# SCCARA-GRAM

Santa Clara County Amateur Radio Association

Volume 11, Number 9

September 1995

## President's Prose

Sunday August 20, 1995 Was Great! The sweet aroma of our SCCARA "Pick Nick" was unbelievable. To the ones who missed this great event, I must say sorry! The smell of juicy steaks, jumbo shrimp, BBQ ribs, juicy hamburgers, and hot-dogs still make my mouth water. Thanks to all who helped out also many thanks to all who came and made it a great success, and all for FREE! THANKS EVERYBODY! (By the way, the smell of steaks, shrimp, and BBQ ribs were from the group next to us on another grill! But, we did enjoy our hot dogs and hamburgers.. HI HI.) A special Thanks to all those that brought extra stuff for us to eat, especially Pat Itatani KC6TDK. Pat got up early Sunday morning, picked some of his home grown sweet corn, and cooked it for our picnic. A whole box of it! About four dozen ears, and it was still HOT! Thanks again Pat.

Queen Elizabeth awarded Ron Broadbent, G3AAJ The order of the British Empire. This award was presented in a ceremony at Buckingham Palace in London "for services to the amateur radio movement and the amateur satellite service." This is only the second time a member of the amateur radio community received such an honor by the Queen. Previous honor was to Roy Stevens, G2BVN who was IARU General Secretary.

G3AAJ, Ron, is a good friend of mine. The last time Ron was in the area, several years ago we had lunch at Chilli's Restaurant in Santa Clara. Brad Wyatt K6WR, our ARRL Pacific Director and Ross Forbes WB6GFJ President of Project Oscar at that time were also there with our friend. Ron G3AAJ is presently Honorable Secretary, Treasurer, & Editor of AMSAT-UK. He also runs the Sunday and Monday 80 meter weekly nets. In January of this year he was made a Life Vice President of the Radio Society of Great Britain. Another great supporter of Ham radio. Congratulations and best of luck Ron.

What a Hobby! Those who get a license and never get on HF or Satellites are missing a lot. HT operation and emergency operations are great, but you must remember there is a whole lot of other stuff you are missing. If you can't get on at least read about it. Remember our club is here to help, if you are interested. You say you do not have room? We have members that live in apartments and condos that are on these other modes, YOU CAN DO IT TO, if you want to.

# Calendar

9/9 Foothill Electronic Flea Market

9/11 SCCARA General Meeting--Dinner!

9/25 SCCARA Board Meeting--(San Jose Red Cross, 7:00p, all are welcome)

10/9 SCCARA General Meeting

10/20-22 Pacificon '95

### **Next General Meeting**

Day: Monday, September 11, 1995

<u>Time:</u> 6 PM, serve at 6:30 PM <u>Place:</u> United Way Building

Agenda: Lasagna dinner meeting! \$5 per person, kids free. Videos

on ATV, Hams in Space, etc.

The United Way Building, 1922 The Alameda, San Jose, (about one mile South West from the San Jose Air Port), From 1-880: take the Alameda turn-off going South, then turn left immediately on McKendrie. From the South: go North on the Alameda, ½ block past Hedding turn right on McKendrie.

As soon as you turn onto McKendrie (heading East), turn right into the parking lot just behind the small church on the corner. Park at the far end of the lot. The main entrance is up the steps at the South East corner of the building. There is wheelchair access at another door at the North East corner, but for security reasons, only one door is open at a time-someone will have to notify the guard if you need wheelchair access. Also, try not to be too late--the doors may be closed with nobody around to let you in

The San Jose Red Cross: South-West corner of North 1<sup>st</sup> and Plumeria Dr. Plumeria is two lights North of Trimble and South of Montague Expressway. From the South on I-880, take the 1<sup>st</sup> Street exit, go North. From the North on I-880, take the Montague (Trimble) exit, go West to Trimble then turn right (North) on 1<sup>st</sup>, (if you miss Trimble, just follow Montague then turn left (South) on 1<sup>st</sup>). From the South on US-101, take the Trimble (De La Cruz) exit going North, then turn left (North) on 1<sup>st</sup>. From the North on US-101, take the Montague exit going North/West, then turn right (South) on 1<sup>st</sup>. The main entrance faces Plumeria (North). Board meetings are open to all.

