



November 2003

Fresno Amateur Radio Club Newsletter

Volume 64, Issue 11

NOV. 6, BOARD MEETING—7PM CEDAR LANES
 NEWLY ELECTED AND PRESENT BOARD MEMBERS PLEASE PLAN ON ATTENDING! .
NOV. 14, GENERAL MEETING 7 PM CEDER LANES.
 PLEASE PLAN ON ATTENDING OUR BIG ANNUAL SWAP!!!!
 K6QI WILL BE HOLDING AN AUCTION. THIS WILL BE A LOT OF FUN FOR EVERYONE!!!!
 REMEMBER THAT YOUR 2004 DUES ARE DUE BEFORE JAN. 1, 2004.
 PLEASE CONTACT KF6ZSW IF YOU HAVE ANY QUESTIONS. WE WILL SEE ALL OF YOU THERE!

FARC General Meetings

are the 2nd Friday of each month, 7 p.m.
 at Cedar Lanes/CA Catering unless otherwise noted.

Weekly Gatherings

Country Waffles:

Saturday & Monday mornings-7:00 a.m.
 Corner of Blackstone & Dakota

Silver Dollar Hofbrau:

Thursdays @ Noon.
 Corner of Hwy 41 & Shaw

FARC Nets

Morning Drive Time Net:

Weekday mornings-7:30—8:00 a.m.
 W6TO/R 146.940 - 141.3

Tech Net:

Wednesdays @ 7:00 pm
 W6TO/R 146.940 - 141.3

FARC Net:

Sundays @ 7:00 pm
 W6TO/R 146.940 - 141.3

The Prez Sez



Happy Thanksgiving

K6MI/John did an "OUTSTANDING" job with his transmitter hunt presentation! If you haven't been on a transmitter hunt; plan on attending our next transmitter hunt at our May 1st 2004 ARRL SJV Section Convention/Hamfest at The Ramada Inn (Shaw/41).

NOVEMBER 14TH/7PM WILL BE OUR ANNUAL SWAP!!!! PLEASE JOIN US AND YOU MAY FIND THAT TREASURE YOU'VE BEEN LOOKING FOR!!!! IF YOU HAVE HAM TREASURES IN YOUR SHACK THAT NEED TO FIND A NEW HOME BRING THEM TO OUR SWAP! THE BACK DOORS WILL BE OPEN AT 6 PM TO BRING THE HAM TREASURES IN (REMEMBER, WHAT YOU DON'T SELL YOU WILL NEED TO TAKE BACK TO YOUR HAM SHACK!!!!)

Marcus/KG6QNY is doing a great job as our Papers and Cans Chairman. Marcus and his crew have almost raised \$1,000. Great job! Please contact Marcus/360-7444 if you need papers picked up or if you would like to volunteer to help!!!! Remember if you are able to; please bring your papers and cans to the next club meeting or bring to the Thursday lunch at the Silver Dollar Hofbrau.

(Continued on page 3)

F.A.R.C. BOARD OF DIRECTORS

President: Kim Davis KF6ZSW
645-6849 12/31/04
kdavis@gotnet.net

Vice-President: Craig Carter K6QI
323-5742 12/31/04
k6qi@sbcglobal.net

Secretary: John Morrice K6MI
275-7373 12/31/03

Treasurer: Bob Allen WA6ITN
435-3786 12/31/04

Pat Fennacy W6YEP 12/31/03
Gene Davis W7POR 12/31/03
gdavis@gotnet.net 645-6849
Rick Fornes KA6Y 12/31/04
fornesasc@aol.com 281-4116
Ken Holden WA6OIB 12/31/03
323-6753
Rob Mavis AE6GE 12/31/04
skip@ae6ge.com 224-7187
Chuck McConnell W6DPD 12/31/03
431-2038
Richard Pack KE6SHL 12/31/04
291-2175

Club Contacts

Papers & Cans Collections:
Marcus Beedle KG6QNY 360-7444

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SKIP Newsletter Editor:
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skip@ae6ge.com

