

Results, September 2002 NCJ CW Sprint

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It is Saturday afternoon, September 7, at 1700 UTC. The 51st CW Sprint will start in 7 hours, and it is time to make sure everything is working. You turn on the radio and take a spin around 20 meters and you hear ... nothing.

You check the antennas—maybe they are still disconnected from the lightning storms you had in August. They are still connected. Next, you check to make sure you didn't borrow a coax from somewhere for Field Day. Still nothing.

Perhaps you turn on the computer and you see this:

**ALERT: Geomagnetic K-index of 6
Threshold Reached: 2002 Sep 07
1700 UTC**

**Synoptic Period: 1500-1800 UTC
Active Warning: No**

About 30 miles south of you, there is a sign on the Interstate that says you are half way between the equator and the North Pole. This means you are well aware of the impact of a K-index of 6. You turn off the radio and attend to the honey-dos that you promised would get done before the contest. Hopefully, things will improve when the contest comes along.

**ALERT: Geomagnetic K-index of 6
Threshold Reached: 2002 Sep 07
1904 UTC**

**Synoptic Period: 1800-2100 UTC
Active Warning: Yes**

Stations in the south are strong, but anyone else above the 45th parallel is S-zero. You decide to work a few stations on two meters—which comes alive when the K index soars.

The contest finally starts:

**ALERT: Geomagnetic K-index of 6
Threshold Reached: 2002 Sep 08
0155 UTC**

**Synoptic Period: 0000-0300 UTC
Active Warning: No**

The solar wind has done its damage. High voltages are being generated hundreds of miles above the earth's surface, and the resulting current flow has electrons crashing into oxygen molecules producing a yellow to green light over much of Canada. The solar wind also over-ionizes the E layer, making it absorb radio signals and preventing them from reaching the F layer. Many signals



Figure 1—Auroral nightmare illustrated: a graphic representation of WB0O's signal as heard in Oregon.

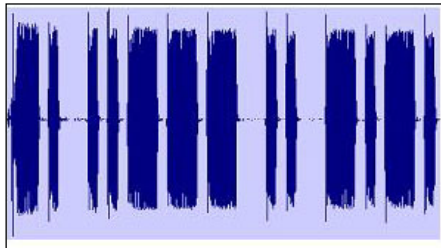


Figure 2—Compare the relative crispness of N2IC's signal as heard in Oregon.

have severe rapid QSB. Dabs sometimes get turned into two dits, making it difficult to copy things like serial numbers, where there is no context to help with error detection or correction.

How does this affect the contest? Well, you probably didn't work North Dakota. Figure 1 shows what WB0O's signal looked like in Oregon during the first 20 minutes of the contest. The modulation on the signal is that Arctic flutter at work. Only three stations in the upper half of the country ended up working North Dakota. As a comparison, Figure 2 shows what a signal from N2IC looked like near the same time.

QRP Category

The QRP activity in this contest continues to grow, and we were able to fill up the top ten box with scores! Congratulations to John Schneider, K7UP, who took top honors with 169 QSOs and 6422 points. Jerry, K6III, wasn't far behind with 6048 points. N9NE, N0UR, KC5R and NB1B were all packed in the middle of the top ten with K3ESE, K0UK, K9GY and WB6BWZ finishing up the list. Congratulations to these small fish who were willing to swim amongst the Sprint sharks.

**Table 1
Top 10 Scores, September 2002 NCJ CW Sprint**

Call	Score	Band Changes	QSOs Lost	00Z	01Z	02Z	03Z
K4AAA	17766	170	4	102	93	88	96
W4PA	17155	136	1	101	88	83	93
N5TJ	17066	134	4	98	92	87	95
N2NT	15916	115	1	101	73	83	89
K6RO	15886	4	5	95	78	79	86
W6EEN	15664	95	1	100	89	78	89
N2NL	15523	68	7	107	75	90	90
K5ZD	15226	47	2	94	75	80	82
N6TR	15075	68	6	91	75	83	87
K3LR	14940	10	6	98	76	69	90
N6TV	14940	8	1	93	73	83	83