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 by the last Monday of the month.

#### OFFICERS and DIRECTORS

President	Mike Marneris, K8ERL	243-9042
Vice President	Hugh Collis, KD6EFL	246-9374
Secretary	Gary Mitchell, WB6YRU	265-2336
Treasurer	Rex Skiver, N6BUO	263-5277
Station Trustee	Stan Getsla, WA6VJY	275-0735
Director	Don Apte, KK6MX	629-0725
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
Good & Welfare	Ed Rawlinson, WD6CHD	264-2988
	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:

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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	HOTLI	VE:			249-6909
ARRL CI	LASS HO	TLIN	3:		971-1424
ARRL LI	CENSE (	VEC)	HOTL	INE:	984-8353

Are you inspired? Come to your SCCARA meeting. If you need a ride, call someone near you. If Norm can make it, no one has an excuse... tell 'em Norm! C U there.

73, Mike Marneris K8ERL



# Good & Welfare

WEDDING BELLS -- In May 1994, this column announced the engagement of Jack Russell, WA6IER and XYL Terry. At the SCCARA picnic last Sunday they showed the matching engagement rings have been supplemented with wedding rings. The deed was accomplished last April. The new couple has taken up residence in the bride's Alameda condo. where Jack is trying to figure how to get his gear working. SCCARA wishes them a long and happy marriage!

HOME FROM THE HOSPITAL -- Long time member John Tanner, K6EJF, had a disconcerting experience while driving home from Reno. Suspecting his extreme discomfort might be heart related, he went directly to the hospital. Sure enough, he had a full blown heart attack and they kept him for five days. He was lucky--he's home now and OK'd to drive and pick up where he left off, as of last meeting. Slow down John! It's not time yet! Stick around, we need you.

Please, if you have news related to any SCCARA member that should be reported, phone me at (408)264-2988, message machine on line.

de WD6CHD, Ed AKA "Chile Hot Dog"

# Lasagna Dinner for September Meeting

The September general meeting of SCCARA will be a dinner meeting held at the United Way Building on The Alameda. Doors open at 6 PM and we plan to start serving around 6:30. The menu will be lasagna, salad, garlic bread, and desert. The charge will be \$5.00 per person, as in the past; however, to make it a little easier on families, kids (under 18) are free. So, please plan to attend and bring your spouse and your children. Remember, mark your calendar for Monday, September 11<sup>th</sup>, for the SCCARA lasagna dinner, and give yourself a night off from cooking and support your club as well.

Hugh KD6EFL

## Thank You

#### GOOD JOB DON

A great job was done by Don Hayden KO6HH who came through at the last minute to speak at the August SCCARA meeting. I had no speaker lined up for the meeting and it looked like we might have to have a video night, but Don came through. His subject was radio frequency and microwave molecular spectroscopy. It was very interesting and Don has an excellent command of the subject. Every one there enjoyed the talk a lot. Again, a big thank you to Don.

Hugh KD6EFL



# **Meeting Minutes**

## General Meeting, Aug. 14, 1995



Meeting called to order 7:40 PM, Mike K8ERL presiding. 25 in attendance.

Self introductions.

WA6QYS: Thanks to all the SCCARA members who helped SVECS host the last flea market.

KO6HH: John Cole passed away. SCCARA is helping his estate by selling his amateur equipment.

#### SPEAKER:

Don KO6HH gave an informative talk on RF and microwave spectroscopy. He mentioned the various methods, set-ups and frequencies used. The absorption data provides information on the structure, size, and shape of molecules.

8:48 Recess. 8:59 Resumed

VP, KD6EFL: Aug. 20 is our picnic. Location--Mary Gomez Park. There will be no coordination on pot-luck items. The next general meeting will be a lasagna dinner meeting.

Repeater, KN6K: Nothing new. We still need to talk to Stan to finalize a repeater code policy, (probably only need to verify licenses--license copy would be required only if needed).

Youth Group, AB6OZ: The General class will be divided into two parts to make time for summer camp.

Field Day, KO6HH: (final report of Field Day committee 1995.) We weren't able to get our report in on time, so we won't be listed in QST.