Technical Services:
Ken Holden WA6OIB 323-6753

Web Site Manager:
Craig Carter K6QI 323-5742
k6qi@attbi.com

Community Awareness Committee:
Steve Miller K6FDR 448-0142

2004 Hamfest/SJV Conv. Co-Chairs:
Kim Davis/KF6ZSW & Rick Fornes/KA6Y

2004 Field Day Chairman:
Dave Smith W6TE 432-0290
w6te@pacbell.net

Treasurer's Report

September, 2003

Income: \$340.30
Expenses: 298.29

Checking: 2642.02
Savings: 5123.68
Petty cash: 50.00

Papers and cans for the month of September: \$29.90 from aluminum cans. The total for papers and cans for the year through September 30 is \$869.46. A load of papers was taken to the recycler's on October 18 and we received \$110.10 at that time. This amount will appear in the October report in the next SKIP. I mention it here to show that we are approaching \$1000.00 and will exceed this figure soon. Everybody please bring papers and aluminum cans to the club meetings or call Marcus, KG6QNY for a pick up. Let's see how much we can raise before the start of 2004.
73,
Bob, WA6ITN

Swap Section

Do you have a for Sale or Want? This is the place for it!

Place your for Sale or Want in the SKIP!

Your ad can be up to 30 words in length and must be Amateur Radio related.

Members=\$FREE! (\$2.50 for ea. Addl. 30)
Non-Members=\$2.50 (\$2.50 for ea. Addl. 30)



SKIP ARTICLES DEADLINE

Please provide any SKIP material by the 20th of the prior month. Please send to skip@ae6ge.com

Local Amateur Radio Repeaters

Organization/Sponsor	Callsign	Location	Frequency	Offset	Tone
CARP	K6ARP	Meadow Lakes	147.675	-	141.3
CARP	N6JXL	Meadow Lakes	224.380	-	141.3
CARP	N6VYT	Meadow Lakes	444.725	+	141.3
CARP	N6JXL	Meadow Lakes	1286.300	-	141.3
CCAC	KE6VFU	Meadow Lakes	146.790	-	141.3
CCAC	KE6VFU	Meadow Lakes	223.780	-	141.3
CCAC	KE6VFU	Meadow Lakes	444.250	+	141.3
CONDOR	WB6BRU	Fresno	224.900	-	156.7
FARC	W6TO	Meadow Lakes	146.940	-	141.3
FARC		Meadow Lakes	223.940	-	none
FARC		Meadow Lakes	444.200	+	141.3
K6SIX	K6SIX	Mariposa	441.350	+	107.2
KARC	W6VFZ	Coalinga	224.440	-	100.0
KARC	W6EMS	Fresno	440.675	+	110.9
KARC	W6EMS	Fresno	1286.475	-	110.9
Kings ARC	KA6Q	Hanford	145.110	-	100.0
Kings ARC		Castle Peak	147.240	+	100.0
Kings ARC	W6IYY	Coalinga	147.330	+	100.0
Kings ARC		Santa Rita Peak	224.440	-	100.0
Kings ARC	N6DL	Coalinga	224.820	-	114.8
Kings ARC	KA6Q	Hanford	441.675	+	100.0
Kings ARC	N6OA	Coalinga	441.900	+	100.0
Madera Co. ARC	W6WGZ	Oakhurst	147.180	+	146.2
Madera Co. ARC			441.175	-	146.2
MTS	N6MTS	Fresno State	145.230	-	141.3
NV6B	NV6B	Fresno	224.960	-	192.8
RACES	N6HEW	Fresno	147.150	+	141.3
W6DCP	W6DCP	Parkfield	147.240	+	none

Steve/K6FDR is doing a fantastic job as our Community Awareness Chairman! Steve has projects set for the rest of 2003 and starting to set up event dates for 2004. Please contact Steve/448-0142 if you would like to serve on this very important committee to our club!!!!

I want to give my Congrats to: John/K6MI, Gene/W7POR, Dave/W6TE, Jim/KF6GKC and Bob/KF6FIG who were elected to serve on our Board of Directors for the 2004-2006 term. I want to give very special thanks to three long time FARC Board Members for all of their service to our club: Chuck/W6DPD, Ken/WA6OIB and Pat/W6YEP.

For some time now our club has needed a Public Information Officer. I have appointed Jan Whiteberry to serve as the club's Public Information Officer. Jan works for The Fresno Bee and he has many contacts in our community. You can contact Jan at jwhitt1@comcast.net. Welcome Jan!!!!