**Table 2
Top 10 in Various Categories**

Top 10 QSOs	Top 10 Mults	Top 10 Low Power	Top 10 QRP	Top 10 Golden Logs (QSOs)	Top 10 Band Changes
K4AAA 378	K4AAA 47	K0EJ 10458	K7UP 6422	K4BAI 311	K4AAA 170
N5TJ 371	W4PA 47	K5AF 10004	K6III 6048	WQ5L 245	N9RV 151
W4PA 365	K6RO 47	N0AX 9635	N9NE 3885	N9CK 227	W4PA 136
N2IC 363	K4NNN 47	K9BGL 9589	N0UR 3552	K9BGL 223	N5TJ 134
N2NL 361	N5TJ 46	N9CK 9080	KC5R 3201	N4BP 217	N2IC 121
W6EEN 356	N2NT 46	KU8E 8930	NB1B 2958	W6YL 183	N2NT 115
N2NT 346	K5ZD 46	N5DO 8720	K3ESE 918	KY7M 72	N6ZZ 108
N6ZZ 344	Many 45	W6YL 8235	K0UK 731	K8MR 40	N5RZ 97
N5RZ 343		N7LOX 8229	K9GY 340	NA0N 33	W6EEN 95
K1KI 339		K4MX 8040	WB6BWZ 117	WB6BWZ 13	K3WW 93

Low Power

The low power category had 61 entries this year and the competition in the top ten was fierce. There was less than a 20-percent score difference between the #1 and #10 scores. Taking the low power honors this year is Mark Speck, KØEJ/4. Mark combined his 249 QSOs with 42 multipliers to beat out Paul, K5AF who had just five less QSOs and one less multiplier. February's low power winner, NØAX, had a hard time with the aurora and finished third with Karl, K9BGL a close fourth. N9CK, KU8E, N5DO, W6YL, N7LOX and K4MX all had good scores over 8K points to round off the top ten.

High Power

Winning his third CW Sprint and making his 18th top ten appearance, Bill Fisher, W4AN/K4AAA, combined the highest QSO total for the contest (378) with the highest multiplier achieved by anyone (47) for a comfortable victory over Scott, W4PA and Jeff, N5TJ. W4PA ended up beating N5TJ by less than 2 QSOs, coming from behind during the log checking process where Jeff lost 4 QSOs to Scott's single deduction. The top three scores outdistanced the rest of pack by over 1000 points.

Fourth place went to Andy, N2NT, who used his excellent logging accuracy to move up a few spots with his 19th top ten showing. K6RO, piloted by Dan, N6MJ, finished fifth just ahead of N6RT, using W6EEN. After just breaking into the top ten for the first time last February, Dave, N2NL, moved up a few spots and finished seventh. Five time winner K5ZD edged out nine-time winner N6TR for 8th place and two stations sneaked into the tenth spot: K3LR and N6TV, who were tied and also have both made the top ten 14 times now. If you compare the final order to the claimed scores, most of the scores moved at least one position, with the exception of the top score.

Trey, N5KO continued his series of stealth DX operations. Everyone's favorite guessing game before the sprints is "Where's Trey?" He showed up in 8P for this contest and made an impressive score with 277 QSOs. Look for him to pop up somewhere else in February.

Team Competition

The Southern States Sprint Coalition fielded four teams, and their first string out-distanced the competition for first place. The NCCC came in second with a full team, beating out the SCCC, which only had 8 team members submit scores. The FRC made a good showing and appeared in the top four after a long absence. There were a total of 23 teams registered, only down one from February. Forming a team is still the best way to ensure plenty of activity in this con-

