The JUG

Presidential Pen de AA6KX
Autumn 1994

By the time you receive this JUG, only about 7 weeks remain until the official start of the Fall Contest Season: the California QSO Party. October 1-2 marks the biggest and most popular state QSO event of the year, and this year we're going to make sure all 58 counties are on the air. Bob Wilson, N6TV, has volunteered to coordinate county expeditions again this year. A lot of us are way down the road in laying out our CQP expedition plans, so get your reservations into Bob now. If you haven't ever done a county expedition before, you really ought to consider it this year. October weather is usually ideal, and the CQP format is like Field Day without mosquitoes! Pick your county wisely and you get a chance to be "rare DX" without ever leaving CA. Plus, there's that bottle of CQP red with your name on it if you're in the top 20. So get ready now!

Then—just 5 weeks after CQP—the Club's sacred honor is on the line again as we go for our third-in-a-row Sweepstakes victory. To help us get ready, our VPCC, N6IP, has thoroughly revised and updated the "NCCC Sweepstakes Handbook", originally written by N6OP in 1975.   Bob has done a fantastic job of pulling together this rich collection of SS lore and strategy.   Besides explaining the fascinating history of NCCC in the November Sweepstakes, absolutely everyone will find something in this treasure trove that will him get higher SS totals. Bob says he'll have this back from the printers by September, and it will be available only to NCCC members whose score can count toward the Club total. We're asking that you pay postage costs if we have to mail it to you.

While the SS Handbook can help you with strategy, you still have to have your station ready. And that takes time! Dave, W6QHS, gave us some great ideas for SS antenna projects at our July meeting. Got your antennas in order yet? If not, get busy! If you need help with computer logging, come to the August picnic and let us help you out. One more thing: have you considered tying your computer and your rig together with an RS-232 line? With some older rigs, this may not be possible. But most of the newer rigs have all the logic on-board to allow a computer to interrogate and set the operating frequency. With such an interface, you never have to worry about setting your logging program to the right band—it's done for you, automatically.   And when you want to change frequency, just type as many significant digits as you need on the keyboard—no need to punch buttons on the transceiver! When the contest is over, your log will have the exact frequency recorded for each QSO you logged. Interested? Go look in the February 1993 issue of QST for a complete discussion of this interface. You'll find it's worth the effort to put one together. But one word of warning: a lot of people have experienced difficulty getting this interface to work with Yaesu rigs (see "Technical Correspondence" in November 1993 QST, for instance).

Coming Contests
All from QST unless otherwise noted

August		
13-14	Eu DX CW (WAE)	Jul. p.126
20-21	NAQP Ph	Jul. p.126
	SEANET Ph	Jun.p.118
	KCJ	Jul. p.126
	NJ QSO	Jul. p.126
	ARRL 10GHz	
	Cumulative	Jun. p.94
September		
3-4	All-Asian Ph	May. p.138
	LZ-DX	Aug. p.101
	MI QRP	Aug. p.101
	Panama XXIII	Aug. p.101
10-11	NA Sprint CW	Aug. p.101
	Eu DX Ph	Jul. p.126
	ARRL VHF QSO	Aug. p.100
17-18	NA Sprint Ph	Aug. p.101
	ARRL 10GHz	
	Cumulative	Aug. p.101
24-25	CQWW RTTY	Aug. p.101

Next Meeting
Saturday, August 27
Our Summer Potluck Picnic
Noon to 5 p.m.
W1FEA's Hilltop Spread
2040 Pleasant Hill Lane, Auburn

This is a fun for family, friends, and future members event. There will be a cooling swimming pool, ponies to admire, computer logging instruction, and lots more. Bring your gear that needs help. The help will be there.

Everybody come!
Talk-in Frequency: 146.550

The July Meeting Crowd

SF REPRESENTED BY BUD BANE, W6WB AND TOM GALLAGHER, N6RA

THE GIRALDIS, LEN, K6ANP AND YF RAE

ROGER STRAUCH, KD6UO, AND CARLOS, NP4IW

Letter to Editor

Joe Staples, W5ASP
10031 Meadow Lake Lane
Houston, TX 77042

re CQP

Jack:

As I mentioned to you at Visalia this past April, I'd like to have you publish my comment regarding CQP in the JUG

Since 1986 I've been a regular participant in the NCCC's California QSO Party. Like a lot of others, I think it's a great QSO party, by far the best. I was fortunate enough a few years ago to win it from out-of-state. The past two years I've concentrated on the "Most CW QSOs" category.

