

SIERRA FOOTHILLS AMATEUR RADIO CLUB

A SPECIAL SERVICE CLUB ASSOCIATED WITH THE AMERICAN RADIO RELAY LEAGUE

SEPTEMBER/OCTOBER 1995

NEWSLETTER

AMATEUR RADIO NEWS AND PUBLIC SERVICE SINCE 1958

VOLUME 36 NUMBER 9

P.O. BOX 3262 Auburn, CA 95604

News Editor: Matthew Diridoni, KC6RUO

AT THE KEY OF S.F.A.R.C.

PRESIDENT

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723-5488

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632-4084

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783-7610

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WA6ULL
Bob Boeckman
983-2776

W6SUP

Bob Metke
783-7610

W3PMP

Bob Greenslade
624-5234

CLUB NETS: ALL WELCOME TO CHECK IN

Wednesdays 7:30 PM 10M
On/Close to 28.415 MHz

Thursdays 7:30 PM 2M / 220
K6ARR & Club Repeater
145.430 (-600, PL 94.8) or
223.860 (-1.6 MHz)

CLUB MEETINGS: Second Fri.
each month, 7:30 PM Auburn
Fire Dept. 226 Sacramento St.
Auburn, CA.

BOARD OF DIRECTORS MEET
Check Event Calendar For Dates
7:00 - 7:45 PM, Roseville City
Main Library, 225 Taylor St.

CLUB BREAKFAST
Last Saturday of the month
(Except in December), 8:00 AM
to 9:00 AM, Susie's Country Cafe
in Roseville Hwy 80 & Riverside Av.

Thurs Night Net Controller:
Dick Lund - WA6HYO 885-3190

1995 CALENDAR OF EVENTS

- | | |
|--------|---|
| Sep 4 | Christian Runners Assoc
49er Canyon Classic
Biathlon - Bowman |
| Sep 8 | Club Meeting |
| Sep 30 | Club Breakfast - Susies Cafe |
| Sep 30 | Transmitter Hunt - Roseville
SEE INSIDE THIS ISSUE
FOR MORE DETAILS |
| Oct 13 | White Elephant Sale
Rose Room - Auburn |
| Oct 31 | Community Event
Halloween Patrol,
City of Rocklin |
| Nov 10 | Club Meeting
ELECTIONS |
| Nov 18 | Community Event
Roseville Holiday Parade |
| Nov 27 | Board Meeting |
| Dec 8 | Christmas Party |
| Dec 18 | Board Meeting |

SFARC WHITE ELEPHANT SALE Open to the Public

October 13, 1995

Rose Room Meeting Hall

(Next to the Auburn Police Station)

1225 Lincoln Wy

Auburn, CA

FREE HOTDOGS !!

Hot Dogs are courtesy of Dr. Henry Sparks, KB2DLE

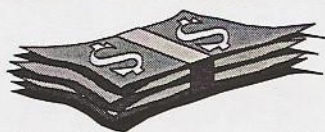
YOUR SFARC NEWSLETTER
PRINTED BY

SNAPPY PRINTING

2280 Sierra Meadows Drive
Rocklin, California 95677

(916)-624-3371

THE TREASURERS REPORT



By Jim Venneman - W6PYX

INCOME

ADVERTISING INCOME	\$ 25.00
ARRL DUES PAID IN	\$ 97.00
AUTOPATCH DONATIONS	\$ 108.50
BADGE SALES	\$ 22.00
COMMUNICATIONS SIGN SALES	\$ 4.00
MEMBERSHIP DUES	\$ 1,189.00
PATCH SALES	\$ 14.00
REPEATER DONATIONS	\$ 167.50
SWAP MEET INCOME	\$ 228.00
TOTAL INCOME	\$ 1,855.00

EXPENSES

ARRL DUES PAID OUT	\$ 60.00	
AUTOPATCH LINE CHARGES		\$ 77.05
BADGES EXPENSE	\$ 45.05	
FIELD DAY EXPENSES	\$ 85.13	
MEETING ROOM RENT	\$ 150.00	
NEWSLETTER EXPENSES	\$ 670.17	
OFFICE EXPENSES	\$ 19.48	
PICNIC EXPENSES	\$ 40.00	
REPEATER ELECTRICITY	\$ 223.22	
REPEATER EXPENSES	\$ 21.00	
WORLD RADIO CLUB AD	\$ 60.00	
TOTAL EXPENSES	\$ 1,451.10	
TOTAL INCOME/EXPENSE	\$ 403.90	

