

Club Repeaters W6RGG/R 147.24+, 442.200 (107.2PL)



**NEXT NCCC MEETINGS**  
**DATE: Monday, JANUARY 12**  
**SOUTH BAY YACHT CLUB**

**DIRECTIONS BELOW!**

The program for the January 12 meeting will be a multimedia presentation by Kenny, K2KW, and other members of the championship effort at 6Y4A in 1997 CQ WW CW, featuring photos, audio presentations of pileup management, and video. Dinner will be catered in and will be your choice of fish or pork for \$10 including beverages (full bar available separately). This is the location where we held a meeting a few months ago that earned rave reviews for ambiance, location, food and ease of access and parking.

**Directions to South Beach Yacht Club:**

From the SOUTH: Take 280 north, and in SF stay to the left until 280 becomes King Street. (Don't take any exit to the right!) Follow King Street for a few blocks until it merges onto The Embarcadero. Turn right into the Pier 40 parking lot -- if the parking spaces are filled, drive into the building on the pier for more spaces. The SBYC is the first building next to the yacht harbor, right off the parking lot and adjacent to the pier building just noted for additional parking.

From the NORTH: Get on The Embarcadero and Pier 40 is just South of the Bay Bridge.

From the EAST: Cross the Bay Bridge into San Francisco and get on The Embarcadero to Pier 40 just South of the bridge.

Tentative plans for February's meeting will feature a special joint meeting of NCCC and NCDXC held on FRIDAY, February 13, (Note the change in the day of the week -- this is NCDXC's normal date and place.) A two part program of interest to all hams will be presented: (a) "Web surfing your way through ham

radio," a guided tour of all the best ham radio sites featuring information on contesting, DXing, vintage gear, callbook lookup and much more, and (b) "How to cope with the RF exposure rules and not get burned," a special presentation by Jim Maxwell, W6CF (with backup by Brad Wyatt, K6WR) on the new FCC rules that affect all amateurs regarding compliance with RF exposure limitations. This is a must - see presentation!

**NCCC OFFICERS**

- President ....  
 Andy Faber, AE6Y ..... ae6y@aol.com
- Vice President/CC .....  
 Bob Wilson, N6TV ..... n6tv@vnet.ibm.com
- Secretary/Treasurer ...  
 Ed Muns, W0YK ..... w0yk@msn.com
- Directors ....

  - Carl Cook, AI6V ... ai6v@aol.com
  - Bruce Sawyer, N6NT ....n6nt@worldnet.att.net
  - Ken Silverman, K2KW  
 ken.silverman@airtouch.com
  - Jim Hollenback, WA6SDM  
 jholly@cup.hp.com

- JUG Editor .... George Daughters, K6GT  
 gdaught6@leland.stanford.edu

**SPECIAL ISSUE:**  
**NCCC ROSTER**  
**PLUS**  
**CQP AND SS**  
**CLAIMED SCORES!**

## MUNS' MONETARY MESSAGE

We are half way through our 97-98 fiscal year, so let's take a look at the treasury. We've collected most of our income for the year, but we have significant expenses ahead, primarily awards for CQP (T-shirts, plaques, certificates, mailing, etc.) and NCCC members (letter openers, mouse pads, plaques, etc.) What follows is a summary of the budget to date, so factor in the upcoming expenses in your review. If you have any questions, please contact me.

	Budget	Actual-to-Date
Dues, 97-98	\$4,110	\$3,998
Member Donations	300	357
Ads	300	0
<b>TOTAL REVENUE</b>	<b>\$4,710</b>	<b>\$4,355</b>
JUG	(\$3,210)	(\$1,135)
CQP	( 590)	1,574
NCCC Awards	( 500)	( 69)
Visalia Suite	( 150)	0
Miscellaneous	( 260)	( 164)
<b>TOTAL EXPENSE</b>	<b>(\$4,710)</b>	<b>\$ 206</b>
<b>NET TOTAL</b>	<b>0</b>	<b>\$4,561</b>

### Notes:

1. An additional \$84 was collected for Dues beyond the 97-98 fiscal year.
2. An additional \$56 was collected for the Repeater Fund which is kept separate from the NCCC books.
3. Actual bank balance is \$8,977 which includes the carry-over from last year.
4. The Repeater Fund stands at \$1,391.

