



KENWOOD TS-120S 80-10, no WARC bands, w/ power supply, AT-120 antenna tuner \$600. John KM6XO 585-2549.

YAESU FT-102 80-10, 150W, with CW/SSB filters \$550. YAESU mic for above \$75. YAESU SPEAKER W/ PHONE PATCH for above \$75. Chuck K6ZUR 546-7326. ■

2801 Gravenstein Hwy. No.
Sebastopol, CA 95472

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

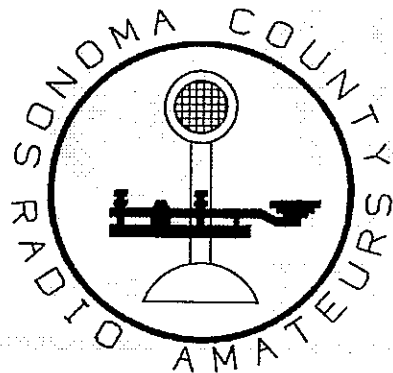
Sonoma County Radio Amateurs, Inc.
PO Box 116
Santa Rosa, CA 95402



VOL 18 #5

WB6PVS

[illegible]



BBS EDITORS: Pete Sourek KC6UXM, and Allan Chapman W6MEO
AUDIO TAPING: John Breckenridge WB6FRZ, Laurel Meyer KC6FKX, Pat Malone KD6MAZ

Activities Committee:

Pub. Service: Kathy Mahan KC6UXJ 823-4980
QSL Mgr: Bill Splaine N6GHG 431-8636
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 527-0981
N1AL WX3K WN6D W6DTV
WB6FRZ AB6OL N6OLD AA6RD
K6UXO KK6XT KC7VS WA8LLY
Education: N1AL WB6FRZ KC6RHA KK6VY
WB6TMY K6XZ K6ZWB KC7VS
Refreshmnts at meetings: Bob Olsten WD6DPE
Greeter at Meetings: Shelly Sourek KD6AFZ
Raffle at meetings: Dave Willey KD6KWM
Membership lottery: Jim Andrews KC6PJW
Homebrew Contest: SteveKK6VY, ChrsKK6WN
Transmitter Hunt: John WB6FRZ, Jim KD6JZJ
Field Day: Merl N6VUC and Steve KK6VY
RACES RO: Jim Pelmulder N6PTM 823-7947
ARRL Liaison: Alan Bloom N1AL 538-7115
Badge Chair: Fred Leoni N6YEU 431-8202

Repeater Control Op's:

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

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 1993

PRESIDENT: Rick Reiner K6ZWB 542-6907
VICE PRESIDENT: Pete Sourek KC6UXM 838-0622
SECRETARY: Alan Bloom N1AL 538-7115
TREASURER: Jim McLaughlin WA2EWE 573-0277
MEMBERS-AT-LARGE: Kelly Cureton KD6CJQ 527-1531
ACTIVITIES CHR: Merlyn Pfeiff N6VUC 584-3898
REPEATER CHAIRMAN: Jim Rutherford WB6PER 526-2972
SHORT SKIP STAFF:
EDITOR: Alan Bloom N1AL (e) 538-7115
1578 Los Alamos Rd, Santa Rosa, CA 95409 (d) 577-3981
CIRCULATION MGR: Adam McLaughlin KD6POC
SWAP SHOP: Rick Reiner K6ZWB 542-6907
HAM NEWS: R.L. Caron KK6GP

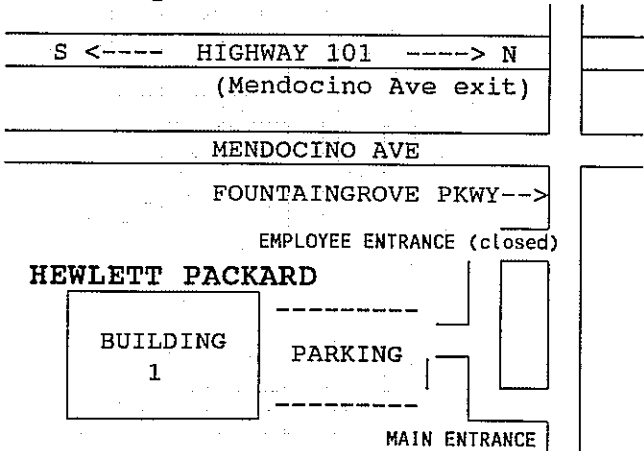
Club Meetings:

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

Next Meeting: May 5, 1993

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...



Board Meeting Minutes

April 14, 1993

The meeting was called to order at 5:39 PM in the Northbay Savings meeting room by President Rick Reiner K6ZWB. Other officers present were Secretary Al Bloom N1AL, Treasurer Jim McLaughlin WA2EWE, and Members-at-Large Kelly Cureton KD6CJQ and Merlyn Pfeiff N6VUC. Members Jim Pelmulder N6PTM, Joe Senft KM6TN, Hoppy Bravin WD6CKP, James Cureton KD6GSF, Adam McLaughlin KD6POC, Jim Andrews KC6PJW and John Breckenridge WB6FRZ also attended.

FIELD DAY: We'll go to the same site as last year at the Coast Guard Training Center. K9ASL is the liason. Pete KC6UXM may be out of the country for FD -- we need another food chairman. Perhaps we could get dinner catered for a reasonable price? Food tickets will be sold at the June meeting. KD6CJQ volunteered to be Novice station coordinator, with WB6FRZ as technical advisor. The power source will be the SCRA generator.

The FD MEETING will be 7 PM, Tuesday May 4 at the EOC.

CLUB LIABILITY: The board voted to authorize up to \$200 for attorney Chuck Tarr WA6VAG to examine our liability insurance policy and come up with a liability waiver form for club activities. M/s N1AL/N6VUC

N1AL proposed that we require participants to wear helmets when riding bicycles on club public service events. Al will come up with specific wording for the next board meeting.

WB6FRZ wondered if Pat Malone KD6MAZ was reimbursed for his expenses with taping *Short Skip*. WA2EWE has mailed out the check and will check with Pat to be sure he got it.

EQUIPMENT INVENTORY: Everyone with club-owned equipment at home should give a list to Pete KC6UXM so we can get the inventory list up to date.

The President is way past due for a new BRIEFCASE. Rick is authorized to buy one. m/s N1AL/N6PTM

The QSL DISPLAY is coming along. It was suggested N6VUC purchase plastic QSL display sheets for the purpose.

The MEMBERSHIP LOTTERY participants list is hard to keep up since the list changes every month. KC6PJW will just put all members' names in the pot and trust people to tell if they didn't put in the 25 cents.

The SCRAPS PICNIC is moving from July 17 to Sept 11.

Our COFFEE POT is no longer big enough for club meetings. KD6CJQ reports that Refreshment Chairman Bob WD6DPE requests permission to buy another 32-cup machine. Approved. m/s N6VUC/KD6CJQ

ANTENNA COMMITTEE: KM6TN attended a recent REDX meeting to enlist their support. As their scheduled program did not show up, Joe ended up speaking for longer than he had planned! Don Boosinger K6XN is having problems with his antenna. He has appealed the removal order to the Design Review Board. If he loses, we will likely want to support him when he goes before the town council. The local paper just had an article on a resident of west Santa Rosa fighting with his neighbors over his 12 ft satellite dish in his tiny front yard.

The BATTERY BACKUP system for the repeater is being persued by WB6PER and N6PTM.

Meeting adjourned at 6:53 PM. m/s WA2EWE/KC6UXM
Respectfully submitted by Al Bloom, Secretary.

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.

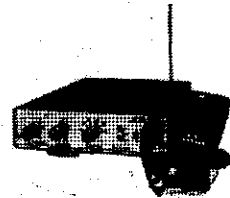
Callsign _____
First Name _____
City _____

HSC ELECTRONIC SUPPLY

GOODIES FOR THE RADIO AMATEUR:

RAMSEY KITS:

- 2 Meter Synthesized FM Transceiver
- 2 Meter 30 Watt Amplifier
- All-mode HF receivers
- QRP CW Transmitters
- Etc...



ARRL BOOKS:

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



POPULAR BRANDS:

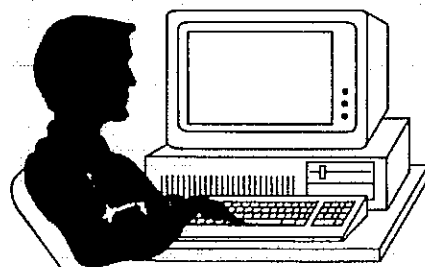
- MFJ
- Ameco
- Larsen
- Antenna Specialists
- Sangean
- Etc...

NECESSITIES:

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

YOUR IBM CLONE HEADQUARTERS

FROM PC-AT's TO STATE-OF-THE-ART 80486 SYSTEMS,
YOU'LL FIND IT AT HSC



- Complete systems
- Cases, Supplies, Motherboards
- Hard/Floppy Discs, Monitors
- I/O Cards, Memory Chips
- Software, Etc...

HSC Halted
specialties co.

Electronics • Prototyping Supplies • Computers • Lasers

George Shedore
Manager
KS6W

6819 REDWOOD DRIVE COTATI, CA 94931 PHONE: (707) 792-2277
FAX: (707) 792-0146



SCRAPS: SCRA Public Service

By Kathy Mahan KC6UXJ

Amidst quite a bit of confusion, SCRAP's volunteers worked their first event for the season: The Super Cities Walk sponsored by the MS Society. Thanks to the following people who gave up a good part of their day to work this event: Kelly KD6CJQ, Coordinator (Good job ACE), James KD6GSF, Don W6CPE (our main net controller), Lorraine KD6KRW, Brian N6IY, Matthew KD6KVH, Bill WA6OLW, Ed AB6QL, Adam KD6POC, Jim WA2EWE, Dave KD6KWM, Ted KB6PTA, Gary KD6BOF, Jim KD6JZJ, Bill KD6LTB and Kathy KC6UXJ. Everyone did a great job for our first time out this year and the mobile bicycle units were great and we plan on doing a lot more events using the bicycles.

