

SCCARA-GRAM

Santa Clara County Amateur Radio Association

Volume 11, Number 8

August 1995

President's Prose

Here we are getting ready for the August SCCARA meeting. It seems like time is flying by faster than ever before. I remember when I was a kid someone made a comment that time seems to go faster as we get older. Back then we thought people saying these things were not quite all there, but now I wonder. Maybe they knew something the rest of us were overlooking, at least it looks that way to me.

Many of us use packet as one of the many modes of communications in this great hobby of ours. Sometime I wonder if we stop and think about what is involved in the BBS that we log on to in order to send and receive messages. When I mention stop and think, think not only about the technology, think about the expense to purchase equipment and the cost to run the system. It may be true that everyone does not use this operating mode, but think of the technology and stimulation of the mind that is made available by those people constantly and diligently devoting their time and money in developing and improving the systems.

We should be proud of the many people that are undertaking these tasks. Most of the sweat and dollars expended are for our benefit, if we choose to take advantage of it. Let's support this. I am proposing that we help N0ARY. Bob has not requested any help, but in good conscious I believe we should help. Come to the next meeting, let's do something for our hobby.

Rodney Stafford KB6ZV of San Jose California, as of July 1st 1995 is our new President of Our AMERICAN RADIO RELAY LEAGUE replacing George Wilson III W4OYI because of health reasons. It is my pleasure to know Rod for the past 18 years and pledge 100 percent support. Thank's Rod, we're all on your side of "the bench". Congratulations on this great honor.

Just think about this... all from Santa Clara County in the American Radio Relay League:

President: Rod Stafford KB6ZV

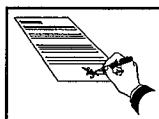
Director Pacific Division: Brad Wyatt K6WR

Vice Director Pacific Division: Jim Maxwell W6CF

Where can you find a more dedicated bunch of people?

"Lets talk PICNIC" for 1995. See you at the meeting. Bring along a friend.

73, Mike Marneris K8ERL



Calendar

- 8/12 Foothill Electronic Flea Market
- 8/14 SCCARA General Meeting
- 8/28 SCCARA Board Meeting--(San Jose Red Cross, 7:00p, all are welcome)
- 9/12 Foothill Electronic Flea Market
- 9/11 SCCARA General Meeting

Next General Meeting

Day: Monday, August 14, 1995
Time: 7:30 PM
Place: United Way Building
Agenda: Don KO6HH -- Radio Frequency and Microwave Molecular Spectroscopy

The United Way Building, 1922 The Alameda, San Jose, (about one mile South West from the San Jose Air Port). From I-880: take the Alameda turn-off going South, then turn left immediately on McKendrie. From the South: go North on the Alameda, 1/2 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 1st and Plumeria Dr. Plumeria is two lights North of Trimble and South of Montague Expressway. From the South on I-880, take the 1st Street exit, go North. From the North on I-880, take the Montague (Trimble) exit, go West to Trimble then turn right (North) on 1st, (if you miss Trimble, just follow Montague then turn left (South) on 1st). From the South on US-101, take the Trimble (De La Cruz) exit going North, then turn left (North) on 1st. From the North on US-101, take the Montague exit going North/West, then turn right (South) on 1st. 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	Don Village, K6PBO	263-2789
Director	George Brady, AB6OZ	729-9012
Director	Lou Steirer, WA6QYS	241-7999

STAFF

Editor	Gary Mitchell, WB6YRU	265-2336
Facilities	Don Village, K6PBO	263-2789
Historian	Jean "Doc" Gmelin, W6ZRI	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:

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 CLASS HOTLINE:	971-1424
ARRL LICENSE (VEC) HOTLINE:	984-8353

Good & Welfare

SILENT KEY: John Cole, AA6QE

Radio friends of John Cole will be saddened by news of his passing away last June 6th. He was taken suddenly by a massive heart attack while on his way home from swimming. Only 73 years of age, John had a background as an airline pilot, retiring at age 60. He is survived by his wife and two children. John held an Extra license and was active in DXing. The members of SCCARA extend their deepest sympathy to his family in their loss.

de WD6CHD, Ed

SCCARA Pick Nick

SCCARA will again host a pick nick at the Mary Gomez park in Santa Clara, Sunday, August 20, starting around noon. This is where we were last time. It's at the North West corner of San Tomas Expressway and Forbes; enter from the West on Bucher. From San Tomas, go West on Forbes, North on Bucher, then right into the small parking lot.

The club will provide burgers, hot dogs, buns, drinks, condiments, and utensils. The rest will be pot luck -- so bring your favorite dish! Please call me at (408) 246-9374 to coordinate. Talk-in will be on the club repeater, 146.385(+).

Hugh, KD6EFL, VP

Secretary Says

Doug WN6U tells me our computers are fixed now. The 286 had a bad motherboard, the IBM had a bad video board. Thanks Doug!

The latest roster is in this issue. Included here are only hte dues paying members. A full roster with all data is available separately at the meetings or contact me for a copy.

Unfortunately, I won't be able to attend Monday night meetings for a couple of months starting mid September. I will need an assistant (called a "recording secretary") to take the minutes for a few meetings (general and board). The notes can be taken long hand or I have a tape recorder to lend. If the recorder is used, the assistant won't have much to do except flip the tape over once. Either way, it's not really a big job. Specific details can be worked out later, but this needs to be settled before the September board meeting. Let me know if you are interested.

If the volunteer would like to attend board meetings, that's fine. Otherwise, it would be better if it is someone

who normally would attend board meetings anyway.

Gary WB6YRU, Secretary

Meeting Minutes

General Meeting, July 10, 1995



Meeting called to order 7:41 PM, Mike K8ERL presiding. 41 in attendance.

Self introductions.

Field Day, KO6HH: CW station made 337 contacts, phone station made about 300. VHF/UHF stations did better than last year. The Novice station did much better than last year.

Repeater, KN6K: Nothing much new. Out of area phone numbers are being programmed.

V.P. KD6EFL: Need speakers for future meetings. We have several good donated items for the raffle this time.

Secretary, WB6YRU: We have about 144 members now. The club has two older computers that are in need of repair, Doug WN6U will be working on them. It seems we may need a video board and motherboard (286 or better), if anyone has something like this, see Doug. The Roster is about to be updated, if there are any corrections, get them to me soon.

Treasurer, N6BUO: Total: \$18788, \$13500 general, \$5000 repeater fund. Compared to last year, we are \$105 ahead. \$1812 net from flea market (\$1320 gate, \$492 food).

K8ERL: Dues are \$15, but after July 1, it's half price. We should do something similar for the repeater auto-patch fee, (to be discussed at the board meeting).

KD6QEI: Field Day Food. I finally got records from Field Day efforts from years past. \$350 was advanced by SCCARA to buy food, actual cost was \$379. I need \$29. \$325 was received by members, so the food costs went in the red by \$54. I may take care of the food next year. My Brother died recently. Now it seems my father (who has cancer) may die around this time next year. So, the club will have to be ready for this next year.

KN6K: The license copy requirement for repeater codes is being re-evaluated. Probably we only need to verify each license and require the license copy only if needed.

Editor, WB6YRU: Help putting together the newsletter is

needed.

