



<http://personal.newworld.net/~wingman/sfarc/>

June 2001

P.O. Box 1005, Newcastle, CA 95658

At the Key of S.F.A.R.C.

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REPORTERS

Satellite Report
Greg Dolkas, K06TH
40 Years Ago at the SFARC
Gary Cunningham, KQ6RT
VE Program
Bob Metke, W6SUP

REPEATERS

145.430(-0.6 Mhz) PL 162.2
440.575(+5 Mhz) PL 94.8
223.860 (-1.6 Mhz)

CLUB NET

All welcome to check
in Thursdays, 7:30 PM
2M K6ARR & Club
Repeater 145.430

CLUB MEETINGS

Second Fri of the
month 7:30 PM at the
Auburn Library 350
Nevada St. Auburn

CLUB BREAKFAST

Last Saturday of the
month at Susie's Café
Cirby at Riverside Ave.
Roseville - 8:00 AM

NET CONTROL OPS

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Gary Cunningham, KQ6RT
Joe Sylvia, KF6OQY
Wayne Mikel, KE6DJE

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2001 Calendar of Events

(Operating Events in Italics)

- | | |
|------------------|------------------------------------|
| Jun 8 | Regular Meeting |
| <i>Jun 9-11</i> | <i>ARRL June VHF QSO Party</i> |
| Jun 13 | VE Test |
| <i>Jun 23-24</i> | <i>Field Day!! Field Day!!</i> |
| Jun 30 | Club Breakfast |
| Jul 11 | VE Test |
| Jul 13 | Regular Meeting |
| <i>Jul 14-15</i> | <i>IARU HF World Championships</i> |
| Jul 28 | Club Breakfast |
| <i>Aug 4-5</i> | <i>ARRL UHF Contest</i> |
| Aug 8 | VE Test |
| Aug 10 | Regular Meeting |
| Aug 25 | Club Breakfast |
| <i>Sep 8-9</i> | <i>ARRL VHF QSO Party</i> |
| Sep 12 | VE Test |
| Sep 14 | Regular Meeting |
| Sep 29 | Club Breakfast |
| <i>Oct 6-7</i> | <i>Cal QSO Party</i> |
| Oct 10 | VE Test |

From the President's Shack

**Matt
KC6RUO**



Hello everyone!

I hope you can join us at the June 8 meeting, as we will discuss Field Day, occurring June 23 and 24th, at Nyack California just east of Blue Canyon on Interstate 80. Please bring the entire family to this most exciting event. You may set up camp as early as Friday June 22.

The Field Day potluck will be Saturday June 23, 2001 at Noon. SFARC will provide hamburgers, and sodas. Please bring your favorite dish to share with the group. Even if you don't wish to operate a radio position, please join us for the visit and potluck.

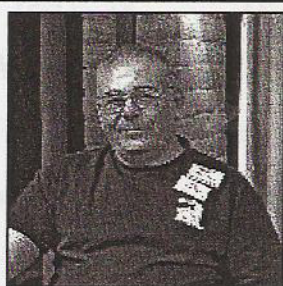
If you are unable to attend the June 8 meeting, but wish to attend Field Day, please e-mail or call and let me know how many in your family will be attending.

73,

Matt, KC6RUO

Secretary's Report

**Joe
KF6OQY**



SFARC General Meeting May 11, 2001

President Matt, KC6RUO, opened the meeting at 1940 hours. Officers present: Vice president Steve, KF6OCE, Treasurer Debbie, KF6LXN and Secretary Joe, KF6OQY. Board members present: Richard, WA6RWS, Eldred, KD6ZSL, and Bob, WA6ULL. Introduction of officers, members, and guests followed. Matt, KC6RUO, announced that the Rocklin Jubilee parade will be on June 30 from 10 am to noon. He also said that the Field day activities will be on June 23 and 24.

Debbie, KF6LXN, gave her treasurers report followed by Greg, KO6TH, with a satellite report. Jettie W6RFF gave us his ARRL report and told us of the upcoming world conference to be held in 2003. He explained about what the ARRL is doing to prepare for this event. He also pointed out that there is an expense in attending this conference. He

asked if the club could donate funds from the treasury or ask members who attend the meetings to donate on their own to help with these upcoming expenses. A decision on which way to go will be decided at the next board meeting.