Upcoming Events:

- May 1 Wine Country Century (Marie KI6QY Coordinator)
- May 2 Tour de Cure (Eran KD6KVO Coordinator)
- May 8 Human Race Bicycle at Annadel (Doug KC6RHA, Kathy KC6UXJ)
- June 19 Terrible Two (R.L. KK6GP, Coordinator)
- July 11 Sonoma Valley Wine Fest & Ride (Eran KD6KVO, Coordinator)

If you would like to volunteer for any of these events please call the event coordinator (check roster for numbers) or Kathy KC6UXJ at 823-4980.

For the next few months I've decided to publish some DO'S and DON'TS for Public Service Events. I hope these help all the new people who have signed up for Public Service and reminders for all the veterans.

DO maintain a courteous, professional image. You may be working with several agencies including police, first aid etc. Extend every possible courtesy to members of these groups. Make sure they know who you are, and what your communications capabilities are.

DO make certain the frequency is clear before making a call. The channel can get very busy during "tactical operations". When you complete an exchange with another station, use the prowords "clear" or "out" so other stations will know the frequency is now available to them. Keep transmissions AS SHORT AS POSSIBLE!. Resist the temptation to ragchew or ramble.

DON'T apply first aid unless you are trained and certified to do so. Call for medical assistance, and an ambulance or medical personnel will be dispatched to your location.

DON'T transport an ill or injured person in a private vehicle. This is the job of the medics and the police. An emergency vehicle is properly equipped and can get through traffic much faster than a private car.

DO enjoy yourself! Amateur Radio public service is fun. (To be continued next month)

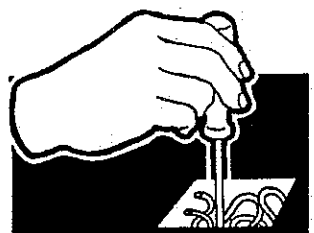
If anyone has any questions about public service, please feel free to call me, Kathy KC6UXJ. Happy May!

Need Some QSL Cards?

We already have an order for 250 club QSL cards in hand. If you would like to order, you can take the order to the printer right away. (That is, you get "express service" without paying the extra fee.) See March *Short Skip* for details or contact N1AL.

Swap Meet

The Valley of the Moon ARC will hold a swap meet on Sat. May 1 on the grounds of the Sonoma Developmental Center, just outside Glen Ellen.



Swap Meet: Sellers set up at 7 AM, swap opens at 8. Tables are \$10, buyers get in free. A raffle and auction will be held.

Breakfast: An all-you-can-eat breakfast of pancakes, eggs, bacon, sausage, coffee and orange juice for \$5 will be served from 8 to 11 AM.

Ham News

by R. L. Caron KK6GP

WIND PROFILER RADARS may soon join hams on 449 to 450MHz, if a recent Notice of Proposed Rulemaking, ET Docket 93-59, is written into FCC rules. These devices use antennas pointed straight up into the sky to identify wind shear around airports. Although hams have secondary use of this band, the FCC will accept comments from any interested party. Another possible band mentioned for this new service, and even favored by some, is 915 MHz, part of another shared ham allocation rapidly filling up with cordless phones, vehicle locator systems, TV extenders, and other consumer devices. *Tnx ARRL.*

PROUDLY DISPLAY YOUR HAM RADIO CALL on your license plates. California's Vehicle Code (CVC) authorizes such plates to any currently licensed Amateur Radio operator. The cost is \$20 for the application, and a \$12 transfer charge if you buy a new vehicle. Recognizing the service performed by hams, the DMV charges no additional yearly fee. Be sure to remind the DMV people you are applying for "Amateur Radio Plates," as provided for in section 5005 of the CVC. Otherwise, they may give you personalized or "environmental" plates, which cost \$35 at the time of issuance and the same amount every year!

THE MOST RECENTLY ISSUED HAM CALLS in 6-land, as of April 1, are AB6SI for Extra Class, KN6JQ for Advanced, and KD6TSG for General, Technician and Novice licenses. Meanwhile, the FCC has introduced electronic filing for applicants in the private radio service. Eventually, it is expected that ham license applications will similarly be accepted by modem, although no timetable for this was mentioned. *Tnx ARRL.*

THE MOST RECENT LARGE-SCALE HAM CALLOUT was in Phoenix during the January floods. For 20 straight days, Amateur Radio played a key role in assisting the Red Cross, the Civil Air Patrol, and other state emergency organizations in providing an orderly flow of radio traffic during floods, a tornado, gas pipeline ruptures, and follow-up damage assessment. Most traffic was conducted using 2 meter and 70cm repeaters. *Tnx N7VEX.*



Digital QRM

by Eric VE2SPY

Hello everyone. Here in Canada and other ITU region 2 countries, we are facing a big dilemma. On 40M, we use the SSB section 7.060-7.100 MHz for local and DX work, and the main problem we are facing is QRM from automatic HF digital mode (AMTOR/packet).

I know that in many case it's not deliberate/intentional, but still we are jammed by unattended HF data communication. It's very unpleasant and regretful, as many hams are thinking it's deliberate which is not good for what they might think about all these new digital modes.

So the main question here is: why are we not complying with the new decision on January 15-16, 1993 by the ARRL Board of Directors to relocate the new subband portion for 40M to 7.100-7.110 MHz. In my opinion it is a very good decision indeed. And please take note that I'm an avid AMTOR operator. Unattended/automatic digital communications are still a privilege in our world of amateur radio. Just look at what ARRL did in the past month to extend those privileges. So tnx for reading this and hopefully we are still going to continue our work to make amateur radio a fun and wonderful hobby.

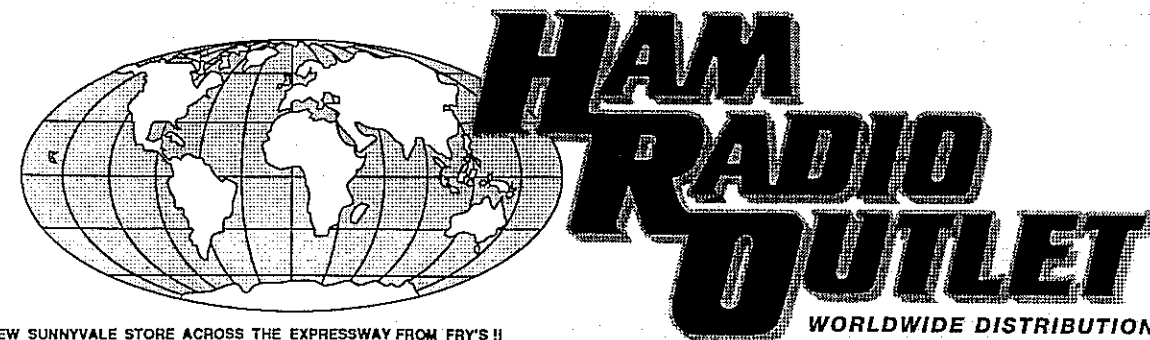
Downloaded by Pete KC6UXM

Toll-Free BBS

Hello Bill here. There is a toll free BBS that has a conference on it for ham operators. The number is 800-642-1982. It is not for downloading programs but messages can be sent to hams for free. (Hey thats almost good as packet.) You noticed I said almost. If you sign on give the command J RADIO. When you get there leave me a message to let me know you read this message. Looking forward to hearing from all of you out there. CUL KB8KPT Bill

Downloaded by Pete KC6UXM

11 STORE BUYING POWER



NEW SUNNYVALE STORE ACROSS THE EXPRESSWAY FROM FRY'S !!

SUNNYVALE, CA 94086
510 Lawrence Expwy. #102
(408) 736-9496
(800) 854-6046

OAKLAND, CA 94606
2210 Livingston St.
(510) 534-5757
(800) 854-6046

Phone Hours: 9:30 AM to 5:30 PM
Store Walk-In Hours:
10:00 AM to 5:30 PM Closed Sundays

ANAHEIM, CA 92801
933 N. Euclid St.
(714) 533-7373
(800) 854-6046

Jim Rafferty, N6RJ, V.P.
Near Disneyland

OAKLAND, CA 94606
2210 Livingston St.
(510) 534-5757
(800) 854-6046

Rich, W4WYB, Mgr.
I-880 at 23rd Ave. ramp

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
6265 Sepulveda Blvd.
(818) 988-2212
(800) 854-6046

Jon, KB6ZBI, Mgr.
San Diego Fwy.
at Victory Blvd.

Bob Ferrero W6RJ
President/Owner
Jim Rafferty N6RJ
Vice President

PORTLAND, OR 97223
11705 S.W. Pacific Hwy.
(503) 598-0555
(800) 854-6046

Earl, KE7OA, Mgr.
Tigard-99W exit
from Hwy. 5 & 217

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. 611-285

SALEM, NH 03079
224 N. Broadway
(603) 898-3750
(800) 444-0047

Jim, K3QIO, Mgr.
Exit 1, I-93;
28 mi. No. of Boston

AZ, CA, CO, GA, VA residents add sales tax.
Prices, specifications, descriptions, subject
to change without notice.