Ed, W0YK

## ANDY'S DANDIES

### December banquet

The holiday dinner was slightly out of the ordinary, being at a Chinese restaurant in Mountain View instead of our usual haunt, the Pleasanton Hotel (but Ed, W0YK, assures me that we already have a reservation at the hotel for December 1998, so we'll be back to traditional fare once again).

There were 36 attendees, which is a good group, though in one sense it's a disappointing turnout - the good news is that many spouses showed up and added diversity and interest to the conversation, the bad news was that meant that there were fewer members attending than should have been there. I know people have conflicts in December, but, hey, if you don't support your club by attending its functions, who will?

Anyway, the food was terrific once the waiters overcame the initial chaos and once our dB level chased out the other diners who had the temerity to be seated in

our private room. Tom, N6BT, and XYL (Bonnie the elf) did their usual superb job of handing out gifts to the attendees, after confounding us with another diabolical variant on the CQP counties theme, this time finding the county names in various nonsensical sentences. There was a nice contingent (both nice in manner and nicely-sized) from the Mother Lode group who showed up and even stayed overnight (after all the wine we drank, we probably all should have stayed overnight).

### Upcoming Meetings

Don't fail to attend our next two meetings! January 12 will be a spectacular multimedia presentation by Kenny, K2KW and others kibitzing on the recent superb effort from 6Y4A. The location alone should make it enticing (no, not Jamaica, I mean the South Beach Yacht Club in SF, which was widely praised when we held our last meeting there.)

Then in February comes our joint meeting with the NCDXC to discuss two topics of interest to everyone: Net surfing with a ham twist, and then the new RF exposure rules that affect us all.

A BOD meeting is also scheduled for Jan 10 at 9 am at my house. It's open to all, but let me know in advance if you plan to attend and are not on the BOD, since I supply food.

### ARRL DX Contest

Don't forget the ARRL DX Contests coming up in a few months. Conditions are improving, so we should be able to do better from the West Coast. Also, since dxpeditions now count for club scores, we're expecting more interesting trips than usual. If you're game, contact our travel agent, Kenny, K2KW, and get the latest info and find out about any vacancies that may exist. To get you in the mood for operating from home, I offer up a quote from a column I wrote for the April 1994 JUG, when I was vp/cc. It's about the one, albeit minor, advantage that we have in the contest:

"Last, while we may suffer from not having easy access to Europe as they do on the East Coast, at least everyone recognizes the state name "California" without repeats (at least if coupled to a "6" callsign), unlike the guys who have to give their state phonetically over and over. Here's a pome about that:

### CALIFORNIANS' REVENGE

We say to DX, "California"

One time, so we know we ain't borin' ya.

No need to spell it.

We sit back and yell it

Just once: "59 California!"

Here's hoping everyone enjoyed Happy Holidays and will have a happy and prosperous 1998 filled with high scores and rare DX.

73, Andy

# FIRST SWEEPSTAKES AT THE "CONTEST STATION FROM THE GOVERNMENT"

Phone SS was our first multi-station operation at the former Fort Ord MARS station. This site has real potential as a competitive multi-multi operation, including a first-class shack with 3 separate sound-proofed operating rooms, a Hy-Gain LP1017 14 element log periodic array for 40-10m @ 70', a 10-80m discone, numerous empty 70' power poles, and a 2 mi. downhill shot to JA, the Pacific and Oceania.

What makes the site especially nice is that it can accommodate visitors without disturbing the operators. It has a nice lounge area with several sofas apart from the operating rooms, and can accommodate several sleeping bags as well. There is also both a coffeemaker and a small but not minuscule microwave oven.

The site is now public property of the City of Marina Recreation Dept, due to the efforts of Pat, AA6EG. Pat is mainly a DX'er, and has been enjoying Field Day for 30 years straight but is now ready for regular doses of more potent stuff, like operating multi-multi in the BIG contests.

To meet our goal of maximum points contributed toward the NCCC club score, the plan was to operate two separate stations for SS, N6IJ as a multi-op with Tony, AE0M, Celia, N0BBS, and Pat, AA6EG using the discone and J.T., K7CO/6 single op using the LPA.

Because the vertically polarized discone is not the ideal antenna for SS, the plan also included a loaner C3S from Force-12 to be assembled by Tony and several others Saturday morning, mounted temporarily on one of the power poles by Pat, then raise 40m and 80m vees on two more power poles and only use the discone for long hop 40m and 80m thereafter.

