

MEETING: HOLIDAY BANQUET

DATE: Monday, December 11, Chef Wang's, 5100 El Camino Real Mountain View 6:00 PM INFO & DIRECTIONS INSIDE and you can *always* check: http://www.nccc.cc/meetings.html

NCCC OFFICERS

President ... Bob Wolbert, K6XX ... k6xx@arrl.net Vice President/CC

Ken Keeler, N6RO.... <u>kenkeeler@jazznut.com</u> or n6ro@arrl.net

Secretary/Treasurer

Kit Kohlmoos, W6ISO....kmoos@pacbell.com Directors

Ed Schuller, K6CTA...k6cta@arrl.netAndy Faber, AE6Y.....ae6y@aol.comRick Tavan, N6XI.....n6xi@arrl.netKurt Andress, K7NV... k7nv@contesting.com

ARRL CAC member: Jim Pratt, N6IG...n6ig@arrl.net JUG Editor: George Daughters, K6GT...k6gt@arrl.net WEBmaster: Ed Muns, W0YK... w0yk@arrl.net

The NCCC 75 meter net meets on Thursdays at 9PM, 3830kHz approximately

December Contests Dates ARRL 160-Meter Contest Dec 1 - 3 **TARA RTTY Sprint** Dec 2 - 3 **ORP ARCI Hol. Spirits Sprint** Dec 3 ARRL 10-Meter Contest Dec 9 - 10 AGB Party Contest Dec 15 **OK DX RTTY Contest** Dec 16 Croatian CW Contest Dec 16 - 17 DARC Christmas Contest Dec 26 2000 6m Activity Contest Dec 26 **RAC Winter Contest** Dec 30 Stew Perry Topband Challenge Dec 31

January Contests

Dates

ARRL RTTY Roundup	Jan 6 - 7
Japan Int. DX Contest, 160-40m	Jan 12 -14
Midwinter Contest, CW	Jan 13
North American QSO Party, CW	Jan 13 -14
NRAU-Baltic Contest, CW	Jan 14
NRAU-Baltic Contest, SSB	Jan 14
Midwinter Contest, Phone	Jan 14
LZ Open Contest, CW	Jan 20
North American QSO Party, SSB	Jan 20 - 21
CQ 160-Meter Contest, CW	Jan 26 - 28
REF Contest, CW	Jan 27 - 28
BARTG RTTY Sprint	Jan 27 - 28
UBA Contest, Phone	Jan 27 - 28
ARRL January VHF Sweepstakes	Jan 29

For a complete calendar, log submission details, and due dates for logs, visit:

http://www.hornucopia.com/contestcal/index.htm

DOUBLE CROSS (Wolbert's Words/ Dos Equis) Happy Birthday N6RO!

All Ken wanted for his birthday was 14 megapoints in SS. Whatta guy! Generously, the NCCC membership provided the gift he requested—as of his birthday, our total stood at 14.1M (and rising)—FB!

Now, of course, we must submit those logs. There are three things to remember:

- 1. Computer logs must be submitted in Cabrillo format (Hand logs are OK)
- 2. CW Logs are due December 6 (postmark/e-mail) to SSCW@arrl.org
- 3. Phone logs are due December 20 to SSPhone@arrl.org

Your paper log, or your check if purchasing a clean-sweep mug or SS pin, is mailed to 225 Main St., Newington, CT 06111.

Is anyone having problems with log conversion to Cabrillo? Speak up and we'll help you!

NCCC Holiday Party

Due to our outstanding results in the Sweepstakes, Santa himself has decided to attend the NCCC Holiday Extravaganza on Monday December 11.

Please join us! We'll dine at Chef Wang's, 5100 El Camino Real, Los Altos (near Rengstorff Ave). Your \$26 covers dinner, tip, gift, and flowers for the ladies. Meet around 6:00; dinner at 7:00. Program provided by Santa—you won't want to miss it!

Reservations are REQUIRED for this event. Reserve your place(s) by contacting Treasurer Kit, W6ISO, by December 7th. Either call (650) 366-7813 or e-mail kmoos@pacbell.net.