Table 3

Team Scores

1. SSSC #1	2. NCCC #1	3. SCCC #1	4. FRC
K4AAA 17766	N6TV 14940	K6RO 15886	N2NT 15916
W4PA 17155	N6RO 12138	W6EEN 5664	N2RM 13889
N2NL 15523	N6XI 11610	K6NA 14535	K3WW 13230
N4AF 14220	K6XX 11396	N6AA 13950	AA3B 12690
K4BAI 13995	K5RC 11298	K6LA 13860	W2GD 10640
W4OC 13112	K7NV 10480	N6AN 12348	W2RQ 10530
K4RO 12464	W6EU 10360	N6VR 12285	N8NA 7683
KT3Y 12276	AJ6V 9963	W6TK 8664	N2ED 7030
WQ5L 10535	W6RGG 9430		K3MD 6528
N4ZR 10250	NI6T 8697		
		107192	98136
137296	110312		
5. SSSC #2 (K5KG, KØ7X, NA4K, KØEJ, K4FXN, K9AY, W4NZ, KU8E, K4MX)	90939		
6. SMC #1 (N9RV, K9NW, K9ZO, KØOU, KA9FOX, K9BGL, N9CK, KAØGGI)	86195		
7. Austin (N5TJ, N5RZ, N3BB, W5KFT, K5NZ, K5AF, AB5EU)	82050		
8. YCCC #1 (K5ZD, K1KI, W1WEF, KM3T, N2GC, K2SX, N1XS)	68271		
9. Azenmokers (N6ZZ, N5OT, K5KA, K5YAA, K5CM, KØCIE)	58703		
10. SSSC #3 (N4AO, K7SV, K3MM, N4BP, K4OGG, W4AA)	58273		
11. NCCC #2 (N6ZFO, W6YL, N6PN, KU6J, K6CTA, K6LRN, AD6TF, NT6K)	44923		
12. Corner (N6TR, NØAX, N7LOX, N7WA, KI7Y)	43457		
13. SSSC #4 (K4IQJ, N4JM, W4ZW, WA4TT, K4LQ, W4SAA, AA4LR)	42450		
14. CCO (VE3EJ, VE3NE, VE3DZ, VE3KZ, VE3KP, VE3FWA, VE3FU, VE3IAY, VE3CR, VE3ZT)	37214		
15. Grand Mesa (N2IC, WØETT, NØKE, NØSXX, KØUK)	33022		
16. NCC (K3LR, K2UA, K8NZ)	30178		
17. Elecraft (NØSS, K7UP, K6III, NB1B, K7RE, K3ESE)	29904		
18. YCCC #2 (K1DG, K2LE, KT1V, W1TO, NT1N, K1GU)	29528		
19. MRRRC (KW8N, N8EA, W8MJ, K8MR)	29083		
20. MWA (KØSR, KØAD, KTØR, NAØN)	21942		
21. SCCC #2 (K6NR, W6KY, NE6I, W3SE)	17354		
22. SMC #2 (K5OT, KJ9C, KØRAY, K9GY)	16501		
23. SSSC #5 (WW4R, ND4AA, K4GA)	9416		

test.

New Records

There were not too many records broken this time with the unstable conditions. Don, W4OC, continues to bless us with the SC multiplier and eclipsed his own record by about 1400 points. Tim, K3LR, posted a new score for Oklahoma, removing the 13-year-old KM5H record. Trey, N5KO, operating 8P9JG, demolished the old 8P record set in 1996 by 8P6EN. If there was a record for the number of VE3 stations on, that would have been set this time as well. A full team of ten of them sent in their logs. Nice work to John, VE3EJ. We had 187 logs submitted, pushing up the record from 182 set in February 2000.

Cabrillo Logs and Robots

Once again, almost all logs were received in Cabrillo format, and again, we thank you for your help. This is allowing us to spend less time working on the logs and doing more fun things like counting how many CQs we made during the contest. The robot did its job and quickly alerted you to any issues with your log, so they would be fixed before we started checking them. Thanks again to Trey, N5KO, for providing a place for

the robot to live.

February CW Sprint Date

The next CW Sprint will be held on February 9 UTC. This is Saturday, February 8 local time in North America. The rules are unchanged and can be found elsewhere in this issue of the *NCJ*, or on the Web at www.ncjweb.com. Remember to check out the helpful Sprint web pages at n6tr.jzap.com/Sprint.html and www.contesting.com/articles/198. Both of these web pages have great information for both newcomers and Sprint veterans.