ALINCO

DJ-580T

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

**CALL FOR
SPECIAL
LOW PRICE**

YAESU

HANDHELDS

FT-415/FT-815

2 Mtr 440 Mhz
2W 2M/1.5W 440
5W optional
Direct DC input
Built-in VOX, 41 Mem.
DTMF paging, CTCSS built-in

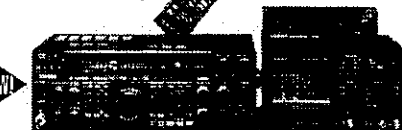
FT-411

2M HT
Standard 2.5W; 49 Mem
2m/140 to 174 Mhz
EXTENDED RECEIVE

KENWOOD

TS-950SDX

RM-1 Included



(Shown with optional SM-230 & SW-2100)
NEW 150W MOSFET Finals • Voice Keyer Optional
NEW DSP on BX • TX • NEW CW Memory Keyer
NEW CW Filter in Sub-Band Receiver
NEW RM-1 Included • NEW S Meter for Sub-Band
General Coverage RX • Built-In AC Supply

ICOM

HANDHELDS

IC-2GAT
2 Meter HT • 7 Watt
IC-4GAT
440 MHz • 5 Watt
IC-W2A
Deluxe Duo-Band
Wide RX Band HT
IC-P2AT, 2 Meter
IC-P3AT, 220 Mhz
IC-P4AT, 440 Mhz
IC-24AT, Duo Band
IC-2SRA, 2M + Wide Rx



ALINCO

DR-599T

2M/440 FM Transceiver



45W/35W + Airband RX
Detachable/Removable Head
EMS-3 Remote Control Mic Std.
CALL FOR SPECIAL PRICE

YAESU

FT-990



100W HF Gen Cov Transceiver
DDS, QSK • 500Hz CW Filter included
CALL FOR LOW PRICE

KENWOOD

HANDHELDS

TH-28A
2M/2.5W DTSS
240 Mem. w/optional
mem. unit
UHF RX

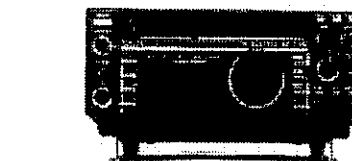
TH-48A
440/1.5W DTSS
240 Mem. w/optional
mem. unit
2 MTR RX

TH-225A
2 MTRS/5W
TH-315A
220MHz/2.5 W

**CALL
FOR
GREAT
PRICES**

ICOM

IC-735



100W 12 volt • 12 channel memory
General Coverage • IF Notch & QSK
CALL FOR LOW PRICE

SCRA MINUTES

April 7, 1993



The meeting was called to order by President Rick Reiner K6ZWB at 7:42 PM. Other officers present were Vice President Pete Sourek KC6UXM, Secretary Al Bloom N1AL, Treasurer Jim McLaughlin WA2EWE, and Members-at-Large Kelly Cureton KD6CJQ and Merlyn Pfeiff N6VUC.

VISITORS: Shelly KD6AFZ introduced 19 visitors.

UPGRADES: KN6JF is now an Advanced, and KD6OSW is now KN6IO. Someone else upgraded to KN6JQ.

The **MINUTES** and **TREASURER'S REPORT** were approved as published. m/s KB6PTA/K6PKF, KK6WN/AA6UY The current Treasurer's Report shows \$4,256.33 in the General Fund and \$864.05 in the Repeater Fund.

REPEATER: N6VUC reports that the autopatch is back on the air, after the lightning strike a couple months ago.

PUBLIC SERVICE: Doug KC6RHA listed upcoming events: Geysers bike race Apr 30 and Diabetes Assn bike event at Annadel Park May 8. Several more volunteers needed.

EDUCATION: We still need an Education Chairman to maintain the student and instructor lists.

CLUB NET CONTROL STATION for May will be Bill N6GHG.

FIELD DAY: Merl N6VUC announced that we will be at the Coast Guard base again. To avoid wasted food (as we had last year), dinner passes will be sold in advance. KD6KWM recommends we have signs at operating positions. Bill K9ASL is our Coast Guard liaison.

MARCONI DAY is April 23. Bill N6GHG reports that the call used will be KK6H/IMD.

Darlene KD6GCK thanked the two Bill's KD6LTA and KA6JLP for help in locating an old ex-ham friend of her Dad.

A **MINI DX-PEDITION** was proposed by Bill KA6OLW. Time frame would be late October, early November. The site is a ranch up in Tehama Co., 38 mi west of Red Bluff on Rt. 36.

The **TAPE MAILERS** for sending *Short Skip* to blind amateurs have arrived. John WB6FRZ passed around a sample.

Ted KB6PTA says Ken N6MSJ, a local blind ham attending school in Santa Barbara has been having health problems.

VE EXAMS last Saturday had 19 applicants, according to Jeff KC7VS. We had a 90% pass rate.

PROGRAM: HOMEBREW CONTEST. The judges for the 1993 contest were Merl N6VUC and last years winners Steve KK6VY and Charlie KK6WN. We had 12 projects officially entered and one "for show."

Jeff KC7VS wrote a Morse code program that runs on Unix workstations. He has also ported it to a PC and had it running on a portable computer. Al N1AL brought a 12-volt power supply, a DSP (digital signal processor) audio filter and (not entered) an unfinished work in progress -- a combination power supply, volt/amp meter, function generator, tunable audio filter, frequency counter and capacitance meter. Ted KB6PTA arrived with his bicycle mobile setup, complete with helmet-mounted antenna. N6IY built a portable antenna mast mounted on a home-built trailer and parked it outside in the parking lot. Glenn N6GN has been working on a high-speed packet network. He brought one of his 900 MHz digital transceivers and beam antenna. Rick K6ZWB constructed a Morse code keyer using the Curtis chip. Bill KA6JLP built a DSP filter similar to N1AL's, but nicer. Jim KD6GCD brought his humongous class-A audio hi-fi amp. Adam KD6POC has homebrewed his own QSL cards on the computer, which Dad Jim WA2EWE brought along, unbeknownst to Adam. Jim's own project was a 30 watt 2 meter power amplifier.

There were two entry categories, under 15 hours construction time and over 15 hours. The under-15-hour winner was K6ZWB's CW keyer with KB6PTA/bicycle mobile runner up. Glenn N6GN's 900 MHz high-speed data transceiver was the over-15-hour winner with N6IY's mast/trailer runnerup.

Darlene KD6GCK won the **MEMBERSHIP LOTTERY** and took home over \$30.

Meeting adjourned, m/s N6VUC/KD6POC

Respectfully submitted by Secretary Al Bloom N1AL. ■

Treasurer's Report

de Jim WA2EWE March, 1993

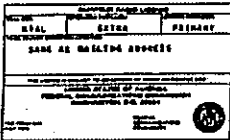
ACCOUNT	REVENUE	EXPENSE
Activities (Field Day)		600.00
Refreshments at meetings ..	17.09	16.56
Dues and Initiations	1286.00	
Raffle at meetings	73.50	
Badges		12.90
Misc	76.00	72.00
Short Skip Newsletter	260.00	55.00
Training and Education		26.00
Membership Supplies	10.00	
	1722.59	782.46

ASSETS:

General Fund Account	4228.33
Cash/checks on hand	28.00
Total General Fund	4256.33
Total Repeater Fund	864.05

■

Marin/Sonoma VE Council FCC Exams



Date	Time	Sponsor	Place
May 1	0900	VOMARC	Sonoma Dev. Center
Jun 5	0900	MARC	Hamilton Field Novato
Jun 19	1800	SMRS	USCG, Two Rock
Jul 3	0900	SCRA	Co. OES Santa Rosa
Aug 7	0900	VOMARC	Sonoma Dev. Center
Aug 21	1800	SMRS	USCG, Two Rock
Sep 11	0900	MARC	Hamilton Field Novato
Sep 25	0900	SCRA	Sebastopol Flea Mart
Oct 23	1800	SMRS	USCG, Two Rock
Nov 6	0900	VOMARC	Sonoma Dev. Center
Dec 4	0900	MARC	Hamilton Field Novato

Candidate requirements:

1. Photo identification or two non-photo IDs.
2. Original and photocopy of license, if any.
3. Original CSCEs from earlier tests, if any.
4. Radiotelegraph license, if held.
5. Doctor's medical exemption, if applicable.
6. Fee is \$5.60, except Novice test is free.

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

Directions to the Test Sites:

Sonoma County Office of Emergency Services (SCRA). Talk-in 146.73-. AAA map Santa Rosa E7. From Hwy 101 take Steele Lane eastward. Take immediate left turn onto Center Dr (next to Shell station). Go north to stop sign, turn left onto Administration Dr, then left at next stop sign, Ventura Dr. Please park in public parking on Ventura. The OES is the building to the west, with no windows, between the Sheriff's Office and Jail.

Hamilton Field, Building 549, Novato. Talk-in 147.33-, AAA map Marin County D4. From Hwy 101 take Nave Lane or Hamilton Field exit. Get on eastern side Frontage Road. Go to main gate of Hamilton. Drive east, over railroad overcrossing. Turn right onto Crescent Dr. Keep to right (one way), follow MARS signs, going left to San Jose Drive. Turn left, then right up access road toward red/white checkered water tower to Bldg 549. Note: speed limits enforced!

Sonoma Development Center (VOMARC) Talk-in 145.35-. AAA map Sonoma County G11. From the south into Sonoma Valley, Hwy 116 from Petaluma or Hwy 121 from Hwy 37, go N 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 S on Hwy 12 to Arnold Dr. Turn right, go through Glen Ellen to the state hospital in Eldridge. Turn right onto Wilson (one block past the flashing light/stop sign) and go to the McDougall building.

US Coast Guard base, Two Rock (SMRS). Talk-in 146.91- AAA map Sonoma County H8. From Hwy 101 in Petaluma, take East Washington St exit and go west through central Petaluma. Washington turns into Bodega Ave. About 10 miles west, turn onto Tomales Road (Coast Guard signs are posted). Go west on Tomales Rd to "USCG Training Center" main gate. Turn left, go up road to Colorado St, turn left and go down to the Bauer building. Note: Speed limits enforced!

Sebastopol Flea Market, (SCRA) Holy Ghost hall. Talk-in 146.73-. AAA map Sonoma Co. F7. Take Hwy 116 north through Sebastopol to Mill Station Road. Turn left; the Holy Ghost hall is on your immediate right (1/2 block).