OLD BUSINESS

KK6MX: We have a chance to invest in a 7% T-bill, insured, for a term of six to 12 months.

KO6HH: Motion to give board authority to decide the issue and proceed. Secretary pointed out the board already legally has this authority. Passed unanimously.

NEW BUSINESS

Dan Dietz WM6M is resigning as director (term ends six months). George Brady, AB6OZ volunteered to fill in. Don K6PBQ: nominates George AB6OZ to finish Dan's term as director. Bill W6ZM: Motion to close nominations. Passed unanimously. George AB6OZ elected director unanimously.

SPEAKER

Roy K6VIP spoke on the topic of the history amateur radio licensing and the VEC program.

The FCC is currently phasing out some HF monitoring.

K6RQ: When looking for noise sources, it's best to use the highest frequency possible.

9:11 PM recess. 9:20 resume.

Raffle

Adjourned 9:28 PM

Board Meeting, July 24, 1995



Meeting called to order at 7:49 PM, Mike K8ERL presiding. Attendance: Mike K8ERL, Don KK6MX, Imre KD6MZM, George AB6OZ, Gary WB6YRU, and Rex N6BUO. (There is just barely a quorum.)

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

Youth Group, AB6OZ: General class starts 7/25/95. There are three students. There were only eleven replies to the youth survey (out of about 70).

Repeater (KN6K absent) K8ERL: No reply from Stan yet about requirements for repeater codes.

K8ERL reports Hugh (absent) has nothing lined up for Aug. gen. meeting. Board decided to have a video night: WB6YRU reports the club has a video on "HAMs in Space" and another on ATV. AB6OZ will bring one on "AMSAT Phase 3D". KK6MX will bring one on ATV, balloon launch.

Secretary, WB6YRU: We have 145 members. Doug WN6U is working on the club computers. An updated roster will be published soon.

Treasurer, N6BUO: Total of \$18895.96--so far this year, we are ahead by \$212. Repeater fund: \$5070.13, general: \$13825.83. For Field Day, we took in \$333 and paid out \$401.50 for a loss of 68.50.

Editor, WB6YRU: Needed help publishing newsletter. New member Clark Murphy, KE6KXO thinks he will be able to help, (maybe sometimes, we'll see).

Postal bulk rates have gone up again slightly. Expected mailing cost will increase for the newsletter by roughly \$1 each month.

Restrictions on advertising in bulk mail from non-profit organizations have gone up. If the newsletter doesn't qualify as a periodical, we must not have any advertising unless it directly relates to our "purpose," money made from them doesn't count. There is a list of requirements for a newsletter to qualify as a periodical--I currently have the SCCARA-GRAM set up so it DOES qualify. This means we may have up to 25 percent advertising, but no more. Future editors will need to be aware of this.

OLD BUSINESS

KK6MX: Move to invest \$10,000 (we still have \$8000 left) in a T-Bill/CD of not less than six percent for a period of six months to one year. Passed unanimously. KK6MX will coordinate with treasurer N6BUO.

NEW BUSINESS

KK6MX: Moved to increase dues to \$20 and have membership include repeater auto-patch codes. Not seconded, motion fails.

AB6OZ: Auto-patch fee is \$10 for individual members and \$15 for family memberships. Move to make auto-patch \$10 for family memberships as well as for individuals. Two in favor, one abstention, motion passes.

KK6MX: Moved to make auto-patch fee ½ after July 1, just like the membership dues. Passed unanimously.

KK6MX: We have four 220 rigs, two may need some repair. 220 is a common band for packet forwarding. Move to donate one or two of them to N0ARY BBS if/when we receive a statement of need from N0ARY. (The idea is: they must be needed and used, not show up at the flea market in a few months.) Passed unanimously.

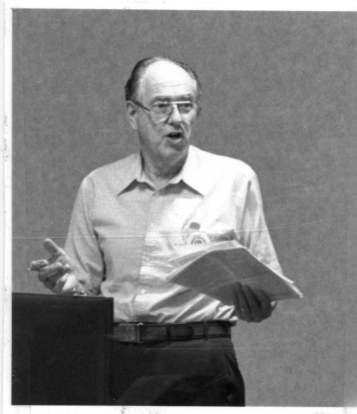
WB6YRU: N0ARY BBS is one of the busiest BBS's, 1200-1500 users. There is a 1200 baud two meter port and 440 port, plus one telephone line. It would be nice if SCCARA sponsored a 9600 baud port on N0ARY BBS. I'll start looking into this if there is any chance of approval. The board seemed favorable.

KK6MX: Moved to give each attendee one free raffle ticket upon signing in (on the sign-in sheet for the meeting attendance) on a trial basis for a couple of months to increase interest and encourage people to stay through the whole meeting. Two in favor, one opposed, motion passes.

Adjourned 9:42 PM.

Gary, WB6YRU, Secretary

Thank You



Roy Metzger, K6VIP

A great job was done by Roy Metzger K6VIP who was our July speaker at the monthly SCCARA meeting. Roy talked about the VEC program and how it originated. He discussed ways in which the rules and the testing have changed over the years. It was an informative talk and all who attended enjoyed it. Again, our thanks to Roy K6VIP.

de Hugh KD6EFL



For the Record...

In last month's issue, the author of the *Novice Station* Field Day article was given as Timothy, KE6MEA, age 11. Actually, the article was co-authored by Timothy and Sarah, KE6MPP, age 14. Due to an error in reformatting that file, Sarah's name was mistakenly omitted. Sorry about that, Sarah!

Gary WB6YRU, Editor

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, 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
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 DeVaughns,
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: deaton101x.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

Introduction To Packet Radio

by
Larry Kenney, WB9LOZ

Part 3

In Part 2 I talked about how to get on the air and make your first QSO. Now let's take a look at some of the commands that are available in your TNC or packet software to help improve your station operation.

The TNC (Terminal Node Controller) has more than 100 different commands available for you to use. You're able to customize your packet operating with these commands and turn on and off various features as you wish. Not all TNCs are exactly alike, but all have pretty much the same set of commands. I'll be using the command set in the TNC2 and clones in my examples. You might want to check the command list in your TNC operating manual to see if your TNC uses the commands as I indicate here.

For those of you who are using the packet software and modem instead of a TNC, you'll find a list of the commands in your help documentation. You will find that some of the commands cannot be modified while the software is running. Some have to be changed with the program's configuration file. Check the help document for instructions on how to change these commands in your particular software.

We covered a few of the commands previously: CONTROL-C for entering command mode, MYCALL, MONITOR, ECHO, CONNECT, and DISCONNECT. (Refer to Part 2 if you need information on these commands.) Now let's discuss a few that will affect the way your station functions on the air. CONV (converse mode): Your TNC will automatically switch to this mode when you connect with someone, but you can also switch to this mode by entering CONV (CR) at the Cmd: prompt. When you're in converse mode and are NOT connected to another station, anything you type will be transmitted via the path you set with the UNPROTO command. (See the next paragraph for UNPROTO.) Packets sent via UNPROTO are sent only

once and are not acknowledged, so there is no guarantee that they'll get through. This mode is used frequently for sending CQ's.