Soapbox

Only had an hour or so to give out some low power QSOs.—AE6Y ... We had a severe thunderstorm that took me off the air for most of the contest. Ran QRP and besides feeling real humble due to CW, the QRN was the pits.—KØUK ... Many thanks to my host KK1L.—K1EA ... It took longer to transcribe (and check for new errors) the log from pen/paper to Cabrillo than to operate the contest.—K1KI ... Doing this contest with just a stealth dipole means a new dimension in frustration.—K2LE ... Wow, conditions were terrible! But I just couldn't quit a Sprint!—K2UA ... First time: what a blast! Not as scary as I thought it would be. Hope to do

better next time!—K3ESE ... My QSO numbers for first 90 minutes may be off one due to figuring out new program quirks. Not too bad QSO number for an old man.—K3MD ... My first shot at high power. Didn't make a lot of difference since conditions were poor.—K4FXN ... Next time 300 QSOs—I hope!—K4NNN ... I can't seem to handle two radios very well in the Sprint. See you in February.—K4RO ... Oh Aurora!—K5ZD ... Lots of fun, but I fumbled around a lot the first hour getting used to the QSY dance. But it got better, I need more practice, and I need to set things up better. Antennas: A3 Tribander @ 33 ft, 40-m 4-square, 80-m 40-ft top loaded vertical with 66 ¼ wavelength radials.—K6NR. First time in this contest—tried to avoid QRM to the many fantastic CW ops. Started to get the hang of it at the end—amazed that some ops are trying SO2R.—K6OWL ... This was my very first NCJ Sprint. As others have noted, band conditions were not great, but I still had a good time. The very different format of this event kept me on the edge the whole time.—K7RE ... Interesting to try Sprint as QRP entry, hah!—K9GY ... Tried to put a turbo-charger on that VV. Next time I'll probably just replace the engine.—KC5R ... Three hours ...—KJ9C ... Condx very disturbed, but the Sprint is always a blast regardless!—KM3T ... Just got on for 1 hour and half was fun.—KTØR ... NCCC Team Two—KU6J ... Too fast for these ears. Maybe hearing aids will help!—NØAC ... Horrendous conditions aside, nothing gets the systolic and diastolic up there like a Sprint. Glad to hear a lot of new calls on the air—welcome to the most fun you can have with a radio! Nice to see K7BG, W07Y and VE6EX show up in the closing minutes.—NØAX ... Thanks to Dick, KB1H, for the use of the station.—N1XS ... First real try at this contest in many years. Plagued with RF in the computer/radio link & finally disconnected the computer. Rate went up!—N4DW ... This was my first Sprint and was lots of fun. I'm afraid I'm hooked. Condx were fair and there was a good deal of flutter on 40 making exchanges a little tough. It's time I started thinking through some strategy for score improvement.—N4GG ... The Sprint must be an "acquired taste"—I'm not sure I'll ever get it.—N4GN ... Operated SO2E this time: Single-op, two excuses. Had a software problem that prevented TR from working. ("But I didn't change anything...") Besides, I left the parallel port keying cable at the other QTH. So I reverted to paper logging which is more in the true spirit of curmudgeonly contesting anyway. Got off to a decent start on 20 but found 40 very tough. Put off going to 80 m too long, but it's always tough