Now What?

With SS behind us, now we've got to decide which team contest we'll select for spring 2001. WPX is our usual selection (and we have the OH challenge encouraging this option), but ARRL DX is another good possibility. What say? Announce your preference on the reflector.

C U at the party!

73 de Bob, K6XX



SS Gavel #13 ?

Thanks to all of you who participated in the ARRL Sweepstakes to help NCCC in our attempt to win our 13th championship in the unlimited club class. It looks like we have a lead on PVRC at this point, but the reported scores do not determine the final results. You *must* send in your entry to ARRL to make it count for NCCC. Digital log entries MUST be in CABRILLO format. If you have a problem with your logging program, please ask for help on the club email reflector – we have gurus on the popular logging programs who can help you.

Before submission by email or land mail, check your log for obvious typos or other logging errors. I found several errors in my log regarding sections: SF vs SFL, NNJ vs NNY, SD vs SDG, NL vs NLI, LA vs LAX, OR vs ORG, etc. Some sections require three keystrokes instead of two, depending on the logging program you use.

Complete info on SS entry requirements are on page 102, October QST, and at the ARRL web site. The deadlines for submission are:

CW - Dec. 6: mailto:SSCW@arrl.org

SSB - Dec. 20: mailto:SSPhone@arrl.org

Special thanks to club members who hosted guest operators in SS: K5RC, N6BT, K6KM, K6TA, W6RN, W6NL, N6IJ, and W6OSP. Also tnx for the great club effort at W6YX by W6LD, N7MH, N6DE.

NCCC competes in the CQWW contests without the big hype of SS. Be sure to list NCCC in your entry. Scores for WW and other fall contests will be published in the January JUG.

Although SS and WW are behind us now, other challenging events arise in December, starting with the ARRL 160m test on December first. TOPBAND is showing signs of life and should be good this weekend. Work fellow club members to help boost their scores. On the other end of the HF spectrum, the ARRL 10m starts on December 8. CQ WW conditions hint that this might be the best year for this event on this sunspot peak.

At the end of December, two interesting events happen on the same weekend, but both can be done with "iron will and butt". RAC challenges VEs and the rest of the world to work each other on CW and SSB, 160 thru 2m. This is a friendly, fun event, good for both casual and hyper contesters, and is great practice for two-radio enthusiasts. During the RAC event, the Stew Perry 160m Challenge starts, with an interesting scoring setup: QSO points are based on distance between your grid square and that of the other station. Many entry classes and awards make this a rewarding event for you all-nighters with 160m ambitions.

Looking even further ahead, January contests include the NAQP, where NCCC teams have done very well in recent years. More on this event in the next issue and on the reflector.



In keeping with the NCCC "KB spirit" Bruce, W6OSP, pounds 'em out during SS.

WACC #1

(160 meters) AWARDED

On November 6, I processed the Worked all California Counties (WACC) certificate for Jim, W6BTO, which was endorsed #1 - 160 Meters. As most know, Jim has been working on this from his apartment in Atascadero for some time. On Oct. 22, Eric, K6EP, operated portable from San Francisco County and gave Jim his last county.

Jim's application included several QSL's that had been hand-made by 160 Meter Old Timers that hadn't sent out cards in years. Hearty congratulations to Jim; this is quite an achievement!

Ken, K6TA

Solving Line Voltage Regulation Problems

During CQP 2000, K6XX operated field-day style from an unimproved hilltop QTH. This was my first high power operation attempted with a generator. Although rated at 5kW, the generator output voltage varied significantly from key up to key down—in fact, the voltage dip was so great that only 500W of output power was produced. Worse, the key up voltage soared over the maximum allowable for the amplifier, which brutally decreases filament and power supply capacitor lifetimes. The unprotected Ameritron AL-1200 did not complain during the CQP period, but its flashing/dimming dial lamps and 20% too-high B+ and filament voltages surely beat it severely. Fancy Alpha amps certainly would not function under these conditions.