Contact Persons:

SCRA: Sonoma County Radio Amateurs
Dave (707) 527-0981

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 ■

HSC

Halted

specialties co.

Electronics • Prototyping Supplies • Computers • Lasers

George Shedore
Manager
KS6W

6819 REDWOOD DRIVE
COTATI, CA 94931

PHONE: (707) 792-2277
FAX: (707) 792-0146



COMING EVENTS:

SCARS NET: 146.73 MHz
Tuesdays at 7 PM.

KIDS' NET: 146.73 MHz
Thursdays at 7 PM.

VE EXAMS HOTLINE NRs:
(408) 984-8353/255-9000

MAY:

- 1 - Wine Cntry BikeTour KI6QY 664-1978
- 1 - ARRL 902/1296/2304 MHz Sprint
- 1 - Fresno Hamfest 209-486-5377
- 1 - Valley of the Moon Swap Meet
- 1-2 - Ten-Ten 10 Meter CW QSO Party
- 2 - Tour de Cure, KD6KVO 996-8933
- 2 - LARK Flea Mart, Livermore WU7R
- 3 - RACES etc. Net 7:30 PM
- 5 - SCRA meeting 7/7:30 PM
- 8 - Human Race/Ride, KC6UXJ 823-4980
- 8 - Foothill College Flea Market
- 15 - Deadline for June *Short Skip*
- 17 - RACES etc. Net 7:30 PM
- 20 - CDF/VIP Meeting 7:30 PM
- 21-23 - West Coast VHF Conference, Ventura
- 22-23 - ARRL 50 MHz Sprint
- 29-30 - CQ Worldwide Prefix Contest, CW

JUNE:

- 2 - SCRA meeting 7/7:30 PM
- 12-14 - ARRL VHF QSO Party
- 19 - Deadline for July *Short Skip*
- 19 - Terrible Two Bike Tour, KK6GP
- 26-27 - Field Day

SEPTEMBER:

- 18 - SCRA Flea Mart, Seb. Holy Ghost Hall

"The Plan"

In the beginning was the plan.
And then came the assumptions.
And the assumptions were without form.
And the plan was completely without substance.
And darkness was upon the face of the workers.
And they spake unto their Group Heads, saying:
"The plan is a crock of sh-- and it stinks."

And the Group Heads went unto their Section Heads
and said: "It is a pail of dung
and none may abide the odor thereof."

And the Section Heads went unto their Managers
and said unto them: "It is a container of excrement
and it is very strong, such that none here may abide it."

And the Managers went unto their Director
and said unto him: "It is a vessel of fertilizer
and none may abide its strength."

And the Director went unto the Executive Director
and said: "It contains that which aids plant growth
and it is very strong."

And the Executive Director
went unto the Vice President and said unto him:
"It promotes growth and is very powerful."

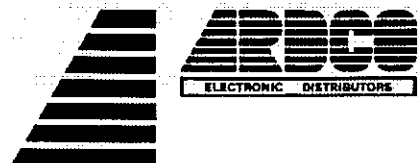
And the Vice President went unto the President
and said unto him: "This powerful new plan
will actively promote the growth and efficiency
of the department and this area in particular."

And the President looked upon the plan
and saw that it was good.

And the plan became policy.

Anon

Tnx Allan W6MEO



345 West College Ave, Santa Rosa, CA 95401 (707) 527-6000

STEVE BASHAM
Manager

Law Offices of
CHARLES J. TARR AND ASSOCIATES
WA6VAG

CHARLES J. TARR
Attorney at Law

REPRESENTING INJURED PEOPLE AND
THOSE ACCUSED OF CRIME

418 B STREET • FOURTH FLOOR
SANTA ROSA, CALIFORNIA 95401
(707) 546-5888

1304 SOUTHPOINT BLVD., SUITE 230
PETALUMA, CALIFORNIA 94954
(707) 778-1114

SCRA Code Practice System

By Alan Bloom N1AL

The system consists of two boxes. The one containing the code oscillators is about 3.5 ft long, 5" wide, 3" tall. There are 6 listening posts, 3 on each side, spread as far apart as possible. Six listeners can use the machine at the same time without bumping elbows.

The other box holds the power supply and the control circuitry that keys all the oscillators simultaneously. Keying can be either from a code key or from an audio tape recorder. The audio tones from the recorder are detected and used to control the key line. The detector circuit is carefully designed not to alter the on/off timing (weight) of the incoming signal and to be relatively insensitive to audio level.

Each of the 6 listening posts can hear either it's own CPO (code practice oscillator) or the audio from the tape recorder, as selected by a switch on the master control box. This is very handy when running volunteer exam sessions so that the examinees can hear the voice instructions on the tape before the code starts. Note that the volume control at each listening post only works in CPO mode.

We plan to build another copy of each box. The CPO boxes each have two interface connectors (on opposite ends) so that both boxes can be connected in series. This will allow 12 stations to be keyed at once.

The CPO circuit was designed to avoid the deficiencies of most simple code oscillators without being too complex to produce in quantity. It consists of a triangle-wave oscillator and a tracking audio filter. The filter reduces harmonics (buzziness) and slows the rise and fall time of the keying to eliminate "key clicks." The filter has a constant bandwidth at all frequencies.

The CPO printed circuit board measures two by two inches. Only one IC, one transistor and a handful of other parts are required.

Construction

Construction should not be critical. I recommend metal boxes to reduce the possibility of hum pickup. I used shielded cable for the 5-wire interface cables, but it is probably not necessary.

The tape audio input jack should match your tape recorder. I wired two in parallel -- an RCA phono and a miniature phone jack.

Use a fairly heavy gauge wire for the audio line. When the tape audio switch is set for "CPO", the audio line is grounded to keep the 6 listening posts from "talking" to each other. If there is too much resistance in this line, listeners may hear other stations faintly. Since I had an extra wire left on the 5-pin DIN connector, I doubled up the audio line. My interface cable is about 6.5 feet long.

The CPO PC board layout is designed for either single or double-sided fabrication. The back side is a ground plane with cutouts for all the non-ground pads. If you go single-sided, one jumper will be required as shown.

The layout is designed to accommodate various size parts with various pinouts. Don't worry about the extra holes.

The IC can be almost any garden-variety quad operational amplifier. If you use an LM324, add a 1K resistor from pin 7 to ground to eliminate cross-over distortion.

To calibrate the oscillator, just adjust the on-board potentiometer for loudest signal.

There is no PC layout available for the Tone Detector board. I just built it on a piece of perforated phenolic board.

Operation

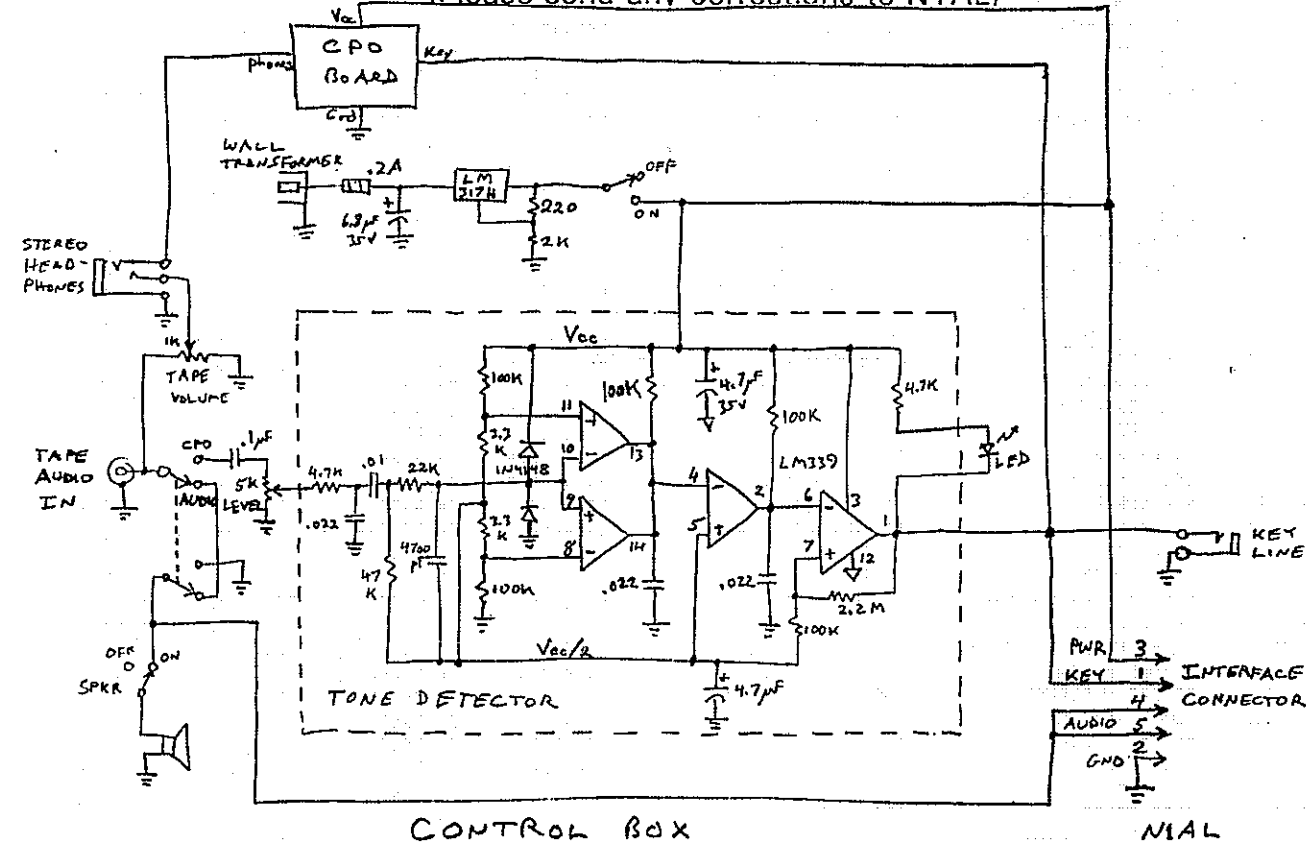
Here's how to run a VE exam. Connect the tape recorder speaker output to the "tape audio in" jack. Switch the tape audio switch to "audio" position. Do a test run of the audio portion of one of the exam tapes and adjust the tape recorder for proper headphone volume at the listening posts.