Ah, but the plan could not deal with all the events of the morning. El Nino decided to present a storm bringing steady rain which did not let up until noon. Tony postponed arrival until 11 AM, and relied on the discone a few extra hours until dry weather arrived for assembly of the C3S. J.T. did his best to assemble the C3S indoors while it rained. Celia began promptly at 1 PM, while Tony completed assembly of the C3S.

Unfortunately, the discone had developed a problem, (high SWR everywhere) so Celia found the going tough. She could hear 4 or 5 times as many loud

stations as she could work. A few days after the contest, she learned, as she suspected, there had been a short in the connection to the discone. Pat, being delayed by the Rolling Stones Concert in Oakland the previous evening, and other helpers by tricks of map reading, did not get the C3S up until 6 PM, and due to advancing darkness only at 20'. The Field Day dipoles were pressed into service as inverted vees suspended from two of the 70' power poles to complete the array as darkness fell.

This made our 500W very loud into Montana, Utah, and Arizona, but these are not the places where hundreds of QSO's can be found. Not easily discouraged, Celia, Tony and Pat continued until 1 AM, then broke for dinner and conversation. (Pat knows some great stories about Tuva and Physicists.) Sleep began at 3 AM. Note: the only restaurant open at 1 a.m. is Denny's and it largely serves sandwiches at this hour. Don't plan on filet mignon. It's probably better to get dinner some time before 10 p.m. The hot tea and sandwiches were nice, as the one disadvantage of the site is, it is without heating until the momentum builds up a bit. We wore jackets throughout most of the contest and with the amplifier running and the bunker - style cinderblock construction we were just fine.

The wee hours festivities led to a late start Sunday morning about 8:30 AM and rates were disappointing on 20m as we let J.T. choose the best band with the LP. By 2 PM we only had 300 Qs on the second station.

Finally, the C3S @ 20' began to gain the upper hand on 15m. At 3:15 Pat took the mike. With a bit of coaching he mastered TRLog and was merrily running 'em within a few minutes. We think he is now hooked. (*note: Pat, AA6EG, is now a full NCCC member!...ed.*)

At 4:30 J.T. had completed his 24 hour maximum and Tony took the LP for a workout on 40m where we were still fresh meat. Our 10 min. rate peaked at 114 and we finished with a respectable 570/76 despite less than 17 hours of operating. This was FUN and made the disappointments seem FUNNY!

In order to attract more participation at the site, Pat is planning to mount the rebuilt KT34XA and a Tail Twister on the 70' pole at the top of the hill. The numerous monobanders will wait until the club has built up a larger cadre of active members.

Those NCCC members who pine for a guest operating chair free of antenna restrictions etc. should take advantage of this opportunity. Everything necessary to be competitive is on site except for a few more rotators, and a sustained series of Saturdays spent in antenna assembly and erection. You will be hearing more on this subject in the near future.

73, Tony, AE0M and Celia, N0BBS

# ELECTIONS LOOM

Have you ever thought about serving as a club officer? It is a great way to contribute to the success of our organization. New blood is critical to keeping the club activities fresh with innovative ideas and enthusiasm.

There are over 160 of us who are local members and could help lead the club next year. (The club's fiscal year runs from July 1 to June 30.)

The officers form the Board of Directors and include the President, Vice President/Contest Chair, Secretary/Treasurer, plus 4 directors consisting of the previous year's President and 3 "at large" directors.

An officer can serve in the same position for only a one-year term. The rationale behind this is the desire to encourage new ideas and to spread the work around a bit. The officers are elected at the April meeting each year. The election is really more of a "confirmation" of the slate of names submitted by the board. Typically, there is only one nominee for each of the 6 positions.

The 7th board member, the Past President, doesn't have a choice. I guess we could impeach the person for sufficiently bad behavior, though!

The current board is now soliciting volunteers for the next term. We would greatly appreciate people coming forward and expressing an interest in one or more of the positions so we don't have to get into our begging routine. I, personally, have found my time on the board to be satisfying and fun. It has been an excellent way for me to repay the enjoyment I receive from the NCCC.