After the contest, tests using light bulbs and hairdryers were run to determine the extent of the problem. A true-RMS reading voltmeter at the load end of the extension cord recorded the following:

Load (nameplate)	RMS Voltage	% Drop (V)	Line Frequency		
<u>(Hz)</u>	-				
None (0W)	264	_	60.5		
Bulb (40W) FT1000MP &	264	0%	60.5		
AL-1200, idle mode	254	3.5%	60		
Hairdryer (1875W)	236	10.6%	59.5		
2 Hairdryers (3000W) FT1000MP &	227	14.0%	59.5		
AL-1200 at max output 2 Hairdryers, FT1000MP, 8	222	15.9%	59.5		
AL-1200 at max output	195	25.8%	59.5		

Actual load power was different than specified, since the line voltage was not the nominal 240V. A further generator problem was documented: occasionally when the loads were rapidly disconnected, the voltage would soar and remain at 270V; other times it shot up to "only" 253V.

When the amp was connected, its idle B+ was 4kV—which is 400V over the filter capacitor rating and about 600V above normal. Keydown at maximum obtainable output, the voltage dropped to 2400V (significantly better than during CQP for some reason...).

What is the solution, short of connecting to the commercial mains or purchasing/renting another generator? About 4V was dropped across the extension at maximum power level, so replacing the wires with something larger than 12 gauge would help the low output situation a bit—but not the key-up overvoltage.

Having heard of the semi-magic properties of ferroresonant transformers, I searched the web for data, eventually finding the brand "Sola". These big hunks of iron boast 1% output regulation for 25% input variation. Bill, K6GNX, warned me about ferroresonant frequency dependency: the fine print specified 1.5% voltage change per 1% frequency shift. In my situation, the output voltage would vary approximately 3.5% due to frequency; an acceptable amount.

A 3kVA Sola was located secondhand, for far less than its kilobuck price new, and the tests were run again. A short cable connected the load to the transformer and the Sola was connected to the generator by the longer cable. This configuration helps preserve voltage regulation.

Load (nameplate)	RMS Voltage (V)	% Drop	Improvement
None (0W)	242	—	8.3%
FT1000MP &			
AL-1200, idle mode		1.7%	6.3%
FT1000MP & AL-12	200		
at 1420W output	223	7.9%	11%
(approx)			

The regulation is not quite as good as the 3.5% expected, but is well within the safe operating range for 240V appliances. Key down voltage remained above 220V, and the B+ variation was about 350V from idle to full output, which is normal for this

particular amplifier. Note that the Sola did not have the capacity to run the hairdryers, so this is not a direct comparison with the previous table. A fully-protected Alpha should accept this supply without complaint as well.

Another benefit of the ferroresonant transformer is spike and surge protection. The device clips medium fast spikes as well as long-term voltage surges. The output was closely watched while the generator ran out of fuel; its voltage never surged above 242V. One drawback is the 12.5% no-load power drain. My 3kVA Sola heats the shack with 375W of idle power, rising to about 500W fully loaded.

Your all-weather contest station is not complete without backup power; unless you have a quality generator or are a low-power masochist, a ferroresonant transformer is a valuable complement. For contestpeditions, the extra box, although it is heavy, will provide better performance and extend component life.

When I haul this junk up the hill for Sweepstakes, I do so with the assurance that the extra 150 pounds of iron promises an easier time for my amplifier as well as another 4.5dB toward my "monster" signal.

My thanks to K6MO, K6GNX, KB6FPW, and WA6AJY for their assistance in solving this problem.

73 de Bob, K6XX



As the smoke starts to clear, but before the full results are known, it is time to generate a huge round of applause for Ken, N6RO! Thanks to his high visibility and persistent cheerleading before the SS began, many of us came out of the woodwork, made commitments and showed up! Getting the pledges out on the web and showing our scores as they came in helped to increase the fever pitch near the end (thanks to W0YK too!) Whether the NCCC prevails or not, it was a major achievement by our club. FB job!