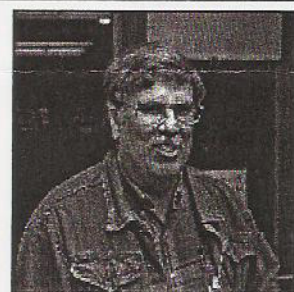
The scheduled speaker for the evening, Dan Brockman, KC6VEQ, had to cancel his presentation for the evening due to family matters. Jim Carmen K6ARR agreed to do a presentation in Dan's absence. He brought along a video of the K6ARR repeater site. As the video showed various equipment, Jim explained what the functions of each piece was and also answered questions from the membership as the showing progressed. Gerald Brentnall, WA6E, had climbed the pole which has the repeater antenna mounted at the top and shot video of the valley from all directions so as to give some idea of the repeater coverage. Gerald also narrated what he shot from the top of the pole. Because this video was shot in 1991, the valley looked different due to the growth of the past ten years. Thank you Jim for the interesting video and for stepping in.

President Matt KC6RUO adjourned the meeting at 2040 hours.

Respectfully submitted,
Joe Sylvia, KF6OQY
Secretary

40 Years Ago At The SFARC

**Gary
KQ6RT**



Barbeque Picnic
20th Dist. Fair Grounds
Auburn Calif.
June 18, 1961

The picnic committee composed of Lin Hunter, Frank Carmen, and Sage had met on Thursday April 20 at Frank Carmen's, May 4th at Walt Dowdy's and June 8th at Frank Carmen's and had worked out all details for the picnic.

There were 35 present at the picnic, which included members, family, and guest. The steaks were barbequed to everyone's satisfaction, thanks to the chefs, Lin and Jim. There was plenty of food for all. Frank Carmen held the drawing and prizes were one by Dick Lund, Elmo Griffith, Howard Davis and Lon Brocklehurst. The lucky ladies were Mrs. Lund and Mrs. Otow. Small gifts were distributed to all the children and men too.

Prizes were donated by the following:

Sacramento Electronic Supply - two Diagonal pliers

Sooman's Wholesale Electronics - Small chassis

Carpenter's Electronics - Surplus power supply

Four packages of meat and some coffee, which were left over, were auctioned off and \$7.70 collected.

A Heathkit tower was operated on the grounds and contact was made with WA6JIT mobiling home.

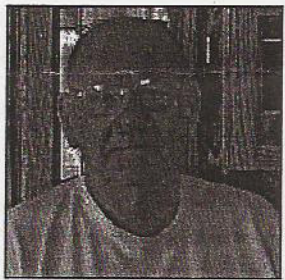
At this time we regret to hear of Mike Bowman passing away among the silent keys on June 16th. He never missed a meeting or our Sunday nets. He will be missed by all of us.

Respectfully submitted,
Sage Otow

73,
Gary

VE Report

**Bob
W6SUP**



Volunteer Examiner Report

Upcoming Exam Dates for 2001

June 13 July 11

August 8 Sep 12

Pre-registration is required. Contact Bob Metke, W6SUP for more information.

Special arrangements and dates can be made to accommodate the disabled, including conducting tests at home.

73,
Bob, W6SUP
511 Oak St.
Roseville, CA 95678
916.783.7610
w6sup@rsvl.net

Sunshine Report

**Jerri
K6GKR**



Roger, N7TK

Roger Hedgepeth, N7TK, is recuperating from surgery at home. No other news, which is good news.

Vice President

**Steve
KF6OCE**



Location, Location, Location

That's what uncle Mort always claimed to be the real secret of any business success. Well, he wasn't really my uncle and he probably wasn't a ham either but his axiom is just as true about ham radio.

I do not own the house that I am presently in, and I cannot put up an antenna on the roof. So I have been relying on my 5-watt handheld and a mobile antenna, which is mounted, on my car to answer the SFARC net roll call. Reliability it is not. Responding to roll call on the club net has been a weekly event of frustration for me. On most all contacts, I have received signal reports ranging from barely kerchunking the repeater to "understandable with 20 to 30 percent white noise. On a few occasions, I even dropped out in the middle of a sentence, and could not even get back on to give my closing call sign. Batteries are fully charged so what is the problem?

I decide that I need more power. So I boost the power with an amplifier. Twenty Watts! that should do it. Next roll call, I get the same "understandable with 20 to 30 percent white noise. More power didn't help. Ok, so back to the drawing board.

