

SCCARA-GRAM

Santa Clara County Amateur Radio Association

Volume 12, Number 3

March 1996

President's Prose

It seems like this is a great year to be a member of SCCARA. There are so many exciting things happening. Charles "Rusty" Epps W6OAT gave a really great talk on the 1996 World Radiosport Team Championships at our monthly meeting on February 12th. This has to be the most exciting ham radio event ever. It is to be a world wide contest In June 1996 and over 50 teams from some 30 or so countries will be participating. The best part of all is that it is happening right here in the bay area. It would be really great if SCCARA could help in some way. An event like this makes me proud to be a ham. It is an opportunity of a lifetime to participate in even some small way in an event of this magnitude. We are very grateful to Rusty W6OAT for letting us know about this exciting event.

It looks like there has been some small progress on putting a SCCARA club station at the Red Cross. We should probably not get our hopes up too much, in light of past relations with the Red Cross, but it does look like some minor things are starting to happen. There will be more to report soon and I will keep you posted.

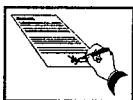
Plans for our 75th year celebration are progressing. Doc Gmelin W6ZRJ and Al Gaetano W6VZT are working on some great arrangements and we will have more details soon.

Field Day is coming up this summer. Dan Dietz WM6M has agreed to be Field Day chairman. Perhaps some other members would like to sign on to help. If so, get in touch with Dan.

On a personal note, my stepson Chris Taylor got his license in the mail. His call is KF6APP. Congratulations to Chris, good job.

Don't forget the March general meeting of SCCARA will be a dinner meeting. Hope to see you all there.

Hugh, KD6EFL



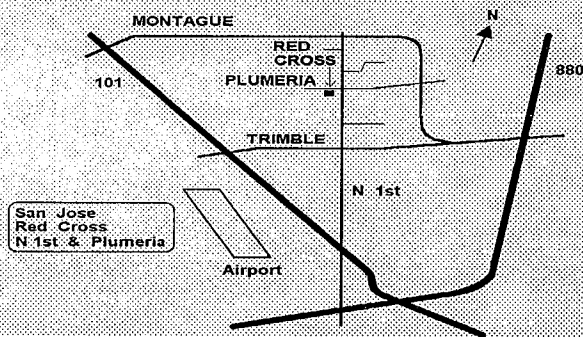
Calendar

- 3/9 Foothill Flea Market
- 3/11 SCCARA General Meeting--Dinner!
- 3/18 SCCARA Board Meeting--(San Jose Red Cross, 7:00p, all are welcome)
- 4/8 SCCARA General Meeting

Next General Meeting

Day: Monday, March 11, 1996
Time: 6:30 PM
Place: Home Town Buffet
Agenda: Buffet dinner. "Old Timer's Night," reflect on SCCARA's history. Also discussion of SCCARA's future and Amateur Radio in general.

Home Town Buffet, 3085 Meridian Ave, at Meridian and Hillsdale. We will be in the back area, (we'll have our own tables, but no separate room). Cost: \$7.32 per person, kids 55¢/year of age up to \$7.32, (plus tax). They stop serving at 8:30.



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.

SCCARA was formed as a general interest amateur radio club in 1921 and became a non-profit corporation in 1947. SCCARA is an affiliate and *Special Services Club* of the American Radio Relay League.

The club station, W6UW, is currently out of service.

Articles for the SCCARA-GRAM must be submitted to the editor a week before the last Monday of the month.

OFFICERS and DIRECTORS

President	Hugh Collis, KD6EFL	246-9374
Vice President	Don Apte, KK6MX	629-0725
Secretary	Lloyd DeVaughns, KD6FJI	225-6769
Treasurer	Rex Skiver, N6BUO	263-5277
Station Trustee	Stan Getsla, WA6VJY	275-0735
Director	Clark Murphy, KE6KXO	262-9334
Director	Imre Takacs, KD6MZM	251-9686
Director	George Brady, AB6OZ	729-9012
Director	Don Village, K6PBQ	263-2789
Director	Lou Steirer, WA6QYS	241-7999

STAFF

Editor	Gary Mitchell, WB6YRU	265-2336
Facilities	Don Village, K6PBQ	263-2789
Historian	Jean "Doc" Gmelin, W6ZRJ	973-8583
Mailman	Tony Sanchez, K6MOB	296-6676
Photographer	Bob Keller, KB6OHO	725-1034

COMMITTEES

Repeater	Keith Butts, KN6K	248-3849
Youth Group	George Brady, AB6OZ	729-9012

SCCARA REPEATERS

SCCARA owns and operates two repeaters under the call W6UU:

2 meter:	146.385 +	PL 114.8 (none for basic use)
70 cm:	442.425 +	PL 107.2

Phone patch capability is available with a small subscription fee. The two meter repeater is located in the Mt. Hamilton foothills, Alum Rock area. The 70 cm repeater is located at the Alexian Brothers Hospital, North of 280 and 101.