I did win the CW last year. But with a mere 326 Qs (compared to nearly 1200 the year I won overall). Not only did I search the bands exclusively for CW contacts, I even went up into the phone bands and begged for CW Qs. I couldn't get anyone to move to CW or even set a CW sked. (And I only asked those stations not obviously busy).

I looked over the final results. Of the 161 California logs listed over 38% made NO CW contacts. KA9FOX worked over a thousand California stations. That could mean more than 700 active CA stations not on CW.

Why bring this all up? Simply because I believe that with a little urging, and perhaps a bit of motivation, the CQP could be an even more interesting event. I suggest the NCCC put more emphasis on CW amongst the locals, at least to the extent of stressing that they spend a part of their operating time on CW. Perhaps California entries should be required to have a minimum percent of their total Qs on CW.

With the decline in the sunspot cycle, the bottomless reservoir of 10 meter phone contacts and a lot of those on 15 will quickly dry up. More time on CW will mean more fun for all. Thanks, I hope to see more of you active on code come October.

73, Joe.

Ed Note: W5ASP is notably active in all contests and you'll read his call near the top of the results in most of them. Joe also edits the Texas BULL SHEET, Newsletter of the Texas DX Society. A man of wit and wisdom, and a certified CW County Hunter. We're happy to have caught his attention. How about it gang-- let's do as he says!

Are you one of the missing 58?

Last Call for Dues   See Page 9

de N6IP
Wolbert's Words

More WPX   Several scores reached me after my JUG deadline; our total now exceeds 87 million points. Pretty good, considering conditions.

WPX CW Scores

Call	Qs	Pfx	Total	Category
P49V (AI6V & K6XC)	3309	796	10,121,936	M/S
VP2EJ (WB6CJE)	2025	614	4,128,536	SO, Low
K6BPB	185	124	28,272	SO, Low

IARU HF World Championship. Hope you participated in the GREAT Eu run on 20m Saturday night. Even my crippled (err, Eastwardly impaired?) station worked a bunch of them. W6BIP summed it up on his summary sheet: "Conditions to Europe were fantastic." 'Course Bip also said he heard me every time he listened — why didn't you call me, then, Bip? After 20m finally closed to Europe, the JAs came through. With zero band noise and nearly no QSB, even the mobiles were solid copy.

Call	Qs	Zones	Total	Category
N6IP	806	115	344,080	Mixed
W6BIP	182	32	23,680	CW

The Sprints Wanna operate like 'KKN or 'TV? For a big adrenaline boost and a quantum improvement in your contesting skills, check out the NCJ Sprints occurring the first two Saturdays of September. If its your first time, read the rules CAREFULLY and prepare to feel like a lid. But go for it anyway; a much better operator will emerge at the end of these four hour thrillers.

New Sweepstakes Handbook . I'm compiling data to update N6OP's old (1975) Sweepstakes Handbook. That old book is great, but outdated and rare. The new SS Handbook has tips and secrets from our experts you won't find elsewhere. It will be available in September. Use oupon below to get your copy. Because of its confidential nature, it's available only to in-region (ARRL's 175 mile rule) paid-up members.

Send me a copy of the NCCC Sweepstakes Handbook. I enclose $2 for postage. I am an in-region member. My SS log(s) will be credited to Northern California Contest Club.

Callsign:_____
Signature:_____(required)
Address:

_____

_____

_____

Mail to: N6IP, 10028 Bon Vista Ct.
San Jose, CA 95127   .Bob Wolbert

de AA6KX
NCCC Logo

What NCCC logo? Unless you count the oval, we really don't have one! Or may I should say, we don't have one which we all use consistently and which has public recognition. The Club issues certificates for various contest achievements, has in the past and will again this year award caps for active participation in Sweepstakes, sponsors the 5 Meg award and the Worked All California Counties Award, etc. Yet there is no NCCC logo which consistently graces these awards. Do you know what a FRC or a YCCC QSL card looks like? Of course you do! They may be boring symbols those guys use, but at least they have a strong recognition factor. But let's face it: we don't have any such symbol we all use, and we need one.