with my little dipole in Saratoga. Although VE3 was ubiquitous, the other Canadians must have been on strike!—N6XI ... Glad to work a few other NM stations this time, but missed Arizona, despite chatting with WØZZ a few minutes before the event.—N6ZZ ... It took a few calls and e-mails to remind me to get on with the Delaware multiplier. I had to drag the feedlines out of the bushes and re-suspend them, after re-hoisting the beam into the tree. The station came together better than the operator. 20 m went through several periods where it was tough to generate any contacts, one with distinctive flutter. Overall propagation seemed to very much favor paths with some North/South in them. It was good to hear everyone, especially the close in stations on 80 m late, as I hate to give Delaware to the rest of the country and miss the locals.—N8NA ... Rough conditions for QRP.—N9NE ... Too many antenna projects going here to enable full concentration on this contest. At least I got a chance to learn a few things about how not to prepare for a contest.—N9RV ... First time jitters with this contest. Hard to compete with the big boys. TR saved the day. Will look forward to the next one.—NG7Z ... I thought Tropical Storm Fay was going to put a damper on my sprint plans by causing a lot of QRN on 40 m. But 40 was surprisingly quiet and I was glad the rain held off long enough for me to sneak out between rain showers to put up the stealthy 40 dipole which played very well—much quieter than the attic dipole on 20 m. This contest is always great fun with some fine CW ops. Looking forward to the next one.—NO5W ... An hour and a half into the contest, while we were driving home, my wife was pointing out the auroral display all around us. At least that meant I wasn't surprised at the lousy conditions.—VE3IAY ... Conditions were not kind to Ves, but I'm glad I wasn't further Northwest!—VE3KZ ... Lots of stations, lots of speedy CW. Still not enough antenna in the air here. First NA Sprint, but won't be my last—my operating can only improve. It's not so hot yet.—VE7ASK ... Team YCCC#2—W1TO ... First time ever to do a Sprint.—W4EBA ... Took me a while to warm up at the start. Not used to this format yet and am still working at copying and typing behind as well as finding the best setting up for the computer. Taller antennas would help. Other excuses available, but am learning and enjoying more each event. Gives me goals to work toward. Looking forward to more great CW next Sprint.—W4SAA ... There were bad thunderstorms in the area, but the new beverage took out almost a in the Sprint, but I've got a way to

go yet.—W5KFT ... First CW Sprint for the new San Jose State University club station.—W6YL ... 80 m = 2, 40 m = 17, 20 m = 19, mults=15, total op Time 2 hr 15 min.—WA6PXU ... This is the first time I've tried this contest. I found it more challenging than I expected. Conditions didn't help; signals were weak and watery.—WB2BXO ... Submitted for check log only. Realized too late that you can't do a multi-op. Was also "registered" for Team Elecraft as N2JZ, but changed call before the contest started. We had a lot of fun nonetheless.—WK2G—Partial effort, but was good shakedown of new computer/Writelog and helped clear out some CW cobwebs.—W01N ... So many QSOs, so few multipliers.—N2IC ... Once again, Bill, W4AN, organized teams, and I volunteered. Since my last outing netted 75 Qs, I signed up for a repeat, but my real goal was to break the 100 Q barrier. I simply needed to maintain a rate of 25 Q/hr for four hours. Easy, right? No. This is the sprint—the hardest doggone contest out there. And low power to boot. First hour was slow with 23 Qs, but picked up 30 Qs in the second hour, and 36 Q/hr the last two hours. I suppose I'm learning. W4AN's tips from last year are still effective. Glad to finally be in 3-digit range. Interesting on the mults. I got 36, but many of the top scorers only got 42-44. Seems like I missed some easy mults like AL, KY, MI.—AA4LR ... Much slower contest this time; still glad to be in the LP top ten.—K5AF ... Always a great competition—thank you to all for the QSOs.—N5RZ ... Tnx to N5YA and N5KR for helping me get set-up at YA's station.—N5TJ ... Operating QRP during the CW Sprint is like bringing a pillow to a gunfight! But it sure was fun anyway!—WW3K ... FT-817, 5 watts, to 28 gauge insulated OCF stealth antenna up 40 feet in trees next to interstate in downtown Atlanta industrial area.—WB6BWZ ... The CW Sprint: 4 concentrated hours of the best contesting has to offer. Just 2 QSOs shy of breaking 300 I froze up. My last 10 minutes were disappointingly slow. Next time! My most thrilling QSO was with VY1JA. When he called his signal seemed to seep out of my noise level like a ghost. He sounded so transparent I was sure I missed the rest of his name when he just sent "J." Thanks for the great multiplier, J!—N6AN ... Started a little late and drank heavily for the last hour so I'd have an excuse for my score. A great time!—KT1V ... Thanks to WØTM for help setting up Writelog and the use of the station.—NØKE ... Mobile, hand logging, 65 mph and 22 WPM on route 20.—KØCO.

