

# SCCARA-GRAM



Santa Clara County  
Amateur Radio Association

Volume 20, Number 2

February 2004



## President's Prose

I trust everyone had a good beginning to this New Year. Wally and I celebrated New Year's quietly, by ourselves in Monterey. We wanted to go do first aid in the Rose Parade, but the RV needed repairs, so we didn't go this year.

The Christmas party was a success! It went well. Don Village did an excellent job coordinating and running the party. Thank you so much Don for all your work. It looked like everyone who came had a good time, too. I plan to make the Christmas party this year better than last year. I had fun putting it together. There were 32 people present. I hope there will be more people present at this year's party.

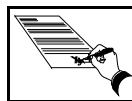
I want to thank Don Apte, KK6MX, for the demonstration he presented at the last meeting. There were plenty of questions for Don during his presentation. As of this writing, there are no speakers planned for the next few meetings. I need help to get speakers for this year. If anyone knows someone who is willing to be a speaker for the club meetings, please let me know. Thank you.

The goals for this year are: 1) Getting the repeater at the City vault in Alum Rock Park finished and sanctioned. 2) Putting more items in the radio room at the American Red Cross, and making it available on a regular basis to club members. I would like to see as many people as possible, check-in to the Monday night 2 meter and Thursday night 10 meter nets. 3) Increasing club membership, and the number of persons attending the monthly meetings. 4) Have more fun at the meetings. It has been suggested that we bring back the raffle at the meetings. I am in favor of this.

I will need help from club members to bring in prizes for the raffle. I hope to get the raffle started next month. It needs Board approval first.

That's all for now. See you at the meetings and on the air.

73, Barbara Britten, KD6QEI



## Help Needed

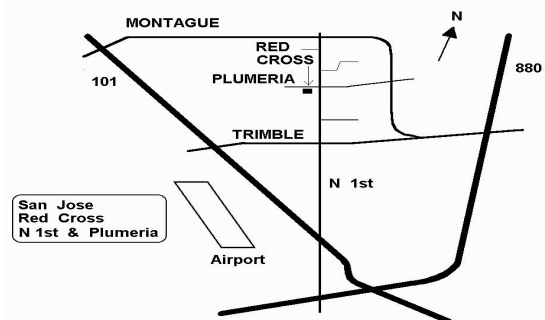
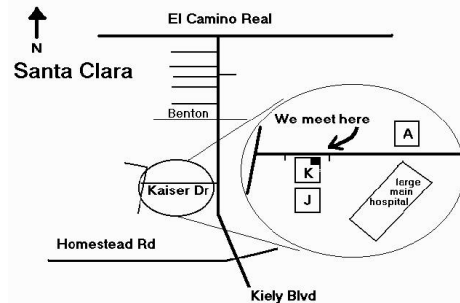
On Saturday morning April 17, 2004 the National Multiple Sclerosis Society will hold their annual MS walk from Campbell to Los Gatos along the Los Gatos Creek Trail. In the past SCCARA members have been very supportive of this walk by providing vital communications at the rest stops and net control.

## Calendar

- 2/7 Livermore Electronic Flea Market
- 2/9 SCCARA General Meeting
- 2/16 SCCARA Board Meeting--(San Jose Red Cross, 7:30p, all are welcome)

### General Meeting:

Day: Monday, February 9, 2004  
Time: 7:30 PM  
Place: Kaiser Santa Clara, Bld K, Rm 1  
Featuring: Howard Califf, KE6PWH, latest radios available on the market



The **SCCARA-GRAM** is published monthly by the **SANTA CLARA COUNTY AMATEUR RADIO ASSOCIATION**, PO Box 6, San Jose CA 95103-0006. Permission to reprint articles is hereby granted, provided the source is properly credited.

**The deadline for articles is second to the last Monday of the month.**

SCCARA was formed in 1921 and became a non-profit corporation in 1947. SCCARA is an affiliate of the American Radio Relay League (ARRL). The club station is W6UW. Web page: <http://www.qsl.net/sccara>.

**OFFICERS - DIRECTORS - STAFF**

President	Barbara Britten, KD6QEI	293-3847
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**COMMITTEES**

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	e-mail: ka6ymd@arrl.net	
N0ARY BBS	Gary Mitchell, WB6YRU	265-2336
	e-mail: wb6yru@aenet.net	

**SCCARA REPEATERS**

SCCARA owns and operates two repeaters under the call W6UU:

2 meter: 146.385 + PL 114.8  
 70 cm: 442.425 + PL 107.2

Phone auto-dial and auto-patch is available. The two meter repeater is located at the Egale Rock near Alum Rock Park in the East foothills of San Jose. The 70 cm repeater and N0ARY BBS is located at the Regional Medical Center (formerly Alexian), east of downtown San Jose, north of 280 and 101.

**SCCARA NETS**

On our two meter repeater: Mondays at 7:30 PM. (not the second monday--our meeting night). Coordinator: Don K6PBQ. On ten meters, 28.385 MHz USB, Thursdays at 8:00 PM. Net control: Wally KA6YMD. Visitors welcome.

**N0ARY PACKET BBS**

SCCARA hosts the packet BBS N0ARY (San Jose). User ports: 144.93 (1200 baud), 433.37 (9600 baud), telephone 408 259-8497, internet (by registration only, get info by sending e-mail to: [info@n0ary.org](mailto:info@n0ary.org)). Sysop: Gary WB6YRU

**TELEPHONE NUMBERS**

SCCARA contact Clark KE6KXO:	408 262-9334
ARRL/VEC Silicon Valley VE group,	
Morris Jones, AD6ZH:	408 507-4698

There are 5 rest stops and a net control. If you can help out please contact me at 408 263-2789.

73, Don Village, K6PBQ

**Treasurer's Treatise**

Financial Summary Report  
 1/1/2003 Through 12/31/2003

Category	Description	Amounts
<b>INCOME</b>		
	Interest inc	18.56
	Other Inc	4,214.30
	Services:	
	BBS	-81.19
	Newsletter	-1,167.66
	TOTAL Services	-1248.85
<b>TOTAL INCOME</b>		<b>2,984.01</b>
<b>EXPENSES</b>		
	Bank Charge	20.00
	Dues and Subscriptions	-140.00
	Insurance	605.24
	Misc	1,632.80
	Miscellaneous, Bus	1,000.00
	Postage and Delivery	279.74
	Rent:	
	FIELD DAY SITE	366.00
	P.O. BOX	44.00
	STORAGE	834.00
	TOTAL Rent	1,244.00
	Telephone:	348.43
<b>TOTAL EXPENSES</b>		<b>4,990.21</b>
<b>TOTAL CASH FLOW</b>		<b>-2,006.20</b>
<b>OVERALL TOTAL</b>		<b>6,050.66</b>

Lloyd DeVaughns, KD6FJI  
 Treasurer

**Meeting Minutes**

**General Meeting, Jan. 12, 2003**



Attendance: 17, including 16 members and 1 visitor.