ASSETS

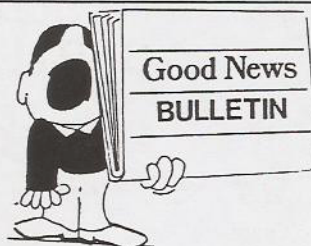
AUTOPATCH FUND	\$214.13
CHRISTMAS FUND	\$697.68
GENERAL FUND	\$ 66.36
REPEATER FUND	\$443.14
TOTAL	\$1,421.31

LET'S MEET FOR BREAKFAST



Saturday September 30th
Susie's Country Cafe

Cirby Wy & Riverside Av - Roseville
Transmitter Hunt after Breakfast at the
Metke's Residence, 511 Oak St in Roseville



Matt Diridoni - KC6RUO
Vice President

Thanks to Bev McCune KE6DJA and Ralph McCune, KE6DJB for taking the challenge of chairing the club picnic on August 27. For those that didn't make it, we had a grand old time.

A special thanks Henry Sparks, KB2DLE, for putting the final touches on our White Elephant Sale on October 13, 1995, 7:30 PM at the Rose Room Meeting Hall in Auburn. The Rose Room is located next to the Auburn Police Station, 1225 Lincoln Wy. Please be sure to clean out your shack and bring something to donate to the club to sell. If you don't have electronics, bring cookies or cakes. This is a great opportunity to help our club financially. Pass the word to other clubs, **FREE HOTDOGS** courtesy of KB2DLE.

Don't miss this most exciting event and don't forget to tell your friends that this event is open to the public, and outside clubs are most cordially invited.

If you have anybody in mind that would like to run for a club office, please be sure to notify the nominating committee, Russ Ahlberg, Jim Venneman or Lewis Tuttle. I will not be running for any offices in '96, but will still be a very active member of the club and will help anybody that my want to seek an office.

M.B. Diridoni, KC6RUO
Vice President

ADVERTISING ?

THIS SPACE COULD BE YOURS
FOR \$5.00 PER MONTH

(6 month minimum)

Contact Matt Diridoni, KC6RUO

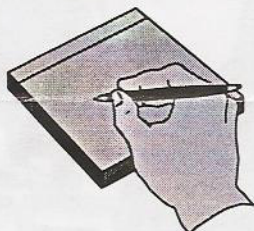
916-487-1969

WANT TO BUY
WANT TO SELL
WANT TO TRADE

SFARC MEMBERS ADVERTISE
FREE

CONTACT THE NEWSLETTER EDITOR

THE VOLUNTEER EXAMINER REPORT



Bob Metke, W6SUP

For the month of May, the SFARC V.E. Team gave 11 tests to 10 applicants.

A special thanks to all members of the V.E. team for taking the time to help promote amateur radio.

If you need to take a test, or have questions about testing, please feel free to call me at (916)-783-7610.