SCCARA NETS

On our two meter repeater: Mondays at 7:30 PM, (not the second monday--it's our meeting night). Net control: Joe WA6DXP.

On ten meters, 28.385 MHz USB, Thursdays at 8:00 PM. Net control: Wally KA6YMD.

Visitors welcome to join in on the SCCARA nets.

IMPORTANT TELEPHONE NUMBERS

SCCARA HOTLINE:	249-6909
ARRL LICENSE (VEC) HOTLINE:	984-8353



Rusty Epps, W6OAT

Charles "Rusty" Epps spoke at the Feb. meeting on World Radiosport Team Championships.

Thanks Rusty!



Meeting Minutes

General Meeting, Feb. 12, 1996



7:37 p.m. Meeting called to order by President Hugh, KD6EFL. Self introductions followed as is our custom.

Minutes of last months meeting approved on motion by Gary, WB6YRU.

The guest speaker was Rusty Epps, W6OAT. He talked about the World Radio Sport Team Championships (WRSTC). Rusty showed a video and discussed the event. He requested help to find suitable stations and places for the visiting participants to stay.

Gary, WB6YRU, said Doc, W6ZRJ, has turned over to him some old SCCARA records from the 40's through 60's.

Don, KK6MX, made a motion that we buy a banner which will indicate that SCCARA is 75 years old. Motion passed.

Business Meeting:

Mike, KC6LCJ, announced that SCCARA will be conducting a class starting March 7 and it will last 10 weeks.

Mike, K8ERL, announced the death of Nick Marshall, W6OLO, who was one of the people was a major force in

AMSAT and other amateur organizations.

George, AA6OZ, announced that one of his students earned her license. Cynthia, KF6AXP, age 16. Hugh's step son Christopher KF6APP, AGE 11, also earned his ham license.

Rex, N6BUO, gave the treasurers report.

Don, KK6MX, announced that next months meeting will be a dinner meeting.

Hugh, KD6EFL, said that the next board meeting will be held one week later, forth monday in February, because the Red Cross will be closed on February 19, for President's Day.

Gary, WB6YRU, wants articles for SCCARA-GRAM.

New Business:

Gary, WB6YRU, noted SCCARA approved a measure to donate a radio to N0ARY BBS. The radio we were to get is no longer available and the next model will not be out for a couple of months. The radio will be purchased when it is available.

9:30 PM Meeting adjourned.

Lloyd, KD6FJI, Secretary

Board Meeting, Feb. 19, 1996



[Editor's note: Because the 19th is President's Day, this meeting was moved to Feb. 26. Those minutes will be in the next issue.]

Introduction To Packet Radio

by
Larry Kenney, WB9LOZ
Part 10

In this and the next part of the series we're going to take an in depth look at the packet node network. In part 4 I explained how to use the network for connecting to another station. Now we'll look at the other features a node offers.

Using the packet node network can make your operating time on packet more enjoyable and it can greatly expand the area that you can reach. The network of NET/ROM, TheNet, G8BPQ and KAM nodes is expanding very quickly and now covers most of the country. New nodes are showing up almost daily. Thanks to all of these stations and the interconnecting links, you can now connect to stations in many distant places using a low powered 2 meter rig. Some nodes are set up for cross-banding, and with the introduction of nodes on 10 meter FM, there's the possibility of working a station just about anywhere.

A packet node, in most cases, is still set up for digipeater operation, so you can still use it as a regular digipeater, but for most of your connections you'll want to use the node features. Why? When using a string of digipeaters your packets have to reach their destination parity correct and the receiving TNC has to return an acknowledgement (ack) to your TNC for each packet to be accepted. As you add more digipeaters to the path, the chances of each packet being accepted becomes less and less. Other stations on the frequencies being used and noise along the route can be the cause of many retries. When using a node, however, your packets no longer have to reach their destination before the acknowledgements are returned to your TNC. Each node acknowledges your packet as its sent along the way toward its destination.