True to his word, Clark Murphy brought Persimmon Cookies, which he proffered to one and all, along with Coffee. If you missed this meeting you missed both a great presentation and great cookies!

Barbara Britten, KD6QEI, opened the meeting at 19:43, with wishes for a Happy New Year and urged all of us to stick to our Resolutions. She then turned the meeting over to Don Apte, KK6MX, for an introduction to and live demonstration of EchoLink.

Don Apte presented an extremely interesting and well-presented overview of EchoLink. The presentation included live linking to various Hams and various repeaters in Sweden, Wisconsin, Australia and Japan. If you were unlucky enough to miss the meeting, an introduction to EchoLink can be viewed at EchoLink.org, but it won't match up to Don's live exhibition of EchoLink, both sending and receiving voice transmissions, live in our meeting room.

The Business portion began at 21:31, following Don's presentation and a short 10-minute break.

Barbara announced that the business portions of the meetings will be shorter, leaving more time for the presentation of the month, and for conversation.

- Don Village, K6PBQ, has reserved our spot at Mount Madonna for Field Day.
- Barbara has reserved our meeting room for the entire year. In February, March and May, we will use the room next-door.
- Lloyd DeVaughns, KD6FJI, reported a savings balance of \$ 4926.73 and a checking balance of \$ 2010.96
- The secretary forgot to bring the minutes of the last meeting, so did not read the minutes. Please see the next SCCARA-GRAM.
- Both W6UU and W6UW licenses need to be renewed; both have a due date of 4/19/2003
- Nothing new regarding the repeaters, newsletter or BBS.

#### New Business

- We should have a Show-and-Tell night.
- We should buy a cable to connect to the In-Focus projection unit in the room we meet in (a borrowed one worked great for the night's presentation), but they're expensive, about \$100.
- An ATV station is being set up at Northwood Elementary School in northeast San Jose, and in a few months, new member David Paul, AE6MV will be asking for volunteers to help man it.
- Our visitor used Valley Transit to get to the meeting; he might be able to come more often if someone who lives near or drives by Saratoga could offer him a ride to our monthly meetings.
- The next SVECS Breakfast is January 24. Sign up on your local weekly Races net, the SVECS Net Tuesday nights at 20:00 on AA6BT, 146.115+ 100.0Hz, or contact Lou Steirer, WA6QYS. The presentation will be on Emergency Communication Procedures, given by Holly Milnes, Dispatcher, for the Moffett Field Police Dept.
- Gary Mitchell, WB6YRU, proposed that we add EchoLink to our 70 cm repeater. A motion passed (Moved by AE6MV, seconded by WA6QYS) that we set up a committee, to consist of Don Apte, KK6MX, Gary Mitchell, WB6YRU, and others, to look in to the possibility.
- The date for the next Social is as yet undetermined.
- If you have any club equipment or property, meet us at 13:00 Saturday February 14 at the storage locker, for a physical audit of club property, and to review locker contents and give away or otherwise dispose of unneeded club equipment.

Clark Murphy moved that the meeting be closed, the motion passed and meeting was adjourned at 22:14.

David Paul, AE6MV  
Secretary

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**Board Meeting, Jan. 19, 2003**



The meeting was called to order at 19:44 by the President, Barbara Britten, KD6QEI. A quorum was present.

Attendees: Barbara Britten, KD6QEI, President; Lloyd DeVaughns, KD6FJI, Treasurer; Clark Murphy, KE6KXO, Director; Don Apte, KK6MX, Director; Don Village, K6PBQ, Director; Lou Steirer, WA6QYS, Director; Wally Britten, KA6YMD, Director; Gary Mitchell, WB6YRU, Editor; David Paul, AE6MV, Secretary; Gwen Steirer, KF60TD, XYL

The President reported that the Presidential Prose for the month is already done and sent off. The goals for this coming year are: 1) Get the 2 meter repeater sanctioned, 2) increase the membership, and 3) have good speakers at all the meetings. No speaker is as yet decided for the February meeting. We should set our dinner meetings for those months when our regular meeting room is unavailable.

#### General Discussion:

- Don Apte: we could have a demonstration of QRP for a meeting;
- Gary Mitchell: we could transmit our meetings by ATV;
- Lou Steirer: we could arrange a speaker to present current topics in Astronomy;
- Gary Mitchell: or Satellite Communications

Treasurer Lloyd DeVaughns, reported a savings balance of \$ 4929.77 and a checking balance of \$ 1309.20

The repeater Chair, Wally Britten, reported no changes / no news regarding the repeaters. We await the xtals, to reverse the repeater, to reapply for re-certification.

Gary Mitchell reported nothing new about the newsletter, but great news about the BBS: the Internet connection is now working! The server named in the configuration file was invalid; correcting it fixed the problem. Currently the BBS connects to the internet by phone. Owen and Bob want to try an RF link, which, if it can be made to work, can supply transfer rates around 1Mb/sec. This is iffy, but if it can be made to work, it could supply an internet connection for the 70cm repeater. A concern is running a Windows computer in a high-noise unmanned site. Don Apte suggested that perhaps he could get the club a commercial-quality well-shielded computer, which might solve the issue.

Lou Steirer moved that the Repeater Internet Connection Committee be empowered to investigate and discuss the topic of internet connectivity for the repeater, and report back to the Board. Clark Murphy seconded the motion, which received unanimous support. Don Apte agreed to provide an update at the next Board meeting.

Barbara Britten, brought up the next Dinner Meeting, and proposed that it be held Monday, March 8 at the Santa Clara Hometown Buffet. After discussion, the proposal was agreed upon. Gwen Steirer, KF60TD, agreed to place the reservation for the banquet room.

#### Old Business

Don Apte was able to find an InFocus cable for only \$25, and offered it to the club for that price. Clark Murphy added that he had checked the price of InFocus cables, and found the typical price not to be the \$100 that Don Apte suggested at the last meeting, but \$200 instead. Don Village moved, with Clark Murphy's second, that the club purchase the proffered cable. The motion was unanimously supported. Don suggested that we could also use a 15-pin extension cable, to extend the reach of the InFocus cable, but that those are more reasonable in price.

Barbara Britten suggested that perhaps Gary Mitchell could provide a presentation and demonstration of Packet and our BBS. After discussion of the logistics of assembling the materials for such a meeting, Gary agreed to provide a demonstration of Packet and our BBS at the April meeting.

- No speaker is needed for the March dinner meeting.
- Perhaps May could be a show-and-tell, or a clinic?
- June's topic should be Field day; July's speaker could be Kit WA6PWW.

For February, Lou Steirer will contact a colleague and try to set up a demonstration of ATV; if he is not available, perhaps a presentation by someone from the Sunnyvale HRO. For February, Barbara will check to see if we can get two smaller adjoining rooms and open the divider between them, since our usual room is unavailable.