QUAD A's ELECTRONIC SUPPLY

7360 AUBURN BL. #B

Citrus Heights, CA

95610

Retail & Commercial Sales
Knowledgeable Assistance
(916)-723-7360

D & C SUPPLIES

RADIO CHESTPACKS

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FIELD DAY, V.I.P., SHARPS

EASY ACCESS TO RADIO

COMFORTABLE

ADJUSTABLE

CUSTOM ORDERS AVAILABLE

(916)-392-0903

Retail Price + Tax



**Transmitter Rabbit Hunt
Saturday September 30, 1995**

9:30 AM

**Metke's Residence
511 Oak St. in Roseville**

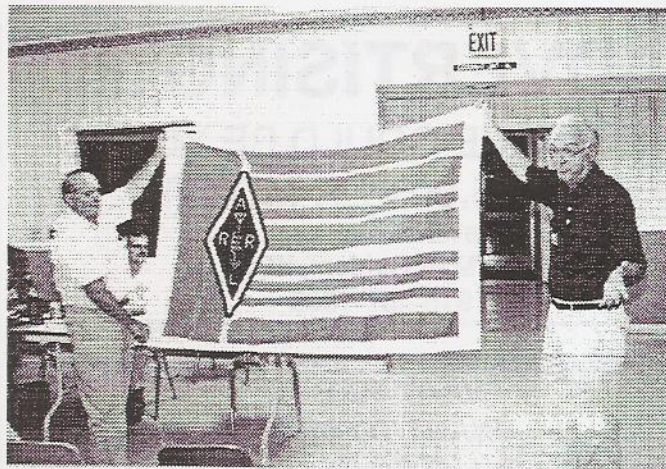
CASH PRIZES

1st Place - \$20

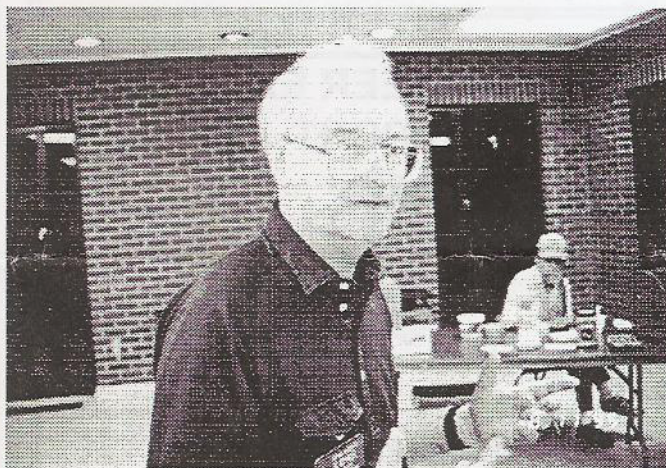
2nd Place - \$10

3rd Place - \$5

**THIS IS A MEMBERS ONLY
EVENT**



Brad Wyatt & Jettie Hill show members at the last SFARC meeting the new ARRL flag that can be purchased from ARRL.



Mr. Wyatt, K6WR of the ARRL gave an excellent presentation at our last meeting. If you missed the meeting, please feel free to call Mr. Wyatt at (408) - 395-2501 or packet K6WR@N0ARY.#NOCAL.CA.



SFARC welcomes new members George L. Baker, KE6RTN, and his wife Betty to the club.

A SERIOUS FOX HUNT

By Bob Buchanan - KA7CCC
Courtesy of Amateur Radio News Service

On Sunday, January 29, the radio direction-finding skills of Radio Amateurs Jerry Clark, K7KZ, and me, Bob Buchanan, KA7CCC, got thoroughly tested.

We took part in a 24-hour search-and-rescue operation conducted by the Santa Cruz County Sheriff's Department, Santa Cruz County Emergency Services, and the Federal Communications Commission (FCC).

Jerry returned home that Sunday afternoon to find an answering machine message to call Bill Croghan, WB0KSW. Bill had received a Santa Cruz County Emergency call about a group of boys thought to be lost since Saturday in the Madera Canyon area, north of Nogales.

Bill had called Jerry because he knew Jerry owned VHF radio direction finding (RDF) gear. Jerry called me, and we quickly gathered our emergency equipment, and installed the Doppler Systems RDF on his vehicle. This system is similar to RDF gear the FCC uses. It can precisely indicate the direction of radio signals--even short-duration transmissions.

On our way south, I called the Santa Cruz County Sheriff's Department on a cellphone, and the dispatcher patched us through to the deputy in charge of the search. He suggested we meet them at the top of Mt. Hopkins, and begin the search there. We decided that if we found a traceable signal before we arrived atop Mr. Hopkins, we would begin tracking immediately.

But we met the deputies on the Mt. Hopkins road before we heard the direct signal from the boy's radio. We learned they were transmitting on an emergency-services channel that they were not authorized to use. A civilian hiker cannot legally use a radio that transmits on such a channel.

The deputy got the "lost" boy (whom we'll call Leo), to talk to him. Unable to hear his direct signal, we concluded that he was nowhere near the search area. So, on a hunch, we drove south towards Nogales.

Meanwhile, the deputy tried to coax information from the boy. Leo obliged with numerous transmissions. By then, of course, we believed it was a hoax. Leo's answers about his location were vague, and they conflicted with earlier information.

Finally, approaching Rio Rico, we got a strong, unambiguous signal. Jerry was like a hound on the scent. We quickly located the house that was the source of the signals, and called in the deputies. We were lucky; the transmissions stopped just as we located the house.

The deputies and the FCC converged on the house. With the help of embarrassed but cooperative parents, they found the illegal radio.

The incident may be expensive for the boy's family (We'll call him Leo). To recoup expenses for the search, the sheriff's department plans to press charges. And the FCC may impose thousands of dollars in fines for interfering with an emergency channel.

(Similar fines are possible for unauthorized or unidentified transmissions on any FCC-allocated to the Amateur Radio Service).

The boy wasted the valuable time of dozens of deputies and emergency services personnel. And the helicopters used in the search had to land at precarious mountain locations, risking the crew members' lives.

Those who indulge in this sort of behavior need to realize that their "innocent fun" can be expensive and dangerous. And their transmissions are not anonymous; they can be found.



THE 1995 SFARC PICNIC

Submitted by Bev McCune KE6DJA

The BBQ smoke has cleared from another SFARC picnic in lovely Meadow Vista Park. The Sun worked extra hard for a bright warm day. A Playful breeze stopped by to play tag and keep the temperature comfortable.