If you've been monitoring lately, you might have seen the nodes in action. You might have wondered why they were sending all of those weird symbols like @fx/< ~|. What you're seeing is the nodes communicating with each other and updating their node lists. You also might have noted call signs with high numbered SSIDs, such as WB9LOZ-14, WA6DDM-15, W6PW-12, etc. The nodes change the SSIDs of all stations that originate packets so that the call signs sent via the network are not the same as those sent directly. If you were to use a node to connect to another station in the local area, there's the possibility of your packets being received by this station both from you directly and from the node. If the call sign through the node wasn't changed, the TNCs involved would be totally confused as it would appear that two stations were connecting using the same call sign. The node automatically changes the SSID using the formula 15-N, where N is your usual SSID. A call with -0 becomes -15, a -1 becomes -14, -2 becomes -13, etc.

The node network is very simple to use. As explained in part 4, to use the node network you first connect to a local node. It should be one where you can connect to it direct with good signal strength. Once you've connected, you then have several options -- connect to another station within range of the node, connect to another node, connect to an associated BBS, obtain a list of the nodes that are available, or check route and user status. On NET/ROM and TheNet nodes you can also answer or call CQ.

There are several commands available on your local node. All have CONNECT, NODES, ROUTES and USERS, and depending on the type of node you're using, you might also find the BBS, BYE, CQ, INFO, MHEARD, PARMS or PORTS commands available.

THE PACKET NODE COMMANDS:

CONNECT: The CONNECT command (which can be abbreviated as C) is used just like you use the CONNECT command with your TNC. To connect to another local station using a node, first connect to the node and then enter C followed by the call sign of the station you want to reach. To connect to another node you can use either the call sign or the alias. For example, to connect to the BERKLY:WB9LOZ-2 node you can use C WB9LOZ-2 or you can use the alias, C BERKLY. Either one will work. Review part 4 of this series for more information on making connections via the node network.

There's a special consideration when making connections from a node using the G8BPQ Packet Switch software. Since these nodes are capable of having several different frequencies operating from the one node, you have to indicate which frequency port you want to make your connection on. The PORTS command, abbreviated P, will give you a list of the ports available, such as this:

SF:WB9LOZ-1} Ports:

1 144.99 MHz

2 223.56 MHz

3 441.50 MHz

You then insert the port number between the C and the call sign, such as C 1 WB6QVU, to indicate which frequency you want to use, in this case the port 1 frequency of 144.99 MHz.

NODES COMMAND: The nodes command can be abbreviated as N and when entered without any other information will give you a listing of other nodes that can be worked from the node you're using. The list contains both the alias and the call sign of each node. The alias might give you a hint of a node's location, but you'll need a list of the local nodes to be able to tell for sure where each node is located. (You'll probably find node lists in the file section of your local BBS.) As you move from node to node, the list of nodes you find will vary in length and will contain different call signs since all of the frequencies are not linked.

The NODES command has a feature that gives you a simple way to find out how easy it will be to connect to another node in the list. All you need to do is enter N followed by either the alias or call sign of the node that you want to reach, such as: N FRESNO or N W6ZFN-2. You'll receive a report showing up to three routes to the node you asked about, how good these routes are and how up to date the information is. If there is no information available, you will receive either "Not found" or

the complete node list, depending on the type of node or switch you're using.

Let's take a look at a typical report you would receive after entering N FRESNO. If you were connected to a NET/ROM or TheNet node the report would look like this:

SFW:W6PW-1} Routes to: FRESNO:W6ZFN-2

105 6 0 WB9LOZ-1

78 6 0 W6PW-6

61 5 0 WA8DRZ-7

If you were connected to a G8BPQ packet switch you would see one less column in the report and it would look like this:

SF:WB9LOZ-1} Routes to: FRESNO:W6ZFN-2

> 126 6 W6PW-10

78 6 W6PW-6

60 4 W6PW-1

Each line is a route to the node you asked about. The symbol > indicates a route that's in use. The first number is the quality of the route. 255 is the best possible quality and means a direct connect via hard wire to a coexisting node at the same site; zero is the worst, and means that the route is locked out. 192 is about the best over the air quality you'll find, and it usually means that the node is only one hop away. If you see a quality of less than 80, you'll probably have a difficult time getting any information through via that route. The second number is the one that tells you how up to date the information is; it's called the obsolescence count. This number is a 6 when the information for the route is less than an hour old. For each hour that an update on the route is not received, this number is decreased by one. A 5 means the information is an hour old, a 4 means that it's two hours old, and so on. The next number, shown only on NET/ROM and TheNet nodes, indicates the type of port. A 0 is an HDLC port; a 1 is an RS-232 port. You don't need to pay any attention to this figure. The call sign is that of the neighboring node that's next in line on the route.

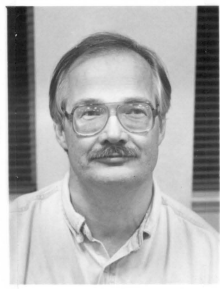
This quick check on a node that you want to reach can save you a lot of time. You'll know immediately whether or not the node is available, and if it is, how good the available routes are to it. You then won't have to spend time trying to connect to a node that isn't available or is of poor quality.

If you find that there's a decent route to the node or switch you want to reach, it's normally best to let the network make the connection for you. Simply enter a connect to the alias or call sign you want rather than connecting to each individual node along the route yourself.

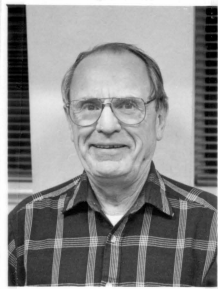
If a route exists but the quality is not very good, you might want to connect to the neighboring node shown for the best route, then do another quality check, repeating this procedure until you find a route with decent quality. You can actually get through to some distant nodes using this method if you have the time and patience to work on it.

New Members

SCCARA would like to welcome to the club:



Carl, WE6ZXU



John, KB6RSB

Do you have any questions, ideas, or comments about SCCARA or any activities? Please don't hesitate to ask. There is a list of club "higher-ups" in each SCCARA-GRAM.

We would like to extend a similar welcome to all new SCCARA members. Please see the club photographer, Bob Keller KB6OHO, at any meeting.

measurements on a picture tube. Although the display (a graph of voltage over time) shows on the face of the screen, all of the action takes place at the other end, where an electron gun which shoots a stream of electrons at the phosphorus coating on the glass face. When electrons hit the phosphorus, their energy causes the phosphorus coating to glow.

If there were nothing else, you would have a machine which showed one bright, immobile dot in the middle of the screen. In order to trace a 2-D graph on the display, there must be a way to aim the electron stream. There are two pairs of deflection plates mounted in the neck of the picture tube. When voltage is applied to these plates, the resulting electrostatic fields deflect the electron stream, moving the dot on the screen face.

One pair of plates is aligned so as to deflect the beam vertically, on the y-axis. The other pair is rotated 90 degrees, so that the electron beam can be deflected horizontally, on the x-axis. Each pair of plates have their own amplifier, so that a small signal applied to the 'scope's input results in enough voltage on the plates to noticeably redirect the electron beam. The higher the voltage, the greater the beam deflection, and the wider the graph.

The most common 'scope configuration includes an sawtooth oscillator which generates a signal used to drive the horizontal (x-axis) sweep of the scope. The electron beam is swept across the face of the screen horizontally, in a straight line, at a linear speed. Simultaneously, the signal to be measured is applied to the vertical deflection circuit, causing the electron beam to be deflected on the y-axis. The resultant combination of x- and y-axis deflection paints a graph on the face of the tube, with the vertical component calibrated in volts and the horizontal component a function of frequency.

The frequency of the oscillator, which controls the number of horizontal sweeps per second, is variable and has a "trigger" (display locking) circuit so that the visual display can be frozen on the screen. Events which occur at a very low frequency are displayed at a low horizontal scan rate. A good example is the cardiac monitor which you can see any day on tv shows - one horizontal sweep of the electron beam takes long enough to display several heartbeats. At higher frequencies and assuming a very repetitive signal pattern, a wave-form is displayed. In practice, scopes have switch-selected multipliers to set frequency and voltage ranges.