Other possible topics: NOAA; USGS; ARRL; Antenna Theory and Practice (Clark knows a good speaker out of Fresno).

Gary Mitchell brought up the New Ham letter, and asked for brainstorming on the topic, what does this club have to offer for new Hams?

Suggestions included:

- 1) Commiseration with and support by experienced Hams; a wealth of experience in current members and 80-years of club experience,
- 2) Two repeaters, one 2 meter and one 70 cm.,
- 3) A Club Station available to members by contacting Lou or Wally
- 4) the option to have experienced hams to support you at the Station,
- 5) a fun Field Day experience, where everybody can operate the Club Station, All Welcome,
- 6) the Club BBS N0ARY, 1200 or 9600 baud, linked to the backbone and the Internet,
- 7) interesting & informative speakers at our monthly meetings,
- 8) an interesting & informative Newsletter,
- 9) special events, social events, and the chance to follow in the footsteps of successful and famous current and former members.

Gary Mitchell brought up that we need to always have interesting meetings and interesting informative topics in the newsletter.

Gwen Steirer suggested that we should bring the drinks from the locker, and serve them at the monthly meetings.

Clark Murphy brought up the Collins radio. We keep talking about selling it, but we never do anything. Clark has spoken to Dave Shaffer, who said that it must be tested, as it would be worth much less if the tubes were not known to be good. If Lou can move it to Clark's house, Clark can plug it in and test it.

Clark Murphy reminded us of the physical inventory of Club equipment, and Club locker cleanout, Saturday February 14th at 13:00, as announced in the Newsletter.

#### New Business

Don Village advised us that the Hungry Hunters at Blossom Hill and in Oakland have closed, and it is possible that the Milpitas HH will also close. The manager will inform Don in March, and if it is to stay open, we can make our reservation for our 2004 Christmas Meeting at that time.

Don Apte moved that the meeting be adjourned, Lou Steirer seconded the motion, and the meeting was adjourned at 21:40.

#### Upcoming Meetings:

- The February General Meeting, 1/09/2004, will be in the room next to our usual room; speaker and topic to be announced.
- The next Board Meeting will be February 16 at 19:30 at the San Jose Red Cross HQ.

David Paul, AE6MV, Secretary

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## General Meeting, Dec. 20, 2003



Monthly Meeting, December 20, 2003, 12:00 at Hungry Hunter Restaurant, Milpitas.

The monthly meeting was held as a Christmas Luncheon. The intended functions of the meeting were a good meal, fun and sociability, and the Presentation and Installation of the Officers for the New Year.

Attending were Joan and Don Village, Joyce and Bob Wharton, Lloyd Devaughns, Virginia & Roy Metzger, Joan & Mike Hastings, Frank Glass, Jack Russell, El Wirt, Pam & David Paul, Gwen & Lou Steirer, Don Hayden, Barbara & Wally Britten, Barbara's daughter Anna, and her husband Mike, Clark Murphy, Don Apte and Marilyn & Erik Ankney.

Festivities started with appetizers, then a fine meal served by the competent and attentive restaurant staff. After the dinner, the new and continuing Officers and Board Members were introduced, including the acting Secretary. President Barbara Britten confirmed a quorum to be present, formally convened the meeting, presented the acting Secretary and proposed that he be formally elected at the meeting. She introduced new member, new ham, and proposed new Secretary, David Paul, AE6MV. David was elected by a majority of those present and voting.

The Installation of Officers followed, then the meeting dissolved into cake and camaraderie.

(Secretarial comment: Jack Russell's Woody PT Cruiser is snazzy!)

David Paul, AE6MV  
Secretary

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## Board Meeting, Dec. 15, 2003



Board Meeting Monday, December 15, 2003

The meeting was called to order at 19:40 by the President, Barbara Britten, KD6QEI. A quorum was present.

The President wished us all a Merry Christmas and a Happy New Year. For the Annual Christmas Dinner/Luncheon, she has crafted Napkin Rings for all attendees, based on a Martha Stewart design. As usual, she will also have a present for each person attending, Barbara's daughter and son-in-law will attend, and will bake and decorate a cake for the occasion. The Presidential Prose for the month is almost ready, and this month, it is rhyming. Barbara thanks the board for supporting another productive year.

The Treasurer, Lloyd DeVaughns, KD6FJI, reported a savings

balance of \$4926.73 and a checking balance of \$2010.96

The repeater trustee, Wally Britten, KA6YMD, reported that both repeaters are functional, that the city has approved the expenditure for new Xtals, and they will be ordered soon. The 70cm repeater still needs a conduit run, which is somehow tied to the remodeling due soon at Regional Medical Center (the old Alexian Brothers). Gary Mitchell, WB6YRU, suggested that we propose to the hospital that we be allowed to run our own conduit. Others suggested that the design of the building's floor structure precludes simply boring a hole and running a conduit.

Gary Mitchell, WB6YRU, reported that he needs a newly updated database version, as he has had none since October; nothing else is outstanding with the Newsletter. Gary further reported that the BBS is still working. The Internet issues remain, Owen De Long has not had time to address the issues. The only other BBS in the region is in Benecia.

#### Old Business

The Christmas Luncheon will be okay -- Barbara will bring plates and forks and napkins to go with the cake. She needs access to the restaurant by 11:00 to do decorations

Clark Murphy brought up the Membership Drive. A new Ham list is available daily from the FCC; maybe we should try that route. We should shift our meeting formats to include fewer reports and less club business, and more interesting, fun stuff. We need to have a break in the middle, to allow members time to visit. Folks go home at the end, so a break in the middle is a good way to allow time for member interaction. But we should reserve committee reports for the Board Meeting. On the same topic, Barbara would like help assembling and editing the Letter for new Hams.

A Motion was proposed (by K6PBQ), seconded and approved unanimously, for Gary to give to new members, starting 1/1/2004, free subscriptions to World Radio, until we run out of the free-subscription cards.

Don Apte brought up the need for a Greeter at our monthly meetings. Barbara agreed that we should start that, and suggested that it might be a good job for a Vice President (which post is currently vacant). Barbara stressed that for now, we all need to be sure to talk to visitors, to learn their interests and needs.

Don Village said that he occasionally gets phone calls in his role as Elmer. It was suggested that each Elmer contact should be reported in the Newsletter, because if one person is asking, others likely have the same question unstated.

Don also brought up the Amateur Radio Station at the Children's Discovery Museum: other members should volunteer their time to man the exhibit.

We should also leave flyers at the Library.

Gary brought the discussion back to the New Ham letter, perhaps as part of a New Ham package we could send to those newly licensed in the area. Don Apte suggested that such a package should contain useful information for new Hams, such as local clubs, and other information a new Ham might appreciate.

Action Item: Barbara will complete her submission for an Introduction Letter, and send it to the Board for discussion.