Pres. K8ERL: The club locker needs to be more organized. Some of the stuff belongs to the club station. Discussion followed about getting the club station into the Red Cross radio room -- not much new.

Sec. WB6YRU: We have 145 dues-paying members, 28 "honor" members. Thanks to Doug WN6U who has repaired our computers. New members joining after July 1 pay half the dues--the board decided to do the same thing for the auto-patch fee. Individual members pay \$10 for auto-patch, family memberships pay \$15; the board voted to drop the auto-patch fee to \$10 for family memberships.

Editor, WB6YRU: The updated roster went out with the August issue. There is also a more detailed roster printed up separately.

#### **NEW BUSINESS**

K8ERL: The club could/should help out the N0ARY packet BBS. KD6EFL: Motion to have WB6YRU investigate the possibility/need for a 9600 baud port (or any other upgrade) at N0ARY BBS. Passed unanimously.

WA6QYS: Are we going to have another license class? KB6LCJ took care of that in the past. We need to sign up for space soon (at the Adult Ed. center) if we are going to do it. Lou (QYS) will contact Mike (LCJ) about this.

9:54 PM Adjourned.

## Board Meeting, Aug. 28, 1995



Meeting called to order at 7:28 PM, Mike K8ERL presiding. Attendance: Mike K8ERL, Hugh KD6EFL, Imre KD6MZM, George AB6OZ, Don K6PBQ, Lou WA6QYS, Gary WB6YRU, and Rex N6BUO.

KD6MZM: Move to accept minutes as published. Passed unanimously.

Youth Group, AB6OZ: There will be a Novice/Tech class starting in Sept. or Oct. for youth.

7:31 PM recess for net check-in, 7:35 resume.

WA6QYS: About SCCARA holding its regular class... KB6LCJ said it's up to the board whether to have another class and the board should line up people to be teachers. KD6EFL said WN6U would be willing to help. K8ERL will also help. Lou will sign us up for a room at the Adult Ed.

Center for Thursdays, 6:30-9:30 PM starting late Sept. This will be discussed at the next general meeting.

VP, KD6EFL: The picnic went very well. It cost us \$94.66. The general meeting Sept. 11 will be a lasagna dinner meeting. We will probably have a couple of videos on amateur radio. The cost is \$5 per person. Motion for kids (under 18) to be free. Passed unanimously.

The raffle is pretty much breaking even thanks to some nice donations from members, (the most prolific donator lately has been Bill KE6OUG).

Treas. N6BUO: Treasury currently has \$18,477. Work on investing in the CD/T-bill is in progress.

Sec. WB6YRU: I won't be able to attend Monday meetings for a couple of months starting mid Sept. Lloyd KD6FJI (sec. last year) will take the minutes.

About SCCARA helping N0ARY: 1) 220 rigs - The only need right now is for a relay station somewhere in the East part of the valley. The Red Cross is in a good location. If only we had our station up in the Red Cross, it would be trivial to set up (just a TNC and a 220 rig with an antenna would be the minimum). 2) N0ARY BBS's 440 port doesn't work very well. Bob would be happy to replace it with a 9600 baud port (new rig and TNC). Years ago, he looked at a Paccom rig/TNC combination for just under \$400, but nothing became of it; besides, that one didn't put out enough power. It looks like the cost of a 9600 ready 440 rig and TNC will likely cost around \$500-\$700. (With this preliminary estimate, the board still wanted to go ahead with the research.)

Editor, WB6YRU: With some of the new big and fancy copiers out now, there may be a possibility of automating the process of affixing address labels... I'm going to look into this.

#### **OLD BUSINESS**

WA6QYS: We still haven't received a bill from the Perham Foundation for the time we hosted the flea market. I believe we owe \$400. It looks like this may have just fell through the cracks; I'll have to contact them.

#### **NEW BUSINESS**

K6PBQ: John Cole AA6QE has passed away and SCCARA is helping sell his amateur equipment for the estate. There is a R5 antenna (multi-band HF vertical) for \$120 which the club could probably use.

WA6QYS: motion to purchase the R5 from the Cole estate for \$120. Passed unanimously.

K8ERL: Bob Keller, KB6OHO, (the club photographer) has not submitted any bills for the cost of photography done for the club. We need to talk to him about this--nobody should pay for club work and supplies out of their own pocket.