Now switch the tape audio to "CPO." Fast forward the tape to the part where it is sending CW. Without changing the tape recorder volume, adjust the "Level" control until the LED flashes in step with the CW signal. You're ready to go.

The headphone jack on the control box is designed for stereo headphones. One ear is tape audio, the other is a CPO. This way the examiner can monitor both signals at once. ■

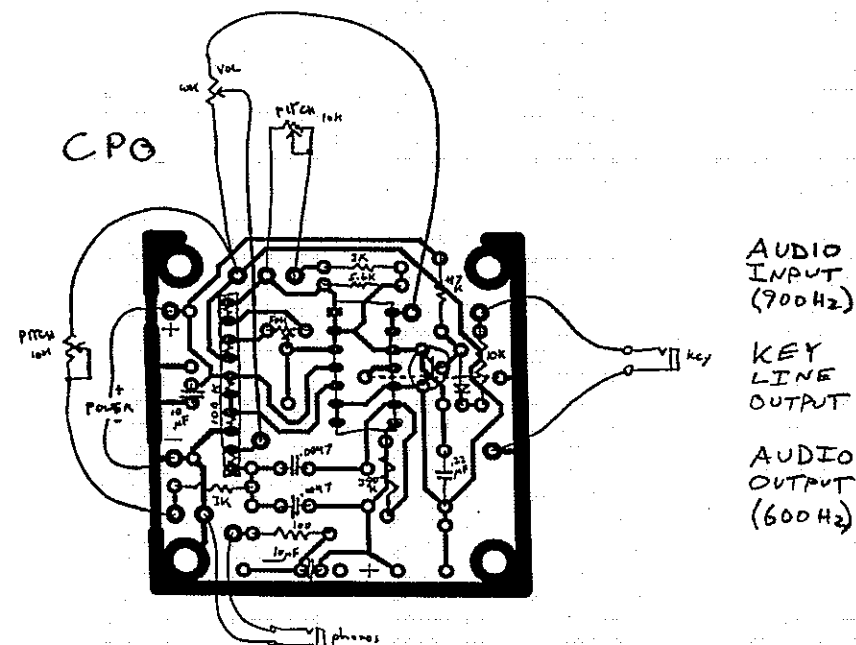
#	CALL	M-CLASS	NAME	STREET	CITY	ST ZIP	PHONE	F YR L
224	KB6ZOL	FULL	MARK BURNELL	150 POPE COURT	SANTA ROSA	CA 95405	575-5332	1 93 G
225	K6ZWB	FULL	RICK REINER	150 STONY POINT RD	SANTA ROSA	CA 95401	542-6907	0 93 A
226	NH6ZY	FULL	SHEP JENKS	886 PLEASANT HILL RD	SEBASTOPOL	CA 95472-4030		0 93 ?
227	WB7CNJ	FULL	ROBERT R WRIGHT MD	673 JEANMARIE DR	SANTA ROSA	CA 95403-1489	571-8262	0 93 A
228	N7SOF	FULL	MARJORIE ZANTEK	4529 FAIRWAY DR	ROHNERT PARK	CA 94928	584-3881	2 93 T
229	KC7VS	FULL	JEFFREY A MORITZ	4403 HEDGE COURT	ROHNERT PARK	CA 94928	584-3610	1 93 E
230	W8LLY	FULL	STEVE LUND	POB 476	GRATON	CA 95444	823-4544	0 93 E
231	K9ASL	FULL	WILLIAM R CLABO	7535 MONET PLACE	ROHNERT PARK	CA 94928	795-2525	0 93 G
232	W9IYG	FULL	HERBERT M ROSENTHAL	3708 LLYN GLASSLYN PL	SANTA ROSA	CA 95403	525-1168	0 93 A

(Please send any corrections to N1AL)



CONTROL BOX

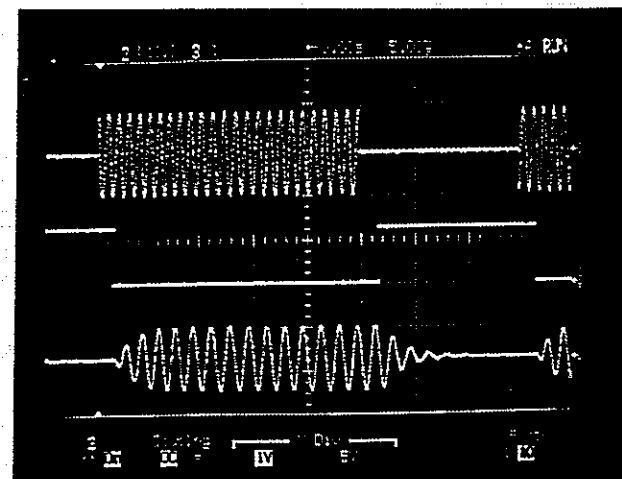
N1AL



AUDIO INPUT (700 Hz)

KEY LINE OUTPUT

AUDIO OUTPUT (600 Hz)