Field day: Don Village will reserve our space at Mount Madonna for Field Day on 12/26; the first day it can be reserved. Field Day discussion ensued: it should be a potluck, so Barbara doesn't have

to spend all her time cooking. Gwen wanted to make sure that if it's a PotLuck, that Barbara brings her Chili. Clark added that we need deep sockets and a ratchet, to set up the station at Field Day. We should also have more than one station set up, but we need more Operators.

Action Item: the secretary will learn when the next Morse Code class is available locally, and notify both Clark Murphy and Barbara Britten of the class schedule.

#### New Business

Announcement: a new character proposed for the International Morse Code dit-dah-dah-dit-dah-dit, equals the @ symbol.

Clark Murphy brought up the situation of the club's storage locker. He has been down to the locker with Lou, and reported that we have lots of equipment, lots of room, and lots of junk.

Clark proposed a motion that we install and operate our Drip Irrigation System. His proposal was in jest, but brought up the point why does an Amateur Radio club own and store a drip irrigation system? We also have a Commodore 64 computer, several daisy wheel printers, and other junk. Discussion ensued, in depth, with the conclusion that we will meet, the second Saturday in February, at 13:00, at the storage locker, to see if anyone has a use for the junk, and otherwise dispose of it. Gary will announce this in the newsletter along with the announcement that anyone holding Club Property should bring it to the site that day for a physical inventory.

We need to become more active again, with contests and hunts. The World Radio lists contests: RTTY, SSB, CW. Maybe a PSK31 contest? The North American QSO party?

Action Item: Don Campbell and Lloyd De Vaughns will look into contests.

We need to make more use of our Radio Room, making it available to new members, with an experienced operator on-site to offer aid.

#### Upcoming Meetings:

The January General Meeting 1/12/2004, will feature a live demo of Echo Link, by Don Apte. It will need Internet access; Barbara will contact Kaiser to confirm this. Barbara will bring sodas to the meeting, Clark Murphy offered that he might bring persimmon cookies.

The next Board Meeting will be January 19 at 19:30 at the San Jose Red Cross HQ.

Barbara asked for any further items of old or new business, with no response.

Lou Steirer moved that the meeting be adjourned, the motion passed by acclamation, and the meeting was adjourned at 21:23.

David Paul, AE6MV  
Acting Secretary

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## ARRL News

From *The ARRL Letter*, January 2, 2004

## ORGANIZATIONS' COMMENTS AUGMENT ALARM OVER BPL

Two organizations have filed comments with the FCC that augment previously expressed worries about potential interference from and to Broadband over Power Line (BPL) systems. Picking up on the "grave concerns" the Federal Emergency Management Agency (FEMA) <<http://www.fema.gov>> expressed over BPL December 4, the nonprofit Disaster Preparedness and Emergency Response Association (DERA) <<http://www.disasters.org>> called on the FCC to require impartial BPL field testing as well as additional public comment and full and open public hearings.

"DERA concludes that serious interference to and disruption of critical emergency communications systems in several licensed services throughout North America would almost certainly result from BPL implementation as currently proposed," DERA said. Endorsing the earlier FEMA remarks, DERA said proposed BPL systems don't just pose a risk of interference, they've already been shown to "actually cause harmful interference to licensed radio services."

Meanwhile, the Amateur Radio Research and Development Corporation (AMRAD) has filed additional test data with the FCC to support preliminary findings suggesting that BPL systems are susceptible to interference from even modest Amateur Radio HF signals. AMRAD said its newest data demonstrated that amateur operation in the test neighborhood would cause many homes to lose their Internet service.

"At least an area out to a radius of 0.51 miles from the transmitting station could have their Internet connection interrupted," AMRAD said. "Closer-in homes would almost certainly have their Internet service interrupted."

For its RF susceptibility experiment, AMRAD used the Potomac Electric Power Company system test site. It features a mid-1960s vintage home with unshielded interior electrical wiring and overhead power lines.

AMRAD found that at a distance of just over one-half mile, data transfer ceased in the face of a 100-W signal on 3980 kHz from a mobile transmitter. Adjacent to the test property, AMRAD said data transfer ceased in all but one instance at a transmitter power of just 4 W in the BPL operating band of from 4 to 21 MHz.

The ARRL hopes to complete an independent BPL engineering study early this year. It will explore how BPL might affect HF and low-VHF amateur operation as well as how Amateur Radio operation could affect BPL systems.

In related news, BPL equipment manufacturer Amperion Inc recently announced an "industry first" by successfully testing its high-speed "Connect" system on 69 kV transmission lines. Typical BPL systems have employed medium and low-voltage lines to deliver broadband and Internet access. Amperion said its tests, performed in conjunction with American Electric Power, demonstrated multi-megabit data transmission to a distance of nearly one mile without the need for a repeater. There's more information on Amperion's Web site <<http://www.amperion.com/press.asp?pid=89>>.

Additional information about BPL and Amateur Radio is on the ARRL Web site <<http://www.arrl.org/tis/info/HTML/plc/>>. To support the League's efforts in this area, visit the ARRL's secure BPL Web site <<https://www.arrl.org/forms/development/donations/bpl/>>.

## A BPL TALE OF TWO CITIES

A Virginia community is preparing to go forward with plans to deploy a city-owned BPL network, while a California city has decided against BPL for its own municipal broadband system. The city council in Lompoc, California <<http://www.cityoflompoc.com/>>--a community of some 42,000--opted December 16 to go with a wireless and fiber optic cable-based broadband network, rejecting BPL and other possible options. ARRL Santa Barbara Section Technical Coordinator Paul Andreasen, K1JAN, said he and other members of the local Amateur Radio community lobbied hard to ensure that Lompoc would not pick BPL.

After contacting Lompoc Mayor Dick DeWesse to spell out the downside of BPL, Andreasen said he subsequently received assurances from City Manager Gary Keefe that Lompoc's consultants would not entertain technology that would radiate in the HF/low-VHF spectrum. The report from McKibben Consulting noted the "ongoing controversy" about BPL and cited a 2003 British Broadcasting Corporation (BBC) study that, McKibben said, "made it clear that there is very good reason to be concerned about RF interference." The consultant concluded that BPL's advantages failed to outweigh its disadvantages.

The Washington, DC, suburb of Manassas, Virginia, meanwhile, indicates it will go ahead this month with plans to inaugurate BPL service in four subdivisions--a total of some 2100 homes. Manassas--with a population of nearly 35,000--hopes to be the first community in the US to deploy BPL citywide.

Amateurs in the Manassas vicinity have pointed to FEMA's "grave concerns" that BPL could interfere with HF communications systems critical to national security and public safety. They've also cited Japan's banning of BPL deployment in the wake of Amateur Radio pressure as well as the BBC study, where the BPL system used the same Main.net technology Manassas plans to employ.