In order to correct this, we would like to hold a LOGO CONTEST. Any NCCC member can participate; the only restriction is that entrants can't also be judges. Get your creative juices going and see what you can sketch. We want a logo we can use on QSL cards, on club awards, on embroidered badges which can go on items of apparel, etc. And it would be a real plus if the logo could go on a redesigned club badge. Given that range of applications, don't let your idea get too complicated nor require too many colors. But give it some thought and see what you can do. Send your suggestion in to me, AA6KX, by October 15. We will submit the entries anonymously to a board of judges and let them decide on the winner. The winner will be announced in the November JUG. Besides fame and glory, we'll have an appropriate club award for the winner. Don't forget: October 15!

Membership Dues Due

The Northern California
Contest Club's

Sweepstakes Handbook

| 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1984 | 1992 | 1993 |

1994 (Pending)

Second Edition
1994

Issued to:_____   Number: ____

How's,Why's,'n,Getting There
ComputerLogging

Compiled by W6ISQ

Always at the leading edge of technology and new ideas, the JUG herewith presents a series of discourses from some of our knowledgeable members, comprising the latest, as well as the most practical, thinking on the subject. It may not be leading edge or anything else to some, but to a lot of us, it may be a leap into the ethereal (sic) world of hi/ho tech. Your cogent comments and further ideas are sought to help advance the art, and especially the scoring possibilities, of NCCC. Here's the lead off.

Why Computer Log?
de Bob Wolbert, N6IP

Computers cost money require extensive training, and often cause RFI. Why should we use them for contest logging?

1) Dupe Checking. Never again worry if your dupe sheet is updated. The computer knows and tells you in milliseconds.

2) Operator assistance. The computer sends the proper CW message with a single keystroke. With a Digital Voice Processor by K1EA (a voice keyer), it can even speak the proper message (including callsign, although rather poorly).

3) Immediate score reporting during the contest. If you only have 3 QSOs on 80m, you'd better spend more time there. Only need VY1 for the sweep? The computer displays all this information full-time so you'll not be surprised and disappointed after the contest over a strategic error.

4) Legible logs in minutes. After contest, logs may be printed immediately.

• 5) Reduce QSL chores. When the stack of bureau cards arrives, start logging program in QSL mode. Zip through the stack, printing confirmation labels immediately

Thanks Bob. With those inducing reasons to use a computer for logging, seems

like the next question becomes: what kind of equipment does it take to put together a reasonable system to perform as above?

Dave Pruitt. K8CC, published an instructive, article in April 1994 FLASH, Newsletter of the Mad River Radio Club. It serves well as a guideline to get into computer logging and also suggests some ideas to upgrade present systems. Dave's article is followed with discussion and comments from several of our own NCCC computer loggers.

BIP WINS AGAIN! PRES. BRUCE, AA6KX PRESENTS SS PLAQUE TO HIM AT THE LAST MEETING AT BO'S RESTAURANT IN S F.

Buying A Logging Computer
by Dave Pruitt, K8CC

With Dayton right around the corner, now is the time to consider buying or upgrading a logging computer for the ham shack. Logging software gets better with every release, although sometimes it takes a better computer to see the benefit. However, if you haven't checked recently, your computer dollar goes a long way in today's market. Dayton's plethora of vendors offers a great opportunity to get just what you need at a steal.

If you already have a logging computer, buying just the pieces to upgrade your old machine makes sense. Otherwise, it you're looking for an entire computer, you'll probably get a better deal buying a complete system from one of the vendors.

There are five areas to consider in buying a logging computer.

CPU Type

There is no place else where your

computer dollars make more improvement in performance than the computer "brain" or CPU. My recommendation is not to buy anything less than a 386 CPU, to get lots of computing power and powerful memory management capabilities. Right now, you can get a 40 MHz 386DX motherboard for around $100 which is a great deal. However, my favorites are the motherboards using 40 MHz Cyrix 486DLC. This chip is essentially the same as the Intel 486 without the math co-processor (which provides no benefit for logging anyway). 486DLC motherboards are typically about $170.

Memory

You should have at least 1 MB of RAM on your computer, or 2 MB minimum if you want to run the new CT. Typically, the choice is 1 MB or 4 MB due to the way memory is arranged, and I recommend buying 4 MB which will cost an extra $100, You can use the memory to hold extra QSOs, or run a disk cache to speed up your hard disk, or maybe get one of the internal voice keyers like a DVP or VoiceBlaster.

