

SCCARA-GRAM

Santa Clara County Amateur Radio Association

Volume 11, Number 12

December 1995

President's Prose

MERRY CHRISTMAS, HAPPY HANUKKAH, SEASONS GREETINGS, HEALTHY 1996...

Here we are with another year almost over, the BIG 1995 is ready to bite the dust as we are ready to usher in the BIGGER year of 1996. But as we all know that this year will be greater and the *YEAR OF ACCOMPLISHMENTS*, we can keep the new year's resolutions and promises... yes! yes! we WILL do better than before.

I would like to thank K6RQ Frank Glass for his January 95 presentation on *The World of DX*. Frank has been licensed for 60 years and is top of ARRL Honor Roll 328/368 Countries and pre WWII DXCC at 96, Mobile DX Countries 293, YLDXCC 215, and YLWAS. He is a member of: ARRL, NCDXC, SCCARA, SIRARC, SOWP, HIDXC, YLISSB, IBMARC. Frank is also a dedicated VE examiner who is always ready to help others. Thanks OM for all the help you have given to all of us through the many years. Also many thanks to your XYL Ciselia who helped you make it possible.

Thanks also to W6ZRJ, "Doc" Gmelin and W6VZT, Al Gaetano. They gave a very nice presentation about SCCARA's old days at our February 95 meeting. Here are two of our "old timers" that have dedicated themselves to HAM radio and helping other hams for many years. Thank you from all of us.

Our "one and only" W6ZM, Bill Stevens, Master of Ceremonies at our dinner meeting at Sizzlers. Bill also has a very impressive HAM radio career and another "old timer" and a Pacific Division Director several years ago.

Thanks to K6VIP, Roy Metzger, a loyal VE and "old timer" that enlightened us at our July 95 meeting about the ARRL VEC Program. Thanks Roy.

Our one and only, KO6HH, Don Hayden, who not only put us together for Field Day 95, but gave a very good presentation at our August 95 meeting on *Radio Frequency and Microwave Molecular Spectroscopy*. Many thanks Don.

We also thank K6PBQ, Don Village and XYL Joan who helped all of us during our lasagna dinner meeting in September and at our "pick-nick" August 20, 1995, also at every SCCARA meeting... sweating over the coffee, juice, and cookie treats. We thank you for all your dedicated effort.

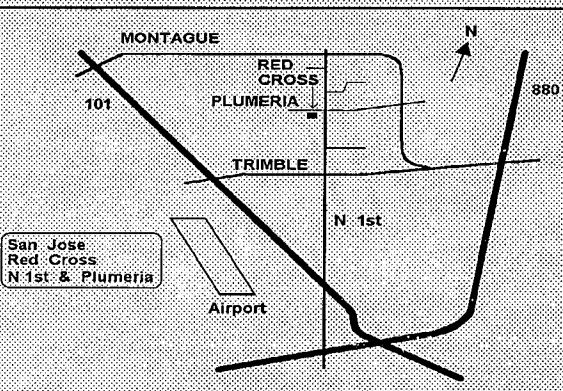
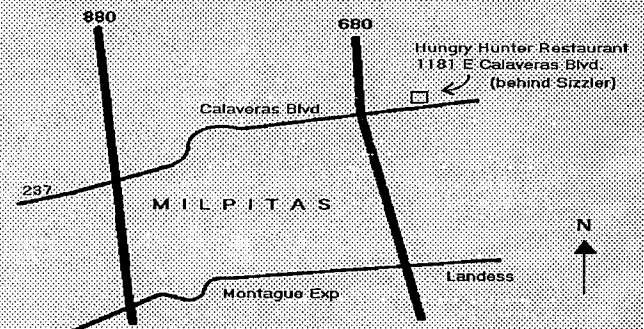
I also thank all of the members and officers of our great SCCARA club that joined, came to the meetings, and support us over the past year.

Calendar

- 12/15 SCCARA General Meeting--Dinner!
- 12/18 SCCARA Board Meeting--3rd Monday
San Jose Red Cross, 7:00p, all are welcome
- 1/8 SCCARA General Meeting
- 1/22 SCCARA Board Meeting--(San Jose
Red Cross, 7:00p, all are welcome)

Next General Meeting

- Day: Friday, December 15, 1995
- Time: 7 PM cocktails, 8 PM dinner
- Place: Hungry Hunter in Milpitas
- Agenda: Annual Dinner Meeting.
(Your reservations should already be in -- Don K6PBQ.)