City officials seem unimpressed. "Nobody has proven it's a problem," City Councilman Ulysses X. White told Potomac News <<http://www.potomacnews.com>>. "If it is a problem, then we re-evaluate it. There's no reason not to go forward with it." The same article quotes City Utilities Director Allen Todd, W4VUB, as saying that the city will monitor the system and rectify any problems that crop up. No field testing for RF interference took place during the system's pilot program. Potomac News also quoted ARRL CEO David Sumner, K1ZZ, saying that the risk of disrupting worldwide and emergency communications for BPL is shortsighted and, as FEMA already has noted, carries potential national security implications.

## ARRL SECTION MANAGER REPRESENTS HAM RADIO IN STATE SENATE BPL INQUIRY

ARRL Western Washington Section Manager Ed Bruette, N7NVP, testified December 9 before the Washington Senate Technology and Communications Committee during an informational inquiry on Broadband over Power Line (BPL). The committee invited Bruette to speak after Gloria Sharp, WA7GYD, of Ellensburg, contacted a senior committee staffer to ask if Amateur Radio would be represented at the hearing. As a result, the panel added Bruette to the list of spokespersons.

"My presentation outlined the Part 15 device limitations, the interference issues both to and from Amateur Radio, BPL trials in Europe and Japan, and the other users of the HF and VHF spectrum who will be impacted by interference by BPL," Bruette said in summing up his 15-minute presentation. "I included the first 37 seconds of the BPL video made by ARRL Lab Manager Ed Hare, W1RFI, along with an NTIA spectrum allocation chart

that I modified to show the potential loss of spectrum."

Bruette followed remarks by two industry representatives. He said the committee's feedback was positive, as was the reaction from the four radio amateurs in the audience.

Bruette said he was surprised to hear one industry representative characterize power lines as antennas. He also said he was pleased to learn that the Chelan County Public Utility District had received letters from local hams expressing concern about BPL.

#### **CANADIAN HAMS MAY LOSE 220-222 MHZ SEGMENT**

After studying the spectrum needs of various services over the past 18 months, the Radio Advisory Board of Canada (RABC) plans to recommend to Industry Canada (IC) that the 220-222 MHz band segment be transferred from the Amateur Service to the Mobile Service. The RABC recommended allocating 219-220 MHz to amateurs in Canada on a secondary basis, in harmony with a similar allocation for US amateurs, who lost the 220-222 MHz band segment in 1991. In addition, the RABC asked that IC continue 222-225 MHz as a primary exclusive amateur allocation. It also recommended grand fathering amateur repeaters in the 220-222 MHz segment, to continue operation for a period of time that the IC would determine, and designating 150 kHz of spectrum for the Amateur and Mobile services to share for certain public safety and disaster communication applications. Radio Amateurs of Canada (RAC) has vigorously opposed the proposed changes without success. The RAC has posted additional information on its Web site <<http://www.rac.ca/news/canada.htm>>. --RAC bulletin

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From *The ARRL Letter*, January 9, 2004

#### **WRC-03 IMPLICATIONS FOR HAM RADIO ON ARRL BOARD AGENDA**

Draft proposals to implement changes in US Amateur Radio rules in the wake of World Radiocommunication Conference 2003 (WRC-03) will be up for discussion when the ARRL Board of Directors convenes later this month. The Board also will elect officers for the next two years. ARRL President Jim Haynie, W5JBP, has indicated that he plans to run for a third term. The Board will meet January 16-17 in Windsor, Connecticut.

Among other significant changes, WRC-03 delegates agreed last summer to leave up to individual countries whether to require a Morse code test for access to amateur high-frequency allocations. Several countries already have dropped the Morse code testing requirement for HF access. In the US, the FCC last year invited public comments on 14 Morse-related petitions for rule making, but it has not yet acted on the issue.

The ARRL Board is expected to discuss in detail recommendations in response to WRC-03 that were developed during last November's meeting of the ARRL Executive Committee.

Amateur Radio-related matters still in the pipeline at the FCC also are expected to be a topic for discussion. ARRL's 2002 "omnibus" Petition for Rulemaking <<http://www.arrl.org/news/stories/2002/03/22/4/>>, which includes a request to eliminate the current Novice bands and "refarm" the spectrum, is among those proceedings seemingly stuck at the Commission. The FCC also has yet to act on other non-ARRL rule making petitions <<http://www.arrl.org/news/stories/2002/01/10/3/>>. The subject of Broadband over Power Line (BPL) also is on the Board's agenda. Among other actions, the Board also will elect members to the

Executive Committee and appoint three directors to the ARRL Foundation Board.

#### **AUSTRIAN AUTHORITIES PULL PLUG ON BPL PILOT PROJECT**

The Austrian Amateur Transmitter Federation (ÖVSV--Österreichischer Versuchssenderverband) <<http://www.oevsv.at/index.shtml>> reports that a Broadband over Power Line (BPL) field test in the city of Linz has been cut short as a result of excessive radio interference. ÖVSV, Austria's International Amateur Radio Union (IARU) <<http://www.iaru.org>> member-society, said in December that the Government Ministry for Commerce, Innovation and Technology closed down Linz Power Company's BPL pilot project because it was generating interference on the HF bands. Shortwave broadcaster Radio Austria's futureZone service <<http://futurezone.orf.at>> says the case that brought the issue to a head was a Red Cross report that emergency services radio traffic during a disaster response drill last May was the victim of massive BPL interference.

"The Commerce Ministry Order not only means the end of the Linz BPL pilot project," the Radio Austria report said, "but the end of the deployment of this technology in Austria, especially given the interference to radio communication in places of business." According to the broadcaster, measurements were said to have indicated that radiation from the BPL system exceeded permissible field strength levels by a factor of 10,000.

ÖVSV says radio amateurs in Austria have opposed deployment of all BPL experiments as neither legal nor compatible with "vital, worldwide shortwave radiocommunication." Among other problems with BPL, ÖVSV has cited its potential to disrupt emergency communications and safety-of-life services as well as military operations on HF and navigation and aeronautical communication.

Last fall, ÖVSV representatives and Linz amateurs got together with power company representatives in an effort to resolve BPL's incompatibility with HF radio operation. The meetings followed news reports of interference to emergency service communications and QRM complaints from several area hams. "Because of the racket, expensive installations, such as a 20-meter monobander on a high-rise building, become totally worthless," ÖVSV said.

The utility agreed to look into the possibility of a 100-meter protective zone around each amateur's location, notch filters for amateur frequencies, network system filters and the use of 5 GHz wireless local area networks.