- **UNPROTO:** Designates the path used when you send BEACONS or when you're in converse mode and NOT connected to another station. The default is CQ, but you can enter a series of digipeaters if you wish, or a specific group or club name. Some examples:

CQ v WB6SDS-2,W6SG-1,AJ7L

SFARC v W6PW-1,W6PW-4

If you include digipeaters in your UNPROTO path, you will have to change the information for each frequency you use. (BEACONS will be discussed in a later part of this series.)

- **FRACK:** Determines how long your TNC will wait for an acknowledgement before resending a packet. It shouldn't be set too low, or you'll simply clutter up the frequency, yet it shouldn't be too high, or you'll spend too much time waiting. I use FRACK set to 7, and have found that to be a good overall value.

- **DWAIT:** Used to avoid collisions, DWAIT is the number of time units the TNC will wait after last hearing data on the channel before it transmits. I have DWAIT set to 16, and have found that to work well.

- **PACLEN:** Indicates the number of characters in the packets you transmit, ranging from 0 to 255. (A value of 0 equals 256.) The more characters you send per packet, the longer it takes to transmit the information and the greater your chances are of noise, interference or another station wiping it out. I've found a PACLEN of 80, which is the length of one line, to be a good value. When working a station nearby, PACLEN can be increased. When working a distant station, it should be decreased.

- **RETRY:** Your TNC will retransmit a packet if it doesn't receive an acknowledgement from the station you're working. RETRY indicates the number of times the TNC will try to get the packet through before giving up and disconnecting. This can be set from 0 to 15, but I've found 8 to 10 to work well. Less than that causes an unnecessary disconnect if the channel happens to be busy, but more than that clutters up the channel. Do NOT set RETRY to 0. That means infinite retries, and serves no useful purpose. It simply clutters up the frequency needlessly.

The following commands affect "monitoring", which is what you see on your screen from stations you're NOT connected to.

- **MONITOR:** This must be ON for you to monitor anything. When ON, you see packets from other stations on the frequency you're tuned to. What packets you see is determined by other commands from the list below. If

MONITOR is OFF, you only see the packets that are sent to you while you're connected to another station.

Note: On some TNCs, such as the AEA PK-232, monitoring functions are selected by a number after the MONITOR command, such as MONITOR 3 or M 3. Refer to your TNC operating manual for details.

- **MALL:** If MALL is ON, you receive packets from stations that are connected to other stations, as well as packets sent in unproto (unconnected) mode. This should be ON for "reading the mail". If MALL is OFF, you receive only packets sent in unproto mode by other stations.

- **MCOM:** If ON, you see connect <C or SABM>, disconnect <D>, acknowledge <UA> and busy <DM> frames in addition to information packets. If OFF, only information packets are seen.

- **MCON:** If ON, you see packets from other stations while you're connected to someone else. This can get very confusing, but is useful when your path is bad and you want to see if your packets are being digipeated okay. If OFF, the monitoring of other stations is stopped when you're connected to another station.

- **MRPT:** If ON, you see a display of all the stations used as digipeaters along with the station originating the packet and the destination station. If OFF, you see only the originating and destination stations. For example, if you have MRPT ON, you might see a transmission such as this:

K9AT>WB6QVU,W6PW-5*: I'll be leaving for the meeting at about 7:30.

If MRPT was OFF, the same transmission would look like this:

K9AT>WB6QVU: I'll be leaving for the meeting at about 7:30.

In the first case, you can see that the W6PW-5 digipeater was being used. The asterisk indicates which station you were hearing the packet from. In the second case you have no idea if digipeaters are being used or what station you were receiving.

- **HEADERLN:** If you have this turned ON, the header of each packet is printed on a separate line from the text. If OFF, both the header and packet text are printed on the same line.

- **MSTAMP:** The date and the time the monitored packets are received is indicated if the MSTAMP command is ON. If it's OFF, the date/time stamp is not shown. NOTE: The date and time must be entered into your TNC memory using the DAYTIME command before the MSTAMP command will function.

I run my station with all of these commands, except MCON, turned ON so that I can really see what's

happening on the frequency I'm monitoring. Try various combinations of these commands and then decide on the combination you like best for your station.

MORE COMMANDS - The commands discussed here are a few of the basic TNC commands. I'll discuss many of the other commands available to you later on in this series.

New Members

SCCARA would like to welcome these new amateurs to the club:



Joanne Moses
KD8ZJK

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.

Packet Pieces

Downloaded from the packet network:

[Editor's note: This first one had many articles in it, only the one about the balloon project appears here...]

=====
Date: 31 Jul 95 01:41
From: KD2BD@KS4HR
To: NEWS@AMSAT
Subject: * SpaceNews 31-Jul-95 *

=====
SpaceNews
=====

MONDAY JULY 31, 1995

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It is published every week and is made available for unlimited free distribution.

* NORTH TEXAS BALLOON PROJECT NEWS *

=====

The North Texas balloon project will launch its seventh high altitude balloon experiment carrying amateur radio payloads on the 19th of August, 1995. The payload carries a variety of radios and instruments that can be easily used by any Amateur with a Technician's license or above.

The launch will be from Clifton, Texas (located 30 miles west of Hillsboro) at approximately 9:30 AM. In the event of inclement weather, the launch will be delayed to the next day, and then to the next Saturday (the 26th). There will be a pre-launch net at 8:30 PM on the Ft. Worth 146.76 repeater the evening before the launch. The morning of launch there will be an HF net on 7.155 MHz +/- QRM. The Net control station will probably be W5IU.

Approximately two hours after launch, the balloon is expected to reach an altitude of 95,000 feet before burst. At this altitude the area of visibility will be about 370 miles in any direction for a total 740 mile communications range. In past missions, there have been QSO's between Corpus Christi, TX and Salina, Kansas.

The following is a list of the available experiments onboard:

Crossband FM Voice Repeater:

Two Crossband FM Voice Repeaters open to all:
Uplink #1 147.450 MHz Downlink #1 445.850 MHz
Uplink #2 147.570 MHz Downlink #2 445.970 MHz

Packet Telemetry on 144.290 MHz:

This GPS and telemetry information will be the data downlink (downlink ONLY) of the mission. The packet format is the common 1200 baud AFSK found in all TNCs. The data will be presented in an easy to read format with no conversions required and is NOT in APRS format. Packet digipeating and packet connects to the package will NOT be possible.

GPS:

Precise longitude, latitude and altitude data will be provided by a donated Rockwell NavCore V GPS receiver. The following data will be measured and can be seen on the 144.290 MHz downlink. Six of the eight channels are used to measure the following:

- | | |
|-----------------------|--------------------------|
| * Inside Temperature | * Outside Temperature |
| * Barometric Altitude | * Main Battery Voltage |
| * ATV Battery Voltage | * Summed Battery Voltage |

Amateur Television (ATV):

There will be a live, full motion, Amateur Television camera and 10 Watt transmitter onboard. The downlink frequency will be 439.250 MHz VERTICALLY Polarized. This frequency was chosen to exactly correspond to Cable channel # 60. With a 440 MHz beam and reasonable Low Noise Amplifier, a cable ready TV tuned to Cable channel 60 should be able to receive an acceptable signal. The camera will be remotely pointed via ground command to any of 256 possible positions.

Other Innovations On NTBP #7:

Active package stabilization: Remotely controlled air foils to cancel package spin.