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

COMMITTEES

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

SCCARA REPEATERS

SCCARA owns and operates two repeaters under the call W6UU:

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

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

SCCARA NETS

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

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

Visitors welcome to join in on the SCCARA nets.

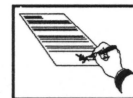
IMPORTANT TELEPHONE NUMBERS

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

Most of all many thanks to KD6EFL Hugh Collis, our VP and President Elect for the coming year and his XYL Paula.

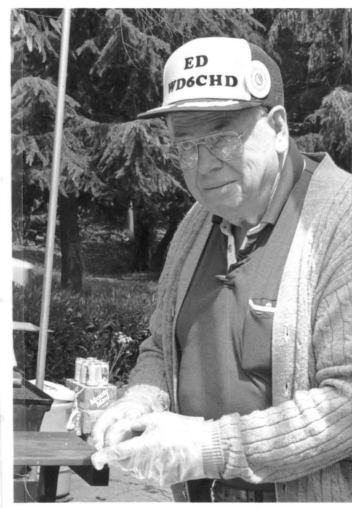
A special thanks to WB6YRU, Gary Mitchell, our great Editor and Secretary who does a magnificent job. And to N6BUO, Rex Skiver, our Treasurer who's financial skills keeps us solvent. Thank You Gary and Rex for all the hard work and dedication you have given us over the past year.

I thank everyone for their support during this past year, especially my XYL Mary for helping me keep my sanity during those crucial moments, "thank you honey".



73, Mike Marneris

K8ERL @ N0ARY.#NOCAL.CA.USA.NOAM



Ed Rawlinson, 1915 - 1995
WD6CHD — *Chili Hot Dog*

Meeting Minutes

General Meeting, Nov. 13, 1995



7:35 p.m. Meeting called to order by club president Mike, K8ERL. Self introductions followed as is our custom.

Brad Wyatt, K6WR, presented George Fugii, K6DEZ, with a 50 years of membership ARRL plaque.

Speaker: George Berry, KC6ULT, talked about the

Oklahoma City Bombing and other emergency events, and how amateur radio came into play. George is a member of California Task Force #3 and has been deployed to various emergencies across the nation. He showed two videos, one was on the emergency task forces and what they did which included search, rescue, medical support, logistics, and how they are funded. The other video was on the work task force did in Oklahoma after the bombing.

ARRL: Brad Wyatt, K6WR, had a few words to say.

A) The FCC to retain code requirement. New Zealand wants to eliminate code requirement. This was shot down and will not be brought up at the 1995 World Radio Conference nor at the 1997. The next time it may come up is 1999.

B) There is talk about closing some MARS stations on bases that are closing.

C) The commercial PCS operators are finding that there is opposition to antenna towers.

Repeater Report: Keith, KN6K, has the yet unsigned agreement with City of San Jose concerning moving the SCCARA repeater to the city vault.

Next meeting: Don, K6PBQ, the Christmas Dinner will be Dec. 15 at the Hungry Hunter in Milpitas.

Elections:

Hugh, KD6EFL, was elected club president.

Don Apte, KK6MX, 2nd by Brad Wyatt, K6WR, was nominated for Vice President. Don was elected VP.

Directors:

Brad, K6WR, nominated George, AB6OZ, 2nd by Al, W6VDZ. George was elected Director.

Clark Murphy, KE6KXO, was elected as a Director.

Don, K6PBQ, was nominated by Brad, K6WR, 2nd by Al, W6VZT. Don, K6PBQ elected Director.

Gary, WB6YRU, was elected secretary, Lloyd, KD6FJI, will help out if Gary is not present.

Good and Welfare: There was a moment of silence for SK Ed Rawlinson, WD6CHD, who passed away recently. New Good and Welfare is Jack, AC6FU.

Historian is Doc, W6ZRJ. (appointed position)

Treasurer: This position was not filled.