Paid-up Members of SCRA 4/17/93

#	CALL	M-CLASS	NAME	STREET	CITY	ST ZIP	PHONE	F YR L
1		SPONSOR	ROSS COLLINS	37 LAKEVILLE ST	PETALUMA	CA 94952	762-2790	0 93 -
2		SPONSOR	HEIDI GUSTAFSON	549 IRWIN LN	SANTA ROSA	CA 95403	523-0266	2 93 -
3		SPONSOR	LARRY GUSTAFSON	549 IRWIN LN	SANTA ROSA	CA 95403	523-0266	1 93 -
4		SPONSOR	? WILLIAMSON	3003 LAGO VISTA WAY	SANTA ROSA	CA 95405	545-7600	2 93 -
5	AA0BV	FULL	JOSEPH W OLSEN	4525 HEATH CIR	ROHNERT PARK	CA 94928	415-492-3282	0 93 E
6	WD0E2S	FULL	STEVE GEBHARD	1211 DEMEO ST	SANTA ROSA	CA 95407	545-5828	0 93 +
7	K0MGT	FULL	MELVIN GROW	451 WOODLEY PLACE	SANTA ROSA	CA 95409-6431	538-3867	0 93 G
8	N1AL	FULL	AL BLOOM	1578 LOS ALAMOS RD	SANTA ROSA	CA 95409	538-7115	0 93 E
9	KA1NVR	FULL	NORMA KERWIN	POB 1309	FORESTVILLE	CA 95436	887-7843	2 93 N
10	W2EBG	FULL	GENE JOHNSON	2437 WIDGEON CT	SANTA ROSA	CA 95401	578-3104	1 93 G
11	W2EWE	FULL	JAMES A MCLAUGHLIN JR	323 ASUELO WAY	SANTA ROSA	CA 95401	573-0277	1 93 G
12	W2HWQ	FULL	BILL KOCZON	POB 2927	PETALUMA	CA 94953	763-5405	0 93 A
13	VP2ML	FULL	CHOD HARRIS	3201 FRANZ VALLEY RD	SANTA ROSA	CA 95404	526-2198	0 93 A
14	WX3K	FULL	JOHN ZANTEK	4529 FAIRWAY DR	ROHNERT PARK	CA 94928	584-3881	1 93 E
15	AB4C	FULL	DON DROEGEMEYER	3549 SLEEPY HOLLOW DR	SANTA ROSA	CA 95404	526-0256	0 93 E
16	N4WBM	FULL	CLINT DANBURY	POB 750037	PETALUMA	CA 94975-0037	510-932-7587	0 93 T
17	KC4WVL	FULL	W S SLADE SMITH	ET-A SCHOOL 05-93 USCG T	PETALUMA	CA 94952-5031	778-6665	0 93 T
18	KB6AAD	FULL	HOWARD GLANDON	118 VALLEY LAKES DR	SANTA ROSA	CA 95409	539-6098	0 93 A
19	W6ACX	FULL	DON OSBORNE	25005 RIDGE RD	WILLITS	CA 95490	459-3980	0 93 E
20	KD6AFZ	FULL	SHELLY SOUREK	406 CYNTHIA CT	WINDSOR	CA 95492	838-0622	2 93 T
21	KD6ATT	FULL	MICHAEL C MILLER	POB 7622	COTATI	CA 94931		0 93 T
22	KC6AVN	FULL	JONATHAN T PROEHL	1016 MC NEAR AVE	PETALUMA	CA 94952	769-1788	0 93 T
23	KI6B	FULL	ROBERT THOMPSON	2 EL ROSE DR	PETALUMA	CA 94952	762-0901	0 93 E
24	KK6BK	FULL	S LEWIS NEWTON	4620 ROCK MEADOW PLACE	SANTA ROSA	CA 95405	538-1370	0 93 A
25	W6BNB	FULL	BOB SHRADER	11911 BARNETT VALLEY RD	SEBASTOPOL	CA 95472	823-9122	0 93 E
26	KD6BOF	FULL	GARY PRICE	8212 WINDMILL FARMS	COTATI	CA 94931	795-2954	0 93 T
27	KD6BQO	FULL	CHUCK STAYER	POB 202	WILLITS	CA 95490	459-3531	0 93 +
28	KC6BSI	FULL	PHILIP GAUL	739 WHEELER	SANTA ROSA	CA 95404	544-2572	0 93 T
29	KC6BTU	FULL	KRISTINE CORNILS	3638 SHELTER CREEK DR	NAPA	CA 94558	255-8554	4 93 -
30	KD6BUW	FULL	MEGAN LINNEHAN	11275 BARNETT VALLEY RD	SEBASTOPOL	CA 95472	829-0973	2 93 T
31	K6BWX	FULL	DICK MADDOX	2435 MURDOCK DR	SANTA ROSA	CA 95404	578-8825	0 93 E
32	KA6BYX	FULL	JAMES HOBART	2053 HUMBOLT ST	SANTA ROSA	CA 95404	546-3225	0 93 T
33	AG6C	FULL	BETTY BRAVIN	3411 COFFEY LANE	SANTA ROSA	CA 95403	542-6750	2 93 E
34	KD6CJM	FULL	RONALD L SPAULDING	1120 YULUPA AVE #3	SANTA ROSA	CA 95405	527-7353	0 93 T
35	KD6CJQ	FULL	ED CURETON	2107 MONTGOMERY DR	SANTA ROSA	CA 95405	527-1531	1 93 T
36	WD6CKP	FULL	HOPPY BRAVIN	3411 COFFEY LANE	SANTA ROSA	CA 95403	542-6750	1 93 A
37	W6CPE	FULL	DONALD E DICKEY	POB 7344	COTATI	CA 94931-7344		0 93 G
38	KA6CRG	FULL	HOWARD TRITES JR	625 TRUMBULL AVE	NOVATO	CA 94947	415-892-5580	0 93 G
39	KC6CYG	FULL	ROBERT H FERGUSON	809 GILARDI DR	PETALUMA	CA 94952	762-7064	0 93 N
40	WN6D	FULL	JIM BOYETT	1326 DOGWOOD DR	SANTA ROSA	CA 95403-1534	544-7943	1 93 E
41	KB6DAN	FULL	KEVIN CORNILS	3638 SHELTER CREEK DR	NAPA	CA 94558	255-8554	3 93 T
42	KA6DJY	FULL	JOHN KOBOLD	2433 APPLETREE DR	SANTA ROSA	CA 95401	544-5330	2 93 A
43	WD6DPE	FULL	BOB OLSTEN	3723 ARIZONA DR	SANTA ROSA	CA 95405	546-5593	0 93 T
44	WD6DTK	FULL	CHARLES A POZZI	1300 HURLBUT AVE	SEBASTOPOL	CA 95472	823-3912	0 93 T
45	W6DTV	FULL	HENRY DAVIS	7822 WASHINGTON AV	SEBASTOPOL	CA 95472	823-7885	0 93 E
46	WD6DXW	FULL	BILL THOMAS	5341 THOMAS RD	SEBASTOPOL	CA 95472	823-9429	0 93 A
47	KA6DYY	FULL	LELAND S HALL	POB 6643	SANTA ROSA	CA 95406		0 93 G
48	K6EAN	FULL	BOB BENDT	4409 VALHALLA BLVD #9	SILOUX FALLS	SD 57106-5208		0 93 G
49	WB6EKV	FULL	BOB SONES	4810 ROCKRIDGE LANE	SANTA ROSA	CA 95404	546-3873	0 93 A
50	KG6EW	FULL	DOUGLAS C REID	1449 LAGUNA RD	SANTA ROSA	CA 95401	829-1719	0 93 A
51	KD6FBN	FULL	PAUL V WEICHEL	5575 CORBETT CIRCLE	SANTA ROSA	CA 95403	571-1782	0 93 T
52	KC6FKX	FULL	LAUREL MEYER	5929 VAN KEPPEL RD	FORESTVILLE	CA 95436	887-2555	0 93 T
53	KK6FM	FULL	DAVID MELCON	2960 MIDDLE TWO ROCK RD	PETALUMA	CA 94952	778-1359	1 93 E
54	WB6FRZ	FULL	JOHN BRECKENRIDGE	574 WILD OAK DR	WINDSOR	CA 95492	838-6398	0 93 E
55	KD6GAC	FULL	KEN WILLIAMSON	3003 LAGO VISTA WAY	SANTA ROSA	CA 95405	545-7600	1 93 G
56	KD6GAD	FULL	MICHAEL BRITT	76 BROOKWOOD AVE	SANTA ROSA	CA 95404	539-4030	0 93 T
57	KD6GAG	FULL	SANDRA J MORITZ	4403 HEDGE COURT	ROHNERT PARK	CA 94928	584-3610	2 93 N
58	KB6BV	FULL	KERMIT SHIRK	RT 1 BOX 429A	MADILL	OK 73446		0 93 T
59	KD6GCD	FULL	JAMES C ROBINSON	16820 LAURI LANE	OCCIDENTAL	CA 95465	874-3958	1 93 +
60	KD6GCH	FULL	HENRY J SIECK	1735 S WRIGHT RD	SANTA ROSA	CA 95407	579-4399	0 93 T
61	KD6GCI	FULL	MYRON RANDALL	508 KEOKUK ST	PETALUMA	CA 94952-2739		0 93 T
62	KD6GCK	FULL	DARLENE LAMONT	16820 LAURI LANE	OCCIDENTAL	CA 95465	874-3958	2 93 T
63	KD6GCN	FULL	JAMES HOYLE	405-C NORTH ST	HEALDSBURG	CA 95448	431-1175	0 93 T
64	N6GDC	FULL	ROBERT B DE HAAN	140 SPRAUER RD	PETALUMA	CA 94952-1026	763-7218	0 93 G
65	K6GEV	FULL	ROBERT N SCOLNICK	900 LIBERTY ROAD	PETALUMA	CA 94952	762-8874	0 93 T
66	NH6GF	FULL	GRANT W CANFIELD	1950 WEST DRY CREEK RD	HEALDSBURG	CA 95448	431-7706	0 93 A
67	N6GHG	FULL	BILL SPLAINE	1360 FOOTHILL DR	HEALDSBURG	CA 95448	431-8636	0 93 G
68	KB6GIU	FULL	CURTIS BRAUCHER	7319 WOODSIDE DR	STOCKTON	CA 95207	209-477-3279	0 93 E
69	KH6GJV	FULL	BILL HILLEDAHL	POB 4151	SANTA ROSA	CA 95402	539-2791	0 93 +
70	KK6GP	FULL	ROBERT L CARON	POB 1263	BODEGA BAY	CA 94923	875-2601	0 93 E
71	KD6GSF	FULL	JAMES CURETON	2107 MONTGOMERY DR	SANTA ROSA	CA 95405	527-1531	2 93 T
72	KD6GSY	FULL	JUDY CORNILS	3638 SHELTER CREEK DR	NAPA	CA 94558	255-8554	2 93 T
73	N6GTF	FULL	HELEN DETTLING	POB 962	PETALUMA	CA 94953	762-4087	2 93 T