Hard Disk

None of the contest logging programs hog disk space, so just about anything will do. (My two dedicated logging computers plus my Packet Cluster get along fine with 40 MB drives). If you're gonna put all of your thousands of QSOs on the computer, you might want to consider a larger hard disk. Plan on paying less than $1 per megabyte. Also, don't get hung up with floppy drives - they exist only to get files onto or off of the computer. Pick a size (3 1/2 preferred) and go with it.

Serial and Parallel Ports

It seems like you can never have too many ports on a logging computer, particularly in a multi-op setting. Even a single op might want to connect to a digital radio, TNC, CW keying and a printer, so right there

de AA6KX Next Meeting
Summer Picnic Saturday August 27

Our August NCCC meeting will be the '94 SUMMER PICNIC at the mountaintop home of Jack Morgan, W1FEA. This fun family event gives us all an excuse to escape to the Sierra foothills for a pleasant Saturday afternoon of good food, great company, and lively conversation. This is an especially good time to reconnect with our SV and SJV members who have trouble making it to Friday evening meetings. Bring your swimming gear because the pool starts looking mighty attractive when the sun gets high in the sky. For the harmonics, there are real live ponies (very tame & gentle) in the back pasture. AND this year we're going to have a computer workshop at the picnic for anybody who would like to take advantage of the incredible amount of computer talent we've got in this club. If you've got a problem or a question getting your rig and your computer to play together or would just like some help getting things set up, throw whatever gear you need into the trunk and bring it up . There's sure to be somebody there who can help solve your problem.
Date: Saturday, August 27 Time: 12 noon -5 p.m. Place: QTH of W1FEA,
2040 Pleasant Hill Lane, Auburn (map below) Talk-in Frequency: 146.550

Format: Pot-luck . NCCCers always eat well at a pot-luck! Please bring a meal-time contribution appropriate to the size of the group you are bringing. <u>Suggested list of what to bring, ordered by the first letter of your call sign suffix:</u>
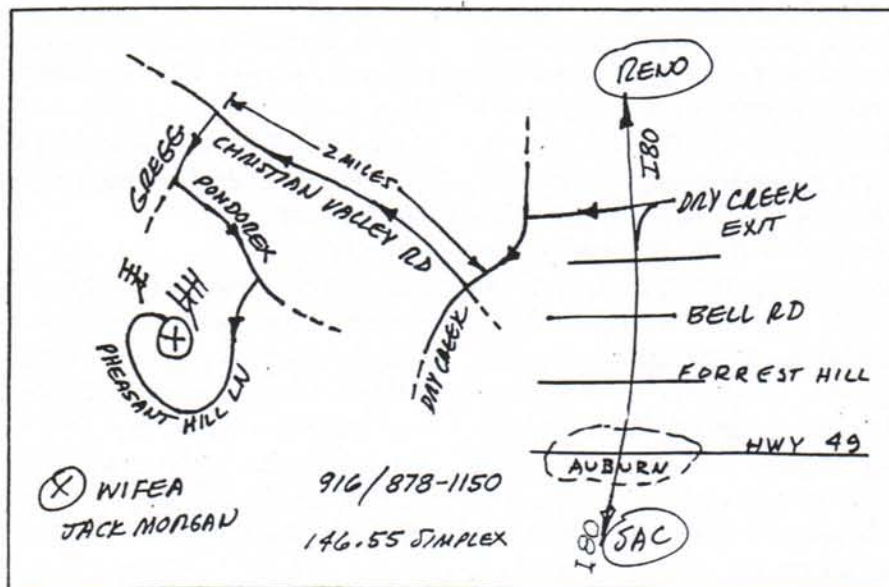
A-F: salad, soup, chips & dips, salsa, paper plates, plastic eating utensils, napkins, paper cups;

G-O: appetizers, finger food, hot dogs, hamburgers, sandwiches, casseroles, vegetable dishes;

P-T: iced tea, lemonade, fruit juice, soft drinks, beer, ice & ice buckets;

U-Z: fresh fruit, cookies, desserts, ice cream, cake.