Mail man: Tony Sanchez, K6MOB. (volunteer position)

Station Trustee, Stan Getsla, WA6VJY, Nominated by Brad Wyatt, K6WR, 2nd by Al, W6VDT. Stan continues as Station Trustee.

Hugh, KD6EFL, nominated Mike, K8ERL; 2nd by Brad Wyatt, K6WR, for director on board if there is an opening. Motion approved.

Bob, KB6OHO, got vote of confidence for Photographer. (volunteer position)

Raffle.

Meeting adjourned 9:51 p.m.

Board Meeting, Nov. 27, 1995



7:11 p.m. Meeting called to order by Mike, K8ERL, president.

Present:

Mike, K8ERL, President

Rex, N6BUO, Treasurer

Clark Murphy, KE6KXO

Lloyd, KD6FJI

Lou, WA6QYS, Dir

Don, K6PBQ, Dir

Keith, KN6K

George, AB6OZ, Dir

Keith, KN6K, discussed the agreement with the city concerning moving the repeaters to the city vault. The final version of the agreement will be worked up by Gary Mitchell, WB6YRU, and distributed to all.

A discussion of keeping Rex, N6BUO, as treasurer and having the treasurer's paper work conveyed to and from him because he will not be able to attend meetings. We are still looking for a treasurer.

The 9600 port at the N0ARY there is a delay in purchasing equipment because of frequency coordination. As soon as this is settled, the equipment will be purchased.

Treasurer's report: SCCARA received a letter from the Second Harvest Food Bank requesting a donation. No action was taken on this request.

In memory of Ed Rawlinson, WD6CHD, SCCARA will donate \$50.00 to AMSAT. Lou, WA6QYS, made the motion to donate \$50 to AMSAT. Seconded by George, AB6OZ. Mike, K6ERL, said he will match the \$50 to AMSAT. Motion passed unanimously.

Old business

Perham Foundation--We are waiting for an invoice form 1995 flea market we hosted.

First Class Mail: Motion to eliminate the option for first class mail with the exceptions on a case by case basis. Motion by Lloyd, KD6FJI, second by Don, K6PBQ. Motion

passed Unanimously

Christmas Dinner: Don, K6PBQ, will get both the Ham and non-ham gifts. Don, K6PBQ, states that a list of meeting dates for SCCARA was sent to the United Way.

Youth Group; George, AB6OZ: There are three students enrolled in the class.

SCCARA members Bill Parent and Clark Murphy passed the written General Class Exam.

New Business

Don Apte, KK6MX, said that he could get a two meter HT at a good price and suggested that SCCARA could hold a special raffle just for this item.

Motion to adjourn by George, AB6OZ, second by Don Apte, KK6MX.

8:50 p.m. Meeting adjourned.

Recording for the Secretary, Lloyd KD6FJI

Thank You



George Berry, KC6ULT

NOVEMBER TALK

Thanks to George Berry KC6ULT, of the Urban Search and Rescue California Task Force 3, for a very thought provoking presentation on his experiences in the Oklahoma City bombing.

George had a video that explained the formation of the Urban Task Forces that go into action in disasters. He also had a very sobering video depicting the experiences of

his task force in Oklahoma City after the bombing. His talk was not only interesting but gave us a lot to think about. Again, thanks to George Berry KC6ULT.

Hugh KD6EFL



Bill Rausch, AA6AP
Phase 3D talk at the Oct. meeting.

Thanks Bill and George!



Secretary Says

I would like to thank Lloyd KD6FJI for helping out by taking the minutes at the recent meetings. As I write this, my Monday night class is ending and there aren't any more Monday night classes on the horizon.

This club has a history of "volunteering" people for jobs when they aren't around to refuse... evidently, that *custom* has struck again! ☺ According to the minutes, I was elected secretary for 1996--despite messages to the president that I wasn't running for re-election. Well, anyway, the latest word is that Lloyd has decided to run for secretary for 1996. Thanks *again* Lloyd!

We still need a treasurer. Rex tells me he is willing to continue as treasurer; however, his work schedule now has him on an evening shift. It's possible for the treasurer to function without attending meetings, but speaking from these past ten weeks (being an absentee secretary), it's not recommended.