For the Secretary/Treasurer position which I've done this year, it helps if you are a bit computer literate. Thanks to some initial work done by N6NT, our roster is in MS Access with all membership information. It automatically prints labels for the JUG, the annual NCCC Roster, the annual NCCC qualified members list for ARRL contests, e-mail address lists of various sorts, etc. I have been able to send meeting announcements and other club information via email to about 80% of club members--those who have supplied e-mail addresses--in addition to the monthly JUG mailing. The financial books are kept on MS Excel which was set up by K6KR and has worked great to keep the checkbook "in sync" and tracking with our annual budget. I have converted both to the MS Office Professional 97 versions and they have served us well this year. Now, it probably takes a couple hours a month to keep up and then maybe another hour or so for the ongoing communication with the NCCC board, typically via e-mail, but occasionally a Saturday morning meeting.

Why not contact any of us on the present board and find out what the position(s) entail? The current list of officers is on the first page of the JUG. You may be surprised how easy it is to jump in and help out.

73, W0YK

## Y2K

If you think Y2K is a German contest callsign, then you may be wishing otherwise very soon. It means "Year2000," and reads like a plot from one of Kafka's novels, when most of the world's computers run into a programming time bomb created by COBOL mainframe programmers in a distant era when dates were abbreviated as (19)xx. In the PC world, time literally began in 1980 and, in both cases, we learn that the world seems to end in (19)99. Our contest PC's have an interesting hardware twist in that they use three different clocks: a DOS clock, a BIOS clock, and a RTC (Real Time Clock). If all three are not Year2000 compliant, then you may be thinking of something more serious than your contest logging software rate meter when January 2000 arrives.

The ARRL RTTY Roundup in Jan. 2000 will have the distinction of being the first contest to feel the full wrath of this bug. I have a P38 board in my P5 computer, and know that neither the BIOS nor the RTC are Y2K compliant. But I know, at least, that my computer will not lock up. At the worst, I'll have to correct the log manually and change the year from /80 to /00. This would be the only time in my life that my low score could serve any advantage!

When March 2000 rolls around, a new crisis will hit us, in one form or another, as we find out much of our software is not Y2K compliant. The year 2000 is a leap year, but most software that was never written to consider what happens after 1999 would also never correct for the fact that the year 2000 is also a leap year. We might notice this on that first contest weekend with ARRL DX Phone. If this is an important one on your contest schedule, you might want to prepare for manual logging - as a backup plan. I'll be using my laptop that weekend, which is Y2K compliant. Even though I have at least 3 different logging programs on it, I'm thinking that setting up an Excel spreadsheet macro might be a good backup alternative.

The first useful step for getting that computer ready is found at

[www.mitre.org/research/y2k](http://www.mitre.org/research/y2k)

where we can download the DOSCHK software to test the three clocks. Beyond that, the options are yours.

73, N2ALE/6

# TV GUIDE

OK, troops, here's what you've all been waiting for!  
It's the scores from ...

## 1997 Sweepstakes CW

Call (Ops)	QSO's	Mults	Score	Class
N7TR	1397	79	220726	SO HP
W6NL	1293	79	204294	SO HP
N6RO	1260	78	196560	SO HP
K6AW	1224	79	193392	SO HP
WC6H	1237	78	192504	SO HP
K6KM (K2KW)				
	1204	79	190232	SO HP
N6TV	1219	78	190164	SO HP
N6NT	1189	79	187862	SO HP
AE6Y	1153	77	177562	SO HP
NI6T	978	79	154524	SO HP
N6DA	1012	76	153824	SO HP
W6BIP(+W6CT, AE0M)				
	953	79	150574	M/S
K6A(K6PU)				
	906	79	143148	SO LP
WA6CTA	903	79	142674	SO HP
W6BSY	900	78	140400	SO HP
W0YK	874	78	136344	SO HP
K6ANP(+K6LRN, N6AD)				
	808	79	127664	M/S
K6XX	773	79	122134	SO LP
W6EU	763	79	120554	SO HP
K6RB	759	77	116886	
AD6E			105028	
K6GT	650	78	101400	SO HP
KT6RA(+KD6KKP)				
	596	79	94168	M/S
N6KD	569	78	88764	
W7DR	561	73	81906	SO LP
N7TN	515	74	76220	SO HP
AJ6V	500	75	75000	SO HP
W6OAT(+Pkt)				
	485	76	73720	M/S
KA6W	471	76	71592	SO HP
W6RGG	442	74	65416	SO LP
N6PN	400	77	61600	SO LP
K6ZM(K6WG)				
	404	75	60600	
K6BPB	365	73	53290	SO LP
W6ISQ(+Pkt)				
	309	79	48822	M/S
K6UM	290	77	44660	SO LP
W6PLJ	303	72	43632	SO LP
K6PUD	285	68	38760	