K6PBQ: Reservations have been made for the annual

Christmas dinner meeting at the Hungry Hunter in Milpitas for Friday, Dec. 15. It looks like the cost per person will be around \$20 (including tax & tip) for a full dinner with drink and dessert.

9:36 PM Adjourned

Gary, WB6YRU, Secretary

# **Secretary Says**

Starting mid September (after the general meeting), I won't be able to attend Monday night meetings for about ten weeks due to a conflict with another activity. There *may* one exception during this period, we'll see. This is just to let everyone know I'm still here, nothing bad happened to me! Our previous secretary, Lloyd KD6FJI has graciously agreed to take the minutes during my hiatus. Thanks Lloyd!

Gary WB6YRU, Secretary

# Youth Group News

Ham License Upgrades

Congratulation on the Ham license upgrades. Stephen Selberg, KE6GDA, age 15 recently upgraded to General Class. Albert Wang, KE6OJS, age 11 recently upgraded to Technician Plus. Good work guys! SCCARA is glad to see that the good study effort paid off. We hope to hear you soon on the bands that you're now eligible to use. Have fun with your new privileges.

George, AB6OZ

# Youth Group Class

**Novice and Technician Plus Class** 

Ham radio is a fun hobby. We can use both voice and digital data to communicate with people around the world. We can use HF signals bounced off the Earth's ionosphere or we can send signals up to a satellite for re-transmission to Earth. There are even local FM repeaters that help us keep in contact with our friends that are here in town and our friends that are on the other side of the hill. In addition, there are lots of things to experiment with and learn about in the world of ham radio.

Learn about ham radio in our next SCCARA Youth

Group class. The class is expected to take place on Tuesday nights from 7:00 PM to 8:30 PM. The cost of the class is the price of a book. With a group discount, the price can be reduced. If you're 17 years old or younger, and if you're interested in attending a Novice/Technician Plus class, call George Brady, AB6OZ at (408) 729-9012. Provide your name, age and phone number.

George, AB6OZ

## SCCARA Picnic

The annual SCCARA club picnic was a big success this year. It was held, as usual, at Mary Gomez park in Santa Clara. The weather was great, and we had a pretty fair turn out. Don Village K6PBQ was a big help with the shopping as well cooking the burgers. Doug Eaton WN6U cooked up his famous hot dogs. Pat Itatani KC6TDK brought the most wonderful home grown fresh corn, all cooked up and ready to eat. Lou Steirer WA6QYS fixed us up with some hot dogs & soda left over from the SVECS flea market at a great price as well as loaning us his coolers, that Mike Hastings KB6LCJ was kind enough to bring out to the park early for us to have. All the way around it was a lot of fun, made much easier to put on with the help of many of our great members. I'm looking forward to doing it again next year.

Hugh KD6EFL

# Introduction To Packet Radio

by Larry Kenney, WB9LOZ Part 4

**USING DIGIPEATERS AND NODES** 

DIGIPEATER is the term used to describe a packet radio digital repeater. Unlike the FM voice repeaters, most digipeaters operate on simplex and do not receive and transmit simultaneously. They receive the digital information, temporarily store it and then turn around and retransmit it. Your TNC can be used by others as a digipeater if you have the command DIGIPEAT turned ON.

You use a digipeater by entering its call sign after a V or VIA in your connect sequence. Here are some examples of proper connect sequences:

C W6PW-3 V WB9LOZ-2 C N6ZYX V WA6FSP-1,WD6EOB-3

#### C W6ABY-4 V K6MYX,N2WLP-2,AB6XO

In the first example, the sequence shown means: Connect to W6PW-3 via the WB9LOZ-2 digipeater.

Your TNC will allow you to enter up to eight digipeaters in your connect sequence or in you UNPROTO path, but using more than 3 usually means long waits, lots of repeated packets and frequent disconnects, due to noise and other signals encountered on the frequency.

When entering the list of digipeaters in your connect sequence, you must make sure that you enter them in the exact order that your signal will use them. You must separate the calls by commas, without any spaces, and the EXACT call signs must be used, including the SSID, if any. That means you need to know what digipeaters are out there before you begin randomly trying to connect to someone. Turn MONITOR ON and watch for the paths that other stations are using.