Some of you may recall that in January, the board

voted/ordered a cessation to any and all efforts of a legal nature (bylaws and such). This has prevented me from doing some of the things I originally planned to do as secretary. For example, the Standing Rules aren't written down anywhere. (These are one notch below bylaws; they're typically motions of a continuing nature voted in at meetings.)

So, the only accomplishments I have done (beyond the usual duties) is to streamline the roster database and some record keeping. The treasure used to have the roster database, but the mailing list came from a different database maintained by Joe. The editor didn't have any database (mailing lists or otherwise) and the secretary only had meeting minutes records. The whole thing is now "new and improved" and consolidated into one package. Also, the meeting minutes are stored digitally in the same place as the roster database.

Certainly things can be improved still further, but this new structure will make life easier on future secretaries, editors, and historians. I will be happy to continue helping out in this regard.

The average member will probably not notice anything new, but the secretary and editor will notice. So will anyone else who wishes look into these records.

Perhaps before too long, we will get around to scanning in existing paper records and store them digitally with the more recent records. It would be nice to have everything together in one spot and easy to work with.... Yesserie, the digital age is upon us!

73 all,
Gary WB6YRU, Secretary

Repeater Report

Remember that supposed move of the repeater to the City of San Jose radio vault? Well, it looks like we can finally see the light at the end of the tunnel. I just sent a "final" version of the *Memorandum of Understanding* to our Repeater Committee chair, Keith KN6K. Evidently, the latest version has been approved by the board and repeater committee. If the City and Races also like it, all that remains is for each party to sign the document and the move can proceed!

Just to refresh your memory: SCCARA has had an opportunity to move both our repeaters to a secure radio vault owned and operated by the City of San Jose. This is one of the places where the City has its fire and police transceivers. The location is a little higher up in the hills from the current two meter repeater location. The coverage for our two meter repeater may be slightly better, except to the South and East. It's a pretty good bet that our 440 repeater's coverage will be MUCH better.

The move couldn't proceed without some kind of "letter of understanding" between SCCARA, San Jose

RACES, and the City of San Jose. The document basically spells out who is responsible for what and that the repeaters are available to RACES in times of emergency.

If anyone would like to see the document, just let me know. Also, I can send it to you via packet.

For the Repeater Chairman, Gary WB6YRU

SCCARA: Circa 1946

by Doc Gmelin, W6ZRJ

I joined SCCARA in 1946 when Irv Rasmussen, W6YPM (then W9FAV/6) was President. At the time the Club alternated the type of monthly meetings, with one meeting a business meeting at a specified location, and the next a dinner meeting. At the time, the dinners were at Vahl's Restaurant in Alviso. As I recall, the September and November meetings in 1946 were dinners at Vahl's and the now traditional December Christmas Party had not been established.

I do recall that unbeknownst to me at the time, I was present at some pretty historical dinner meetings. One was when "Doc" Harold spoke to the club at Vahl's. I think it was at the November 1946 meeting. Doc Harold originated radio broadcasting right here in San Jose in the first decade of the 20th century. Doc ran a school for radio enthusiasts and had some impressive local people as his students. Two that I know of were Ray Nubey and Harry Engiwcht. Harry was the founding President of SCCARA and held the call W6HC from that time until his untimely death in 1969. Harry later became a Professor of Engineering at San Jose State College, now San Jose State University. In addition to teaching, Doc operated a radio broadcasting station that later became KQW. After World War II KQW moved to San Francisco and is now KCBS.

When I joined SCCARA it was in its 25th year, although I don't recollect any particular celebration of the event. In fact I don't think I even knew that the club was 25 years old at the time. Later the club did celebrate both the 50th and 60th anniversaries with dinners and programs. Next year brings me to my 50th year as a club member and will also mark the 75th anniversary of SCCARA. Perhaps the club should again hold some kind of celebration.

At the time I joined SCCARA I did not hold an amateur license but was working towards my Class B (now General Class) license. That required a somewhat stiff technical test and 13 WPM code. The code was both sending and receiving, and you had to copy one minute straight with no errors and then send for at least one minute with no errors. The test was given in San Francisco at the Customs House. If you failed any part you had to wait 30 days and then take the entire test over. I think that the tests were given on Monday mornings at the time. Later the day changed to Fridays. I owned a car but we took the train to

San Francisco the first time I went up in February 1947. I think that my car needed some mechanical work and I was afraid to drive it up all that way. There were no freeways then and it took a couple of hours to go to the "City".