RSVP: In order to coordinate the right amount and type of food and drink, we will need an approximate count of the number of people who will be attending. Please drop me a line ahead of time to let me know how many people you will be bringing and, if possible, what item(s) you will bring to the picnic. Reach me via Packet (AA6KX), Internet (zf8bs@twg.com) or phone (408-741-0518).

Highlights at S F

SPEAKER OF THE EVENING, DAVE LEESON, W6QHS TELLS ALL YOU NEED TO KNOW ABOUT ANTENNAS

LINDA HRRPER, KN6BD, CAME IN FROM PIONEER

CHECKING OUT THE ACTION DX ED GARRY, N16T JOKES WITH BOB MARTINEZ, K6ZXS, WHO HOLDS THE POST OF QSL MANAGER FOR W6BIP.

(Con't from page 4) are two serial and two parallel ports. Most ports I/O cards have two serials and a parallel - buy two and all your needs will be met. Note: be sure at least one of the cards can be set up as COM3 & COM4, with IRQs other than 4 and 3.

Monitor.

It seems like most contesters scrimp when it comes time to buy a monitor, when in reality it is one of the most important parts of the logging system. Think about it - you're staring at the monitor a large part of the time while operating, so why not get one that looks good? Color makes a world of difference in the display of data, so decide right now to take the plunge. What you want is a 14" or 15" VGA monitor, 0.28 mm dot pitch, 1024 x 768 resolution non-interlaced. My suggestion is to always ask to see the monitor in operation, because there are some really poor monitors around. If you stick with the specifications listed above, you should get a decent monitor for under $300.

There are some other minor recommendations. At K8CC, I prefer to have my computers (I have seven) in tower cases. The mini-towers can be mounted beneath the operating desk and out of the way.

I used to prefer the old-style keyboards with the function keys on the left, but I have been won over by the 101 keyboards with function keys on top. There is a small IBM keyboard available that saves valuable space on the operating desk - keep an eye out for one.

Hopefully, these notes are useful - good luck in your buying spree!

Comments From NCCC'rs

The JUG distributed copies of K8CC's article to some NCCC members and asked for comments. Herewith are excerpt some of their interesting, instructive findings.

General

K6PU: "The machine I use (386) is exactly what he describes except my keyboard has function keys on left which I prefer. AA6WM: Dave's advice is pretty accurate. AI6V (P40V): I log by

hand and use CT in post contest mode after. Do not type good enuf to keep up the rate. As far as gear goes, I think it's the op 90% and gear 10%, so it's not that important. AG6D: I totally agree with K8CC re: computer specs. Can't think of any point I would dispute. N6IP: There is some software for the Macintosh, but you'll be running against the tide. Macintoshes don't have enough easily available input/output ports for full featured contest programs. W6RGG: I prefer any PC to any Mac !

CPU Types

W1FEA: I agree with Dave. With $75 motherboards around (386DX-33) you can build your own PC for about $600. A 386-33 is plenty fast for CT. I would not consider a 386 now that the 486 have come down in price. (The 586 is now available). N6RA: It seems ridiculous to even think about getting a 386 these days, the 486s are so cheap. The best price/value is clearly a 486, probably at least 50 MHz (a "DX2"). A 100 MHz 486 is not much more (a "DX4"). WA6SDM: Definitely nothing less than a 80386. But these are now becoming obsolete, so would suggest a 80486 type motherboard. There are a number of speeds, and a 33 MH or a DX2-50 is good for the present. W6QHS: If you are going to use the computer for other tasks (I use mine to run YO and AO antenna software), consider 486-40 or 50 speed. Otherwise stick with the least expensive motherboard you can find that will run CT9, probably one with a 386DX CPU ($90 with CPU). For reliability, try to find a motherboard that has the CPU soldered on, and consider the Cyrix 486DLC or the AMD 386 or 486 CPUs. I'd consider the 386SX as obsolete and too slow. N6IP: There is simply no reason to buy a Microprocessor older than a 486. K6ANP: I would not consider a 386 now that the 486 have come down in price. AA6MC: I wouldn't waste money on a 386 these days. You get so much more computer for so little extra money that I'd agree that a low-end 486 makes more sense.

Memory

BRAD WYATT, K6WR, PAC DIV DIR ENJOYS A LIGHT MOMENT AT THE DINNER MEETING IN S. F.