I've just returned from PACIFICON '03. I made a lot of contacts for our club and enjoyed this great event! There was great information for everyone who attended! The Mt. Diablo Amateur Radio Club did an outstanding job in hosting this annual event!!!! This shows us how important planning and team work is to all events.

I invite all of you to be more involved in club committees!!!! All Committee Chairmen are listed; please contact them for details and info on how you can be more involved in 2004.

We will see you all on Nov. 14!!!!

Thank you all for your support!!!!

73, Kim/KF6ZSW

VE Corner

Amateur Radio VE Exams in Fresno
Unlicensed thru Extra Class
Fresno Amateur Radio Club
A.R.R.L. VEC

Exams for all Amateur license classes will be conducted on the following dates in Fresno, California. Exams are given on Sunday and Begin at 1:00 P.M.

- November 2

Location: Seventh Day Adventist Central Church, 2980 East Yale, Fresno CA 93703. One block south of Clinton and one block west of First Street, southwest corner of Yale and Orchard. Watch for signs.

Directions: From Hwy 99, take Clinton Ave. exit east four miles to First St., turn right (South), one block right on Yale, one block. Look for Signs. From Highway 41, take Shields Ave exit, turn right (East), 1 mile to First St., turn right, continue one block past Clinton, right on Yale to Orchard. Look for Signs.

Theory Exams are multiple choice. Code Exam is fill in the blank. Express mail is used to send paperwork to ARRL, who sends data to FCC via electronic mail, thus assuring the fastest possible service on new licenses which typically arrive in about 2 weeks.

Bring: Two ID's, one with photo. Taxpayer ID Number (Social Security Number) or ULS registration number. **Fee is \$12.00 per test session.** Original copy of Amateur License and CSCE's if upgrading.

Talk in on W6TO/R 146.94/64 repeater.

Walk-in's only, no pre-registration.


More info contact

Chuck, W6DPD, 559-431-2038

Area VE Test Sessions

IF YOU MISSED THE LAST TEST SESSION IN FRESNO
HERE ARE SOME OTHER LOCATIONS:

Nov 8	Sonora	Contact Karl	(209) 962-7146
Dec. 7	Oakhurst	Contact Edward	(559) 642-2789



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SAN JOAQUIN VALLEY SECTION.

Report for the month of September 2003:

SM Charles McConnell, W6DPD- ASM K6YK, ACC W6DPD, SEC K6IN, OOC N1VM, STM K6RAU, PIC Vacant, TC W6TE. Greeting from the San Joaquin Valley Section. If your club would like news of their activities and events listed here, please send the information to your SM, w6dpd@arrl.org. Emergency Coordinators are needed in Mono and Calaveras Counties.

Contact K6IN (k6sec@mercednet.com) or W6DPD (w6dpd@arrl.org) if you can help. Congrats to K6SUU for promoting the Turlock ARC's 75th Anniversary celebration on Sept. 20, 2003. EMCOMM South is Oct. 11 from 9 a.m. to 3 p.m. at CART, 2555 Clovis Ave. in Clovis. The annual Turlock Auction will be October 11 at the Turlock Youth Center. Doors open at 8 AM, and the auction starts at 10 AM. Talk-in will be on W6BXN/R, 147.03+, pl 100 HZ. Check www.w6bxn.org <<http://www.w6bxn.org>> for information. Pacificon 2003 will be October 17-19, 2003, at the Marriott in San Ramon CA.