Jim, W6EU, (and all of NCCC... ed)

Scores: 2000 CQWW SSB

Call	Class	QSO's	Zones	Countries	Score				
VE3EJ (VE3SUN(AB6WM), VA3NA(YT7WW), VA3RU, VA3UZ(UT4UZ),									
VA	A7RR, VE3EJ, VE3SS, VE3X	N, VE7CO	C, VE7ZO						
	MMABHPUA	12246	190	742	28,123,000				
N6IG (<u>W6AX@W6GO</u>)								
	SOABHPUA	2897	161	448	4,837,287				
9M6AC	CC (K7AR, W7YAQ, W7RR, 1	N6NZ, N7	NU, G4M	(JS)					
	MSABHPUA	3253	143	326	4,417,980				
K6ZM	(WA6O, K6WG)								
	MSABHPUA	1997	139	368	2,770,755				
K7NV	SOABHPUA	914	127	352	1,198,937				
K3EST	(@N6RO)								
	SO15HPUA	2188	38	142	1,104,660				
	Page 4								

K6UM	SOABLPUA	634	98	234	585,648
	M SO10HPUA	1216	38	137	572,775
W05K (@N6RO)				
	SO10HPUA	1236	36	116	524,704
K6III	SOABHPAS	510	103	232	476,705
AJ6V	SOABHPUA	572	90	193	422,802
K6GT	SOABHPUA	514	86	191	386,415
K6KO	SO10HPUA	707	38	122	312,800
NU6S (@WC6H)				
	SO15LPUA	730	36	116	305,216
N6RO	SO80HPUA	52	21	27	6,192
Total					46,045,876

CW KLEAN THWEEPS

These are listed in order of time of the QSO for the 80th section logged:

Call	Date/Time(Z)	Prec	Band	QSO nr	Penultimate	80th
AJ6V	5/11 0102	В	21	991	WY	MB
W6YX (N7MH)	5/11 0558	М	7	669	AK	WTX
N6RO	5/11 0608	А	28	717	PR	NWT
K6KM (N6TV)	5/11 0646	В	3.5	714	PAC	ND
K6CTA	5/11 1731	В	28	656	NWT	NL
K6RIM	5/11 1732	U	28	767	ME	NL
W6RGG	5/11 1747	U	28	557	EWA	NL
AE6Y	5/11 1815	В	28	877	DE	MAR
W6OAT	5/11 1909	U	14	565	NL	WY
N6XI	5/11 1910	В	28	926	AB	NL
W6ISQ	5/11 1925	U	28	390	WY	ME
N6IJ (AE0M)	5/11 1925	М	28	781	NL	MN
K6PUD	5/11 1932	U	28	926	AB	NL
W6BSY	5/11 1945	В	21	471	NL	WY
K6III	5/11 2028	U	28	642	EWA	MAR
W6OSP	5/11 2031	А	28	888	WY	MAR
WA6O	5/11 2131			931	SD	NL
K6TA (WX6V)	5/11 2153	В	21	1040	NL	MAR
N6BV	5/11 2154	В	28	1002	NL	NWT
N6EE	5/11 2304	U	28	697		NL
K7NV	5/11 2312	В	28	1105	NL	MAR
K6GT	5/11 2323	В	21	731	MAR	AB
W0YK	5/11 2334	В	21	919	NL	PR
NF6S	6/11 0127	А	14	579	AB	MAR
KS6H	6/11 0245	В	14	722	NFL	WY

The Newfoundland/Labrador section was the last one worked for the sweep in 7 of the 25 reports received, (and was the next-to-last in another 7 logs.) The MARitime section was next at 6, and Wyoming was third at 3.

If I missed anybody it was because I didn't get your e-mail proclaiming your triumph. Sorry!

It seems like most everybody made a Thweep in fone SS!