Of course, there are variations of the traditional configuration. Many scopes allow external signal input to both x- and y-axis amplifiers. This feature allows display of closed (Lissajous) loops, or utilization of external sweep signals. It is fun to play with an oscilloscope to see what wave-forms can be displayed. Placing a battery across the input causes the display line to jump up or down, depending on polarity. If there is a capacitor in series with the input, the displayed line will return to zero as the capacitor charges. If there is no capacitor, the line will remain high or low.

When the 'scope is set to monitor the output of a CW

Packet Pieces

Downloaded from the packet network:

=====

Date: 19 Nov 95 11:42
From: AA2AD@KB2OBB
To: TEK TIP@ALLUS
Subject: HOW OSCILLOSCOPES WORK

TEKTIP #4

TEKTIPS #1 - #3 have dealt with using an analog multimeter to check components. Let's shift gears a little, and talk about how oscilloscopes work, and what they are used for.

An oscilloscope is quite simple in concept; it is little more than a voltmeter which displays voltage

transmitter, there are bursts of r.f. sine wave corresponding to closure of the keying circuit. On an amplitude modulated (AM) transmitter, the technician views the RF sine carrier and sees amplitude variations of the modulation as changes in the height of the graph. As expected, SSB modulation looks similar, except that there is no RF signal when there is no modulation.

The most important improvement of 'scopes was the added capability to view two (or more) different graphs on the same screen, called "dual trace" (or multiple trace). Dual trace 'scopes have an input for each individual channel, allowing the technician to either compare signals from two different circuits, or compare the input of a stage with its output. In the latter case, for example, signal distortion (intentional or otherwise) in the stage will make it impossible to exactly superimpose one graph on the other: differences in the wave-forms cause changes beyond simple amplitude changes. Other 'scope improvements increased the maximum frequency at which the equipment will function and added the capability to capture and store graphs for future reference.

If you want to expand your service capability and already have hand tools and a good multimeter, your next acquisition should be an oscilloscope.

"You can't fix it if you don't take the case off!"

73, Peter AA2AD@KB2OBB.#WNY.NY.USA.NOAM

=====
Date: 17 Feb 96 16:03
From: N9XLU@N9VXS
To: HUMOR@ALLUS
Subject: A SCIENTIST

From: N9XLU@N9VXS.#NCIN.IN.USA.NOAM
To : HUMOR@ALLUS

A scientist invented a salve that could bring inanimate objects to life and decided to try it out on the statue of a great general. Sure enough, the statue gave a quiver and a moment later, the general, creaking a bit in the joints, climbed down from his pedestal.

"I have given back your life!" Exulted the scientist. "Tell me general, what is the first thing you're going to do?"

"That's easy," rasped the general, ripping his gun from its holster. "I'm going to shoot about two million pigeons!"

=====
Keep smiling! © 73, Gary WB6YRU

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 ask the club secretary for an Elmer survey form and fill it out.

Antennas, feed-lines, tuners:

WB6EMR, AC6FU, K6PBQ, W6PHF, K6RQ, WB6YRU

Lightning protection, grounding: W6PHF, WB6YRU

Station set-up, equipment: AC6FU, K6PBQ, W6PHF, K6RQ

TVI/RFI: W6PHF, WB6YRU

Homebrew projects, construction: AC6FU, KD6FJI, W6PHF, WB6YRU

Computers: KB6NP; IBM PC: WN6U, WB6YRU

Packet Network (BBS, forwarding): WB6YRU

Other digital modes (AMTOR, RTTY): WN6U

Code operating and installations:

WB6EMR, AC6FU, K6PBQ, W6PHF, K6RQ

Contesting & techniques: W6PHF, K6RQ

DX (long distance/propagation): W6PHF, WB6EMR, K6RQ

Emergency operating/preparedness: W6PHF, WA6QYS

FM (VHF/UHF, repeaters): W6PHF, WA6VJY

HF operating techniques (SSB, CW):

WB6EMR, AC6FU, K6PBQ, W6PHF, K6RQ

Mobile operating: W6PHF, K6RQ, WN6U

NTS & traffic handling: W6PHF

QRP (HF low power, all modes): W6PHF, WN6U

TEN-TEN (10 M only): AC6FU

Classes/license upgrading: W6ACW, AC6FU, W6PHF

Legal/FCC rules: WB6YRU

SCCARA (club inner workings):