## 1997 Sweepstakes CW (continued)

AD6AY	272	71	38624	SO LP
AK6L (+Pkt)				
	246	76	37392	M/S
KD6NOS (+Pkt)				
	241	74	35668	M/S
W6ISO	205	68	27880	SO LP
N6NZ	179	62	22196	SO LP
AA6W	143	59	16874	
W6G(WB6DSV)				
	160	50	16000	SO LP
KM6F	119	51	12138	SO HP
N6EE	106	50	10600	SO LP
K7CO	64	39	4992	
N6BT	16	14	448	

**CW Total: 4,669,412 (48 entries)**

## 1997 Sweepstakes SSB

N7TR	2301	79	363558	SO HP
WC6H	1866	79	294828	SO HP
N6RO(+K3EST)				
	1550	79	244900	M/S
W6NL	1525	79	240950	SO HP
N6NT	1455	79	229890	SO HP
K6AW(+KX7M)				
	1351	79	213458	M/S
K6KM(NU6S)				
	1274	79	201292	SO HP
K6HNZ	1254	79	198132	SO HP
AE6Y	1206	79	190548	SO HP
W0YK	1183	79	186914	SO HP
K6ZM(WB6MZQ, KD6RMN, AF7Y, K6WG)				
	1134	78	176904	M/S
KI6CG	1071	78	167076	SO HP
W6BSY	1034	79	163372	SO HP
K6BZ	1013	79	160054	SO HP
K6PU	1012	79	159896	SO HP
NH7A/W6	984	79	155472	SO HP
W6BIP (+W6CT, AE0M)				
	953	79	150574	M/S
WX6V	944	79	149152	SO LP
NI6T	934	79	147572	SO HP
W6RGG (+Pkt)				
	921	79	145518	M/S
K6RB	790	77	121660	SO HP
W6ISO	690	77	106260	SO HP
N6TNW (+N6TNX)				
	686	77	105644	M/S
K6GT	653	79	103174	SO HP
K6UM	641	79	101278	SO LP

## 1997 Sweepstakes SSB (continued)

AC6DQ	638	79	100804	SO HP
N6IJ(AE0M, N0BBS, AA6EG)				
	570	76	86640	M/S
AD6E			78280	
N6TV	538	72	77472	SO HP
K7CO	462	78	72072	SO HP
AK6L(+KD6NOS, +Pkt)				
	427	78	66612	M/S
N6UUG	424	72	61056	SO HP
W6IXP	334	70	46760	SO HP
K6EP	328	70	45920	SO HP
N6BT	326	69	44988	SO HP
W6ISQ(+Pkt)				
	272	78	42432	M/S
WX6M	326	63	41076	SO HP
W7DR/M	263	78	41028	SO LP
N6JT	288	71	40896	SO HP
N6EE	239	77	36806	SO LP
K6BPB	248	68	33728	SO LP
K6XX	233	66	30756	SO HP
WA6CTA	220	62	27280	SO HP
AJ6V	169	58	19604	SO HP
AF7Y	127	55	13970	SO LP
WA0YQM	121	49	11858	SO LP
W6OAT(+Pkt)				
	112	49	10976	M/S
W6DPD	116	46	10672	SO LP
N6NZ	124	43	10664	SO LP
AD6AY	105	49	10290	SO LP
N7TN	101	37	7474	SO HP
KM6F	86	42	7224	SO LP
KD6WW	68	33	4488	SO LP
N2ALE	75	29	4350	SO LP
K6ST	46	30	2760	SO LP

Phone Total: 5,567,012 (55 entries)

**NCCC Grand Total: 10,236,424**  
(103 entries)

These numbers are unofficial, but should be very close to correct! Thanks to everyone who entered. Now the anxious waiting begins.

73, N6TV

## Contester Runs Out of Gas During CQP!

No, I didn't have gas. But in CQP I ran out of it. No, I didn't run out of energy or lose my concentration. I ran out of helium and lost my 160 meter balloon vertical.