WA6SDM: 2 MB minimum, more is better. W1FEA: 4 megs of memory is the best deal these days. N6IP: CT version 9 requires 2 Megabytes of memory. If you use the DVP vioce keyer, you'll want at least 4 M. N6RA: If you run N6TR's program it only requires the basic 640K memory in order to hold some 30,000 QSOs. Tree uses a much more clever way of handling his data than does the CT program. W6QHS: Memory is typically arranged in two banks of four sockets on the motherboard, and a bank must be filled with plugins. Memory comes in various speeds, and in 256 K, 1 Meg and 4 Meg sizes. I typically use four 1 Meg plugins (about $40 each) in a single bank to get 4 Megs of memory, but you can get by with 1 or 2 Megs by using four or eight 256K (about $14 each) plugins. To upgrade to 5 Megs, you can use four 1 Meg and four of your old 256K plugins. Get 70 nsec speed plugins so they will work in faster computers later.

Hard Disc

WA6SDM: Prices on disks have been dropping faster that a lead baloon. I recommend at least 170 to 200 MB disk. W1FEA: I found that the smaller drives (like 200 meg) are more expensive than 210 meg drives (at Fry's at least). I recently bought 210 meg Connor for about 160 dollars and it works very nicely W6QHS: 40 Meg IDE drives are now down near $100, but a 100+ Meg drive with *(Con't on page 7)*

cache is a better long-term buy ($170). Don't be tempted by bargain drives in older formats, and get the size that fits in a 3 1/2" floppy mount, as these are newer designs that work faster and are easier to configure. Be sure to get a copy of DOS 5.0 or DOS 6 to install. You can use either floppy format, but I'd start with 3 1/2" floppy drive ($45) and get software in this format. N6IP: Get one that was manufactured in the past year or so. Newer drives are much more rugged and reliable than those built a few years ago. Capacity is not an issue if contest logging is your main interest. Use 3.5" Floppy disk drive AA6WM: Although a large hard drive is not necessary for contesting, it is becoming essential for most other programs. I would not buy anything less than 200 megabytes. I recommend installing both 3.5 and 5 1/4 inch drives. There is still a lot of software distributed on 5 1/4 diskettes (especially at hamfests!), and it is cheaper and easier to get the drive installed with the system than to add one later. N6RA: I recommend a hard disc of at least 300 MB with a fast seek time.

Serial and Parallel Ports

W1FEA: A second serial board for COM3 and COM4 will usually run OK using interrupt lines IRQ4 and IRQ3 respectively. Then COM3 and COM4 port addresses must be set appropriately. WA6SDM: With IDE type drives, look for a controller card that does not have 2 serial and a single parallel port. A second parallel port can be gotten for around $15. One note of caution, most of the combined controller cards do not allow toggling of DTR line required by the CT and other programs that use the serial line to drive the CW...use the second parallel for this duty. The second parallel port also drives N6IP's DVK just dandy. It is interesting getting more than 2 parallel ports working, so don't go wild here. N6IP: "Multifunction" IDE Disk Drive controller board with two serial ports and one parallel port runs your disk drives and communications ports. The parallel port is

for your CW keying interface during the contest and for your printer afterwards. The serial ports talk with: your computer controlled radio, your packet, other computers linked together, for a multioperator

JOHN LARSON, K6AUC, FITS IN RARE APPEARANCE AT LAST MEETING

station, and/or your mouse (CT9 only). Two is often enough, you might need four serial ports. AA6WM: Make sure the serial card uses a 16550 UART. This is necessary for high speed modem operation and high speed networking in a multi set up. W6QHS: You'll need a video card with a socket to match your monitor cable, a drive interface card and serial (COM) and parallel port (LPT) card. The best bet since you won't be using Windows is to get the cheapest SVGA video card ($15-25) and an inexpensive combination floppy-disk(FDD), hard-disk (HDD) and I/O card 2H/2F/2S/1P $15-25). Be sure to get manuals with these. The combination I/OP cords should have a 16-bit "AT" connector so it can be configured as COM3 and COM4 if you want to add inexpensive 2S/1P card ($12) to get four serial ports for multi-op networking, TNC and radio control. A word to the wise - not all cables from the card to the case are the same, so keep cables and card together and mark them. Setting up for more than two serial ports requires advice from a PC master (try N6TV). If you're going to use K1EA's DVP "voice processor" ($150), you need a computer with room to plug it in and at least 4 Megs of memory. There are voice recording pro-

grams that use Sound Blaster audio cards ($80), which you will also need to run the training program CT Midoki