K06HH, K6PBQ, WA6VJY, WB6YRU, WA6QYS

Math applications: AC6FU

Children's Discovery Museum, volunteer operator: K6PBQ

W6ACW, Ed Hajny, (408) 739-6105

WB6EMR, James D. Armstrong, Jr.,

day: (408) 995-0621, evening & msg: (408) 945-1202

KD6FJI, Lloyd DeV Vaughns,

day: (408) 299-8933, evening: (408) 225-6769

packet: home BBS KB6MER

AC6FU, Jack L. Ruckman, (408) 379-4846

K06HH, Don Hayden, (408) 867-4643

packet: home BBS NOARY

KB6NP, Jon Dutra, day & msg (408) 428-2058

evening (408) 867-8654

packet: home BBS NOARY

internet: jad@aol.com

K6PBQ, Don Village, (408) 263-2789

W6PHF, David Palmer, (415) 948-9527

WA6QYS, Lou Steirer, (408) 241-7999

packet: home BBS NOARY

K6RQ, Frank Glass, (408) 356-1026

WN6U, Doug Eaton, (408) 377-3736
packet: home BBS NOARY
internet: deaton1@ix.netcom.com

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

Newsletter Notes

As you can see from the content of this newsletter (and previous issues), most of it comes from outside the club. I really feel this makes it more of a "generic" newsletter rather than *the SCCARA-GRAM*.

There are many amateurs in SCCARA who have

been active in radio communications for (not to put too fine of a point on it) a *considerable* number of years. Please consider making *your* SCCARA-GRAM in particular and the club in general a bit better. Contribute an article once in a while. Almost anything related to amateur radio, technical or not, is most welcome and needed.

Give us a laugh, an education, or just something to think about. Here are just a few ideas... Product reviews: Have you purchased something and discovered you'd made a big mistake or the opposite? Station installation: Have you discovered a nifty way of setting something up in your station? Technical: Do you know how a SWR meter works or exactly why a 5/8 wave antenna works better than a 1/4 wave? Operation: Are you particularly good at snagging those tough DX stations? Anecdotal: A funny thing happened when I tried so-&-so's idea to cure a noise problem in my mobil... Whatever it may be, how about sharing it with the rest of us?

73, Gary WB6YRU, editor

SCCARA Amateur Radio Class

Start Date: Thursday 03/07/96

Duration: ten weeks

Time: 6:30 - 7:30PM Code
7:30 - 9:00PM Theory

Place: Santa Clara Adult Ed. Center
1840 Benton St
Santa Clara CA 95050

Cost: The class is free. The book
Now You're Talking is
required. It will be available
at class start for about \$20.

For more info: Call Doug WN6U at 408 377-3736
or Mike KB6LCJ at 408 243-6745

Our class will prepare you for the Novice, Tech. and Tech. Plus license level. The classroom environment offers an excellent opportunity to learn the skills needed to become a HAM. Classes are composed of instruction, hands on demos, and videos. Mini tests are administered to help you chart your progress. There are no prerequisites for this class (other than your interest). Amateur radio operators come from all walks of life and all ages. Persons with disabilities are welcome. Come and join us for a fun class where you can earn your Amateur Radio license.

Interested? Fill out this form and send it in... That's all there is to it!

Name _____ Phone _____

Street _____ City _____ Zip _____

Fill out this form (or a copy) and give it to the Secretary at any meeting or mail to:
SCCARA PO Box 6 San Jose CA 95103-0006

ARRL Pacific Division Update

February 1996

One new ham's view of ARRL

The following message exchange between Roger Cravens, KE4YQZ, and ARRL President Rod Stafford, KB6ZV, occurred after the ARRL Board meeting on Jan. 19, 20, 1996:

Dear Mr. Stafford,

I am a new ham (KE4YQZ) and until May, 1995, I had no idea what ARRL did, but the magazine looked interesting so I joined.

Based on my extensive reading of QST, I couldn't have made a better decision if I had tried. I simply wanted to drop a quick message thanking ARRL, you, and members for the outstanding job they do in furthering the cause of ham radio. The interface with Congress and making recommendations to the FCC are exceptionally important and I trust this will continue.

Thank you and ARRL for being here for us 'New Guys' on the block, and please don't think that we don't notice. We do! Those that don't, should, and I remind them every chance I get to join ARRL.

Again, many thanks.