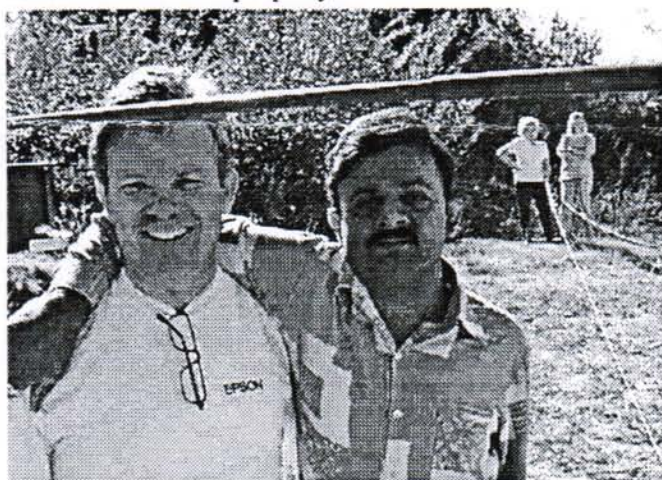
I put up the balloon late Friday afternoon, because CQP starts at 9AM local time. When I got home Friday night, I noticed the balloon didn't seem to have full lift, and the antenna seemed to be drooping. I pulled the balloon down, secured it to the balcony "launch pad," and figured I'd take a break and fill it up Saturday night, right before I moved to 160 meters. I'd only need it up for an hour or two.

So, Saturday night I take a break, run up to the balcony, and start filling the balloon. I got lucky and actually felt some gas coming out through a very small, pinprick-sized leak. I asked my son to hold the balloon, and I was just about to apply a patch when the balloon popped! I got a replacement balloon, but after it was about 1/5 inflated, I ran out of helium!

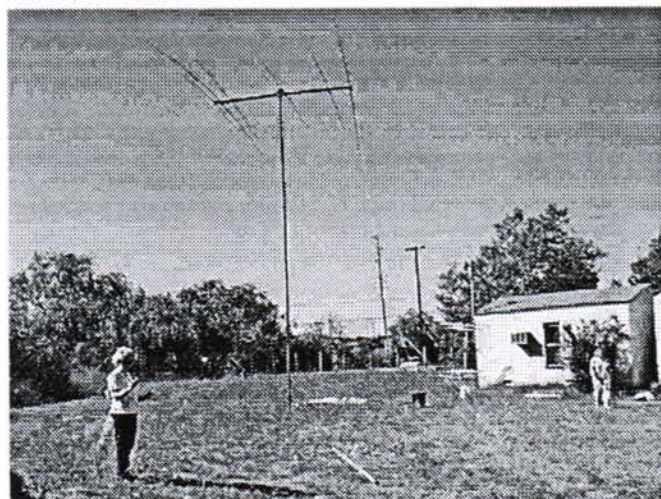
73, k6la

## A SHORT CQP PICTURE STORY

You may remember J.T. (K7CO) telling about the Napa county expedition for CQP. Here are a few photos documenting their experience. First, we see J.T.'s dad, Dennis (AF7Y) with the proprietor of the "Silverado Motel," who was keeping fairly close tabs on the construction on his property!



And here we see the final antenna farm with the motel none-the-worse-for wear!



And on the right is a "Junior op" on the expedition! I don't know who she is, but she surely does lend some beauty to the operating site! If any club member has photos which might be of interest to JUG readers, let your ol' JUGhead know!



Finally! J.T. starts to hand out Napa county to the hungry hordes.  
Thanks to Dennis and J.T. for the photos! ... ed



## 1997 CQP High Claimed Scores

High Claimed Scores, CA S/O

	CALL	QTH	Score	Mults	QSOs	Operators	Club
1	K6NA	San Diego	323988	58	2419	K6LL	
2	W6GO	Sacramento	314650	58	2354	N6IG	River City Contesters
3	K6LA	LAX	301136	58	2178		
4	N6TV	Santa Clara	289130	58	2080		
5	KC6CNV	Orange	270164	58	1977		
6	KF6T	Placer	263900	58	1858		
7	AC6T	Ventura	240758	58	1659		
8	K6RO	LAX	227824	58	1733		
9	N6NT	Glenn	224295	57	1556		
10	N6ZS	Sacramento	223590	58	1534		River City Contesters
11	N6ED	LAX	223532	58	1927		Young Gunners DX Assoc
12	KC6X	LAX	222952	58	1560		
13	K6BZ	Shasta	220168	58	1837		Shasta
14	N6HC	Orange	201202	58	1419		
15	K6RIM	Marin	198766	58	1414		REDXA
16	W0YK	Santa Cruz	191632	56	1462		
17	N6MU	Kern	191400	58	1100		
18	K6RB	Santa Cruz	183744	58	1286		
19	W6BJH	Shasta	182004	58	1237		Shasta
20	K6UT	Sacramento	178466	58	1493		MLDXCC
21	W6TKF	San Luis Obispo	176088	58	1285		CCDXC
22	WX6M	Solano	175856	58	1516		
23	WA6FGV	Riverside	170868	58	1122		
24	W6DI	Solano	170694	58	1460		