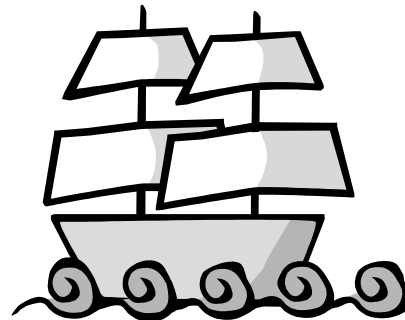
Check www.pacificon.org <<http://www.pacificon.org>> for program information and registration forms. W6DPD attended the Section Manager Workshop at ARRL HQ. If you have not participated in the Amateur Radio Emergency Communications Courses offered through the certification and continuing education part of the ARRL web page, please consider taking the courses. ARRL has received grant money to cover the cost of the courses. Upon successful completion of the course, your fee money will be refunded. If you have completed Level 1, then you should take Level 2, then Level 3. KG6MNX, W6FRH, and W6TE completed ARECC Level One. W6PAJ, N6EKE, and KA6TZX completed ARECC Level Two. It is my sad duty to report the following Silent Keys for September: K6LKJ, N6BMN, KB6NCE, WB6YIS, and WB6WUF. There are card checkers for awards in the section. W6XK and W6DPD can check cards for DXCC. W6DPD can check cards for WAS, VUCC, WAZ, and CQ DX awards. Special Service clubs may appoint HF and VHF awards managers as a service to their members. AD6W qualified for VUCC on 6 meters. The Stanislaus ARA held a club rocket launch on Sept. 6. The Manteca ARC participated in an open house at the Tracy Airport on Sept. 27 where Amateur Radio was demonstrated. Traffic for September was zero. PSHR K6RAU 52.

F.A.R.C. Website

<http://www.qsl.net/w6to>



Rick Fornes KA6Y gives a tech talk at our 2003 Hamfest



Thomas L. Whitlock



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W6TE's Satellite—News/Tips & Techniques

Last month we talked about what equipment is needed to operate through AO-40 mode US (U=UHF, Tx 435 MHz. And S= S band, Rx 2340 MHz.). This month I'll explain how to determine when the bird is within range, operating schedule and squint angle.

Satellite Tracking

To be able to figure out where the satellite is, if it meets your operating schedule, and when it is available, you will need some tracking software.

There are several satellite tracking software programs available. Listed on the AMSAT website are five; Nova (\$60), SAT PC32 (\$50), Instant Track (\$50), Quick Trak (\$35), and STSOrbit plus (\$20). These prices are for non-AMSAT Members. There is a \$10 discount for AMSAT members. (If you are interested in working the birds I encourage you to contribute to AMSAT by joining (\$35). All of these programs do basically the same thing: (1) multiple satellite tracking, (2) automatic control of AZ/EL rotors, (3) automatic rig shift control, and (4) automatic download of current keps. I currently use Nova for Windows and I have also used InstantTrak and Quick Trak. You can go o the AMSAT web page (WWW.AMSAT.ORG) for a detailed description of each program.

Once the program has been installed on your PC, there are a couple things you will need to do to keep updated so your tracking accuracy will be maintained.

(1) The seven parameters comprising the “Keplerian” elements (keps) will need to be updated for each satellite. The Keplerian elements after Johann Kepler (1571-1630) who defined the orbital geometry of celestial bodies. Simply put, the kep elements define the satellite’s orbit around the earth. I can remember dutifully checking in on the 75 meter AMSAT net in the late seventies, early eighties, while Cliff, W7RR (then W6HDO) and others painfully read each number of the seven parameters for each satellite, after which I would manually inter these numbers into my tracking program. These elements need to be updated periodically because the orbits change because of outside influences, gravitational pull of earth, moon, etc. Some satellite elements need to be updated more than others.... LEO’s (low earth orbiting) have greater influences from earth and, therefore, need to be updated more often. Things have gotten a whole lot better in recent times. Now days, the tracking program can be set up to automatically download the keps. I have mine set up to automatically go to the NORAD (the organization responsible for tracking satellites and other space junk) and update my satellite’s kep elements.

(2) Next you will need to update the ALAT – ALON information for AO-40....the ALAT – ALON coordinates... Attitude LATitude and Attitude LONgitude (also known a Bahn coordinates). Just like the Keplerian elements define where a satellite is in space at a given time, the ALAT, ALON coordinates define the orientation of the satellite with regards to earth. This information will determine the “squint” angle (or the off pointing) of the satellite. An ALAT, ALON of 0,0, will have the antennas of AO40 pointing directly towards the center of earth. Sometimes thinking

of ALAT, ALON in terms of azimuth and elevation helps to visualize the concept. The squint angle is the angle that the satellite is pointing away from your position on earth. With a small 60 cm receive dish (like I’m using) a squint angle larger than 25 degrees and I can no longer here the satellites transponder for it to be useable. With larger dishes (and consequently higher gain) one can get away with operating with much larger squint angles. ALAT and ALON numbers can be obtained from the operating schedule page at AMSAT.ORG. Since the satellite needs to change orientation from time to time to allow for maximum solar cell illumination the ALAT and ALON will change (this is caused by the seasonal changes and the earth’s tilt).