Roger Cravens, KE4YQZ

Dear Roger,

Thanks very much for your note about the ARRL. I have just this hour returned from an ARRL Board of Directors meeting. One of the topics discussed at the meeting was the fact that a very low percentage of new licensees join the ARRL. Personally, I think part of that is due to the fact that it takes a little while before a new ham understands the value of being a member of the national society and supporting the work we do. I wish we could get that message over to new hams a bit better. I am glad you "heard the message."

If you don't mind, I'm going to share your message with the other officers and directors of the ARRL. We are all volunteers and don't hear enough from new hams like yourself about your reaction to what the ARRL is doing.

Good luck in amateur radio. It's a great hobby and you can spend a lot of time helping people through public service (emergency communications and other public service events) while having a great time.

73, Rod Stafford, KB6ZV
President, American Radio Relay League

ARRL Files to Clarify and Modify PRB-1

The ARRL wants the FCC to take additional steps to compel state and local governments to make reasonable accommodation for Amateur Radio under PRB-1 and apply the least restrictive means to regulate amateur antennas and activity. In a Petition for Rule Making filed February 7, 1996, the League calls on the FCC to amend Section 97.15(e) to say that any state or local ordinances restricting ham radio antennas to heights below 70 feet would be presumed unreasonable, unless the state or local authority could show its restrictions support a clearly defined health, safety or aesthetic objective. State and local governments also could not impose substantial application costs on amateur service licensees.

The League also wants the FCC to acknowledge that it has an interest in the effective performance of Amateur Radio stations in areas regulated by deed restrictions or restrictive covenants rather than by local zoning ordinances.

The League says clarifying the preemption policy (PRB-1) would help guide municipalities to enact provisions that make fair accommodation for amateurs and avoid highly divisive litigation between hams and localities.

QST will carry more details in the April 1996 issue.

Telecommunications Reform

Telecommunications reform continues to be a hot topic in Washington DC. In early February, both Houses of Congress passed a conference bill and President Clinton signed the bill into law.

From all the information available it appears that the new law has little direct impact on the Amateur Radio Service with the exception of the items noted below. It should be noted, however, that the spectrum allocation aspect of the law was removed and will be brought up later in the Spring.

The relatively immediate direct impact on Amateur Radio that appears is in the Titles IV and VII.

Title IV - Regulatory Reform - has somewhat more effect on Amateur Radio than did the draft bill that disappeared into the conference rabbit hole. Instead of simply eliminating the so-called firewall between VEs and publishers (as we had expected), it now completely eliminates the conflict-of-interest provision, even for manufacturers. This is the result of an FCC request that, we are told, came up late in conference, but had been floating around since last May. Also eliminated is the statutory requirement for certification and record keeping by VEs and VECs who retain reimbursement of out of pocket costs.

Some early interpretations of this title are as follows:

1) In removing the "conflict of interest" provision, the legislation permits employees of manufacturers to become VEs;

2) the legislation permits ARRL (and of course others) to distribute literature at exam sessions. FCC confirms that this was FCC's intent;

3) the biggest (and most immediate) direct benefit to our VEs is the removal of the record keeping requirements.

Title VII - Miscellaneous Provisions - contains at least one potential "sleeper" which may have an impact on Amateur Radio -- It mandates that FCC complete ET Docket 93-62 to "prescribe and make effective rules regarding the environmental effects of radio frequency emissions..." within 180 days after passage of the law. This docket refers to the ANSI 1992 standard currently before EPA and FCC. There are a number of possible outcomes ranging from Amateur Radio being exempt to each of us having to file an Environmental Impact Statement for each transmitter, power level and frequency we use. Keep tuned for more on this one.

Of course, these changes don't become applicable until FCC rules change. FCC has been given 180 days to implement these and many other changes. The ARRL Washington Team continues to monitor these developments and be active on our behalf. See DC Currents in QST for additional information.

Spectrum Protection Battles Continue

The 2300 - 2310 MHz battle is probably coming soon. There is a proposal by the NTIA to make this segment available to Land Mobile Services, but this would require "auction authority" from Congress.

NTIA has also written a letter to FCC urging FCC to issue an Notice of Proposed Rule Making for the Apple Petition which involves a sharing of the frequency allocation in the ham band at 5.7 GHz. See earlier Updates for details.