73, de W6ISQ

SCORES: 2000 ARRL Sweepstakes

mailto:SSCW@arrl.org 6 Dec 00 CW mailto:SSPhone@arrl.org 20 Dec 00 Phone

Total

Call	Class	QSO's	Sections	Score	Class	QSO's	Sections	Score	QSO's	Score	KB Award
K7BV (@K5RC)	U	1300	80	208,000	U	2036	80	325,760	3336	533,760	3,336
N6BV (@N6BT CW	& N6RO F	Phone)									
	В	1174	80	187,840	В	1952	80	312,320	3126	500,160	3,126
W6YX (N6DE, W6L	D, N7MH)										
	Μ	1231	80	196,960	М	1807	80	289,120	3038	486,080	3,038
WX6V (@K6TA CW	/ & K6KM	Phone)									
	В	1205	80	192,800	В	1619	80	259,040	2824	451,840	2,824
W0YK	В	1031	80	164,960	В	1769	80	283,040	2800	448,000	2,800
WC6H	В	1123	80	179,680	В	1671	80	267,360	2794	447,040	2,794
AE6Y	В	1137	80	181,920	В	1464	80	234,240	2601	416,160	2,601
N6XI	В	1106	80	176,960	М	1354	80	216,640	2460	393,600	2,460
K6RIM	U	1001	80	160,160	U	1332	80	213,120	2333	373,280	2,333
K6XX	В	1084	79	171,272	U	1260	80	201,600	2344	372,872	2,344
NU6S (@N6BT Phor	ne)										
	В	633	79	100,014	В	1695	80	271,200	2328	371,214	2,328
WA6O (@K6ZM)											
	В	1037	80	165,920	В	1212	80	193,920	2249	359,840	2,249
W6EU	В	705	77	108,570	В	1544	80	247,040	2249	355,610	2,249
N6IJ (AE0M, AA6E0	G+W7SW	Phone)									
	Μ	1024	80	163,840	Μ	1154	80	184,640	2178	348,480	2,178
N6RO	В	1256	80	200,960	В	876	77	134,904	2132	335,864	2,132
W6OAT	U	782	80	125,120	М	1106	80	176,960	1888	302,080	1,888
K6GT	В	794	80	127,040	В	1055	80	168,800	1849	295,840	1,849
AJ6V	В	1057	80	169,120	В	754	80	120,640	1811	289,760	1,811
KS6H	В	724	80	115,840	А	1057	80	169,120	1781	284,960	1,781
K6PUD (+KQ6OB @	W6RN Ph	one)									
	А	543	80	86,880	М	1237	80	197,920	1780	284,800	1,162
NT6K (+KABIM Pho	one)										
	А	380	72	54,720	Μ	1436	80	229,760	1816	284,480	1,098
W6BSY	В	634	80	101,440	А	1005	80	160,800	1639	262,240	1,639
K6III	U	818	80	130,880	U	788	80	126,080	1606	256,960	1,606
KR6RF (N6EE, W6X	KK)				М	1600	80	256,000	1600	256,000	1,600
K6ANP	В	579	79	91,482	В	1012	80	161,920	1591	253,402	1,591
K6RB	В	750	76	114,000	В	845	80	135,200	1595	249,200	1,595
K7NV	В	1261	80	201,760	В	300	70	42,000	1561	243,760	1,561
W6RGG	U	702	80	112,320	U	800	80	128,000	1502	240,320	1,502
KF6RIP	А	660	78	102,960	В	861	79	136,038	1521	238,998	1,521
W6CYX	В	973	79	153,734	В	500	80	80,000	1473	233,734	1,473
N6ZFO	А	701	77	107,954	А	776	78	121,056	1477	229,010	1,477
K6HNZ					В	1351	80	216,160	1351	216,160	1,351
KX7M (Phone*)											
	А	633	77	97,482	А	750	78	117,000	1383	214,482	1,383
N6TV (@K6KM)											
	В	1275	80	204,000				0	1275	204,000	1,275
K6KO (with K6TA)					М	1273	80	203,680	1273	203,680	637
W6OSP (+AD6E CW											
	М	1030	80	164,800	U	249	71	35,358	1279	200,158	1,279
K6CTA	В	915	80	146,400	В	346	74	51,208	1261	197,608	1,261
N6ZB	В	791	79	124,978	В	380	80	60,800	1171	185,778	1,171
N7TR	В	508	72	73,152	В	629	80	100,640	1137	173,792	1,137
AA6W	В	522	77	80,388	В	529	76	80,408	1051	160,796	1,051
W6NL*	В	1000	80	160,000				0	1000	160,000	1,000
W6ISQ	U	498	80	79,680	U	500	80	80,000	998	159,680	998
K6SRZ	В	371	70	51,940	В	637	80	101,920	1008	153,860	1,008
N6JS					В	830	80	132,800	830	132,800	830
K6IF	В	359	77	55,286	В	444	78	69,264	803	124,550	803
N6EE	U	737	80	117,920				0	737	117,920	1,537
K6UM	А	260	78	40,560	А	469	80	75,040	729	115,600	729
AD6E					В	715	80	114,400	715	114,400	715
N6UUG	В	104	54	11,232	В	621	80	99,360	725	110,592	725
K6EP	В	225	75	33,750	В	477	80	76,320	702	110,070	702