Monitor

W1FEA: A 14" or 15" color monitor with .28 dot pitch is a good choice. Larger monitors are hard on the eyes at close range. RF interference to your RX and Video modulation by your TX can usually be eliminated with a ground braid to the keyboard. W6QHS: for home use, you don't need non-interlaced, but if it fits your budget definitely stick with 0.28 mm dot pitch 14" monitor ($200+). Check for RFI and magnetic susceptibility from transformers in rotator control boxes. You'll need a video card, but the cheapest ones work fine for contesting. WA6SDM: Yep, don't cheap out here. And be careful of the cheap color monitors. They can be a goldmine of RFI. I've used two higher priced monitors ($350 to 400 class) without hardly a peep. W6XX: a good color monitor well placed for easy viewing will minimize operator fatigue. N6IP: the earlier monitors, MGA, CGA, EGA, etc. have poor RF shielding and high emissions. Color is nice, but not necessary.

Cases

WA6SDM: definitely a tower. W6QHS: I use the standard floor-style mini-tower case ($50). For RFI reasons, don't get one of the real cheap ones that are riveted rather than spot-welded. I always put in an extra 12V 0.1A fan to blow the air around inside the case, aimed at the CPU and HDD circuitry. The case should come with a little plastic bag of all the hardware you need. Get the special 6" adapter cable to connect the switched AC from the power supply to the monitor line cords. When done, check for RF radiation and susceptibility, and wind ferrite chokes if necessary. In minimizing RFI problems make sure the computer has a full metal case for good shielding. It appears that some manufacturers are now using cases that are mostly plastic. Most of the tower and compact tower cases I have seen are mostly metal. N6IP: Use metal case and power supply.

Keyboard

W6XX: For contesting I prefer to use a compact keyboard (such as the Suntouch Jr. manufactured by Suntouch instead of the standard 101 key type because it conserves desk space. The width of the compact keyboard is only 12 inches as compared to 17 inches for the standard keyboard. Central Computers in Saratoga carries two brands of compact keyboards priced at about 40 bucks each. **WA6SDM:** Religious subject. No comment. **N6IP:** Get a good quality 101-key keyboard. You will be glad your keyboard has a pleasant touch after several hours in a contest. **AA6MC:** K8CC's remarks were on the money with one exception—the original IBM PC keyboard, the ones that came with the original IBM PC and PC-XT, are notoriously RF sensitive. They tend to emit characters when your hands are near the keys in the presence of a strong RF fields. The general consensus is to avoid the really old IBM keyboards. They generate keystrokes when subjected to significant RF fields on 160 meters particularly. **NI6T:** Old style keyboards to which he (K8CC) refers are indeed smaller and the F keys are arguably more accessible, but I was disappointed to find that capacitive switches used were individual antennas and the RF package rendered the keyboard useless when transmitting. I don't have a problem with the F keys across the top of the 101-keyboard, and there are 12 instead of 10. **W6QHS:** I've found I can only go really fast on the old MaxiSwitch 84-key keyboard with the function keys on the left and no keys between the letters and the number pad (I had a 376 hour at P40V this year). And I don't like the "click" type keyboard, but that's a personal preference item. Some keyboards are really sensitive to RF, so ask around. Keyboards are cheap from surplus places ($5-10) but also cheap new ($30). **W1FEA:** Inexpensive keyboards are not a good idea because of key failure problems. Keyboards get beat up on quite a bit during a contest. Also, I normally run a ground

braid from the metal plate under the keys to the case of the computer to keep RF out of the keyboard circuits. I like the style with the function keys across the top where I place a strip key legend. **W6RGG:** I agree with K8CC's recommendation for the "101" keyboard.

Concluding Gems of Advice

WA6SDM: The choice for CPU should really be towards the 486 class. Look for a pentium overdrive ready board. Windows on a slow 386 tries the patience. For the same reason one should get a large disk. It's amazing how fast the disk space disappears once Windows is loaded and some applications follow. With Windows and Windows applications, 4 MB of memory is about the smallest to be considered. When shopping for a computer go to Fry's at the beginning of the month and pick up a copy of Microtimes. They are the ham's favorite price—free. Most of the 250 or so pages are ads from about every dealer in the Bay Area. If you have an older 80286 class computer, consider lifting the hood and putting in a new motherboard. Takes about 30 minutes or so and is far cheaper than a complete new computer. Later on the disks can be upgraded. My computer is of this ilk. About the only thing in it that is from the original computer is the mouse and the mouse interface card. Everything else has been changed out and upgraded since then. I'm currently on my third motherboard, second case, second drive and second monitor. Of course I've been at this for about 10 years.