Vanity "Preferred" Call Signs - Forms Available; Start Date Delayed Again

ARRL has just learned that the FCC may delay until mid-1996 the announcement of when it plans to open the first gate or gates of the vanity call sign program. A Commission spokesman says the FCC first wants to deal with remaining Petitions for Reconsideration it has received. The FCC had been expected to announce opening dates early this year.

FCC 610-V - Amateur Station Vanity Call Sign Request - is now available, although they may not be filed until the first "gate" has been officially opened. The ARRL has mailed 9,000 copies of Form 610-V (along with FCC Form 1070-V and an Amateur Station Vanity Call Sign System Fact Sheet PR-5000, Number 206-V) in response to previous requests. If you requested one from the ARRL and have not yet received it, call 860-594-0300 or e-mail to vec@arrl.org. If you have not yet requested one, write to ARRL-VEC, 225 Main St Newington CT 06111. Please include an SASE.

Form 610-V also is available from the FCC via the Internet at <http://www.fcc.gov/Forms/Form610V> or by anonymous ftp at <ftp://ftp.fcc.gov/pub/Forms/Form610V/>, or by fax at 202-418-0177. Ask for Form 006108.

The FCC Forms Distribution Center should be accepting orders now. Call 800-418-3676. Call the FCC Consumer Assistance Branch at 800-322-1117 if you have any additional questions.

Antennas, Towers and Ordinances

The negotiations over these ordinances continue in Fresno, Sonoma, and Napa counties. Fresno appears to be a long term project into late 1996; Sonoma meetings continue in front of the Board of Supervisors; Napa also continues in front of the Board of Supervisors meeting. It appears that progress is being made, but slowly. Good luck!

There is an indication that Contra Costa County will join in this effort to try to regulate cellular towers -- unfortunately, amateur radio has been caught up in the discussions.

Please forward copies of all antenna, tower and related ordinances to Phil Kane, N6SP, who is collecting this data for the Pacific Division. Phil can be reached at PO Box 280192, San Francisco CA 94128-0192, (415) 369-7373 or commmlaw@netcom.com.

Coming Events

- Livermore Swap Meet - 1st Sunday of each month at Las Positas College in Livermore, CA, 7 AM to Noon, all year. Talk in 147.045 from west, 145.35 from the east. Contact Noel Anklam, KC6QZK, (510) 447-3857 eves.
- Foothill Flea Market - 2nd Saturday of each month from March through September at Foothill College, Los Altos CA.
- International DX Convention will be held in Visalia at the Airport Holiday Inn, April 19 - 21, 1996. Contact Don Bostrom, N6IC, (H) (818) 784-2590 or (W) (310) 334-8717 for details.
- The Valley of the Moon Amateur Radio Club, WB6DWY, is holding its annual ARRL Hamfest Sunday, April 21, 1996, from 8 a.m. to 3 p.m. at the Sonoma Veteran's Memorial Building, 126 First Street West, in Sonoma, California. Talk-in will be on 145.35, -600, PL 88.5. For more information call Darrel, WD6BOR, at 707-996-4494.

Brad Wyatt, K6WR
Director, ARRL Pacific Division

18400 Overlook Rd. #5
Los Gatos CA 95030-5850
(408) 395-2501 (voice & fax)

Packet: K6WR @ N0ARY.#NOCAL.CA.USA.NOAM
Internet: k6wr@arrl.org



S.C.C.A.R.A. Membership Form for 1996

(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: _____

Telephone: () _____ ☐ New Member ☐ I'm also an
☐ Renewal ARRL member

For family memberships (at the same address), please list other name(s) and call(s):

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 (and half auto-patch fee).

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

I want _____ SCCARA badges @ \$3 ea. Badge name & call: _____

Please send the repeater Auto-Dial codes (no charge, circle): Yes

Please send the repeater Auto-Patch codes (includes Auto-Dial), \$10.00 Yes

WE MUST BE ABLE TO VERIFY YOUR AMATEUR LICENSE

BEFORE ANY REPEATER CODES WILL BE SENT

TOTAL: _____

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/CUT ==

SANTA CLARA COUNTY
AMATEUR RADIO ASSOCIATION

PO BOX 6
San Jose CA 95103-0006

Affiliate of the American Radio Relay League

NONPROFIT ORG. US POSTAGE PAID SAN JOSE CA PERMIT NO 3318

FORWARD & ADDRESS CORRECTION

TIME DATED BULLETIN