#### **ALASKA EXPERIMENTAL LF BEACON SHUTS DOWN**

Laurence Howell, KL1X, in Anchorage, Alaska, reports that his experimental (Part 5) WD2XDW beacon on 137.77356 kHz ceased transmitting at 1400 UTC on January 6. Howell--who is also GM4DMA--is relocating to "The Lower 48" in the near future. Until his tower comes down, he says he'll continue to listen for very slow-speed CW (QRSS) signals and publish receive captures on his Web site <<http://www.kl1x.com>>. KL1X hopes to reestablish the LF beacon at his new plains (Oklahoma or Kansas) location, pending FCC approval. "The beacon's 1 W ERP signal has been successfully heard down the Pacific coast and recently in Minnesota," Howell said, with partial call sign reports from England and Europe. Howell also reports that he was delighted to receive the Radio Society of Great Britain/Nevada 2003 Nevada LF Experimenter's Cup.

From *The ARRL Letter*, January 16, 2004

## **FCC CHAIRMAN TOUCHES ON BPL INTERFERENCE ISSUE IN PRESS CLUB SPEECH**

FCC Chairman Michael Powell has cited the Commission's promotion of Broadband over Power Line (BPL) technology as an example of a government policy that supports expansion of broadband technology to all Americans. At the same time, Powell said, the FCC needs to ensure BPL doesn't interfere with licensed radio services. In his January 14 speech before the National Press Club, Powell mentioned BPL among "new emerging platforms" for broadband delivery.

"With BPL you theoretically reach every American with broadband to every power plug in America," Powell said. "Our goals of universal service will be substantially advanced if that service were fully deployed." Powell also acknowledged interference concerns that have been dogging BPL and raised by the Amateur Radio community and by at least two federal agencies: the Federal Emergency Management Agency--now a part of the Department of Homeland Security--and the National Telecommunications and Information Administration (NTIA), which manages spectrum allocated to government users.

"We will continue to explore ways to support this technology while protecting services from interference," Powell pledged.

In the next breath, Powell pointed out that the FCC also is looking to increase the feasibility of broadband delivery via satellite. "Because satellite technology has the ability to reach the entire country," he said, "it holds tremendous potential as an effective Internet solution for many parts of the nation, especially rural and remote areas, at affordable rates."

When it issued its BPL Notice of Inquiry (NOI), ET Docket 03-104 <[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-03-100A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-03-100A1.doc)>, last April, the FCC suggested that BPL technology would be one way to provide broadband service to rural dwellers. Some technology experts suggest that, because of the equipment needed to deliver BPL broadband to rural customers, BPL would not be cost-effective for such residents.

In a bit of unintended irony, Powell's speech, "The Age of Personal Communications," bore the subtitle "Power to the People."

Since BPL applies high-frequency RF to parts of the power grid, one aspect of the NOI was to gather information on potential interference to authorized spectrum users. To date, the NOI has attracted nearly 5150 comments, many from the amateur community.

The FCC has indicated that providers of BPL equipment "are free to continue to deploy their networks in conformance with existing Part 15 rules." BPL providers already are setting up BPL systems in several communities.

NTIA Acting Assistant Secretary for Communications and Information Michael D. Gallagher recently told a gathering of the Power Line Communications Association <<http://www.plca.net/>> that the risk of interference to government or other spectrum users provides an incentive to BPL operators to "design and operate their systems to avoid such interference." He said the NTIA has been studying interference risks and the potential "for making risks more tolerable." He said the objective is "to accommodate BPL with acceptable risk."

The ARRL anticipates completing an independent BPL engineering evaluation early this year. The study will explore how BPL might affect HF and low-VHF amateur operation as well as how Amateur Radio operation could affect BPL systems.

Additional information about BPL and Amateur Radio is on the ARRL Web site <<http://www.arrl.org/tis/info/HTML/plc/>>. To support the League's efforts in this area, visit the ARRL's secure BPL Web site <<https://www.arrl.org/forms/development/donations/bpl/>>.

## **CONGRESSMAN-HAM ASKS FCC TO WAIT FOR NTIA STUDY BEFORE ACTING ON BPL**

US Representative Greg Walden, WB7OCE, has called on the FCC to put off any further action in its Broadband over Power Line (BPL) proceeding until the National Telecommunications and Information Administration (NTIA) releases the results of its BPL study and the public has had a chance to comment.

"I feel that it is important to give the NTIA study thorough consideration before proceeding further with BPL technology, in view of the importance of avoiding interference to federal government HF communications," Walden said in a January 15 letter to FCC Chairman Michael Powell. An Oregon Republican, Walden is one of two Amateur Radio licensees in the US House.

The FCC released a BPL Notice of Inquiry in ET Docket 03-104 <[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-03-100A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-03-100A1.doc)> last April.

In comments <[http://www.ntia.doc.gov/ntiahome/fccfilings/2003/bplcomments\\_08132003.htm](http://www.ntia.doc.gov/ntiahome/fccfilings/2003/bplcomments_08132003.htm)> filed last August, the NTIA expressed "broad concern" about BPL. The agency--which administers spectrum allocated to federal government users--has said the FCC "must ensure that other communications services, especially government operations, are adequately protected from unacceptable interference."

The NTIA, which is part of the US Department of Commerce, subsequently undertook evaluations of BPL field test sites, in part to gauge the technology's interference potential. Walden noted that the NTIA's field work was scheduled to wrap up this month, and that its observations and conclusions would be released sometime during the first quarter of this year.

Walden told Powell that, given its interference potential to federal and nongovernment radio services in the HF and low-VHF range, the issue of BPL is "of great concern to me." He did not indicate in his letter that he was an Amateur Radio licensee.

"It is important that the commission give serious consideration to both the NTIA study and the subsequent round of public comment on the study results," Walden asserted. While agreeing with the goal of increased competition in broadband delivery, Walden encouraged the FCC to "give sufficient attention" to concerns raised regarding BPL's potential to interfere with other radio services. He also asked Powell to respond outlining how the FCC intends to proceed in the matter.

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From *The ARRL Letter*, January 23, 2004

## **ARRL TO PROPOSE NEW ENTRY-LEVEL LICENSE, CODE-FREE HF ACCESS**



The ARRL will ask the FCC to create a new entry-level Amateur Radio license that would grant HF phone privileges without a Morse code test. The League also will propose consolidating all current licensees into three classes, retaining the Element 1 Morse requirement--now 5 WPM-only for the highest class. The ARRL Board of Directors overwhelmingly approved the plan January 16 during its Annual Meeting in Windsor, Connecticut. The proposals, put forth by the ARRL Executive Committee, were in response to changes made in Article 25 of the international Radio Regulations at World Radiocommunication Conference 2003 (WRC-03).

"Change in the Amateur Radio Service in the US, especially license requirements and even more so when Morse is involved, has always been emotional," said ARRL First Vice President Joel Harrison, W5ZN, in presenting the Executive Committee's recommendations. "In fact, without a doubt, Morse is Amateur Radio's 'religious debate.'" Harrison said the League's proposal would provide "a true entry-level license with HF privileges" to promote growth in the Amateur Service.