Something to remember when using digipeaters is the difference between making a connection and sending information packets. If the path isn't all that good, you might be able to get a connect request through, but will have a difficult time with packets after that. The connect request is short, so it has much less of a chance of being destroyed by noise or collisions than a packet containing information. Keeping information packets short (PACLEN set to 40 or less) can help keep retries down when the path is less than ideal.

NODES: Net/Rom, TheNet, G8BPQ packet switch and KA-Node are names that refer to a device called a packet node. This is another means of connecting to other packet stations. Later on in this series you'll find a complete review of node operation, but for now we'll cover the basics so that you can begin to use the node network. The difference between a digipeater and a node that you should note here is that you connect to a node rather than using it in a connect path as you do with a digipeater. Some packet stations are set up so that they can be used as a digipeater and as a node.

First, you need to determine what nodes are located close to you. You can do this by monitoring and watching for an ID, or by watching to see what other stations in your area are using. It is most common for a node to have an alias ID in addition to its call sign. Once you determine the call-sign or alias of a local node, you connect to it the same way as you connect to any other packet station. You may use either the call sign or the alias to make the connection. For example, the node I operate has the alias ID of BERKLY and the call sign of WB9LOZ-2, so you could connect to it using C BERKLY or C WB9LOZ-2. Either one will work.

When you connect to a node, your TNC automatically switches to converse mode, just like when you connect to

any packet station. Anything you now type is sent to the node as a packet, and the node acknowledges each packet back to your TNC. For the remainder of your connection your TNC works only with this one node.

To use the node network to connect to another local station, you simply connect to the node and then enter a connect request to the other station. Say you wanted to connect to K9AT using the WB9LOZ-2 node. You first connect to WB9LOZ-2 (C WB9LOZ-2) and then, while you ARE STILL CONNECTED TO THE NODE, you enter the connect request to K9AT (C K9AT). The node will then retransmit your connect request and you'll receive one of two responses: "Connected to K9AT" or "Failure with K9AT". Once you are connected, you hold your QSO just as if you had connected direct or via a digipeater. When your QSO is finished, go to command mode on your TNC (Control C) and enter "D" (CR) and you will be disconnected from the node and the station you were working.

(NOTE: If the node you're using is a G8BPQ packet switch, it might have several frequency ports. You'll have to enter a port number between the C and the call sign in your connect request to indicate the frequency you want to use, such as: C 2 K9AT. Enter "PORTS" for a list of the frequency ports.)

#### NODE NETWORK:

The packet nodes work together to form a packet node network. Once an hour each node transmits a list of other nodes that it knows about. The neighboring nodes use this information to keep track of the other nodes in the network. We will discuss how all of this works later on in the series.

When you're connected to a node you can enter: NODES (or N) <CR> and you'll receive a list of other nodes that you can reach on the network from the node you're using. You'll note that the node list will vary in length and in the calls listed as you move from frequency to frequency, since all frequencies are not linked together. The list gives both an alias ID and a call sign for each node. The alias ID often gives you a hint as to where the node is located, but not always. To find out for sure where a node is located you'll need to get a copy of the descriptive node listings that are available on most packet bulletin board systems. These complete lists give the alias, call sign, location, frequency, and other information on each node in the network.

To connect to a station in another area using the node network you first must determine which node is closest to the station you want to work. For demonstration purposes, let's say we want to connect to N6XYZ. He's told you he uses the W6ABC-3 node, so you check the node list and see that GOLD:W6ABC-3 is listed. WHILE YOU ARE STILL CONNECTED TO YOUR LOCAL NODE you connect to the

distant node by sending a normal connect request, in this case C GOLD or C W6ABC-3. Your TNC will send this as a packet to your local node and your local node will acknowledge it. The network will then go to work for you and find the best path between your local node and the one you're trying to reach. Remember, with digipeaters you needed to know the exact sequence of stations. With nodes you don't. The network does that for you.