A few days later, I am at Birdcage Mall in Citrus Heights, I hear Gary (KQ6RT) on the radio. With the same 5-watt handheld and mobile antenna, I break in to say hi. Gary gives me a full quieting report.

How can that be? Full quieting with five watts, but only two miles away I get 20 to 30 percent white with 20 watts? I keep pondering this issue with test after test. None of which results in any real answer to the above questions.

The Epiphany! One night, the day before garbage pickup, all the trashcans are in the street. It is also a rare occasion, because my wife is home from work and her car is parked in the driveway. I cannot get into the driveway myself, so I park next to my neighbors' driveway. It is Thursday night, and I respond to the nets roll call. Full quieting I am told. Eureka! but why? I have changed nothing since my last poor contact.

So I decided to try a little research. I get a map out and I draw a line from my residence to the repeater. It works out to 18.5 miles direct. I draw a line from Birdcage mall to the repeater. It comes to 18.7 miles direct. I draw a line from my house to Birdcage mall. That comes to 2.1 miles direct. And the distance from my driveway to the neighbors' driveway is 45 feet. Ok, now I have the numbers, what do I do with them?

I climb onto the roof of my house and with binoculars I look in all directions. I try to peer towards Auburn. Unfortunately, I cannot see Auburn; there is this big tower in-between my house and Auburn that is blocking my view. There are a number of antennas on the tower, horizontal, vertical, dished, and some that I have no clue what they are called. Gee, I wonder if that tower could be interfering with my signal? Time for testing. I drive down the street and try to make a contact. I get a full quieting report with 5 watts and a strong full quieting with 20 watts. In my neighbors' driveway, another contact, and another full quieting report on both 5 and 20 watts. But in my own driveway I get the same poor signal, but understandable with 20 to 30 percent white noise on both 5 and 20 watts. I have concluded that the tower is definitely the problem.

I wonder if Roseville Telephone Company would move their tower so that I could make better Amateur Radio contacts? Sorry, I drifted off of reality for a moment. I just need to be a little more careful when I choose a location the next time I need to make a residential move. After all, in business and amateur radio, it's LOCATION; LOCATION; LOCATION.

God help me when I pass my code tests. I hear that HF is a whole new ball game when it comes to antennas. (*Bigger ball game too, Steve. Ed.*)

Steven, KF6OCE

FREE!!!

Anybody need a service manual for an Alinco DJ-120T/E ? E-mail me back and I will mail it to you.

Matt, KC6RUO
mdiridoni@rsvl.net

Big SFARC Event Dates

All at Auburn Recreation Center, 123 Recreation Dr. in Auburn.:

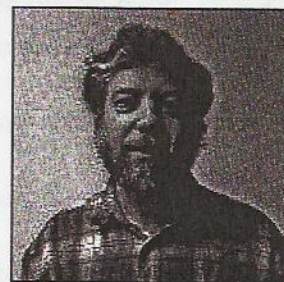
Club Picnic: August 18

White Elephant Sale: October 12 (Stella Irving Room)

Christmas Party: December 14 (Stella Irving Room)

Amateur Satellites

**Greg
KO6TH**



Working AO-40 – S-band isn't as HARD as you might have thought

The AO-40 satellite continues to operate, in spite of what appears to have been an explosion of the rocket motor last Christmas. Several of its systems are no longer operational, but many are quite healthy, thanks to some good engineering on the part of its design team (and a little luck). One of the systems not heard of since "the incident" is the 2-meter transmitter. Last fall, hams around the world were treated to some really strong 2-meter telemetry signals, strong enough for easy reception even when the spacecraft was out at the far reaches of its orbit, some 35,000 miles away.

Well, all is not lost. While there is some faint hope that either the 2-meter or 70-cm transmitters can be coaxed back to life, there is a very nice S-band (yes, 2.4 GHz) transmitter functioning on board. And, all of the receivers, including the 2-meter, 70cm, and 23-cm (1.2 GHz), are functional. So is the interconnect matrix, the on-board computers, and even the TV camera (although it's lens seems to be coated with something resembling, uh, rocket fuel). So, we have a workable satellite with a workable beacon and transponder. But, is there anyone out there who can work it? *Yes!*

The uplink is easy. The transmit side of the mode-B station many hams have (receive on 2 meters, transmit on 70cm) will have an easy time, as AO-40's receivers are more sensitive than the earlier AO-10 or AO-13's were. AO-40's orbit is a little higher, but not enough to matter.

