that she would have won the **MEMBERSHIP LOTTERY!**

The meeting adjourned at 9:38 PM. m/s N6PTM/KB6UCM

Respectfully submitted by Al Bloom N1AL.

## Board Meeting Minutes

September 14, 1994

The meeting was called to order by President Merle Pfeiff N6VUC at 5:31 PM in the meeting room at the Northbay Savings Bank. Other officers present were Vice President Kelley Cureton KD6CJQ, Secretary Al Bloom N1AL, Treasurer Mike Michlig KN6JQ, Repeater Chairman Jim Rutherford WB6PER, Member-at-Large Kathy Mahan KC6UXJ, and President Emeritus Rick Reiner K6ZWB. Also present were SCRA members Hoppy Bravin WD6CKP, Jim Peimulder N6PTM, Joe Senft KM6TN, Fred Leoni N6YEU, Ted DeCroff KB6PTA, Brian Torr N6IY and two other members.

**ELECTIONS** are in November. Rick K6ZWB is the Chairman of the Nominating Committee with members Jim N6PTM and Darlene KD6GCK. The Member of the Year Committee is chaired by Kathy KC6UXJ, aided by Phil WA6SEU.

**SERVICE AWARDS** will also be handed out at the December Christmas party. Contact a Board member with any recommendations for meritorious members. The **CHRISTMAS PARTY** will likely be at Cattlemen's restaurant again this year. N6VUC will check on availability. **PROGRAM** ideas for club meetings was discussed.

**REPEATER:** WB6PER has received the batteries generously donated by club member Mark Walsh KM6XU. Jim suggested we sell them at the Flea Market to obtain money to buy a battery that would be more suitable for repeater backup service due to size, shape and strapping considerations. The donated units would be excellent for home backup use. Jim's motion passed. m/s WB6PER/KD6CJQ

Jim has been tracking down the weird courtesy tones heard on the '73 repeater. So far there have been 6 phone calls to the controller manufacturer, ACC. N6VUC asked about the legality of using the repeater for code practice broadcasts. The consensus was that while that would be legal, there are lots of better methods to learn the code.

**PUBLIC SERVICE:** Marie KI6QY reported on upcoming events. She asked for ideas on ways to recognize volunteers. In addition to the SCRAPS picnic, we can give service awards to outstanding contributors.

**QSL MANAGER:** N1AL asked who gets incoming QSL cards. Fred N6YEU volunteered on the spot to be QSL Manager.

**ANTENNA COMMITTEE:** KM6TN is meeting with the City Attorney Monday morning to discuss revising Santa Rosa antenna regulations concerning radio amateurs.

**STORAGE LOCKER:** N6PTM has contacted CDF about using their site for a locker to store SCRA property. They seem receptive to the idea — Jim will follow up. Jim also reported that the EOC is available most evenings for training classes if we want it. We will probably use the HP room if available.

There is a **RACES/ARES** training drill Oct 15.

**FLEA MARKET:** Rick K6ZWB has received the ICOM IC-281H grand prize and 13+ door prizes. Thanks to HSC, Ardco and ARRL for prize donations. Nearly all the volunteer spots are filled. Many Flea Market details were discussed.

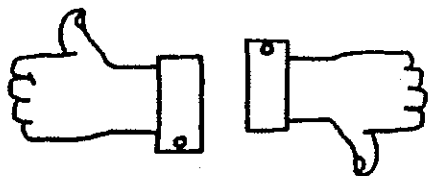
**FIELD DAY:** Rick's Drake "B line," used in many club Field Days, has been purchased by the club for \$300.

**BADGES:** N6YEU reports that badges now cost the club \$4.50. Fred just mailed out a big batch of unclaimed badges.

Meeting adjourned at 6:41 PM. m/s WB6PER/K6ZWB

Respectfully submitted by Al Bloom N1AL.

# DSP Comparison: Timewave vs W9GR



by Wayne Estes WD5FFH

This weekend I borrowed a friend's W9GR DSP II to compare with my Timewave DSP9+. I compared them using SSB and CW signals on 2 meters, 20 meters, and 40 meters. The "rankings" were the same on all three bands.

## Noise Reduction:

On all bands, the W9GR "optimized noise reduction" was much more effective than the Timewave "aggressive" noise reduction. The W9GR gave more noise reduction with less voice distortion. The Timewave "less aggressive" noise reduction also distorted the audio more than the W9GR did.

The Timewave noise reduction attenuated the lower voice frequencies, and added significant high frequency ringing to voices. The resulting tinny, distorted sound was only slightly more intelligible than copying a weak signal without noise reduction.

The W9GR, on the other hand, retained the full voice frequency response without significant distortion. The result was a significant improvement in the intelligibility of SSB signals that were buried in the noise. The W9GR "combined notch and noise" reduction did not reduce noise as well as the "optimized noise reduction" mode, and the "combined" mode also introduced some high and low frequency ringing (but not as bad as the Timewave's ringing).