SCORES (continued): 2000 ARRL Sweepstakes SCW@arrl.org mailto:SSPhone@arrl.org

mailto:SSCW@arrl.org 6 Dec 00 CW

20 Dec 00 Phone

Total

Call	Class	QSO's	Sections	Score	Class	QSO's	Sections	Score	QSO's	Score	KB Award
N6PN					А	701	77	107,954	701	107,954	701
K6AW (@ W6NL)	В	684	77	105,336		/01		0	684	105,336	684
N6TNX (+N6TNW)	-				М	626	80	100,160	626	100,160	626
NF6S	А	621	80	99,360				0	621	99,360	621
AD6G	А	312	68	42,432	А	252	75	37,800	564	80,232	564
KA6BIM	В	481	78	75,036				0	481	75,036	481
K6SV	А	252	72	36,288	А	227	71	32,234	479	68,522	479
K6IDX					U	388	80	62,080	388	62,080	388
K2KW (@K6ST)					В	400	70	56,000	400	56,000	400
N6ST	В	314	75	47,100				0	314	47,100	314
AK6L	В	286	78	44,616				0	286	44,616	286
K6MIG	В	277	78	43,212				0	277	43,212	277
W6WS					А	272	74	40,256	272	40,256	272
N6DA*	В	256	77	39,424				0	256	39,424	256
K6XV					А	278	65	36,140	278	36,140	278
N6NU	А	237	75	35,550				0	237	35,550	237
W6CT	А	212	70	29,680				0	212	29,680	212
W6DPD					А	181	68	24,616	181	24,616	181
W6RJ	В	250	48	24,000				0	250	24,000	250
K6BPB					А	181	62	22,444	181	22,444	181
K6ST					В	118	58	13,688	118	13,688	118
K6RC	В	66	41	5,412				0	66	5,412	66
WA0YQM	В	23	20	920				0	23	920	23
Total			6,425,040)				8,191,968		14,617,0	08

*estimate by webmaster

2000 CQWW CW

Call	Class	QSO's	Zones	Countries	Score
N6RO	SOABHPUA	2870	150	378	4,197,072
AJ6V	SOABHPUA	794	90	176	596,106
WA6O (K6ZM)	SO15HPUA	1338	35	105	516,889
K6UM	SOABLPUA	454	95	197	371,716
K6GT	SOABHPUA	211	69	125	107,088
NT6K	SO10LPUA	374	27	61	93,544
K6III	SOABQRPUA	115	71	54	39,875
K6SRZ	SOABHPUA	101	32	80	32,368
W0YK	SOABHPUA	63	43	42	12,410
HC8N (N5KO, K6AW,)	MMABHPUA				
Tot			5,967,068		



NCCC 44 Toyon Terrace Danville, CA 94526

check us at: http://www.cqp.org http://www.nccc.cc repeaters: W6RGG/R 147.24 + and 444.2 (PL107.2)

FIRST CLASS

FIRST CLASS