Power distribution: Non essential equipment turned off after touchdown and batteries summed to provide power to essential DF'ing beacons.

Audio Distribution: Ground commands allow audio from crossband repeaters, packet downlink, or command uplink to be piped through ATV audio.

Improved Parachute/Tow line: New spreader ring design, swivels and woven tow line should help ensure that parachute does not tangle.

QSLs can be had through KG5OA via the Callbook address.

[Info via Doug Howard, KG5OA]

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Date: 2 Aug 95 18:47

From: KB8NW@WB8BII

To: ALL@ARRL

Subject: ARLX036 2 meter record claimed

QST de W1AW

From ARRL Headquarters Newington CT
August 2, 1995

2 meter record claimed

An over water distance record on the 144 MHz band has apparently been set between Hawaii and Washington state.

On July 1, 1995, Paul Lieb, KH6HME, on Mauna Loa volcano, worked Jim Costello, W7FI, in Woodinville, Washington, near Seattle, a distance of 4333 kilometers. The previous record was set between KH6HME and XE2GXQ, on Baja California, a distance of 4276 km, on July 13, 1989.

This tropospheric ducting opening began June 28 when the 144.170 MHz beacon on Mauna Loa, 13,680 feet (4170 meters) above sea level, was heard on the West Coast, according to QST VHF columnist Emil Pocock, W3EP, who called the next three days "the most widespread Hawaii-to-West Coast opening ever recorded."

In the early evening of June 30, KH6HME worked WI7Z and N7KSI, both near the coast of Washington, the first ever 144 MHz contacts from that state to Hawaii, and then worked N7AVK, in Oregon. The breakthrough came the next day, at 0600, when KH6HME worked several Seattle-area stations, beginning with W7FI, and was heard by VE7SKA, who could not make himself heard in Hawaii.

Using computer software, the various Seattle-area stations calculated who was the farthest from Mauna Loa, and the winner was W7FI. The record-setting distance was 58 km farther than the six-year-old record.

Unfortunately, the conditions did not extend to higher bands; KH6HME made 432 MHz contacts with K6QXY and W6SYA, but no others were completed.

Newsletter Notes

This doesn't have much to do with the SCCARAGRAM per se, but as editor, I have the ability to print up more than just the newsletter.

As most of you know, SCCARA has had two club radio contests recently, the first was almost a year ago. It was mentioned that participants would receive a certificate. Unfortunately, there still are no certificates and nobody has been working on this.

I have the ability and willingness to print up certificates, so we can avoid the cost of having this done professionally. I have software that will generate a variety of fonts and font backgrounds, but no drawing software, so any graphics will have to be supplied by someone else. Existing graphics images can be easily including in a document.

The club already has the raw materials (blank certificates and seals), this is a good opportunity to use that stuff. What's lacking is the design and wording.

If anyone has a contest certificate that they like (to use as an example) or any design ideas, please contact me.

73, Gary WB6YRU, editor

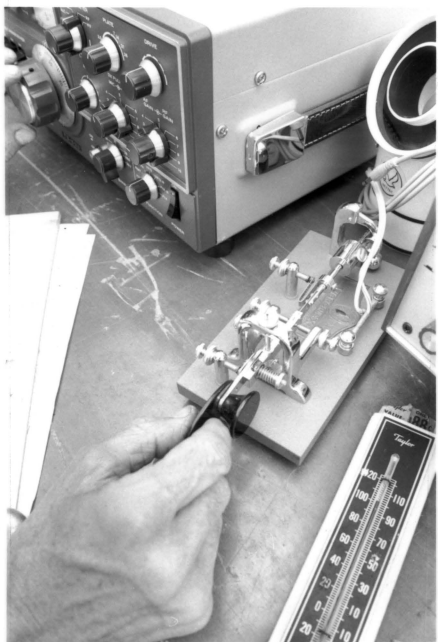
Field Day Photos



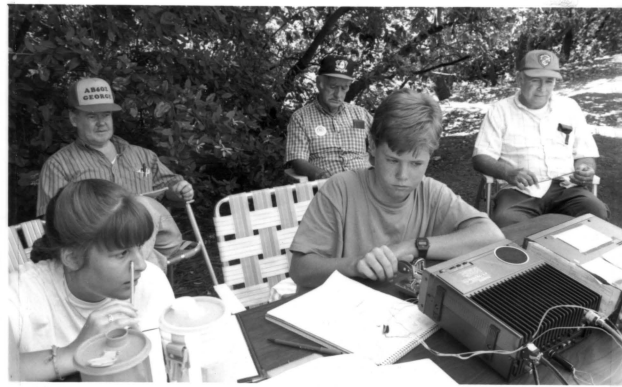
No, we're not goofing off, we're manning the talk-in station... really! The talk-in station is the rig on the car hood.



Wally and Barbara kept us fed with a great barbecue.



The code station was NOT running QRP this year--look at the thermometer! We'll blame them for the hot weather. ☺ (The mercury is at 101°)



Sarah and Timothy did great at the Novice station. Thanks to them, this year was one of the Novice station's best.



Don (left) and Clark at the six meter station



The phone station (background), with Jack (at the mike) and Robert shared the same spot with Imre at the packet station and the VHF station (out of view to the right).

Photos by Bob Keller, KB6OHO

ARRL Pacific Division Update

August 1995

Rod Stafford, KB6ZV, is ARRL President

Rod Stafford, KB6ZV, ARRL First Vice President became President on July 1, 1995, upon the resignation of George Wilson, W4OYI. Rod becomes the second ARRL President from the West Coast in the entire history of ARRL. Rod is also a past Director of the Pacific Division. Please congratulate Rod when you see him!

On July 1, 1995, American Radio Relay League President George S. Wilson III, W4OYI, submitted his resignation from the office he has held since January 1992. Mr. Wilson, who suffered a stroke on February 11, presently is in a rehabilitation hospital in Evansville, IN, anticipating his return home soon.

In submitting his resignation as ARRL President, Mr. Wilson said that while he has made progress in rehabilitation, his medical condition prevents him from traveling and from devoting the energy required to perform the duties of the office for the remainder of his term, which expires at the January 1996 meeting of the ARRL Board of Directors.

Messages can be sent to George's address at 1849 Griffith Ave., Owensboro KY 42301. Get well, George!

Vanity "Preferred" Call Signs - Big News

The price of a "Vanity" call sign has been reduced by the FCC to \$30 from \$70 effective September 18, 1995. Whether this change means the program will now wait until then or not is unclear.

The "sequentially issued" club call signs part of the "Vanity" call sign program is going strong with club call signs being received in all call areas. The club calls issued in the KE6Uxx block are being received currently.

No starting date has been announced by the FCC thus far for the remainder of the program. However, the long-awaited form 610-V is nearly ready: it was finally approved by the Office of Management and Budget on May 2; however, copies have not yet been made available.

There is a new twist to the program. It has now been learned that a form 1070-V, will have to be filed with each 610-V as a transmittal for the \$30.00 fee. As yet the details on where to send what are unknown.

There are two routes to follow to obtain the necessary 610-V and 1070-V forms: direct from the FCC or via ARRL.