The downlink – ah, there's the problem. 2.4 GHz is, well, hard, isn't it? Well, not really. Consider that you needed to receive AO-10 or AO-13. The downlink was on 2 meters, but it was rather weak. At 30,000 miles you needed some gain to hear anything at all. And, gain on 2 meters comes with a hefty size penalty. Receive antennas were often 15 to 20 feet long, and of course, mounted on an AZ / EL rotor, had to be moved and pointed to the right spot in space. Oh, and don't forget the low noise preamp mounted at the antenna.

For 2.4 GHz, the story is a little different. At that frequency, the noise floor is much lower, antennas with considerable gain are much smaller, and therefore easier to mount, and for reception we have the magic of the down-converter. This wonderful little device converts the unmanageable microwave stuff into simple VHF signals that anyone can receive. Best of all, there are lots of them around. Well, almost. With the demise of the over-the-air TV services like HBO, in favor of cable delivery, lots of MMDS down-

converters are becoming available at very low prices. The favorites are units from Drake, Transsystems, and ADIC. They can be easily modified to move their receive from the 2.5 GHz MMDS band to the 2.4 GHz Ham band. I found a Drake 2280, dish antenna, preamp (yes, you still need one of these), and pickup for well under \$100. A new crystal and a tweak to one capacitor, connect it all to my existing VHF receiver, and I'm on the air. There are quite a number of web sites dedicated to this topic. The best bet is to go to the AMSAT-NA page (www.amsat.org), and follow the links from there.

Now, this is not a system that would make NASA blush. Reception is still a little marginal at times, mostly because AO-40's only transmitting antenna is the narrow beam high gain one. The wide beam omni was damaged and doesn't appear to work. That means that the spacecraft has to be pointing exactly in the right direction (i.e. towards this planet), otherwise nobody hears anything. They're still working on the recovery efforts up there, so not every pass will be optimal. But that's what makes it fun. So far, I have managed to snag 4 QSOs through AO-40, including one with AMSAT's president VE3FRH, and one with a ham in Australia.

73,
Greg, KO6TH

For Sale

Yaesu FT-90 2m/440 Mobile: \$285
Yaesu FT-2600 2m mobile: \$150.
Mirage B-3106 2m amplifier (.25-8W in, 100 W out): \$150
MFJ Code Tutor: \$40
Patrick, N6PBM, 916.681.5687 n6pbm@lanset.com

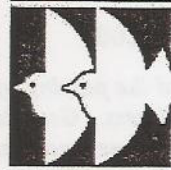
For Sale

5 antennas - \$200 for everything

- 1) 22' vertical beam
- 2) 23' AEA Isopole
- 3) 40 meter #877234 Hy-Gain Elect.
- 4) Tri-beam with 3 mounting poles that measure 20' (2 - 10' connected), another 10' and an 8' 4" (38' 4") plus the top pole is 14' 6" (52' 10" total) which has an electric rotor on it and a 12' cross pole mounted on top. Each beam is 14' across with a coil load on each end.
- 5) 2 each 15' poles with 13 - 3' elements on them. I'm not sure of the frequency range of some of them.

Contact Gordon, KF6ZWI
ote1@surfbest.net

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COMING EVENTS

Rocklin Jubilee



Mark your calendars for the 2001 Rocklin Jubilee on Saturday, June 30, 2001. Rocklin Police will be looking for radio operators for communications and traffic control. This is a family event, and all are invited.

GEORGIA BARTOLDO KB6RBZ SK

8/29/1939 – 5/27/2001

It is with deep regret that we record the passing of Georgia Bartoldo, KB6RBZ, after a long illness. Georgia was the wife of Dennis, N6PMI, a long-time member of the SFARC, active amateur in the area, and retired Placer County Deputy Sheriff. On behalf of all club members, we extend our sympathy to Dennis and his family.

A memorial service will be conducted on June 9, 2001 at 12:00 p.m. at Lincoln Christian Life Center, 1200 Lincoln-Newcastle Hwy (Hwy 193). From Roseville, take Hwy 65 to Hwy 193 in Lincoln and turn right (east). The church is at the first drive on the right.