25	KV6H	Sacramento	166866	58	1213		River City Contesters
26	AD6E	Santa Clara	165300	58	1106		
27	N7CW/6	San Diego	163305	57	955		
28	W6JTI	Humboldt	162748	58	1087		Shasta
29	KI6AN	Butte	159268	58	1066		Shasta
30	WA6CTA	Marin	158004	57	1045		Shasta
31	KF7AM/6	Plumas	155382	58	893		
32	K6XX	Santa Clara	155034	58	1048		73 Contest & DX Club
33	W6EU	Nevada	146376	57	1047		
34	N6NF	San Mateo	143028	58	1007		
35	AC6DQ	Amador	134676	58	1161		MLDXCC
36	WN6K	San Diego	132126	57	912		
37	W6TKV	Riverside	130732	58	1073		Circle City Contesters
38	N6WU	El Dorado	128760	58	1090		MLDXCC
39	N6NM	Monterey	125802	58	777		
40	W6KFV	San Luis Obispo	122136	56	727		CCCDXC
41	KN6XU	Sacramento	113680	58	980		MLDXCC
42	K6EL	Butte	107673	57	754		Shasta
43	K6GT	Santa Clara	106952	58	753		
44	NN6NN	Stanislaus	101094	58	858	W6XK	San Joaquin Valley
45	W6HAL	San Bernardino	100408	56	751		

#### High scores from CA M/S

	CALL	QTH	Score	Mults	QSOs	Operators	Club
1	W6EEN	Riverside	241048	58	1855	W6EEN + K6XC + N6NC + W6ORD + KI7FX	
2	W6UC	Tulare	233450	58	1815	W6UC + NO6X	Hot Air Merchant ARC
3	K6XV	Sutter	181716	57	1302	K6XV, W7DR, N6VV	
4	N6KD	Amador	178866	57	1286	N6KD + N6KI	MLDXCC
5	N6UUG	Tuolumne	167040	58	1432	N6UUG + N1CS	
6	KT6RA	Stanislaus	159442	58	1188	KT6RA + KD6KKP	
7	W6OA	Alpine	155568	56	1080	NF6S + NI6T + KQ6DI + W6OA	LARK
8	KM6OH	Mono	155556	58	1208	KM6OH + W6BSY + K6DPW + KF6NCS	
9	K6ZM	Contra Costa	150993	57	1000		
10	WB6YIK	Tulare	138214	58	1125	WB6YIK + KC6HJJ	
11	W6BHZ	San Luis Obispo	130017	57	1046	KD6CVS + KE6SYA + KQ6BX + N6DE + N6NL	CPARC
12	K6RCC	Sacramento	123120	57	836	K6RC + AA6WJ	River City Contesters
13	N6TNW	Calaveras	112288	58	968	N6TNW + N6TNX	MLDXCC
14	AF7Y/6	Napa	108813	57	865	K7CO + AF7Y + AF7O	Alameda Contest Club

#### High scores from CA M/M

	CALL	QTH	Score	Mults	QSOs	Operators	Club
1	N6O	Contra Costa	581450	58	4217		
2	W6KC	Mono	251372	58	1752	W6KC + W6SW	
3	K6BJ	San Benito	62208	54	521	AC6KW + K6TG + K6EP + KD6FMF + AC6DN	
4	W6SD	LAX	36989	47	347	K6QWH + AC6YV + KC6T + KK6 WI + K6HCJ + KE6SDB + KE6EIT + KD6PLU + KD6TOT + KD6KKQ + AC6BY + KE6RVA	SFVARC