#	CALL	M-CLASS	NAME	STREET	CITY	ST	ZIP	PHONE	F	YR	L
74	W6GYY	FULL	JIM T HALL	1580 GEARY RD APT 219	WALNUT CREEK	CA	94596-2743	938-1559	0	93	A
75	N6GZV	FULL	MAY KOBOLD	2433 APPLETREE DR	SANTA ROSA	CA	95403	544-5330	1	93	T
76	KD6HAA	FULL	RICHARD VAN DE BOOM	1425 GREGORY CT	ROHNERT PARK	CA	94928	585-3361	0	93	T
77	KD6HQ	FULL	DON BOOSINGER	1151 PIPPIN CIR	SANTA ROSA	CA	95407	546-1217	0	93	A
78	KC6HXS	FULL	AURELIA F ANDERSON	617 G STREET	PETALUMA	CA	94952-4182	762-2348	0	93	+
79	KJ6HY	FULL	BILL PATTERSON	2307 MAHER DR #5	SANTA ROSA	CA	95405	546-4787	0	93	A
80	N6I1Y	FULL	BRIAN TORR	1625 GAMAY ST	SANTA ROSA	CA	95401	575-5871	0	93	T
81	KN6IO	FULL	JACK L TRIMINGHAM	9251 LAKEWOOD DR	WINDSOR	CA	95492	838-2406	0	93	?
82	KB6IOT	FULL	OLIVER KILBEY	2985 FULTON RD	FULTON	CA	95439	545-8175	0	93	T
83	N6IRJ	FULL	SUSAN RUTHERFORD	POB 222	KENWOOD	CA	95452	526-2972	2	93	T
84	KD6JAM	FULL	THOMAS FLORENCE	11945 LOS AMIGOS RD	HEALDSBURG	CA	95448		0	93	T
85	K16JC	FULL	RAUL TAIBO	448 IGNACIO BLVD #172	NOVATO	CA	94949	415-382-5313	0	93	A
86	KN6JF	FULL	JERRY RICKSECKER	509 KELLER ST	PETALUMA	CA	94952	763-2069	0	93	A
87	KA6JLP	FULL	WILLIAM KIKER	1575 TIMBER HILL RD	SANTA ROSA	CA	95401	823-5652	0	93	G
88	KN6JQ	FULL	MICHAEL MICHLIG	2373 MORNINGSIDE CIR	SANTA ROSA	CA	95405	526-9655	0	93	?
89	K16KE	FULL	JAMES A JOHNSTON	400 TWIN LAKES CIRCLE	SANTA ROSA	CA	95409	538-2857	0	93	A
90	N6KITJ	FULL	KEN PERRY	21791 BONNESS RD	SONOMA	CA	95476	938-3114	0	93	G
91	W6KNO	FULL	JACK JACKSON	18 HIGHGATE RD	KENSINGTON	CA	94707	524-8911	0	93	G
92	KB6KRN	FULL	RICHARD I GEASLAND	362 TWIN LAKES DR	SANTA ROSA	CA	95409	539-6474	0	93	N
93	KD6KRW	FULL	F LORRAINE HASSETT	11151 CHERRY RIDGE RD	SEBASTOPOL	CA	95472	823-5980	0	93	T
94	KB6KSA	FULL	PATRICK B BRODERICK	3357 GLEN ECHO DR	SANTA ROSA	CA	95404	528-2109	0	93	T
95	KB6KTX	FULL	BEA JOHNSON	2437 WIDGEON CT	SANTA ROSA	CA	95401	578-3104	2	93	N
96	KB6KUN	FULL	BILL OLDEN	8025 SONOMA HWY	SANTA ROSA	CA	95409	833-5929	0	93	N
97	KD6KVH	FULL	MATTHEW RAPAPORT	407 EASTMAN #12	PETALUMA	CA	94952	762-0329	0	93	?
98	KD6KVJ	FULL	NANCY A ANDREWS	7249 ROXANNE LN	ROHNERT PARK	CA	94928	795-2163	2	93	?
99	KD6KVV	FULL	ERIC JACOBSON	842 ST FRANCIS DR	PETALUMA	CA	94954	778-6141	2	93	?
100	KD6KWM	FULL	DAVE WILLEY	POB 3514	SANTA ROSA	CA	95402	577-0558	0	93	T
101	KD6KXS	FULL	MELANIE KRAMME	1971 DOGWOOD DR	SANTA ROSA	CA	95403	545-9269	2	93	N
102	KD6KXT	FULL	STEVE KRAMME	1971 DOGWOOD DR	SANTA ROSA	CA	95403	545-9269	1	93	T
103	KD6KXV	FULL	PETER TREGUBOFF	545 CATHERINE CT	SANTA ROSA	CA	95409	539-3909	0	93	+
104	W6LCZ	FULL	KEN CHRISTENSEN	2615 RANCHO CABEZA DR	SANTA ROSA	CA	95404	542-2716	0	93	E
105	W6LGQ	FULL	ART HAGOPIAN	34 LAUREL AVE	PETALUMA	CA	94952	762-2132	0	93	E
106	KM6LI	FULL	JOHN D FOOTS	3400 MT HOME RANCH RD	CALISTOGA	CA	94515	942-9178	0	93	A
107	W6LOU	FULL	FRED PLANTE	10020 SKY CT CLR	KELSEYVILLE	CA	95451	277-7377	0	93	A
108	KD6LRY	FULL	ELI MARLIN	541 EMERALD PARK CT	SANTA ROSA	CA	95409	539-9148	2	93	N
109	KD6LSU	FULL	JUNE LINNEHAN	818 MARGARET ST	SANTA ROSA	CA	95403	528-6138	0	93	T
110	KD6LTA	FULL	BILL MARLIN	541 EMERALD PARK CT	SANTA ROSA	CA	95409	539-9148	1	93	T
111	KD6LTB	FULL	WILLIAM FREDSON	POB 14282	SANTA ROSA	CA	95402-6282	526-1829	0	93	T
112	KD6LTD	FULL	KATHERINE ROWBOTHAM	1143 LOMBARDI LANE	SANTA ROSA	CA	95407	526-5314	2	93	T
113	KD6LYS	FULL	STEVE ONINES	114 VERONDA WAY	COTATI	CA	94931	664-8119	0	93	?
114	KD6MAZ	FULL	PATRICK L MALONE	1949 ALBANY DR	SANTA ROSA	CA	95401	542-1274	0	93	G
115	W6MEO	FULL	ALLAN CHAPMAN	5602 RATERS DRIVE	SANTA ROSA	CA	95409	538-4935	0	93	A
116	KD6MFA	FULL	DONALD C GEIS	POB 991	GUALALA	CA	95445-0991	884-9232	0	93	?
117	KD6MFC	FULL	DONNA LEE DE BAETS	POB 1424	GUALALA	CA	95445	785-3163	0	93	?
118	N6MGY	FULL	WILBUR DALE	4030 BARNES RD	SANTA ROSA	CA	95403	528-1911	0	93	T
119	W6MIS	FULL	AUDLEY W MAXWELL	9396 ARGONNE WAY	FORESTVILLE	CA	95436	887-2590	0	93	G
120	WB6MJB	FULL	FOSTER (BUD) LOCKWOOD	47 WAMBOLD LANE	PETALUMA	CA	94952	792-1444	0	93	T
121	N6MRV	FULL	DALE C VAWTER	1350 GASPAR CT	ROHNERT PARK	CA	94928	584-4670	1	93	T
122	N6MSG	FULL	CLYDE ANDERSON	534 PARQUET	SEBASTOPOL	CA	95472	823-4830	0	93	T
123	KC6NEO	FULL	STEVE LASSEN	4539 BRIGHTON DR	SANTA ROSA	CA	95403-1749	526-5677	0	93	G
124	KC6NNK	FULL	KEVIN P JOHNSTON	2543 BUSS ST	SANTA ROSA	CA	95407-7368		0	93	A
125	WB6NOV	FULL	KENNETH DE BRECHT	POB 358	COTATI	CA	94931	792-2634	0	93	T
126	W6NPJ	FULL	ROBERT C BECHTOL	2210 BRUSH CREEK RD	SANTA ROSA	CA	95404	539-4406	0	93	A
127	N6NSG	FULL	CANDY VAWTER	1350 GASPAR CT	ROHNERT PARK	CA	94928	584-4670	2	93	T
128	K16NY	FULL	CAL CORNILS	3638 SHELTER CREEK DR	NAPA	CA	94558	255-8554	1	93	E
129	N6OH	FULL	WALT BRUUN	POB 283	PETALUMA	CA	94953-0283	763-0476	0	93	E
130	AB6OL	FULL	CLAUDE JONES	3612 BANYAN ST	SANTA ROSA	CA	95403	527-8593	0	93	E
131	WA6OLW	FULL	BILL WATERS	115 SUMMER WHEAT RD	WINDSOR	CA	95492	838-0543	0	93	A
132	N6ONZ	FULL	GARRY PALMER	333 E ROBLES AVE	SANTA ROSA	CA	95407-7971	584-3425	0	93	T
133	N6OOA	FULL	PHILIP SCHLEYER	8105 B ST	WINDSOR	CA	95492	838-2912	0	93	T
134	KD6OTC	FULL	RONALD E DAVISON	1119 DEBBIE HILL RD	COTATI	CA	94931	795-8934	0	93	+
135	K16PB	FULL	STEPHAN M WOYTOWICZ	POB 3558	FAIRFIELD	CA	94533		0	93	A
136	K16PD	FULL	HANS G SORENSEN	9684 O CONNELL RD	SEBASTOPOL	CA	95472	823-2091	0	93	E
137	KC6PDA	FULL	PAUL DANA	46 VALLEJO ST	PETALUMA	CA	94952	762-1461	0	93	G
138	WB6PER	FULL	JIM RUTHERFORD	POB 222	KENWOOD	CA	95452	526-2972	1	93	G
139	KC6PEY	FULL	CHESTER R SMITH	1411 DEER LANE	SEBASTOPOL	CA	95472	823-2228	0	94	T
140	KC6PJW	FULL	JIM ANDREWS	7249 ROXANNE LN	ROHNERT PARK	CA	94928	795-2163	1	93	A
141	KD6PKD	FULL	WARREN LUM	1218 VALERIE WAY	SANTA ROSA	CA	95407	528-9447	0	93	T
142	KD6PKE	FULL	SILVIA CAMERON	329 TUCKER ST	HEALDSBURG	CA	95448		0	93	T
143	KD6PKF	FULL	MIKE HAWK	6516 COUNTRY CLUB DR B	ROHNERT PARK	CA	94928	585-1851	0	93	T
144	N6PLQ	FULL	BOB DAMON	6724 PETALUMA HILL RD	PENNGROVE	CA	94951	795-3038	0	93	G
145	KD6POC	FULL	ADAM MCLAUGHLIN	323 ASUELO WAY	SANTA ROSA	CA	95401	573-0277	2	93	?
146	AB6PR	FULL	WILLIAM E PALMER	21853 BURNDAL RD	SONOMA	CA	95476-9621	938-2120	0	93	E
147	KB6PTA	FULL	TED L DeCROFF	1044 MERCED AVE	SANTA ROSA	CA	95407	542-4008	0	93	T
148	N6PTM	FULL	JIM PELMULDER	2801 GRAVENSTEIN HWY N	SEBASTOPOL	CA	95472	823-7947	0	93	A