It was fortunate that I joined SCCARA because the club sponsored an amateur radio class at San Jose Technical High School in the fall of 1946. The instructor was "Bud" Jacklin, W6IXJ, who taught radio at Tech. I remember that the class was on Tuesday evenings. That class did a great deal to help get me started in ham radio. But I'm sorry to say it took me longer than I had hoped because I flunked the code twice which meant that I had to wait two months before I passed everything and got my license. That was in April 1947.

During the years I've been a member, SCCARA has given me more than I have given back to the club. I did learn a great deal about radio and electronics. As an example, I was privileged to hear a talk about something called a "transistor" which was going to replace vacuum tubes. We youngsters knew that wasn't going to happen.

And then a couple of hams from San Francisco came down and gave a talk and demonstration of something called "single side-band, suppressed carrier" modulation. It was interesting, but the signals sure didn't have the quality of "good old" AM phone. It was an interesting experiment but we knew it never would go anywhere either.

There are lots of other talks that I listened to over the years and I learned about how to be a better ham and also to keep up with the latest in radio and electronics. I even ended up teaching high school radio and electronics as a result of my membership in SCCARA.

I remember many, many years of SCCARA events: field days, picnics, dinners, emergency tests and of course the annual SCCARA Christmas Parties. I have a lot of fond memories of all of the SCCARA events I've taken part in.

SCCARA is a great club.

CQ JOTA

I operated *Jamboree On The Air* again from my home station on Sunday, Oct. 22, 1995. I had 15 scouts with leaders and some parents for a full house.

We were able to hook up with scout groups in South Dakota and Minnesota on 17 meters. They had a great time talking with these groups and discussing school work and sport activities.

I also had a code practice oscillator so the scouts were able to send their names etc in morse code.

Everyone had a fun afternoon and I'm looking forward to *Jamboree 1996!*

73, Don Village K6PBQ

WANTED

Kenwood speaker, model SP520 or SP230, for the TS520 or TS830 transceivers.

Don Village, K6PBQ, 408 263-2789

Faithful Member



George Fujii K6DEZ is presented a plaque at the November meeting by ARRL Pacific Division Director Brad Wyatt, K6WR, honoring his fifty years as an ARRL member.

Introduction To Packet Radio

by
Larry Kenney, WB9LOZ
Part 7

Messages are directed throughout the worldwide BBS network using a scheme called HIERARCHICAL ADDRESSING. The format for a hierarchical address is: addressee-call@BBS-call.#region.state.country.continent For example, my hierarchical packet address is:
WB9LOZ @ W6PW.#NOCAL.CA.U.S.A.NOAM

It might look complicated, but it's not. First, note that each section of the format is separated by a period. State and province codes are the recognized two-character codes established by the US and Canadian Post Offices. These may be found in the Callbook, your phone directory, or

any zip code listing. Don't guess on the state and province code if you aren't sure what it is, and make sure you use only the two-letter abbreviation. You could send the message to the wrong state or province or keep it from being forwarded altogether.

The codes used for the countries and continents are standards, now accepted throughout the world. You should be able to find a list of them in the help document or file section of your BBS. The country code has three letters and the continent code has four letters. (An older version of the continent code, still used by some BBSs, has only two letters.)

The code for the local area is optional. Since you probably have no idea what code is being used in upper New York state or in Iowa City, IA, for example, you don't have to enter it. If you do know the local code, please use it, because it will help get the message closer to where it's going more directly.

For messages going outside of the US or Canada, the state-province section is not always used.

Using the hierarchical format, here are some examples of packet addresses:

```
KB6LQV @ N6ZGY.#CENCA.CA.USA.NOAM
KC6NVL @ K6VE.#SOCA.CA.USA.NOAM
KC3XC @ N4QQ.MD.USA.NOAM
VE3XYZ @ VE3RPT.ON.CAN.NOAM
JA1ABC @ JA1KSO.#42.JPN.ASIA
```

You'll note that the local area code is preceded by the octothorpe (now, how's that for a \$5 word?), better known as the *number* or *pound* sign. The reason is that in Great Britain, Japan, and possibly other areas, they use routing numbers for the local area, which could get confused with zip and postal codes. Using the # on all local area codes will eliminate forwarding problems.