Western States Endurance Run

This year's Western States Endurance Run will be held on June 23-24, which, as usual, coincides with Field Day. For those new to the area, the WSER is a foot race from Squaw Valley to Placer High School in downtown Auburn, following parts of the historic Western States Trail. The trail itself was a major roadway for the westward migration in the 19th century, beginning in Salt Lake City, and ending in Sacramento.

The WSER is an outgrowth of the Tevis Cup Endurance Ride (August 4-5 this year), and has been run since the mid '70s. The highest point is at the Watson Monument at the summit of Emigrant Pass at 8,200'. The lowest is No Hands Bridge below Auburn at about 700'. Total ascent distance is about 18,000' and total descent is about 22,000'.

Oh yes, if you run the 100.2 miles in 24 hours or less (no fooling!) you receive a silver belt buckle. Run it in 30 hours or less, and you get a bronze buckle. The race starts at 0500 on Saturday morning, and the first runners will begin arriving at the Placer High School stadium around 2130 that same night.

If you are unable or do not desire to participate in Field Day, here is an alternative for you. Hams in the Foothill and Sacramento area have been providing safety and logistics communications for this event for years (*see accompanying Tevis story in this issue*), and we can always use both packet and voice operators. We use both VHF and UHF frequencies for voice, and collect runner times and status via packet radio.

If you are interested in operating at one of the 20+ checkpoints or at the NCS at Overlook Park in Auburn, visit a regularly updated web site containing current information and needs for the event. Just point your browser at <http://home.pacbell.net/andrea/j/> and click on the "WSER Comm Support" icon. For more information on the event in general, visit <http://ws100.com/>

Local History

Tevis Cup Endurance Ride – 1962

From the August 1962 RAMS News [Radio Amateur Mobile Society] – courtesy Les Cobb, W6TEE

100 MILE TRAIL RIDE

As the dawn arrived on Saturday, July 14, 1962, it found the members of the RAMS scattered through the hills, waiting for some thirty-three horses and riders to ride through on the Western States 100 Mile Tevis Cup Trail Ride, from Lake Tahoe to Auburn.

The day started with Floyd, WA6HGH and Carol, WA6THI getting the starting line up as the horses left Lake Tahoe at 5 A.M. Buck, W6QHP was atop Donner Summit ready to relay the information to the stations down the line.

At check point #1 at Robinson Flats was Glenn, WA6NDL. At check point #2 at Last Chance was Hugh, K6UKH. They passed the in and out times as the horses came through to Jim, WA6DOZ/6 at Michigan Bluff. His antenna hung between the trees supported in places with string.

The trail plunged down to the canyon and river where we found Vic, K6SEA and Fran, K6SBL with mobile rig, gooney bird and fishing pole all ready to go.

On the ridge above was Ed, W6KME relaying for Vic and Fran from that canyon some 3,000 feet below.

On the finish line in Auburn we found Bruce, K6THC/6 waiting for those horses who completed the ride.

All this took some 20 hrs. or more and needless to say there were many tired horses and riders and many tired RAMS.

From the Trail Ride Committee came a great deal of thanks and this added little gesture of "See you next year, and you were a wonderful team."

This writer wishes to express a big vote of thanks to all the RAMS for keeping the frequency clear for the traffic being passed and to those members listed below a vote of thanks for a job well done.

K6THC-Bruce
WA6DOZ-Jim
WA6NDL-Glenn

W6TEE-Les
W6KTB-Fred
W6KME-Ed

K6UKH-Hugh	W6QHP-Buck
K6SEA-Vic	WA6ORZ-Glenn
K6SBL-Fran	K6VPF-Roy
W6KEV-Doug	WA9AXP-Dave
K6VYV-Steve	