The Great Balloon Toss, The Raw Egg Throw, the Water Balloon War, Marshmallow Baseball, followed by Marshmallow Golf led to the BINGO Finale!

Dave Peden, KA6KUT, started us off by holding the best spot in the park. We had reserved it, but there were many other groups there as well who were quite envious of our location. Thank you Dave !

Well done to Chef Matt - KC6RUO, Assistant Chef Ralph - KE6DJB, Communications, Greg - KC6LOE, Game Director Extrordinaire Jan - KC6LIX and to Lowell - WA6FSO - Our bean Man serving the best beans this side of the Mississippi River.

A special YUM YUM to all our wonderful food people who brought everything from deviled eggs to mint desserts.

Thank you one and all !
Bev McCune, KE6DJA
1995 Picnic Chairperson

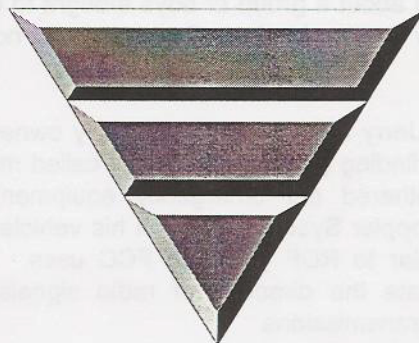
SFARC NEWSLETTER GOES BI MONTHLY

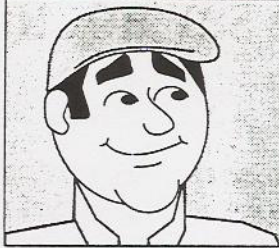
The SFARC Board of Directors voted on Monday August 28 to mail the newsletter on a Bi monthly basis. Effective September 1995, SFARC will print six newsletters per year. If your company paid for a six month advertisement in this newsletter, it will be extended. If you have any questions, please feel free to call President Martha Vance.



Lewis Tuttle, KE6MFL, wants everybody to know that he is available for any questions that you may have about testing or upgrading your license.

Please feel free to contact him at the next meeting or by telephone.





BOB SIMPLETON'S GUIDE TO QUARTER WAVE ANTENNAS

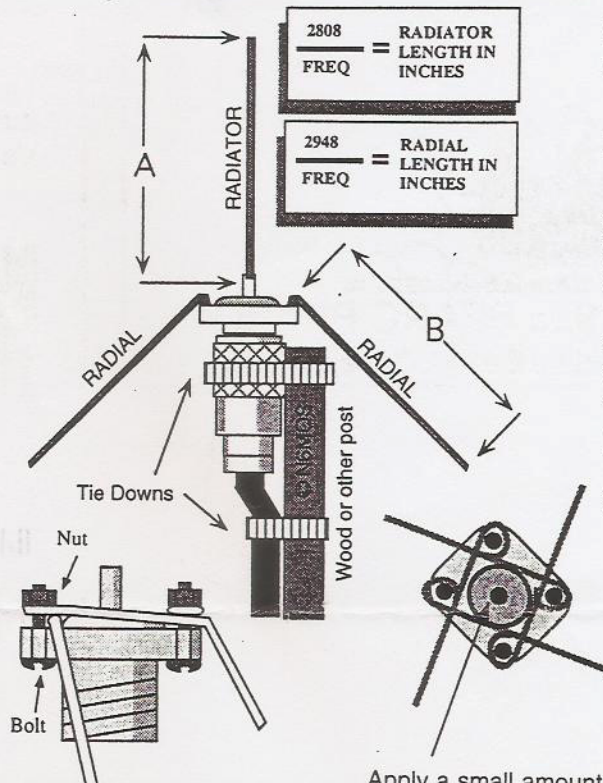
brought to you by
**Amateur
Radio
Trader**

One of the simplest antennas you can build is a quarterwave ground plane antenna. It is small in size and is inexpensive.

The only part you will need to buy is an SO-239 panel mount connector. You can use an old wire hanger for the radiator and radials.

You will need to use your soldering iron or gun to attach the Radiator to the center post of the SO-239. File any paint or coating from the radiator wire before soldering. Cut the radiator to the proper length before soldering it. If you can find a short copper tube to help secure the radiator to the SO-239, your antenna will stand up to high winds.

The radials may be soldered or attached with screws. Screws are the easier method if you take the time to overlap them as shown in the diagram. Cutting the radials may be done after the construction is complete.



Apply a small amount of sealant around the center pin to prevent water from entering the connector.