In order to obtain forms from the FCC, call 1-800-418-3676 and follow instructions. This number, which is open 24 hours per day, hooks you into an automated form

ordering system. Good luck.

If you wish to obtain your forms from ARRL/VEC, send a business-sized self-addressed, stamped envelope (SASE) to ARRL HQ/VEC, 225 Main St, Newington CT 06111, and ask for a 610-V. A 1070-V will automatically be included with each 610-V request. The ARRL/VEC will honor all requests in this manner.

There is to be a new form 610-B for club call signs. In the meantime, you can use the existing Form 610-B dated March 1992 and write "NEW" in the call sign box at the top of the form (item #1). Form 610-B can be obtained from the ARRL/VEC for an SASE. Mail the completed club call sign application form 610-B (with a copy of the trustee's license) to FCC, 1270 Fairfield Rd, Gettysburg PA 17325-7245.

In order to apply for a "vanity" call sign for a club, you must already have a club call sign or have obtained one under this new program. A club trustee would then apply for a vanity call based on the "gate" for his or her license class.

A Club Call Sign Application Fact Sheet by FCC has been released to fully define the process. The ARRL-VEC also has an information sheet available to answer questions if you will send an SASE to ARRL-VEC.

On the matter of what call signs from what call areas are to be available in gates 2 through 4, the ARRL and several individual hams have filed Petitions for Reconsideration of paragraph 10 of this Docket. The petitions are to insure the availability of call signs from ONLY the call sign area of residence as proposed by ARRL and QCWA originally and currently rejected by FCC. The FCC plan currently makes any available call sign in any call sign area -- KH6, KH0, KL7, KV4, W6, W7, et al - - available to any applicant. There is no date known by when the FCC will make a decision. However, this aspect of the call sign assignment will not be applicable until later in "gate 2". See May 1995 QST, page 95 for more details.

Some additional thoughts for those of you concerned with recovering Silent Key call signs of close relatives, please be ready. Be sure that you or some close relative is licensed at some level.

Telecommunications Reform

Many of you are probably concerned about the new Telecommunications Act passed June 15 by the Senate and the now separate "Think Tank" proposal to eliminate the FCC and allocate the entire RF spectrum on a "property rights" basis. These stories continue to be headline news. The ARRL Washington Team continues to monitor these activities very closely. There were many last minute amendments added to the Senate bill so that even the legislators apparently are not really sure of the details. It appears that this bill does not affect the Amateur Radio Service directly, but there may yet be surprises. The two House committee versions of this bill are considerably different from the Senate version and each other. This summer, the House must first reconcile its two versions and

then work out the differences with the Senate. Also this summer, the "Think Tank" proposal to eliminate the FCC could well influence the debate on the expected FCC funding bill.

The mood in Congress seems to be to enact some sort of telecommunications reform, but just what is unclear so far. Stay tuned! The ARRL Washington Team is active on our behalf!

5.8 GHz Band Battle Now Underway

Just as we are coming out of the 13 cm band battle, the 5.8 GHz band is now threatened by a petition to the FCC from Apple Computer Corp., the Intelligent Transportation System folks and possibly others.

Basically, Apple asks that half of our 300 MHz wide band be shared with a new service -- a "National Information Infrastructure" band. One characterization of the NII band might be a "wireless Internet available to all persons without license." It is not clear that compatibility is possible. If there is incompatibility, this might lead effectively to 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 outside our band just above 5.1 GHz. The petition was filed at the end of May but could not be obtained from the FCC until mid June. The deadline for filing Comments was July 10. Reply Comments are due July 25.

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

The Washington and the Pacific Division teams are working tirelessly to defend this spectrum. In the mid to latter part of July, please contact Jim Von Striver, W6ASL, the Pacific Division Spokesman for the Spectrum Management Committee at (510) 827-9826 for information or to offer assistance. Vice Director Maxwell, W6CF, and I will be at the ARRL Board meeting, although we can be reached, but with considerable difficulty, at ARRL HQ (203) 594-0200 (new phone number).

13 cm Band - Latest News

Current FCC information indicates that the battle over 2300-2310 MHz has been postponed until very early in 1996 even though NTIA's schedule of transfer is Aug. 1995. Be prepared again!

We Get New Spectrum: 219-220 MHz

On Mar. 17, the FCC issued a Report and Order on ET Docket 93- 40 awarding operating privileges in the 219-220 MHz band effective April 26, 1995. The Amateur Service has been awarded, on a secondary basis, permission to use the band for a point to point fixed digital message

forwarding service. As we will be sharing this spectrum with other services, ARRL, acting as a "national contact point" for "local amateur coordinators," will provide information on known current licensees in these other services. A few applications have been received -- the first two were from the Pacific Division. Those who are interested in using the new band should contact ARRL HQ for an information sheet and application form.

Antenna Ordinances

The antenna ordinance effort in Fresno County came to an unhappy end on June 27. In spite of the major effort by the Fresno ARC and other groups in the county to have a more "reasonably accommodating" ordinance passed by the Fresno County Council the vote was 3-2 against us. We are regrouping and planning for a retry. Strategy is being formulated.

Scholarships and Awards

There are many scholarships and awards covering a wide range of situations available to licensed Amateurs. The ARRL Foundation, The Dayton Amateur Radio Association, The Foundation for Amateur Radio, to name only a few, will be announcing their dates for applications for their 1995/6 scholarships. Watch QST and other amateur radio publications for details.

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 to September at Foothill College, Los Altos CA.
- SCRA Hamfest/Swapmeet, Sept. 16, 1995, in Santa Rosa CA. Contact Rick Reiner, K6ZWB, (707) 575-4455.
- 2nd National Hamfest, Oct. 6-8, 1995, at Costerisan Lake in Bakersfield, CA. Contact the Kern Co. Central Valley ARC at P.O. 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

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



SCCARA ROSTER as of August 1995 (145 dues members)