We need to emphasize two very important points: hierarchical addressing DOES NOT indicate a forwarding PATH and ONLY ONE BBS call should be included in the address. A list of BBS calls separated by periods will not get your message to its destination. In fact, it can cause your message to loop between BBS's and your message probably won't be delivered. The addressing scheme is said to be one area inside another area. Using my hierarchical address as an example, WB9LOZ @ W6PW.#NOCAL.CA.USA.NOAM, here's how you would describe the address: "WB9LOZ at W6PW which is in Northern California which is in California which is in the USA which is in North America".

USING THE HIERARCHICAL ADDRESS

This section explains how the BBS software uses the hierarchical addressing scheme. For an example, let's say

that I send a message to my friend Richard, KA7FYC, who uses the KD7HD BBS in Missoula, MT as his home BBS. I would enter:

```
SP KA7FYC @ KD7HD.#MSL.MT.USA.NOAM
```

All BBSs have a routing list called a "forward file". Like your local postal sorter, it "knows" about local routings in detail, but as the destination grows more distant, it knows only about larger geographical areas. If the only items in my BBS's forward file are other California BBS's plus a list of state abbreviations, country, and continent codes, let's see how this message would be forwarded. The BBS software will attempt to find a match between the items in the BBS forward file and the various parts of the hierarchical address starting with the left-most item in the address field. In our case, it would not find a match for KD7HD. If there isn't a match, it then moves to the next section to the right. It wouldn't find a match for #MSL, so it would again move to the right. Since all of the state abbreviations are listed in the forward file, it would find MT and that match would allow the message to be forwarded. The forward file would indicate the call of the next BBS in line to receive a message addressed to MT. Once the message is received at the next BBS, the process would start all over again until the message is finally delivered to its destination.

Packet Pieces

Downloaded from the packet network:

```
=====
Date: 5 Nov 95 14:28
From: AA2AD@KB2OBB
To: TEKTIP@ALLUS
Subject: TEST TRANSISTORS IN CIRCUIT
=====
```

The first T-TIP dealt with testing transistors out of circuit, but it would be handy to do some preliminary testing without removing every transistor from the board! Here are some tips for locating defective transistors while they are still mounted on the board. The tests are run with the case opened and power applied, so BE CAREFUL. Besides danger to yourself, the job of troubleshooting a piece of equipment can be complicated by one slip of the test probe.

Good technicians always begin the troubleshooting process with careful observation. Is a transistor too hot to touch? Remember to keep one hand in your pocket when you stick the other into the equipment's guts, and keep both hands away from high power RF circuits! Transistors may be quite warm in normal operation, but generally not hot enough to raise a blister. Conversely, if a transistor

looks like it is designed to dissipate heat (a big case mounted to a heat sink is a good clue), but is cold to the touch even after several minutes of operation, it may not be conducting. Watch for those clues. Is there a resistor which is discolored from heat? Has any component gotten so hot that the board is discolored? It may be normal, or it may be another clue.

After careful visual inspection, it may be time to break out your voltmeter. Transistors which are conducting show predictable voltage patterns. Specifically, the voltage drop between the emitter and base of a silicon transistor should be between 0.6 volts and 0.7 volts (about 0.3 volts for a germanium transistor). The voltage at the base should be between the voltage at the emitter and the voltage at the collector. For an NPN transistor, the collector will be more positive than the emitter. For a PNP transistor, the collector will be more negative than the emitter. While the voltage difference between the emitter and the base is 0.6 to 0.7 volts, the difference between the base and the collector is generally much greater. Remember that these values are relative to each other. Here is a chart of six imaginary transistors, showing logically possible voltages relative to ground which you might find on a good transistor which is conducting. Note that these patterns do not apply to a good transistor acting as a switch in the "off" mode. Also, transistors acting as higher power RF amplifiers may check differently.