The League says its proposal would continue a process of streamlining the amateur licensing structure that the FCC began more than five years ago but left unfinished in its Amateur Service license restructuring Report and Order (WT 98-143) that went into effect April 15, 2000.

A new entry-level license class--being called "Novice" for now--would require a 25-question written exam. It would offer limited HF CW/data and phone/image privileges on 80, 40, 15 and 10 meters as well as VHF and UHF privileges on 6 and 2 meters and on 222-225 and 430-450 MHz. Power output would be restricted to 100 W on 80, 40, and 15 meters and to 50 W on 10 meters and up.

"The Board sought to achieve balance in giving new Novice licensees the opportunity to sample a wider range of Amateur Radio activity than is available to current Technicians while retaining a motivation to upgrade," said ARRL CEO David Sumner, K1ZZ. The ARRL plan would grandfather current Novice licensees into the new entry-level class without further testing.

The middle group of licensees--Technician, Tech Plus (Technician with Element 1 credit) and General--would be merged into a new General license that also would not require a Morse examination. Current Technician and Tech Plus license holders automatically would gain current General class privileges without additional testing. The current Element 3 General examination would remain in place for new applicants.

The Board indicated that it saw no compelling reason to change the Amateur Extra class license requirements. The ARRL plan calls on the FCC to combine the current Advanced and Amateur Extra class licensees into Amateur Extra, because the technical level of the exams passed by these licensees is very similar. New applicants for Extra would have to pass a 5 WPM Morse code examination, and the written exam would stay the same. Sumner said the Board felt that the highest level of accomplishment should include basic Morse capability. Current Novice, Tech Plus and General licensees would receive lifetime 5 WPM Morse credit.

Among other advantages, Sumner said the plan would allow new Novices to participate in HF SSB emergency nets on 75 and 40 meters as well as on the top 100 kHz of 15 meters. The new license also could get another name, Sumner said. "We're trying to recapture the magic of the old Novice license, but in a manner that's appropriate for the 21st century."

The overall proposed ARRL license restructuring plan would more smoothly integrate HF spectrum privileges across the three license

classes and would incorporate the "Novice refarming" plan the League put forth nearly two years ago in a Petition for Rule Making (RM-10413). The FCC has not yet acted on the ARRL plan, which would alter current HF sub-bands.

The ARRL license restructuring design calls for no changes in privileges for Extra and General class licensees on 160, 60, 30, 20, 17 or 12 meters. Novice licensees would have no access to those bands.

See "ARRL to Propose New Entry-Level License, Code-Free HF Access" on the ARRL Web site, <<http://www.arrl.org/news/stories/2004/01/19/1/>>, for the specific sub-band allocations ARRL is proposing for each class.

The amateur community and other interested parties will have an opportunity to comment on the ARRL proposal once the League formally files a Petition for Rule Making and the FCC puts it on public notice.

### **FCC'S ABERNATHY ACKNOWLEDGES AMATEUR RADIO BPL CONCERNS**

In a seeming shift away from "Broadband Nirvana," FCC Commissioner Kathleen Q. Abernathy <<http://www.fcc.gov/commissioners/abernathy/>> this week specifically cited Amateur Radio concerns about the interference potential of Broadband Over Power Line (BPL). In remarks prepared for delivery at her alma mater, the Catholic University of America's Columbus School of Law <<http://www.law.edu/>>, Abernathy said BPL should not be widely deployed before dealing with ham radio's interference fears.

"I recognize that Amateur Radio licensees have raised concerns about harmful interference," Abernathy said, "and that is something that will have to be addressed before any mass market deployment can occur." She addressed the convocation "The Journey to Convergence: Challenges and Opportunities" January 22 on the school's Washington, DC campus.

Abernathy said that if engineers can find a way to prevent harmful interference to other radio services, BPL would represent "a tremendous advance for consumers, because it could bring broadband to any home that has electricity."

In her speech, "Overview of the Road to Convergence: New Realities Collide with Old Rules," Abernathy called BPL "another promising technology" that electric utilities have already successfully field tested. As an "add-on service to the existing electrical grid," she said, BPL might be a cost-effective alternative to provide broadband service to rural and other "under served communities."

Missing from her remarks was any mention of interference worries that the Federal Emergency Management Agency (FEMA) and the National Telecommunications and Information Administration (NTIA) have expressed to the FCC in the BPL proceeding.

Abernathy drew fire from the Amateur Radio community last September after she expressed unabashed enthusiasm for BPL in a talk before the United Powerline Council's <<http://www.uplc.utc.org/>> annual conference. In that talk, she'd suggested that BPL was a step along the pathway to "Broadband Nirvana."

The ARRL led the barrage of strong objections in the wake of Abernathy's characterization. ARRL CEO David Sumner, K1ZZ, pointed out that preliminary testing already had established BPL is a significant source of radio spectrum pollution" and that BPL

could not be implemented without causing harmful interference to radio services. Abernathy's office later conceded that her "Broadband Nirvana" speech may have failed to make sufficiently clear her concerns about potential BPL interference.

More than 5100 comments--many from the Amateur Radio community--have been filed in response to the FCC's BPL NOI and are available for viewing via the FCC's Electronic Comment Filing System (ECFS) <<http://www.fcc.gov/cgb/ecfs/>>.

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## Packet Pieces

### Downloaded from the packet network:

=====  
Date: 28 Jun 2000 21:21  
From: AB7RG@AB7RG  
To: FARCE@WW  
Subject: Great lines from job evaluations:  
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1. I would not allow this employee to breed.
2. This associate is really not so much of a has-been, but more definitely a won't be.
3. Works well when under constant supervision and cornered like a rat in a trap.
4. When she opens her mouth, it seems it is only to change whichever foot was previously there.
5. He would be out of his depth in a parking lot puddle.
6. This young lady has delusions of adequacy.
7. He sets low personal standards and then consistently fails to achieve them.
8. This employee is depriving a village somewhere of an idiot.
9. This employee should go far and the sooner he starts, the better.
10. Not the sharpest knife in the drawer.
11. Got into the gene pool when the lifeguard wasn't watching.
12. A room temperature IQ.
13. Got a full 6-pack, but lacks the plastic thingy to hold it together.
14. A gross ignoramus - 144 times worse than an ordinary ignoramus.
15. A photographic memory but with the lens cover glued on.
16. A prime candidate for natural deselection.
17. Bright as Alaska in December.
18. One-celled organisms outscore him in IQ tests.

19. Donated his brain to science before he was done using it.
20. Fell out of the family tree.
21. Gates are down, lights are flashing, but the train isn't coming.
22. Has two brains: one is lost; the other is out looking for it.
23. He's so dense, light bends around him.
24. If brains were taxed, she'd get a refund.
25. If he were any more stupid, he'd have to be watered twice a week.
26. If you give him a penny for his thoughts, you'll get change.
27. If you stand close enough to him, you can hear the ocean.
28. It's hard to believe he beat out 1,000,000 other sperm.
29. One neuron short of a synapse.
30. Some drink from the fountain of knowledge, he only gargled.
31. Takes him an hour and a half to watch 60 Minutes.
32. Wheel is turning, but the hamster is dead.
33. Since my last report, this employee has reached rock bottom and has started to dig.
34. His men would follow him anywhere, but only out of morbid curiosity.