CALL	CLS	FIRST NAME	LAST NAME	PHONE #	ADDRESS	CITY	ST	ZIP	MEMBR SINCE	HAM SINCE
W6ACW	G	ED J	HAJNY	408 739-6105	20581 CRAWFORD DR	SUNNYVALE	CA	94087	1983	1948
N6ANE	T	EUGENE	HILL	408 226-6801	381 BLUEFIELD DR	SAN JOSE	CA	95136-2106	1980	1978
KA6ASV	A	TOM	DUNBAR	408 246-4273	117 N STERLING BLVD	STERLING	VA	20164-4021	1990	1978
KD6ATU	G	ROGER D	KEENAN	408 734-2806	1050 BORREGAS AVE #71	SUNNYVALE	CA	94089-4270	1992	1991
KC6BFQ	N	WARNER	NASH	408 241-5788	2652 WALLACE ST	SANTA CLARA	CA	95051-3826	1988	1988
K6BQN	E	WILLIAM	KEAGY	408 243-1869	2417 GLENDENNING AVE	SANTA CLARA	CA	95050-6415	1953	1953
N6BUO	A	REX	SKIVER	408 263-5277	1871 SHENANDOAH AVE	MILPITAS	CA	95035	1994	1969
WA6BYB	G	FRANK M	MONEZ	408 578-7067	407 BLUEFIELD DR	SAN JOSE	CA	95136	1995	1962
K6CAY	A	OTHO "OCH"	LAWRENCE	408 867-1647	18965 HARLEIGH DR	SARATOGA	CA	95070	1925	1925
W6CF	E	JIM	MAXWELL	408 353-3911	PO BOX 473	REDWOOD ESTATES	CA	95044	1994	1948
W6CFK	A	DICK	BARRETT	408 264-4320	1520 SANTA MARIA AVE	SAN JOSE	CA	95125-4463	1932	1932
WD6CGI	G	HENRY	PONCE	408 433-1655	2151 OLD OAKLAND RD #179	SAN JOSE	CA	95131-1520	1976	1976
WD6CHD	T+	ED	RAWLINSON	408 264-2988	2619 ARAGON WAY	SAN JOSE	CA	95125-5811	1976	1976
KO6CI	E	REUBEN J	VASELENKO	408 247-0825	1201-66 SYCAMORE TER	SUNNYVALE	CA	94086	1994	1993
N6CMJ	G	DICK	RAWSON	408 248-4805	141 KIT CARSON CT	SANTA CLARA	CA	95050-6615	1981	1979
KE6CTH	T	JOHN	REAGENT	408 984-1256	4201 NORWALK #DD103	SAN JOSE	CA	95129	1994	1993
K6DEZ	A	GEORGE	FUJII	408 293-8568	824 NORTH 5TH ST	SAN JOSE	CA	95112	1932	1931
KB6DLB	T+	ED	MANGAN	408 377-1630	4942 KENLAR DR	SAN JOSE	CA	95124-5104	1984	1983
KE6DSB	T	TOM	LAPIERRE	408 245-4717	1487 BARTON DR	SUNNYVALE	CA	94087	1993	1993
WA6DXP	E	JOE	QUIRANTES	408 371-0959	2809 NICHOLAS DR	SAN JOSE	CA	95124-1535	1975	1953
KD6EFL	T	HUGH	COLLIS	408 246-9374	611 WOODHAMS RD	SANTA CLARA	CA	95051	1992	1991
K6EJF	A	JOHN	TANNER	408 244-2445	2340 WALNUT GROVE AVE	SAN JOSE	CA	95128	1992	1952
WB6EMR	E	JAMES D	ARMSTRONG JR	408 945-1202	1334 HIGHLAND CT	MILPITAS	CA	95035-7057	1991	1974
W6EOA	E	SAM	TERESI	415 968-1814	1988 DEODARA DR	LOS ALTOS	CA	94024-7056	1948	1947
KE6EOC	T	STAN	CHUE	415 991-2128	66 ALPINE AVE	DALY CITY	CA	94015	1993	1993
KE6EOD	T	ANTHONY	SACCO	408 295-1433	1463 ALMA LOOP	SAN JOSE	CA	95125-1771	1994	1994
KE6EOI	E	LOUIS P	KALDY	408 262-4799	2163 PEDRO AVE	MILPITAS	CA	95035	1994	1994
K8ERL	E	MIKE	MARNERIS	408 243-9042	2679 BRADY CT	SANTA CLARA	CA	95051-3030	1978	1956
KB6ETA	T+	BYRON	BOMMARITO	408 281-1916	571 GIRAUDO DR	SAN JOSE	CA	95111	1989	1984
KE6FBY	T	LAURA	GAYNON	415 853-6049	1340 HAMILTON AVE	PALO ALTO	CA	94301-3122	1994	1994
KC6FGX	T	JOHN	SKINNER	408 446-5451	939 S TANTAU AVE	CUPERTINO	CA	95014-4601	1988	1989
KD6FJI	T	LLOYD	DeVAUGHNS	408 225-6769	216 WHIRLAWAY DR	SAN JOSE	CA	95111	1992	1992
KE6FQV	T	THOMAS	JEW	415 857-6179	10109 OAKLEAF PL	CUPERTINO	CA	95014-1109	1994	1994
KE6FTZ	T	RICHARD	GREENE	408 274-7783	2294 RUBY AVE	SAN JOSE	CA	95148	1994	1994
AC6FU	E	JACK L	RUCKMAN	408 379-4846	1695 EBBETS DR	CAMPBELL	CA	95008-5111	1994	1954
KE6FUG	T	PETER	ZEN	415 940-2267	11538 ROCK SPRING CT	CUPERTINO	CA	95014	1995	1994
WA6GKV	E	THEODORE C	BRICE	510 657-5779	48332 COTTONWOOD ST	FREMONT	CA	94539-7672	1976	1976
KA6GZO	T+	JERRY	MCKEE	408 985-0349	1959 JACKSON ST	SANTA CLARA	CA	95050-3826		
W4HCX	E	FOSTER W	PAULIS	408 370-7394	582 SMOKEY CT	CAMPBELL	CA	95008-3717	1991	1953
WA6HET	T+	GEORGE	ROUSH	408 741-1876	14660-B BIG BASIN WAY	SARATOGA	CA	95070	1965	1972
AC6HG	E	MALCOLM	LAWTON	408 268-3251	1360 WHITBOURNE CRT	SAN JOSE	CA	95120-4555	1991	1991
KO6HH	A	DON	HAYDEN	408 867-4643	13755 SKYLINE	LOS GATOS	CA	95030	1991	1991
KD6HIK	T+	JOANNA	WOODROW	408 266-3993	1545 CALLE DE STUARDA	SAN JOSE	CA	95118-1917	1994	1994
KE6HM	A	CLIFF	FURLOW	408 258-4139	27 PLEASANT RIDGE AVE	SAN JOSE	CA	95127	1981	1981
KD6HNG	T	CRAIG	ADAMS	408 285-9702	15090 BEL ESCOU DR	SAN JOSE	CA	95124-5014	1993	1993
KD6HNL	T+	JOHNNY	ANDERSON	415 469-4906	402 PLYMOUTH AVE	SAN FRANCISCO	CA	94112-2902	1992	1992
KA6HTP	G	FRANK	MITCHELL	408 262-6655	1714 BUTANO DR	MILPITAS	CA	95035	1992	
WB4IAI	E	KEN	STACKHOUSE	408 723-8979	1580 INVERNESS CIR	SAN JOSE	CA	95124-4809	1985	1967
WA6IER	T+	JACK	RUSSELL	408 296-5276	2137 OTIS DR #204	ALAMEDA	CA	94501-5703	1976	1959
KE6IKV	T	MELVIN D	CHAN	408 379-5232	2054 ANTHONY DR	CAMPBELL	CA	95008	1995	1994
K6IUU	T+	VIRGINIA	METZGER	408 294-3575	285 EAST MISSION ST	SAN JOSE	CA	95112-5011	1991	
KN6K	E	KEITH	BUTTS	408 248-3849	409 BUNDY #8	SAN JOSE	CA	95117-1660	1977	1977
KD6KGI	T	MICHAEL	WEISER	408 378-2496	831 GALE DR APT 46	CAMPBELL	CA	95008	1994	1992
N6KMQ	G	WILLIAM A	JOHNSTON	408 377-1524	209 SOUTH PETER DR	CAMPBELL	CA	95008-3312	1988	1988
W7KPA	E	JOHN	STORIE	415 964-8350	255 S RENGSTORFF AVE #45	MOUNTAIN VIEW	CA	94040-1733	1995	1957
KE6KXO	T	CLARK R	MURPHY	408 262-9334	PO BOX 135	ALVISO	CA	95002-0135	1995	
KB6LCJ	G	MIKE	HASTINGS	408 243-6745	2681 BARCELLS AVE	SANTA CLARA	CA	95051-5729	1985	1985
KB6LFZ	T	JOAN	HASTINGS	408 243-6745	2681 BARCELLS AVE	SANTA CLARA	CA	95051-5729	1986	1986
KB6LUC	A	TOM	SERVER	408 264-4482	PO BOX 7234	SAN JOSE	CA	95150-7234	1986	1986
AE6M	E	HARRY	WIJTMAN	408-241-1118	PO BOX 2101	SANTA CLARA	CA	95055-2101	1976	1975
WM6M	E	DAN	DIETZ	408 458-3460	25 WESTDALE DR	SANTA CRUZ	CA	95060	1977	1956
KE6MEA	T+	TIMOTHY	BRADY	408 729-9012	687 HIGH GLEN DR	SAN JOSE	CA	95133	1995	1994
KE6MGQ	T	BRIAN	SAM	415 968-3021	1428 SAN LUIS AVE	MOUNTAIN VIEW	CA	94043	1995	1994
KE6MGR	T	DANIEL	SAM	415 968-3021	1428 SAN LUIS AVE	MOUNTAIN VIEW	CA	94043	1995	1994
AC6MH	E	ROBERT E	WITTERS	408 265-6618	1823 LAURINDA DR	SAN JOSE	CA	95124-5614	1995	1994
K6MOB	A	TONY	SANCHEZ	408 296-6676	1761 BENTON ST	SANTA CLARA	CA	95050-5200	1958	1958
KE6MQU	T	CYNTHIA	SAM	415 968-3021	1428 SAN LUIS AVE	MOUNTAIN VIEW	CA	94043	1995	1994
KK6MX	E	DONALD R	APTE	408 629-0725	71 SOUTH SEA CT	SAN JOSE	CA	95138	1990	1990
WA6MYU	T+	GEORGE	HAMMEL	408 453-5770	PO BOX 612017	SAN JOSE	CA	95161	1990	1976
KD6MZM	T	IMRE	TAKACS	408 251-9686	1649 VIRGINIA PL	SAN JOSE	CA	95116	1989	1992
KE6NBP	T+	ERIC	WANG	408 251-4862	3306 CROPLEY AVE	SAN JOSE	CA	95132-1812	1995	1994
KB6NP	A	JON A	DUTRA	408 428-2058	20746 SEVILLA LN	SARATOGA	CA	95070-4824	1995	