NPN		

e + 2.0	e -12.0	e - 0.5
b + 2.7	b - 4.5	b + 0.2
c +12.0	c - 3.8	c +48.0
PNP		

e +12.0	e - 3.8	e +48.0
b + 2.7	b - 4.5	b + 0.2
c + 2.0	c -12.0	c - 0.5

These would be typical voltages measured with respect to ground. Often it is easier to simply measure the voltages across the legs of the transistor. If you can identify the emitter and put one voltmeter probe on that lead, you will measure about 0.6 volts to the base with the other voltmeter lead, and will measure a greater differential to the collector. The polarity of the voltage will tell you whether the transistor is NPN or PNP, and you can identify the lead configuration of a good transistor by the voltages on its leads.

Fred, AB6GQ, wrote a response to the first T-TIP (thanks, Fred), and has made an excellent point. Although some physical lead configurations are more common than others, you cannot assume that the lead configuration on

two transistors is the same just because they look alike. Do your homework!

I do appreciate short notes letting me know that you are reading these T-TIPS. Let me know if you missed the earlier bulletin on testing transistors out of circuit with an ohmmeter. I would be glad to forward it to you.

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

```

=====
Date: 9 Nov 95 09:08
From: N6DCD@KB7WE
To: PUZZLE@ALLUS
Subject: its logical
-----

```

Removing the unnecessary letters in the following string results in an amateur related statement:

THANEANUMANTEEUURESSEARLAYTLEEDSTTTATERRMSENT

Newsletter Notes

Unfortunately, I wasn't able to attend the November board meeting; however, I'm told it looks like we'll do away with the first-class postage option for the newsletter.

People with the first-class postage option received two newsletters last month (and will again this month). This experiment is to gather information as to the actual need for the first-class postage option. For some reason, *nobody* has been forthcoming with the results; it's beyond my comprehension why. Does no one care? At least fifteen of you should--that's how many of you paid extra last year for this option.

The board hasn't yet decided how to deal with possible late deliveries. One option is that they may simple "grant" first-class postage to individuals as needed.

Another option is to move the publishing date up a week and have NO first-class mailings--I favor this option. The only fly in the ointment here is that the board meeting will occur at the same time the newsletter reaches the post office. Of course, the logical thing to do is move the board meeting up a week as well. In the past, some have indicated they'd rather not do that, but I personally don't see any problem with it.

If you have any comments, please let me know... and, if you have the first-class option, *PLEASE* tell me what date you received each one. C'mon guys, it's not like you have to actually *do* anything.

73, Gary WB6YRU, editor

ARRL Pacific Division Update

December 1995

No Change For HF CW Requirements

In late October, FCC announced the dismissal of three more petitions for changes in the CW speed requirement for HF licenses in the U.S. See page 15 December QST.

On the international front, at the World Radio Conference - 95 in Geneva, Switzerland, it was decided at the Working Group level, that New Zealand's proposal to delete the Morse requirement for amateur operation below 30 MHz on a world wide basis will not be taken up at WRC-95. The matter of placing it on the agenda of a future conference, probably not before 1999, will be taken up in another Working Group, the Working Group of the Plenary, later in the conference.

Nothing is final until adopted in the final review of documents in the Plenary, usually late in the conference. This conference is scheduled to end November 17.

Vanity Call Signs - Still No Start Date

It appears as though the program for the actual application for individual call signs, other than the sequentially issued club call sign part of the program, will continue to be delayed, perhaps until 1996.

Telecommunications Reform

Telecommunications reform is one of the key topics in Washington DC currently as Congress returned from its 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. A conference committee from both houses is trying to reconcile the differences between S. 652 and H.R. 1555. The conference committees have been named. In the Pacific Division, Anna Eshoo (D) CA 14th is a member of the House conference committee. Little progress has apparently been made pending the resolution of the overall budget battle which continues as this is being written on Nov. 11.

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. The proposal, essentially, 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 just what is unclear so far.

The ARRL Washington Team continues to monitor these developments and be active on our behalf. See September QST page 50, October QST page 53, and December QST page 52 for more details.

Save Those MARS Stations

With the closing of the military bases, the related MARS stations will likely be closed. There are several groups working to attempt to save the MARS stations involved. Several have written proposals to save the stations but with mixed results. One Federal program which might be a great aid in saving the MARS stations is the "Federal Lands to Parks Program" as described in a brochure "U.S. Government Printing Office 1993-0-359-650" and related information available from the National Park Service, Western Regional Office, Planning, Grants and Environmental Quality Division, 600 Harrison St, Suite 600, San Francisco CA 94107, (415) 744-3972. A preliminary contact with Pete Sly, the manager of this program has been made. There may be other contacts and programs, but this is the only one found so far.