After you get the tracking software installed and updated with current keps and ALAT, ALON numbers you will need to look at the satellites operating schedule to determine when it will be available for use. The transponder is turned off for various reasons. With a limited power budget only one (or two) operating modes can be accommodated at a time. Instead of degrees in the orbit, the operating schedule is marked off in 256 equal phases (0 – 255) called MA (mean anomaly). MA 000 is equal to when the satellite is at perigee (leaving perigee – closest to earth) and MA 255 is when the satellite is all the way around the orbit and approaching perigee again.

Latest Transponder Schedule:


The passband has been shifted to account for the change in ALON. The K-band segment is still active at a later interval.

N	QST	AMSAT	AO-40		SCHEDULE				2003-10-09	
	MA		002	060	174	176	184	230	244	002
			-----7-----	-----1-----	-----3-----	-----6-----	-----4-----	-----5-----	-----0-----	-----7-----
S2/K-Tx			S	S	S/K	S/K	S	S	S	S
MB			*	*	*	*	*	*	*	*
RUDAK										
V/U-Rx			U	U	U	U	U	U	U	V
Uplink				UL1		UL	UL			

The schedule is a bit difficult to interpret to the uninitiated and I will attempt to do so in next month’s column.

Be safe and best of DX’ing,
73,
Dave Smith / W6TE
ARRL Technical Coordinator / AMSAT Area Coordinator

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KA6Y's-----ASK THE EXPERT**Special November Birthday Greetings
for these fellow FARC Members**

For this months article I want to talk about the ham radio community.

It's been a tough month for me. My dad passed away suddenly due to a heart attack. We were very close and it's been difficult for me to accept his loss. He was 74 years old and lived a very good life. As I look back at some of the great moments I had with my dad, I can't forget how he helped me get started in ham radio. At the age of 14 he helped me build my first heathkit. HR-10B. Once that was completed he put up my first dipole across two telephone poles on our lot. He was just as excited as I was getting that station up and running. Over the years he helped me build kits, install antennas, find parts and listen to my great DX stories. Even though he never became a ham operator he enjoyed getting involved with me as a father and a friend.

Ham radio is a great hobby. Not only does it give you the opportunity to learn about electronics, but also it fosters some great friendships. The social aspect of the hobby is just as fun and important as the operational side. Sometimes we can get so involved with the rules, regulations, meetings and bickering over stupid issues, that we forget how fortunate we are to be part of such a great hobby. We as a ham radio community need to spend more time reaching out to new operators, enjoying old friendships getting involved with the local clubs and just having fun. Remember life is short enjoy the moment.

I would like to give special thanks to Gene & Kim Davis for their special gift and to all the hams who sent me emails or called to show their condolences. What a great ham radio community.

Happy hamming

Rick Fornes
KA6Y
ARRL Technical Specialist
fornesasc@aol.com

ANDREW BONDURANT	K6PYA
BERGE BULBULIAN	W6XC
BILL WOODY	W6GM
CRAIG CARTER	K6QI
GWYNNE HOLDEN	WA6VZM
JIMMIE WAKEFIELD	W6PSQ
JOHN MORRICE	K6MI
JOHN STEWART	KE6DK
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RICHARD ESSEGAN	K6REE
RICHARD PACK	KE6SHL
ROBERT LIVESEY	N6TSK
RODNEY CLIFTON	WA6IUJ
STAN OSTROM	W6XP
STEVE HENDERSON	N6RHH
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Fresno Amateur Radio Club Board of Directors Meeting minutes October 2, 2003 Cedar Lanes

Meeting Called to order by President, Kim Davis/KF6ZSW at 7:02 a.m.

Members Present: Kim Davis/KF6ZSW, Rob Mavis/AE6GE, Gene Davis/W7POR, Chuck McConnell/W6DPD, Bob Allen/WA6ITN, Richard Pack/KE6SHL. Late Arrivals: Pat Fennacy/W6YEP & Ken Holden/WA6OIB.