FREQUENCY CUTTING CHART

FREQ	RADIATOR	RADIALS	FREQ	RADIATOR	RADIALS	FREQ	RADIATOR	RADIALS
28.1	99.93	104.93	144.0	19.50	20.48	423.0	6.64	6.97
28.2	99.57	104.55	144.5	19.43	20.40	424.0	6.62	6.95
28.3	99.22	104.18	145.0	19.37	20.33	425.0	6.61	6.94
28.4	98.87	103.82	145.5	19.30	20.26	426.0	6.59	6.92
28.5	98.53	103.45	146.0	19.23	20.19	427.0	6.58	6.90
28.6	98.18	103.09	146.5	19.17	20.13	428.0	6.56	6.89
28.7	97.84	102.73	147.0	19.10	20.06	429.0	6.55	6.87
28.8	97.50	102.38	147.5	19.04	19.99	430.0	6.53	6.86
28.9	97.16	102.02	148.0	18.97	19.92	431.0	6.52	6.84
29.0	96.83	101.67				432.0	6.50	6.83
29.1	96.49	101.32	220.0	12.76	13.40	433.0	6.48	6.81
29.2	96.16	100.97	220.5	12.73	13.37	434.0	6.47	6.79
29.3	95.84	100.63	221.0	12.71	13.34	435.0	6.46	6.78
29.4	95.51	100.29	221.5	12.68	13.31	436.0	6.44	6.76
29.5	95.19	99.95	222.0	12.65	13.28	437.0	6.43	6.75
29.6	94.86	99.61	222.5	12.62	13.25	438.0	6.41	6.73
29.7	94.55	99.27	223.0	12.59	13.22	439.0	6.40	6.72
29.8	94.23	98.94	223.5	12.56	13.19	440.0	6.38	6.70
29.9	93.91	98.61	224.0	12.54	13.16	441.0	6.37	6.69
50.0	56.16	58.97				442.0	6.35	6.67
50.5	55.60	58.38				443.0	6.34	6.66
51.0	55.06	57.81				444.0	6.32	6.64
51.5	54.52	57.25				445.0	6.31	6.63
52.0	54.00	56.70				446.0	6.30	6.61
52.5	53.49	56.16				447.0	6.28	6.60
53.0	52.98	55.63				448.0	6.27	6.58
53.5	52.49	55.11				449.0	6.25	6.57
54.0	52.00	54.60				450.0	6.24	6.55

Facts about Rubber Ducks

The rubber duck antenna on your handheld is not a very efficient antenna. The typical 2 meter rubber duck has a 5dB loss. If you have a 3 watt radio, your rubber duck will only radiate less than 1 watt!! A quarterwave antenna has 0 db loss and will allow all 3 watts to be radiated!!

SIERRA FOOTHILLS AMATEUR RADIO CLUB
P.O. Box 3262
Auburn, CA. 95604



TO:



Apply a small amount of
glue to the bottom of the
card and press it into the
slot.

Rubber Ducks
The rubber duck
contains an air
chamber that is not
a very efficient
antenna. The
typical 2 meter
rubber duck has
a SWR that is
you have a 2
watt radio, your
rubber duck will
only radiate less
than 1 watt!
A duck antenna
radiates 0.5 db
loss and will
allow an S meter
to be reduced

Frequency		Frequency		Frequency	
MHz	kHz	MHz	kHz	MHz	kHz
1.800	000	2.100	000	2.400	000
1.800	010	2.100	010	2.400	010
1.800	020	2.100	020	2.400	020
1.800	030	2.100	030	2.400	030
1.800	040	2.100	040	2.400	040
1.800	050	2.100	050	2.400	050
1.800	060	2.100	060	2.400	060
1.800	070	2.100	070	2.400	070
1.800	080	2.100	080	2.400	080
1.800	090	2.100	090	2.400	090
1.800	100	2.100	100	2.400	100
1.800	110	2.100	110	2.400	110
1.800	120	2.100	120	2.400	120
1.800	130	2.100	130	2.400	130
1.800	140	2.100	140	2.400	140
1.800	150	2.100	150	2.400	150
1.800	160	2.100	160	2.400	160
1.800	170	2.100	170	2.400	170
1.800	180	2.100	180	2.400	180
1.800	190	2.100	190	2.400	190
1.800	200	2.100	200	2.400	200
1.800	210	2.100	210	2.400	210
1.800	220	2.100	220	2.400	220
1.800	230	2.100	230	2.400	230
1.800	240	2.100	240	2.400	240
1.800	250	2.100	250	2.400	250
1.800	260	2.100	260	2.400	260
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1.800	280	2.100	280	2.400	280
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1.800	300	2.100	300	2.400	300
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1.800	420	2.100	420	2.400	420
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