You might have to be a little patient here, since it sometimes takes a few minutes for the connection to be completed. Don't type anything while you're waiting for a response because any new information received by your local node will override any previously entered information. When the network has completed its work you'll receive one of two responses: "Connected to W6ABC-3" OR "Failure with W6ABC-3". If it can't connect for some reason, try again later. It could be that W6ABC-3 is temporarily off the air or the path has decayed and is no longer available. We're going to be positive here and say we received the first option.

Once you're connected to W6ABC-3, enter "C N6XYZ". Again, your TNC will send this as a packet to your local node and the local node will acknowledge it and send it down the path to W6ABC-3. W6ABC-3 will then attempt to connect to N6XYZ. Here again you'll get one of the two responses: "Connected to N6XYZ" OR "Failure with N6XYZ". If you get connected, you hold your QSO just as you normally would, but there's one BIG difference -- your TNC is receiving acknowledgements from your local node and N6XYZ is receiving acknowledgements from W6ABC-3. The acknowledgements do not have to travel the entire distance between the two end stations. Each node in the path handles the acknowledgement with the next node in line. Because of this, retries are greatly reduced, and your packets get through much faster than when using a similar number of digipeaters.

When you're finished with the QSO, you disconnect in the normal manner -- go to Command Mode on your TNC and enter "D" < CR>. The entire path will then disconnect automatically for you.

Nodes offer a variety of other features besides allowing you to connect to other stations. We'll look at those and go into much more detail on the packet network in parts 10 and 11 of this series.

## SCCARA Class

We need teachers for another SCCARA amateur radio license class. George AB6OZ has been going great guns on classes for the youth group, but it's time we have another class for the rest of us. It will most probably be on

Thursdays, starting late September or early October. Please consider it and volunteer at the next general meeting.

# 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 WB6YRU Code operating and installations:

WB6EMR, AC6FU, K6PBQ, W6PHF, K6RQ

Contesting & techniques: W6PHF, K6RQ

DX (long distance/propagation): W6PHF, WB6MER, 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 ORP (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):
KO6HH, K6PBQ, WA6VJY, WB6YRU, WA6QYS
Math applications: AC6FU Children's Discovery Museum, volunteer operator:

W6ACW, Ed Hajny, (408) 739-6105

WB6EMR, James D. Armstrong, Jr., day: (408) 995-0621, evening & msg: (408) 945-1202

KD6FJI, Lloyd DeVaughns, day: (408) 299-8933, evening: (408) 225-6769 packet: home BBS KB6MER

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

KO6HH, 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@1x.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

## **Packet Pieces**

## Downloaded from the packet network:

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Date: 20 Aug 95 06:08 From: KP4IG@KP4IG To: ALL@ARL

Subject: ARLB040 FCC data on Internet

QST de W1AW From ARRL Headquarters Newington CT April 18, 1995

FCC data on Internet

The Federal Communications Commission is now offering the complete amateur service database on the Internet, via the FCC's file transfer protocol (ftp) site. This new service marks the beginning of electronic granting of licenses at the FCC's Wireless Telecommunications Bureau. As soon as the data for a new license appears in the database, the license is effective and all privileges of that license may be exercised by the licensee.

Licensees will no longer need to wait to receive a license document in the mail; they may use the database as proof of licensing and go on the air immediately.

The database will be updated every Monday by noon (Eastern Time). Information may be retrieved using the following procedure:

Access: anonymous ftp.fcc.gov Directory: pub/XFS AlphaTest/amateur

Documentation: readme.txt

The FCC's Consumer Staff in Gettysburg, Pennsylvania, can answer questions at 800-322-1117 or 717-337-1212.

# ARRL Pacific Division Update

### September 1995

## **ARRL Board Meeting Highlights**

New ARRL President Rod Stafford, KB6ZV, presided over the July 21-22 Board meeting. Some of the highlights follow:

The Board of Directors expressed its gratitude to past President George S. Wilson, III, W4OYI, for his many years of dedicated service and conferred upon him the title of ARRL President Emeritus.

The Board approved the institution of three year terms for ARRL Directors and Vice Directors, to be implemented in accordance with a transition schedule beginning in 1998.

The Board directed that the ARRL staff create a plan, including a budget, for the creation of standardized testing procedures for consumer electronics equipment to ascertain their degree of immunity to RF interference.

The Board declined to have the ARRL participate actively in the recently created corporation of volunteer examiner coordinators.