Members Absent: John Morrice/K6MI, Craig Carter/K6QI and Rick Fornes/KA6Y.

An announcement was made by Kim Davis that if anyone was ruled out of order or were disrespectful, they would be asked to leave the meeting.

September 4th Board meeting minutes:

John Morrice was absent. Kim Davis asked for any corrections to the minutes. The Minutes were approved with the following corrections:

- Chuck McConnell to be listed as absent from the meeting.
- In Jimmie Wakefield's proposal the abbreviation Ass. Is to be changed to Assn.

Treasurer's Report:

Bob Allen handed out copies of the current treasury balance sheet and went over the line items.

Committee Updates and Reports:

- Community Awareness/Fund Raising: Kim Davis went over the list of upcoming community awareness activities.
- Hamfest/SJV Convention: Kim Davis gave an update on the Hamfest Committee.
- Field Day: Kim Davis reported that we are waiting on final approval from FSU Security to have Field Day at O'Neils Park. Committee meetings to start in January.
- Papers & Cans: Kim Davis reported the Ted has stepped down as chairman. Marcus Beedle has been appointed chair.
- Special Event Station: There was a discussion of possible events for the club to operate a special event station.
- Website: Craig Carter was not present. There was a discussion of the "old" FARC website still floating around the web.

Old Business:

-Tech Classes: Kim Davis Reported that the Tech Class ended last night and there will be 4 students going to the Madera VE Exam Session next week. -General Classes: Kim Davis reported that there were 3 weeks left in the General class and we expect 6 students to attend the following VE Exam Session.

-FARC 100th Anniversary (2010): The Anniversary will be handled by the Hamfest Committee. Pat Fennacy noted that during his research he can not find any documentation to prove the 1910 date for the Fresno/San Joaquin Amateur Radio Club formation. Pat Fennacy was appointed to research the issue more.

New Business:

None

Motion to adjourn meeting by Gene Davis, Seconded by Bob Allen. Meeting Adjourned at 7:31pm.

Submitted by:

Rob Mavis

Acting Secretary

Fresno Amateur Radio Club General Meeting minutes October 10, 2003

Meeting called to order by President Kim, KF6ZSW, at 7:07 P.M. at Cedar Lanes, followed by self introduction of all present.

Minutes and treasurers report accepted as published in Skip. Treasurer Bob, WA6ITM reported the club was up to 178 members.

Community Awareness Report, Steve K6FDR, chairman. Steve reported on several activities, a presentation at CART High School, three FSU games with three to go in the working fundraiser, and a presentation Oct. 8th given by Harold and Dan. \$1333 received from the work at the first two FSU games. Correction on the profit percentage, beer is 8%, food is 12%.

Hamfest report given by Rick, KA6Y. Advanced publicity is going out.

Steve Basset, NA6G, reported on his appointment of EC for ARES, and his plans for reactivating ARES.

New ham radio classes are forming for January.

W6TE, KF6GKC, K6MI, W6FIG, and W7POR were reported elected to the board for two year terms after the ballots were counted.

The speaker was John, K6MI, who talked about hidden transmitter hunting, past and future, with stories of past hunts and the tricks of the trade learned from them.

Refreshments and raffle concluded the meeting. Meeting was closed at 8:45.

Respectfully submitted,
John Morrice, K6MI



FRESNO AMATEUR RADIO CLUB, INC.
 P.O. Box 783
 Fresno, CA 93712-0783

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F.A.R.C. DUES ARE \$15.00 PER YEAR FOR FULL MEMBERSHIP.
 Additional family members in the same household are \$5.00 each per
 year. Make checks payable to F.A.R.C. and send to:
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2003 F.A.R.C. MEMBERSHIP APPLICATION				
Name		Callsign		
Address				
City	State		Zipcode	
Home Phone		Business Phone		
Occupation		Birthdate		
License Class		Year first Licensed		
E-mail Address		ARRL Member?		
FARC - P.O. Box 783, Fresno CA 93712-0783				

Upcoming 2003 FARC Events

- Nov 14 FARC's Annual Swap Night
Auction Preview—Craig/K6QI
- Dec 12 2003 Awards
Merry Christmas