also

WA6HGH-Floyd	WA6HYO-Dick
WA8THI-Carol	K6ARR-Jim

of Auburn

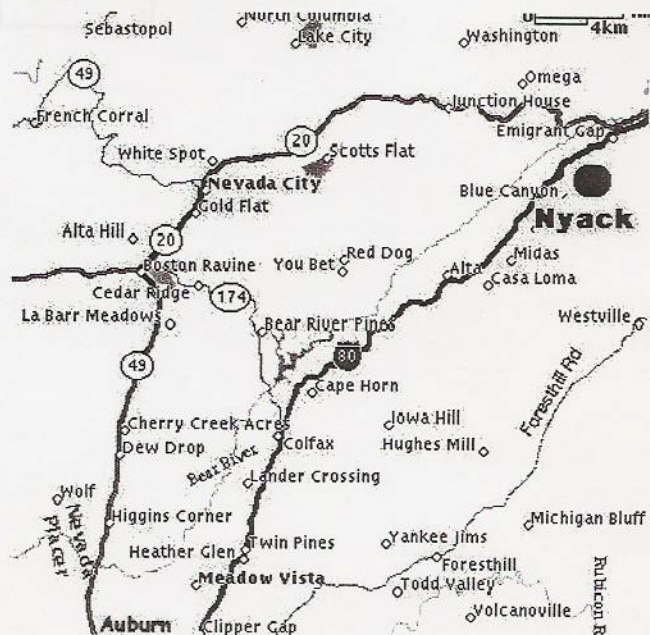
de WA6THI

2001 comments on the above: Although it doesn't say because everyone took it for granted then, the frequency used was 3965 KHz AM on 75 meters. The one exception was the relay from K6SEA and K6SBL at the bridge over the American River in the canyon, by W6KME on the highway above. This was on 2 meter AM, "gooney bird" being slang for a Gonset Communicator, a popular 2 meter AM rig in those days. I have 35 mm slides that I took that day at all locations from Last Chance to Auburn. - Les, W6TEE

2001 SFARC Field Day

As in previous years, the 2001 SFARC Field Day will be held at Nyack. Field Day is close to if not the oldest ham radio operating event/contest. The goal is to work as many other FD stations (and non-FD as well), exchanging your entry class and ARRL Section ("Sacramento Valley - SV"). Your class is determined by how many separate transmitters you are operating, and how you are obtaining your power. Again this year, United Rentals in Rocklin will furnish a 10KVA generator for the SFARC FD outing.

For those who have never been there, Matt has provided a map. For those whose odometer reads in miles instead of kilometers, Nyack is about 30 - 40 minutes NE of Auburn, just beyond Blue Canyon (of local TV Weather Person fame), at about 5,500' elevation.



Final planning will take place at the regular club meeting on June 8.

Your Personal 72-hour Emergency Kit



A personal 72 hour kit your car, office, desk, boat, cabin, R.V. or airplane should contain at least the following as a minimum...

Water pouches, food bars (3 day supply), thermal blanket, body/hand warmers, poncho w/hood, hygiene pack (Toothbrush, toothpaste, moist towelettes, etc) first aid kit, flashlight w/batteries, light sticks, and a whistle.

A Disaster Service Worker (DSW) needs more than a "personal" kit. Below is the bare minimum you should carry with you in addition to a personal 72-hour kit if you go to a Disaster Shelter...



Sleeping Bag, amateur radios, extra batteries, magnetic mount antenna, note pad, extra pencils, thermal coffee cup (my favorite item), and at least 7 days worth of any prescription drugs.

Remember that even though the disaster relief agencies take care of the relief workers first, it may still take up to three days or more to get supplies to your shelter.

Wayne Mikel KE6DJE
EC Western Placer County ARES

Call for News

Ever wanted to be a writer? Do you dream of a Pulitzer Prize hanging on your wall (and in your checking account!)? Well, here's your chance. We seek member's stories (fictional or non-fictional), experiences, etc. Vice President Steve's column is a great example. If you have a subject you'd like to write on each month like Greg, KO6TH, we'll make room for that too.

A note on pictures: Any (even prints) will work. Digital pictures are best if they are converted to 8-bit monochrome, and please, include an ID of the people in the picture, location, date, and a suggested caption.

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Phone Number: _____ Application: (Circle One) New Renewal

Member Dues: Circle Amounts That Apply. Applications received in the middle of the year will be pro rated. Contact the President or Treasurer for exact rate.

Membership:	\$22.00	Name Badge:	\$5.50
Associate:	\$ 7.00	Repeater Donation:	\$ _____
ARRL	\$34.00	Auto Patch Donation:	\$ _____
ARRL (Spouse)	\$ 5.00	Newsletter Booster:	\$ _____
ARRL (Special)	\$28.00	Worldradio Renewal:	\$ _____
		TOTAL:	\$ _____

NOTE* Renewing your ARRL membership through the Club earns the Club money with no additional cost to you. To renew your ARRL membership through SFARC, make check payable to SFARC and mail to P.O. Box 1005, Newcastle, CA 95658.

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P.O. Box 1005
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