AA6MC: There are a variety of sources here in Silicon Valley that will make up a computer to your specifications, and they'll back them with service. HD Computers in Sunnyvale, NCA and Fry's are the largest and best known. If it goes wrong it's good to have someone local to take it back to.

An operating desk with a recessed well to accommodate the keyboard at the proper height for typing instead of simply placing it at standard desk height reduces operator fatigue. I find laptop computers to be a poor choice for con-

test operation because the monitor which is attached to the keyboard tends to be in a position that interferes with your view and access to the rig and other equipment on the operating desk.

W6QHS: Software: A cheap application called Clock keeps the computer much closer to WWV time for contesting. To hook up to a TNC or run digital radio, you'll want to find the COMTSR's that come with CT. If you practise, you'll learn how to write batch files that start various TSR's and CT. I used Telix for packet and modem connections when the computer isn't dedicated to contesting. Station Layout: Most contesters put the monitor on top of the radio, with the keyboard in front of it. You'll be surprised how little you touch the radio if you CQ enough, and remote running is getting more available. Any other layout will give you a stiff neck or back. Th-th-th-that's all, folks!

Editor's Last Word. Thanks to all who participated in this review of how-to and what it takes for computer logging. The JUG stands ready to print further comments and soundings on the subject. Please take the mike, or in this case maybe computer, and speak up. We're listening to ya! More next month.

JUG thinks this might be the story W 6 O A T shown at left was telling members at SF meeting:

A young Ham got a job at a lake resort where small boats were rented. His job was to call out the number of the boat due in . First number he saw was 61, and after three calls, when it still didn't come in., he went to his boss and told him 61 was not responding. "Idiot, we don't have a 61!" Next call over the loud speaker went as follows, " Boat 19, we'll be right out to help.!"
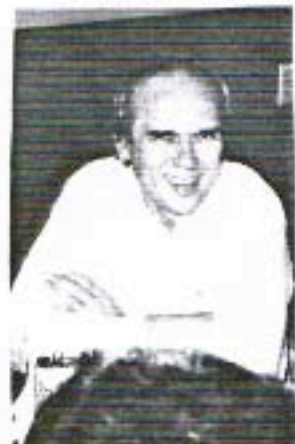
New Members

John Taylor
AC6AH

Enes T94EC here for an extended stay decided to join NCCC.

Bob Chortek, AA6VB, curry about joining

Don, N6IPE, signs on for contesting

De AA6MC
Treasury Notes

We welcomed new members that joined us at our July meeting in San Francisco: Roger Strauch KD6UO, Don Melcher N6IPE, and Enes Ceric T94EC. We're glad to have you with us!

	1994-95 Budget	YTD Actual
Membership dues	$3780	$2760
Member contributions to General Fund	$ 100	$ 346
Contributions to CQP	0	$ 10
Advertisements	$ 300	$ 300
Total revenue	$4180	$3416
JUG publishing & special mailings	($2600)	($ 196.09)
NCCC share of CQP expenses	($ 500)	
Awards	($ 650)	
Visalia Hospitality	($ 200)	
Contingency	($ 230)	
Self-funding events (Banquets, badges)	($ 0)	($212.20)
Total expenses	($4180)	($408.29)

Our current account balance is as follows:

Balance at start of Fiscal Year 94-95	$2501.02
Activity credited to Fiscal Year 94-95	$3007.71
Activity credited to Fiscal Year 95-96	$ 48.00
GENERAL FUND TOTAL:	$5556.73
Repeater fund	$1273.65
Checkbook balance	$6830.38

Mark December 10 on your calendar for the NCCC Christmas Banquet. More details in upcoming JUG issues.

de Dick Dievendorff, AA6MC

Last Call for Dues...Last Call...Last...

Membership renewals are still out on 58 of you. Check the label on this JUG to identify yourself, and Do it TODAY! That's NOW! All systems GO!

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