## Notch Filter:

The Timewave notch filter was superior to the W9GR notch filter for continuous carriers, carriers with rapid fading, and for CW signals. The Timewave notch filter was faster and deeper than the W9GR notch filter. The Timewave notch filter also has some "hang time" that causes the notch to stay engaged during rapid fades. The Timewave notch filter added very little distortion to the desired voice signal.

The W9GR "combined notch and noise reduction" mode did not give a very deep notch (about the same depth as the IF notch filter on my Icom 751). The W9GR "optimized" notch filter was deeper, but still not as deep as on the Timewave. The W9GR "weak signal" notch filter added a lot of distortion to the voice signal, and was not pleasant to listen to.

## Bandpass Filters:

Both models had excellent CW bandpass filter performance. I prefer the Timewave 500, 200, and 100 Hz bandwidths over than the W9GR bandwidths of 200, 100, and 30 Hz.

The W9GR does not have bandpass filters for SSB, which was a problem for me. My Icom 751 audio output has high and low frequency noise, which passes straight through the W9GR. To compound the problem, the W9GR generates its own high frequency hiss. I am using high-fidelity Sennheiser headphones, but my friend also hears the hiss on his Heil communications headphones.

The Timewave Voice mode includes a 300-3000 Hz bandpass filter which eliminates the high and low frequency noise from my Icom 751. And the Timewave does not add any hiss of its own. The "medium" and "narrow" voice bandpass filters are only needed when using an older transceiver with a wide IF and no passband tuning (they helped a lot on my old Ten-Tec Triton IV).

## RFI Immunity:

The W9GR filter is very prone to RFI, even when all the connecting cables are wrapped around toroids. Consequently, one must turn the receive volume down when transmitting. (My friend and I both run 100W HF with RG-8 to verticals about 40 feet away).

The Timewave is less prone to RFI. If RFI is experienced, the Timewave DSP-9+ PTT input can be connected to the transceiver to mute the DSP output when the transmitter is keyed. This feature is great for HF, but not when operating full duplex on satellites.

## CW Sidetone:

The W9GR CW filter will block the transceiver's CW sidetone if the sidetone frequency does not fall within the CW filter passband.  
(next page)

# DSP Comparison (from page 6)

In CW mode, the Timewave PTT input has a different function: The audio filter is bypassed with a relay when the transceiver is keyed. This allows the transceiver's sidetone to pass through to the speaker/headphones, while still eliminating any RFI in the DSP.

## Data:

(Comparison based on reading the W9GR manual, and actual tests of the Timewave)

The W9GR has fixed-bandwidth data filters, but the center frequency can be switch selected for the standard Packet mark/space frequencies or for the standard RTTY/AMTOR/PACTOR mark/space frequencies.

The Timewave has several front-panel-selectable data filter bandwidths, but the center frequency is only selectable by an internal jumper. This may or may not be a problem depending on your TNC model.

Note: I believe that the above comments about the Timewave DSP9+ are also applicable to the Timewave DSP9, except that the DSP9 does not have the following features: Data filters, PTT input, Hard-wire relay bypass when power is off, AGC.

## Conclusion:

If noise reduction for weak signal SSB is most important to you, then the W9GR is preferable to the Timewave. The W9GR is great for Oscar-13! If Bandpass filters, Notch filters, and RFI immunity are most important to you, then the Timewave is preferable to the W9GR.

Thanks to Scott Migaldi KF5JQ, for loaning me his W9GR filter.

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COLOR: BLACK/RED/BLUE ON LIGHT BLUE BACKGROUND.

# Club QSL Cards

It's been quite a while since we reminded you of this: For a small fee, you can have a batch of club QSLs printed with your call/name/address. We wait before taking them to the printer unless you order "Express" service.

Payment must accompany your order. If you want the cards mailed to you, so indicate by adding \$4.00 postage/handling. Bring your order to a club meeting or send to:

SCRA, PO Box 116, Santa Rosa CA 95402.

## PERSONALIZED CARDS:

# CARDS	NORMAL SERVICE	EXPRESS SERVICE
250	24.00	44.00
500	35.00	56.00
1000	56.00	75.00
> 2000	6.00/100 (120.00/2000) (Express service only)	

## "BLANK" CARDS: (No Call/Name/Address)

\$5.00 per hundred cards.  
(Available at club meetings)

Enter the information EXACTLY as it should appear on the card: (Postage is optional)

\*\*\*\*\* SCRA MEMBERS ONLY \*\*\*\*\*

ADD ARRL CALLSIGN: \_\_\_\_\_  
DIAMOND? \_\_\_\_\_  
YES NO NAME: \_\_\_\_\_  
EXPRESS ADDR: \_\_\_\_\_  
SERVICE? \_\_\_\_\_  
YES NO \_\_\_\_\_

\$ \_\_\_\_\_ + \$ \_\_\_\_\_ = \$ \_\_\_\_\_  
NR. OF CARDS CARDS POSTAGE TOTAL