CALL	CLS	FIRST NAME	LAST NAME	PHONE #	ADDRESS	CITY	ST	ZIP	MEMBR SINCE	HAM SINCE
WA6O	E	GEORGE	ALLAN	408 225-2368	668 CHEMEKETA DR	SAN JOSE	CA	95123-3012	1979	1956
WB6ODL	A	WALT	MITCHELL	408 262-6655	1714 BUTANO DR	MILPITAS	CA	95035	1979	1965
N6OHK	T+	THOR	JOHNSON	916 644-8498	2881 ALDER CT	CAMINO	CA	95709-9672	1986	1986
KB6OHO	E	BOB	KELLER	408 725-1034	1059 BIG OAK CT	SAN JOSE	CA	95129-3106	1986	1986
KE6OJS	N	ALBERT	WANG	408 251-4862	3306 CROPLEY AVE	SAN JOSE	CA	95132-1812	1995	1994
KE6OKK		LINDA	SCHULZ		17 UPPER LAKE RD	WOODSIDE	CA	94062	1995	
AA6ON	E	MILTON	O'HARA JR	408 988-3959	2376 SHORESIDE CT	SANTA CLARA	CA	95054	1989	1989
W6OQY	G	BOB	WHARTON	408 251-0505	1535 SUNSHADOW LN	SAN JOSE	CA	95127-4663	1956	1950
WB6ORU	A	WILLIAM A	OLIVER	408 292-0426	627 N 4TH ST	SAN JOSE	CA	95112-5124	1973	1970
KE6OUG	T	BILL	PARENT	408 926-9040	1138 SUMMERGARDEN CT	SAN JOSE	CA	95132	1994	1994
KE6OUN	T+	PATRICK J	MONAHAN	408 370-7257	215 GOMEZ CT #2	CAMPBELL	CA	95008-1234	1995	1994
KE6OUP	T+	JACK	MONAHAN	415 326-1713	1525 ALMA ST	PALO ALTO	CA	94301	1995	1994
AB6OZ	E	GEORGE	BRADY	408 729-9012	687 HIGH GLEN DR	SAN JOSE	CA	95133	1991	1991
KD6PAB	T	HARVEY	SAM	415 968-3021	1428 SAN LUIS AVE	MOUNTAIN VIEW	CA	94043	1993	1992
KD6PBH	T+	J S	GOLDBERG	619 693-0767	PO BOX 26910	SAN DIEGO	CA	92196-0910	1992	1992
K6PBQ	E	DON	VILLAGE	408 263-2789	3290 WOODY LANE	SAN JOSE	CA	95132	1985	1955
N6PCQ	E	ROBERT L	FORSTER	408 296-5509	268 KELLOGG WAY	SANTA CLARA	CA	95051	1987	1987
WB6PFB	G	KEN	ADCOCK	408 923-1701	3023 LITTLE ROCK DR	SAN JOSE	CA	95133-2030	1992	1964
KO6PH	A	JAY	O'DELL	408 238-9245	3149 MIDHURST CT	SAN JOSE	CA	95135	1995	1992
W6PHF	E	DAVID	PALMER	415 948-9527	638 BENVENUE AVE	LOS ALTOS	CA	94024	1995	1957
KC6PUQ	T+	KEN	WILLIAMS	408 247-4129	739 ROGERS CT	SANTA CLARA	CA	95051-5716	1991	1991
WA9PUR	G	JEROME N	LINDEN	408 629-9432	4979 SCARLETT WAY	SAN JOSE	CA	95111	1990	1965
KD6PWK	T+	ROBERT H	HULT	408 374-2203	301 N 1ST ST #4	CAMPBELL	CA	95008	1993	1993
KG6PY	E	ARTHUR	FURTADO	408 371-2655	2266 STRATFORD DR	SAN JOSE	CA	95124-2635	1979	
AA6QE	E	JOHN	COLE	408 996-7311	12661 HOLYOKE CT	SARATOGA	CA	95070	1989	1989
KD6QEI	T	BARBARA	BRITTEN	408 293-3847	585 S 14TH ST	SAN JOSE	CA	95112	1989	1993
KD6QEJ	T	KIRSTEN M	BRADY	408 729-9012	687 HIGH GLEN DR	SAN JOSE	CA	95133	1993	1992
N6QIO	T	NEAL	MACKLIN	408 741-1448	16620 BOHLMAN RD	SARATOGA	CA	95070-9604	1987	1982
KE6QKJ	T	ERIC	SCOREDOS	408 338-7824	15880 KINGS CREEK RD	BOULDER CREEK	CA	95006	1995	1995
KC6QOC	T	REGINA	WILLIAMS	408 247-4129	739 ROGERS CT	SANTA CLARA	CA	95051-5716	1991	1990
N6QVG	T	RENEE	MACKLIN	408 741-1448	16620 BOHLMAN RD	SARATOGA	CA	95070-9604	1987	1982
KD6QVO	T+	JAMES	SANTOS	408 985-8349	444 SARATOGA AVE #1B	SANTA CLARA	CA	95050-7032	1993	1993
WA6QYS	A	LOU	STEIRER	408 241-7999	2809 TOLEDO AVE	SANTA CLARA	CA	95051-5605	1983	
K6RQ	E	FRANK	GLASS	408 356-1026	14910 LOS GATOS RD	LOS GATOS	CA	95032-2011	1946	1935
KC6SOC	E	TERRY	YOUNG	408 270-5639	3383 BELGROVE CT	SAN JOSE	CA	95148-3114	1991	1991
KD6SV	A	RAY	PETSCHONEK	408 729-7893	1573 SAW LEAF CT	SAN JOSE	CA	95131	1992	
WA6TBT	G	JOSEPH	MANNINA	408 226-6214	5450-7 MONTEREY HWY	SAN JOSE	CA	95111	1980	1984
KC6TDK	A	PAT	ITATANI	408 463-0844	PO BOX 13157	COYOTE	CA	95013-3157	1991	1991
KA6TGE	G	DON	DeGROOT	408 243-8827	937 PERREIRA DR	SANTA CLARA	CA	95051	1992	1982
KE6TKM	T	ALAN	REEVES-FORTNEY	408 444-0737	1732 NEW HAVEN WAY	SALINAS	CA	93906	1995	1995