If you would like a listing of facilities closed or realigned since 1988 in the Pacific Division, just ask for a copy.

Ham Shot - Saved by Ham Radio

As reported last month, Rory Clark, KD6RKL, of Citrus Heights CA, a suburb of Sacramento, was shot while standing at a bank automatic teller machine. Using his hand-held transceiver, he called for help on the N6ICW repeater owned and operated by Chris Huber. As a result, he was able to obtain medical assistance promptly. In the words of local authorities, "That contact saved Rory's life."

As this Update goes to press, Rory continues to recover. In a conversation with him on Nov. 11, he was in good spirits and reported that he is now "up and about."

Good luck, Rory, and thanks to all who were involved!

FCC News

In late Oct., the FCC adopted the proposed changes announced on Aug. 17, by FCC Chairman Reed Hundt 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. The Honolulu field office is now part of the FCC's San Francisco Region as the Seattle Regional office is now closed with the retirement of the Regional Director.

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. See December QST page 84 for more details.

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. See October QST page 80 for additional details.

The FCC Compliance and Information Bureau has recently 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 called Bulletin CIB-2, May 1995, apparently 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, Pittsburgh, PA 15250. The price is \$2.50 postpaid. See October QST page 15 for additional details.

New Pacific Division Appointments

It is my pleasure to announce that Michael E. Petersen, WB6ZKF, of Placerville CA, has been appointed as a Volunteer Counsel in the El Dorado Co. area of California. Welcome, Mike, to the Pacific Division team!

I am pleased to announce that Rusty Epps, W6OAT, after meritorious service as Assistant Director for Legal Affairs, has taken on a new responsibility as Assistant Director for Special Projects. His first effort will be to represent the Pacific Division in the development of the World Radio Team Championship - 1996 to be held in the San Francisco Bay Area in June 1996.

Thank you, Rusty, for all your help and good luck with WRTC 96!

Succeeding Rusty as Assistant Director for Legal Affairs will be Phil Kane, N6SP, who is currently serving as a Volunteer Counsel in the San Francisco and Redwood City areas. Phil will also continue the development of the antenna and tower ordinance data gathering project for the Pacific Division.

Welcome and thanks, Phil, for taking on the additional role!

Antennas, Towers and Ordinances

The struggles over these ordinances continue in Fresno, Sonoma and Napa counties. No significant news to report. Please forward copies of all antenna, tower and related ordinances to Phil Kane, N6SP, to help with the collection of this data. Phil can be reached at PO Box 280192, San Francisco CA 94128-0192, (415) 369-7373 and commlaw@netcom.com.

Please read the article by Chris Imlay, N3AKD, ARRL General Counsel, "But I Never Agreed to That" starting on page 47 of Dec. 95 QST.

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.

The Dayton Amateur Radio Association is now accepting applications for its 1996 college scholarships. Amateur Radio licensees graduating high school in 1996 are eligible for 2000 dollar scholarships.

Each year the DARA offers eight such scholarships. No specific field of college study is required. Winners will be announced around June 1, 1996.

Interested students should send a self-addressed, stamped envelope for an application to DARA Scholarships, 45 Cinnamon Court, Springboro, Ohio 45066.

Other organizations will be announcing their dates for applications for their 1996 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.

Brad Wyatt, K6WR
Director, ARRL Pacific Division

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



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

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: 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

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

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

Name: _____ Call: _____ Class: E A G T+ T N

Address: _____ Licensed since (yr): _____

City: _____ State: _____ Zip: _____ - _____

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

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

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

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

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

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

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

WE MUST BE ABLE TO VERIFY YOUR AMATEUR LICENSE

BEFORE ANY REPEATER CODES WILL BE SENT

TOTAL: _____

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

===== PLEASE DO NOT TEAR/CUT ===== PLEASE DO NOT TEAR/CUT =====

**SANTA CLARA COUNTY
AMATEUR RADIO ASSOCIATION**

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San Jose CA 95103-0006

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