73 & May the FARCE be with you! Clinton, AB7RG.  
[ AB7RG @ KB7FRV.AZ.USA.NOAM ]

=====  
Date: 28 Jun 2000 22:35  
From: AB7RG@AB7RG  
To: QUOTES@WW  
Subject: QUOTES # 045 !!!  
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Conquer your fears before they conquer you.

If you don't have a sense of humor, you don't have any sense at all.

Cats rule and dogs drool!

Famous Last Words: "Even the airline baggage handlers can't hurt this..."

If there is no hope there is no future.

How do you make a little money racing? Start out with a lot of it.

Don't take life so seriously, it's not permanent...

Life is just FULL of Quotes!!!

Car sickness is the feeling you get when the monthly car payment is due. (Or car insurance, if you happen to drive a

Porsche, like your's truly.)

Families are like fudge; mostly sweet with a few nuts.

Today's mighty oak is just yesterday's nut that held its ground.

Laughing helps. It's like jogging on the inside.

My mind not only wanders, sometimes it leaves me completely.

One day I shall burst my buds of calm blossom into hysteria.

If you can remain calm, you just don't have all the facts!  
Good Day: When you're out driving in your new Porsche.

Bad Day: When the insurance bill arrives for your new Porsche.

Passion is the ultimate motivator.

When in doubt, mumble.

This message sent on 100% recycled bandwidth.

This is message error free due to operator and Macintosh.

Bad habits are hard to break. Especially if you like them.

Nothing makes you more tolerant of a neighbor's noisy party than being there.

If you think education is expensive, try ignorance.

Experience is the name everyone gives to his mistakes.

Blessed be he who expects nothing, for he shall never be disappointed.

Misspelled? What do you mean it's misspelled? Packet is an error-correcting mode!!!

Happiness is BEING the DX station!!!

Oxymoron: Smart politics.

Friends don't let friends use PC's!!!

If you're still reading at this point, I feel that it is my duty to inform you that you are addicted to QUOTES!!!

The Truth IS Out There...

If you sit and wait long enough you're bound to see something...

I don't lie, I just willfully participate in a campaign of disinformation.

Aliens (for the most part), are not green. They are grey.

Ever have a train of thought only to have it derail?

If a tree falls in the forest, and there's no one there to witness the event, does it make a sound?

## Need Help?

Amateurs have a long history of helping each other. An experienced amateur who helps another is traditionally called an "Elmer." If you have a question or problem, you are encouraged to ask one of SCCARA's Elmers. Below is a list of topics including who to contact for each.

If you consider yourself to be reasonably competent in at least one area of amateur radio and would be willing help others, please fill out an Elmer form from the club secretary.

Antennas, feed-lines, tuners: WB6EMR, K6PBQ, WB6YRU  
Lightning protection, grounding: WB6YRU  
Station set-up, equipment: K6PBQ  
TVI/RFI: WB6YRU  
Homebrew projects, construction: KD6FJI, WB6YRU  
Computers: KB6NP; IBM PC: WB6YRU  
Packet Network (BBS, forwarding): WB6YRU  
Code operating and installations: WB6EMR, K6PBQ  
DX (long distance/propagation): WB6EMR  
Emergency operating/preparedness: WA6QYS  
FM (VHF/UHF, repeaters): WA6VJY  
HF operating techniques (SSB, CW): WB6EMR, K6PBQ  
Classes/license upgrading: W6ACW  
Legal/FCC rules: WB6YRU  
SCCARA (club inner workings):  
K06HH, K6PBQ, WA6VJY, WB6YRU, WA6QYS  
Children's Discovery Museum, volunteer operator:  
K6PBQ  
EchoLink: KK6MX

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W6ACW, Ed Hajny, (408) 739-6105

WB6EMR, James D. Armstrong, Jr.,  
evening & msg: (408) 945-1202

KD6FJI, Lloyd DeVaughns,  
day: (408) 918-4635, evening: (408) 225-6769  
e-mail: lloyddevaughns@sbcglobal.net

K06HH, Don Hayden, (408) 867-4643  
packet: home BBS NOARY

KK6MX, Don Apte, (408) 629-0725  
e-mail: kk6mx@aol.com

KB6NP, Jon Dutra, day & msg (408) 428-2058  
evening (408) 867-8654  
packet: home BBS NOARY  
e-mail: jad@aol.com

K6PBQ, Don Village, (408) 263-2789

WA6QYS, Lou Steirer, (408) 241-7999  
packet: home BBS NOARY

WA6VJY, Stan Getsla, day: (408) 738-2888 x5929,  
evening & msg: (408) 275-0735

WB6YRU, Gary Mitchell, msg (408) 265-2336  
also (408) 269-2924  
packet: home BBS NOARY  
e-mail: wb6yru@aenet.net

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73 & May the FARCE be with you! Clinton, AB7RG.  
[ AB7RG @ KB7FRV.AZ.USA.NOAM ]

# SCCARA Membership Form for 2004

(Fill in name and address if there is no mailing label below; make corrections if the label is incorrect)

Name: \_\_\_\_\_ Call: \_\_\_\_\_ Class: E A G T+ T N

Address: \_\_\_\_\_ Licensed since (yr): \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ - \_\_\_\_\_ Licence Expiration Date (mo/yr): \_\_\_\_\_

Telephone: ( ) \_\_\_\_\_  New Member  I'm also an  
 Renewal  ARRL member

E-mail: \_\_\_\_\_ Packet: \_\_\_\_\_

For family memberships (at the same address), please fill out a separate form for each. Indicate the "primary member" for mailing purposes: \_\_\_\_\_

Annual membership dues are payable at the first of the year and expire the following December 31. New members joining on or after July 1, pay half the membership dues.

**Annual Membership dues:**  \$15 Individual  \$20 Family  \$5 Student (under 18)

Please send the repeater Auto-Dial/Auto-Patch codes (no charge, circle): ..... Yes  
WE MUST BE ABLE TO VERIFY YOUR AMATEUR RADIO LICENSE  
BEFORE ANY REPEATER CODES WILL BE SENT

Give this completed form (or copy) with payment to the Secretary or Treasurer at any meeting or mail to the return address below.

====> PLEASE DO NOT TEAR OR CUT FORM <====

**SANTA CLARA COUNTY  
AMATEUR RADIO ASSOCIATION**

PO BOX 6  
San Jose CA 95103-0006

Affiliate of the American Radio Relay League



**FIRST CLASS  
ADDRESS SERVICE REQUESTED**