KD6TOC	T	DAVID	CENCE		PO BOX 10489	SAN JOSE	CA	95157-1489	1994	1993
W6TQH	T+	MICHAEL	GAYNON	415 853-6049	1340 HAMILTON AVE	PALO ALTO	CA	94301-3122	1994	1959
N6TQN	T+	JACK	LOVGREN	408 238-1900	6146 MONTGOMERY PL	SAN JOSE	CA	95135	1991	1988
N6TYI	T	DAVID	PRATT	408 281-2482	207 PINOT CT	SAN JOSE	CA	95119-1855	1991	1989
WN6U	E	DOUG	EATON	408 377-3736	185 UNION AVE #22	CAMPBELL	CA	95008	1984	1981
KD6UD	A	WARREN	GILLERAN	408 988-2706	3543 MACINTOSH ST	SANTA CLARA	CA	95054-2246	1980	1939
KM6UJ	A	CLINTON	HANCOCK	408 268-2106	6567 ASHFIELD CT	SAN JOSE	CA	95120-4502	1993	1959
KA6UMI	T+	ROLAND	WELSPIEL	408 296-2006	1669 LEXINGTON ST	SANTA CLARA	CA	95050-5350		
KA6UUS	G	FRAN	ELLIOTT	408 226-6214	5450-7 MONTEREY HWY	SAN JOSE	CA	95111	1980	1983
WA6UWF	T+	JOHN	MEIERDIERKS	415 967-4266	1666 MORGAN ST	MOUNTAIN VIEW	CA	94043-1801	1971	1955
WE6V	E	JIM	O'KEEFE	408 264-4987	1581 INVERNESS CIR	SAN JOSE	CA	95124	1981	1981
K6VIP	E	ROY	METZGER	408 294-3575	285 EAST MISSION ST	SAN JOSE	CA	95112-5011	1956	
WA6VJY	A	STAN	GETSLA	408 275-0735	477 PAMLAR AVE	SAN JOSE	CA	95128-4220	1984	1971
KC6VPZ	G	J FERRIS "NORM"	NORMAN	408 947-1011	450 FULLER AVE	SAN JOSE	CA	95125-1546	1992	1992
KC6VVU	A	DONELEY H	WATSON	408 266-3993	1545 CALLE DE STUARDA	SAN JOSE	CA	95118-1917	1991	1991
WB6VXA	G	BOB	AVINA	408 247-3311	963 BLOSSOM DR	SANTA CLARA	CA	95050	1989	
W6VZT	E	ALBERT F	GAETANO	408 379-3776	115 OLD ADOBE RD	LOS GATOS	CA	95030	1946	
KO6WM	A	NEAL	PATE	408 293-1219	PO BOX 15	SAN JOSE	CA	95103	1994	1992
KD6WPC	T+	RUTH	SMITH	408 248-3646	3215 ORTHELLO WAY	SANTA CLARA	CA	95051-3761	1991	1993
WA6WST	A	JOHN	SHINN	408 272-8070	1051 RIBISI CIR	SAN JOSE	CA	95131		1976
W06X	E	CARLA	WATSON	408 773-1885	473 PALO VERDE DR	SUNNYVALE	CA	94086-6763	1985	1984
N6XME	T+	ALONZO	DALLAS	510 794-7602	PO BOX 610164	SAN JOSE	CA	95161-0164	1995	1990
N6YLM	T+	BARBARA	EGGLESTON	408 248-4805	141 KIT CARSON CT	SANTA CLARA	CA	95050-6615	1990	1990
KA6YMD	A	WALLY	BRITTEN	408 293-3847	585 SOUTH 14TH ST	SAN JOSE	CA	95112	1978	1978
WA6YRU	A	JOE	BOCANEGRA	408 266-2997	PO BOX 585	SAN JOSE	CA	95106	1992	1977
WB6YRU	A	GARY	MITCHELL	408 265-2336	1851 LAURINDA DR	SAN JOSE	CA	95124-5614	1990	1977
N6YWZ	T+	WILLIAM M	ROGERS	408 225-8377	4648 MIA CIR	SAN JOSE	CA	95136-2325	1994	1989
N6ZEX	T	ALI	MOULINE	408 263-3897	955 COVENTRY CIR	MILPITAS	CA	95035	1995	
KD6ZJJ	T	ANDY	WIRT	408 978-1874	5067 RAFTON DR	SAN JOSE	CA	95124	1994	1993
KD6ZJK	T	JOANNE	MOSES	408 578-7306	6059 BIGELOW CT	SAN JOSE	CA	95123	1995	1993
W6ZM	E	BILL	STEVENS	408 377-6722	2074 FOXWORTHY AVE	SAN JOSE	CA	95124	1935	1934
W6ZRJ	E	JEAN "DOC"	GMELIN	408 973-8583	10835 WILLOWBROOK WAY	CUPERTINO	CA	95014	1946	1947
K6ZYY	A	EL	WIRT	408 377-2202	4952 ESTHER DR	SAN JOSE	CA	95124-5411	1991	1957

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: _____ Licensed since (yr): _____

City: _____ State: _____ Zip: _____ - _____

Telephone: () _____ A.R.R.L. Member: Yes No

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

Send the SCCARA-GRAM by first class mail for \$7.50 extra

I want _____ SCCARA badges @ \$3.00 ea. Badge name & call: _____

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

Please send the repeater Auto-Patch codes \$10.00

A COPY OF YOUR LICENSE IS REQUIRED FOR ALL REPEATER CODES

(Auto-Patch includes the Auto-Dial codes)

TOTAL: _____

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

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