The ARRL will produce a handout aimed at new hams, explaining the concept of band planning, and will include approved band plans.

Changes were made to the operating procedures of the ARRL Awards Committee and Advisory Committees. Membership of the Awards Committee was reduced to six members. An ad hoc committee was created to review the terms of reference and operating method of Advisory Committees.

The Board adopted a resolution thanking NASA for its continued support of the SAREX program.

Details are in September QST starting on page 51.

#### **FCC News**

On Aug. 17, FCC Chairman Reed Hundt proposed actions to save money, including personnel reductions and facility closings. In the Pacific Division, the Honolulu HI field office and the Livermore CA monitoring station would be closed by the summer of 1996. One facility in Laurel MD would be the central site for "electronic monitoring." The FCC will add a new centralized FCC Call Center where for the first time, members of the public anywhere in the United States will be able to call one toll-free number to reach the FCC for information or assistance.

In another announcement, the FCC is considering privatizing the resolution of radio frequency interference to

consumer electronics devices. Under the plan, private repair shops would be used to fix problems in the field. FCC spelled out the Commission's concept at a meeting in Tampa, saying "Since it is not feasible for the Commission to attempt to resolve these complaints" (the most of which come from Citizens Band operation), "it is our policy not to investigate interference to home electronic equipment. Likewise, we do not offer any protection from interference." Over the past several years, the FCC has been unofficially out of the "retail" RFI business, and parties who contact the FCC about an interference problem are asked to work together toward a solution. Depending on what the local repair shop found, either the shop would fix the equipment or, in the case of a violation of FCC rules, the service shop would refer the case back to the FCC for possible FCC action. The question of who would pay was not addressed.

The FCC Compliance and Information Bureau has just released a new 24 page color publication titled, "Interference to Home Electronic Entertainment Equipment Handbook." This document states "cost-cutting manufacturing techniques, such as insufficient shielding or inadequate filtering, may also cause your equipment to react to a nearby radio transmitter. This is not the fault of the transmitter and little can be done to the transmitter to correct the problem." The publication contains diagnostic checklists and suggested remedies in language targeted to consumers who experience various types of interference. It is also a good compilation of data for hams. The publication called Bulletin CIB-2, May 1995, may be obtained directly from the FCC CIB Field offices, although reports of actual availability vary.

One known source is the U.S. Government Printing Office. PO Box 371954, Pittsburg PA 15250. Phone (202) 512-1800. The price is \$2.50 postpaid.

## Vanity "Preferred" Call Signs

It appears as though the program for the actual application for call signs, other than the club call sign part of the program, will continue to be delayed. There are various stories targeting "Fall of 1995."

The fee for a vanity call sign has been reduced by the FCC to \$30 from \$70 effective September 18, 1995.

Additional details regarding availability of the necessary forms can be found in previous editions of this Pacific Division Update and in QST.

# Telecommunications Reform and Proposal to Eliminate the FCC

Telecommunications reform is one of the key topics in Washington DC currently as Congress is in August Recess.

Both the House and Senate have passed differing Telecommunication Reform Acts. Apparently these bills focus on broadcast TV, cable TV, telephone service, and related matters. It appears that these bills do not affect the

Amateur Radio Service directly, but there may yet be surprises. In September, a conference committee from both houses will try to reconcile the differences between S. 652 and H.R. 1555.

There are also various other proposals floating around Washington DC including proposals to eliminate the Department of Commerce and the FCC, as examples. This latter idea comes from the "Progress and Freedom Foundation," a think-tank group consisting of folks with various political views. Essentially, the proposal is to eliminate the FCC and allocate the entire RF spectrum on a "property rights" basis.

The mood in Congress seems to be to enact some sort of telecommunications reform, but the specifics are unclear so far. See September QST page 50 for more details.

### **Spectrum Protection Battles Continue**

Just as we are coming out of the 13 cm band battle, the 5.6 to 5.9 GHz band is now threatened by a petition from Apple Computer Corp. Basically, Apple asks to share 150 MHz of our already shared 275 MHz wide band to develop an "National Information Infrastructure" band characterization of the NII band might be a "wireless Internet available to all persons without license." One key request in the petition is that "Part 16" standing for the NII band be granted, which translated means that no interference can be caused to the unlicensed service by other services. Although "Part 16" does not now exist, it apparently is a proposed upgrading of Part 15 unlicensed service which does exist. Although denied in the Comments on the Petition by Apple, one impact of this proposal might be the elimination of the operation of a San Francisco Bay Area group which has been active in this band for some 20 years. The petition also asks for 150 MHz just above 5.1 GHz, outside our band.