#	CALL	M-CLASS	NAME	STREET	CITY	ST	ZIP	PHONE	F	YR	L
149	WA6PXW	FULL	FRANK DETTLING	POB 962	PETALUMA	CA	94953	762-4087	1	93	G
150	N6PXY	FULL	ROBERT BOWMAN	1395 EASTMAN LANE	PETALUMA	CA	94952	763-3547	1	93	A
151	AB6PY	FULL	KEN MEYER	16500 WILLOW CREEK RD	OCCIDENTAL	CA	95465	874-3007	0	93	A
152	KC6QFK	FULL	PAUL KALDUNSKI	4255 HESSEL RD	SEBASTOPOL	CA	95472	829-2780	0	93	G
153	AB6QL	FULL	EDWARD H JACOBSON	842 ST FRANCIS DR	PETALUMA	CA	94954	778-6141	1	93	E
154	KM6QO	FULL	DAVID WELSH	255 WIKIUP MEADOWS	SANTA ROSA	CA	95403	544-7579	0	93	A
155	AB6QW	FULL	JOHN WATROUS	3244 N EDISON ST	GRATON	CA	95444	823-4957	0	93	?
156	K16QY	FULL	MARIE MAPPUS	374 SPRAUER RD	PETALUMA	CA	94952	664-1978	0	93	A
157	W6QYB	FULL	RODOLF G (BOB) BARTON	326 ENGLISH ST #D	PETALUMA	CA	94952	765-9314	0	93	G
158	KC6RDH	FULL	RICHARD POLFUS	2075 DUTTON AVE	SANTA ROSA	CA	95407	528-0272	0	93	T
159	KC6RHA	FULL	DOUGLAS CARTER	1139 GUAYMAS ST	SANTA ROSA	CA	95401	528-9116	0	93	T
160	KC6RHB	FULL	WALTER BURANDT	9045 CHALK HILL RD	HEALDSBURG	CA	95448	838-7813	0	93	T
161	N6RMW	FULL	BOB PHILLIPS	1508 PLUMERIA DR	SANTA ROSA	CA	95403-9402	542-5209	0	93	G
162	KF6RS	FULL	RAYMOND P HEIL	197 GILBERT DRIVE	SANTA ROSA	CA	95405	528-3332	0	93	E
163	KD6RVA	FULL	RICH OSBORN	1773 PARADISE LN	SANTA ROSA	CA	95403	526-0789	0	93	T
164	N6RVN	FULL	LELAND W KINARD	885 GRANT AVE	PETALUMA	CA	94952	763-3597	0	93	T
165	AB6RY	FULL	DARET G BARCLAY	1005 ALPINE CT	NAPA	CA	94558	255-7612	0	93	E
166	KK6SE	FULL	PETER VELIE	126 SANDALWOOD CT	SANTA ROSA	CA	95401	526-9507	0	93	A
167	WA6SEU	FULL	PHIL RICHARDSON	3613 CYPRESS WAY	SANTA ROSA	CA	95405	527-0935	0	93	E
168	K6SRD	FULL	LOWELL LUX	4567 BRIGHTON DR	SANTA ROSA	CA	95403-1750	546-7099	0	93	G
169	KC6SSB	FULL	MICHAEL L BRYANT	2625 FIR PARK WAY	SANTA ROSA	CA	95404	526-7609	1	93	A
170	KC6SSC	FULL	TYLER M BRYANT	2625 FIR PARK WAY	SANTA ROSA	CA	95404	526-7609	2	93	T
171	KC6SSE	FULL	MICHAEL DRANGINIS	601 BUENA VISTA DR	SANTA ROSA	CA	95404	523-4373	0	93	T
172	KC6SSF	FULL	DAVID S JACKSON	1451 KEISER AVE	SANTA ROSA	CA	95404	584-1386	0	93	T
173	KC6SXN	FULL	SHIRLEY WALLACK	POB 1115	KENWOOD	CA	95452	833-1873	2	93	N
174	K6TCD	FULL	BILL MEYER	6516 MEADOWGREEN PL	SANTA ROSA	CA	95409	539-1489	0	93	G
175	KA6THB	FULL	BOB DAWSON	225 DECKER ST	SANTA ROSA	CA	95401	542-4885	0	93	T
176	KD6TID	FULL	JIM STRICKLAND	617 GREENVIEW DR	SANTA ROSA	CA	95403		0	93	T
177	W6TLK	FULL	JOHN WALLACK	POB 1115	KENWOOD	CA	95452	833-1873	1	93	A
178	WB6TMY	FULL	TRACY REESE	POB 4694	SANTA ROSA	CA	95402	527-8124	0	93	E
179	KM6TN	FULL	JOE H SENFT	510 WOODCHUCK CT	SANTA ROSA	CA	95401	578-5824	0	93	A
180	KD6TSA	FULL	SAM CURREN	214 BODEGA AVE	PETALUMA	CA	94952	778-6876	0	93	T
181	KC6TWF	FULL	? VAN BUER	11840 PACIFIC AVE	LOS ANGELES	CA	90066-4625	310-397-5888	3	93	T
182	KD6TXE	FULL	BILL LAURIE	5639 YERBA BUENA RD	SANTA ROSA	CA	95409	538-0399	1	93	T
183	KD6TXH	FULL	TIM LAURIE	5639 YERBA BUENA RD	SANTA ROSA	CA	95409	538-0399	2	93	N
184	KD6TYG	FULL	ROBERT J LIVINGSTON	115 METZ LN	PETALUMA	CA	94952	778-0132	0	93	?
185	KD6TYJ	FULL	PAT S REYNOLDS	5730 CORBETT CIR	SANTA ROSA	CA	95403	576-1154	0	93	?
186	WB6UAZ	FULL	KATHI BOYETT	1326 DOGWOOD DR	SANTA ROSA	CA	95403-1534	544-7943	2	93	G
187	KB6UCM	FULL	HAROLD BALDWIN	2315 FRANKLIN AVE #D	SANTA ROSA	CA	95404-2224		0	93	T
188	K6UKK	FULL	ROBERT W BURWELL	5050 REDWOOD HWY	SANTA ROSA	CA	95403	579-2501	0	93	A
189	KB6UOJ	FULL	TOM HITCHCOCK	3411 SIDNEY SQUARE	SANTA ROSA	CA	95405	544-0911	0	93	G
190	KC6URO	FULL	AARON GAUGER	1627 FURLONG RD	SEBASTOPOL	CA	95472	829-2599	2	93	T
191	KC6UXI	FULL	RICK MAHAN	540 LIVE OAK AVE	SEBASTOPOL	CA	95472	823-4980	1	93	A
192	KC6UXJ	FULL	KATHY MAHAN	540 LIVE OAK AVE	SEBASTOPOL	CA	95472	823-4980	2	93	T
193	KC6UXM	FULL	PETE SOUREK	406 CYNTHIA CT	WINDSOR	CA	95492	838-0622	1	93	T
194	K6UXO	FULL	KENNETH H KERWIN II	POB 1309	FORESTVILLE	CA	95436	887-7843	1	93	E
195	AA6UY	FULL	REN BACULO	5599 INVERNESS AVE	SANTA ROSA	CA	95404	584-8320	0	93	E
196	WA6VAG	FULL	CHARLES J TARR	418 B ST - FOURTH FLOOR	SANTA ROSA	CA	95401	546-5858	0	93	G
197	KB6VBL	FULL	JOHN E BARKDOLL	1119 CLELIA CT	PETALUMA	CA	94954-5616		0	93	G
198	KC6VJI	FULL	LARRY L ROBERTS	929 HUDIS	ROHNERT PARK	CA	94928	584-5030	0	93	T
199	N6VUD	FULL	ALAN JUDD	3080 A14 MARLOW RD #175	SANTA ROSA	CA	95403	324-6286	0	93	T
200	W6VXI	FULL	BUREN EAGLE	309 CORONADO DR	PETALUMA	CA	94954-3403	762-8776	0	93	A
201	KC6VXU	FULL	CRISPIN VAN BUER	11840 PACIFIC AVE	LOS ANGELES	CA	90066	310-397 5888	2	93	T
202	K16VY	FULL	DARREL J VAN BUER	11840 PACIFIC AVE	LOS ANGELES	CA	90066-4625	310-397-5888	1	93	E
203	KK6VY	FULL	STEVE CARNIGLIA	4711 ANNABEL HTS DR	SANTA ROSA	CA	95405	538-7658	1	93	A
204	KE6WL	FULL	BRIAN KOTZIAN	2601 MCBRIDE LN #4	SANTA ROSA	CA	95403	528-3004	0	93	E
205	KK6WN	FULL	CHARLES J CARNIGLIA	POB 1120	SANTA ROSA	CA	95402	578-5832	0	93	A
206	KC6WPH	FULL	DEBRA MELCON	2960 MIDDLE TWO ROCK RD	PETALUMA	CA	94952	778-1359	2	93	T
207	KC6WTJ	FULL	JOHN C ROWBOTHAM	1143 LOMBARDI LANE	SANTA ROSA	CA	95407	526-5314	1	93	G
208	KC6WTO	FULL	SAL CARUSO	3989 SHADOWHILL DR	SANTA ROSA	CA	95404	539-4661	0	93	+
209	KC6WUI	FULL	NADINE SHARROCK	607 BROOKWOOD AVE	SANTA ROSA	CA	95404	528-3601	0	93	T
210	KD6XF	FULL	BUD BARTLETT	35 MISSION DR	PETALUMA	CA	94952	763-2119	0	93	E
211	KM6XO	FULL	JOHN SHAPPELL	6044 DONNA COURT	ROHNERT PARK	CA	94928	585-2549	0	93	?
212	KK6XT	FULL	JOHN K GAUGER	1627 FURLONG RD	SEBASTOPOL	CA	95472	829-2599	1	93	E
213	KM6XU	FULL	MARK WALSH	POB 1376	ROHNERT PARK	CA	94928	585-1764	0	93	A
214	K6XZ	FULL	ROBERT CRAIG	5519 EL ENCANTO CIRCLE	SANTA ROSA	CA	95409-4303	539-1693	0	93	E
215	W6Y	FULL	WARREN WALKER	POB 22	LAKEPORT	CA	95453	263-0400	0	93	E
216	N6YEU	FULL	FRED LEONI	9627 WESTSIDE RD	HEALDSBURG	CA	95448	431-8202	0	93	G
217	N6YIG	FULL	CLIFF REIN	6595 BRIDGEWOOD DR	SANTA ROSA	CA	95409		0	93	T
218	N6YMQ	FULL	LOU SCHNEIDER	POB 1192	NOVATO	CA	94948	415-461-8251	0	93	T
219	WA6YTW	FULL	BOB E DAVIS	305 EAST SPAIN ST	SONOMA	CA	95476	938-2033	0	93	A
220	KC6YUV	FULL	MIKE WITKOWSKI	POB 614	GLEN ELLEN	CA	95442	996-1681	1	93	G
221	KJ6YV	FULL	RAY CLARY JR	2125 E FOOTHILL DR	SANTA ROSA	CA	95404		0	93	A
222	AA6YX	FULL	DAVE NEW	1923 TONJA WAY	SANTA ROSA	CA	95401	527-0981	0	94	E
223	KK6YZ	FULL	DAVE LINNEHAN	11275 BARNETT VALLEY RD	SEBASTOPOL	CA	95472	829-0973	1	93	E