High scores from outside CA S/O

	CALL	QTH	Score	Mults	QSOs	Operators	Club
1	VX7SZ	VE7	164604	58	1246	VE7NTT	
2	W8MJ	MI	127136	58	918		Mad River Radio Club
3	W5ASP	TX	111418	58	828		Texas DX Society
4	WE9V	WI	101384	58	761		
5	K7QQ	WA	99586	58	714		
6	WD5K	TX	97556	58	688		Northern Texas Contest Club
7	W8GN	OH	91234	58	645		North Coast Contesters
8	K7SV	VA	88692	57	621		PVRC
9	WA3HAE	PA	88521	57	632		
10	N5DO	TX	86184	57	633		
11	VY1JA	VE8	85318	58	647		
12	WA4PGM	VA	84840	56	624		
13	KE9I	IN	84616	56	640		
14	VE7NKI	VE7	84564	58	729		Fraser Valley DX Club
15	W4MR	NC	77064	57	579		PVRC
16	KE1FO	MA	73660	58	582		YCCC
17	W04O	TN	66990	58	471		Tennessee Contest Group
18	WA8WV	WV	65912	56	472		
19	N5TJ	TX	64866	57	464		
20	N1CC	NY	64695	57	485		YCCC
21	NB1B	MD	62328	53	473		YCCC
22	WP2Z	VI	58752	54	450	AG8L	
23	KM0L	MO	58644	54	412		Kansas City DX Club
24	WB0O	ND	56376	58	414		
25	W7SE	WY	55233	57	404		
26	K5AM	NM	53694	57	412		
27	K0JPL	MO	51198	53	364		MVDXCC
28	VE1JX	VE1	50160	57	440		
29	WD5IQA	TX	49445	55	372		TDXS
30	AH7W	IA	48776	52	379		
31	VE3HX	VE3	47840	52	353		
32	N3IXR	PA	47060	52	347		Weekend Warriors
33	WB5KIA	TX	46970	55	345		
34	WB2OSM	NY	46748	58	403		
35	KK1L	VT	46145	55	359		
36	VE3KP	VE3	45186	51	340		
37	KB5KYO	TX	43990	53	329		
38	K4BAI	GA	43628	52	331		
39	K0ZM	KS	42771	53	309		KCDXC
40	K4MF	FL	42287	49	321		
41	WT9B	SC	40443	51	317		
42	WA1KKM	NY	38500	50	300		
43	KB0C	IN	37856	56	338		
44	KN7T	WA	36990	54	278		
45	KN4Y	FL	35856	48	249		

High scores from outside CA S/O

	CALL	QTH	Score	Mults	QSOs	Operators	Club
1	N0AC	IA	100166	58	690	N0AC + N0NI	
2	W4CAT	TN	55915	53	414	K1KY + KC4QFR	Tennessee Contest Group
3	N7SG	OR	29044	53	274	N7SG + K7FD	
4	N7LR	AZ	20629	49	173	N7LR + W9CF	

Full through Jun 30,98  
 Charles K. Epps, W6OAT  
 651 Handley Trail  
 Redwood City, CA 94062

FIRST CLASS



FIRST CLASS

<http://zap.com/nccc>

or

<http://www.contesting.com/cqp>

check us at:

NCCC  
 44 Toyon Terrace  
 Danville, CA 94526

**OAKLAND, CA**

2210 Livingston St., 94606  
 (510) 534-5757  
 (800) 354-6046  
 Mark KE6QFP, Mgr.  
 I-880 at 23rd Ave. ramp

**SUNNYVALE, CA**

518 Lawrence Exp. #102  
 94086  
 (408) 736-9496  
 (800) 854-6046  
 Ken, K1ZKM, Mgr.  
 So. from Hwy. 101

**Special HRO Holiday Discounts Off Our Already Low Prices!**

Holiday Specials continued through January!!



**HAM RADIO OUTLET**  
 WORLDWIDE DISTRIBUTION



**NEW! IC-756**



**All Mode Transceiver!**

- HF/50 MHz + 6 M
- 4.9 inch Multi-Function LCD
- Newly Designed DSP • Twin PBT • Dual Watch
- 5-100 variable-control watts of 100% stable output power (5-40 W on AM)
- PC Programmable (Optional CT-17 required)



**TS-870S HF Transceiver**

- DSP in I.F. Stage! • 100W 12V DC
- Dual mode noise reduction
- Digital Filtering (no opt. filters req.)
- Built-in RS232 Windows software incl.



**FT-920 HF+6M Transceiver**

- 100w 160-6M, 12VDC
- Built-in DVR, CW Memory Keyer
- DSP Auto-Notch • 99 Memories
- Computer controllable, CAT System



Call For Intro. Low Pricing!