The petition provides very little technical information on such items as why 300 MHz is needed, how the sharing technically will be done, the power and antenna aspects and many other issues. The Apple request appears to have the FCC authorize this conceptual idea and then to work out the details in a Notice of Proposed Rule Making. See Sept. QST pages 61-62.

After a extremely rapid but effective effort, the ARRL filed Comments and Reply Comments on time opposing the petition. Several individuals and groups in the Pacific Division also worked extremely rapidly to file Comments and Reply Comments opposing the petition

See page 50 in Sept. QST for details of another attack on these frequencies in the U.S. Senate in S. 652.

## Congratulations

On Aug. 10, it was my pleasure to award the ARRL Cover Plaque Awards for June to Steve Bible, N7HPR, and Greg Pool, WH6DT, of the Naval Postgraduate School Radio Club. Their article, "Amateur Radio on the World Wide Web" was selected by the ARRL Board of Directors as "best

of issue" for June QST.

The Pacific Division has been honored with additional scholarships for a total of five major winners this year. The most recent awards were made by the Foundation for Amateur Radio. The John W. Gore Memorial Scholarship was won by Craig Gullickson, KC6CEX, of Fresno CA -- he was a previous winner of a FAR Scholarship; The QCWA - Leo Meyerson Family Living Scholarship went to Carolyn Reiring, KB6EEK of Madera CA; one of the QCWA Memorial Scholarships went to Daniel L. Sperring, N6VBB, of Galt CA; and one of the Radio Club of America Scholarships was won by Taras B. Zima, KD6VWQ, of Reno NV.

### Scholarships and Awards

There are many awards and scholarships covering a wide range of situations available to licensed Amateurs. For example, the ARRL Awards include the International Humanitarian (nomination due Dec. 31); the Herb S. Brier Instructor of the Year; Professional Educator of the Year; Professional Instructor of the Year; Excellence in Recruiting; Phil McGan Memorial Silver Antenna (nominations all due Feb. 15): Hiram Percy Maxim Memorial; Field Organization Volunteer of the Year (nominations all due March 31). See the September 1995 edition of the ARRL Section Leader or contact the Field Services Dept. at ARRL HQ for details.

To apply for ARRL Foundation scholarships, write to The ARRL Foundation Inc., 225 Main St., Newington CT 06111. Deadline for applications and transcripts is Feb. 1. See Sept. QST pages 118-119.

## **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.
- 2nd National Hamfest, Oct. 6-8, 1995, at Costerisan Lake in Bakersfield CA. Contact the Kern Co. Central Valley ARC at PO Box 743, Bakersfield CA 93302
- Pacificon '95 at Concord CA, Oct. 20-22, 1995. Contact Richard Schultze, AA6DL, at (510) 932-6125 on the Pacificon'95 Hotline.

Brad Wyatt, K6WR Director, ARRL Pacific Division

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



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Internet: bwyatt@arrl.org

## S.C.C.A.R.A. Membership Form for 1995

(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:		I	icensed si	nce (yr):
City:	State:	Zip:		
Telephone: ( )		A.R.R.L	. Member:	Yes No
For family memberships (at the same addre	ss), please	list other nam	e(s) and c	all(s):
Annual membership dues are payable at the New members joining on or after July 1, parameter Annual Membership dues: Individual \$15 Send the SCCARA-GRAM by first class mail	ay half the Family \$2	membership due	s (and half under 18)	auto-patch fee).
I want SCCARA badges @ \$3.00 ea.	(no charge, \$10.00 FOR ALL REE	circle):	• • • • • • • • • • • • • • • • • • •	Yes
Give this completed form (or copy) with partial to the return address below:	ayment to th	e Secretary or	Treasurer	at any meeting or
PLEASE DO NOT TEAR			PLEA	ASE DO NOT TEAR ==

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