Table 4

Scores, September 2002 NCJ CW Sprint

Call	Name	QTH	20	40	80	QSO	Mlt	Score	Team	Call	Name	QTH	20	40	80	QSO	Mlt	Score	Team
K5ZD	RANDY	MA	116	137	78	331	46	15226	YCCC #1	W01N	*KEN	MA	16	1	3	20	10	200	
K1KI	TOM	CT	133	114	92	339	42	14238	YCCC #1	WW3K	DOM	CT	21	0	0	21	8	168	
K1DG	DOUG	NH	106	99	70	275	40	11000	YCCC #2	KA1EZE	*RICK	RI	8	2	0	10	5	50	
W1WEF	JACK	CT	102	106	61	269	40	10760	YCCC #1	N2NT	ANDY	NJ	125	137	84	346	46	15916	FRC
KM3T	BOB	NH	86	95	68	249	40	9960	YCCC #1	N2RM	JOHN	NJ	145	89	89	323	43	13889	FRC
K1EA	KEN	VT	48	74	28	150	36	5400		K2UA	RUS	NY	87	98	83	268	41	10988	NCC
KT1V	TED	NH	31	71	38	140	31	4340	YCCC #2	W2GD	JOHN	NJ	90	105	85	280	38	10640	FRC
W1TO	TOM	MA	29	58	40	127	32	4064	YCCC #2	W2RQ	BILL	NJ	82	109	79	270	39	10530	FRC
N1XS	CHRIS	CT	70	0	41	111	34	3774	YCCC #1	N2GC	MIKE	NY	61	90	67	218	39	8502	YCCC #1
NB1B	**DJ	MA	50	35	17	102	29	2958	Elecraft	N2ED	ED	NJ	67	81	37	185	38	7030	FRC
NT1N	DAVE	CT	22	21	29	72	30	2160	YCCC #2	K2LE	ANDY	NY	56	59	58	173	35	6055	YCCC #2
K1GU	*NED	MA	34	40	9	83	23	1909	YCCC #2										

Call	Name	QTH	20	40	80	QSO	Mlt	Score	Team	Call	Name	QTH	20	40	80	QSO	Mlt	Score	Team
K2SX	DENNIS	NY	59	64	26	149	39	5811	YCCC #1	W6TK	DICK	CA	104	84	40	228	38	8664	SCCC #1
WB2BXO	*FRANK	NY	0	56	0	56	29	1624		W6YL	*SCOTT	CA	103	74	6	183	45	8235	NCCC #2
WK2G	JOE	NJ	45	16	7	68	22	1496		N6PN	*MATT	CA	79	81	32	192	39	7488	NCCC #2
W2LE	*PAUL	NJ	16	19	0	35	17	595		KU6J	*ERIC	CA	100	54	16	170	40	6800	NCCC #2
K3WW	CHAS	PA	110	102	82	294	45	13230	FRC	K6III	**JERRY	CA	107	26	11	144	42	6048	Elecraft
AA3B	BUD	PA	92	118	72	282	45	12690	FRC	K6CTA	ED	CA	103	50	0	153	37	5661	NCCC #2
K3MM	TY	MD	95	95	71	261	40	10440	SSSC #3	K6LRN	DICK	CA	62	70	15	147	34	4998	NCCC #2
N8NA	*KARL	DE	47	78	72	197	39	7683	FRC	W6MVW	*DICK	CA	109	0	0	109	35	3815	
N4GG	*HAL	ME	73	82	56	211	36	7596		W6KY	*ART	CA	67	45	11	123	29	3567	SCCC #2
K3MD	JOHN	PA	71	67	54	192	34	6528	FRC	NE6I	DENNIS	CA	96	0	0	96	33	3168	SCCC #2
K3ESE	**ED	MD	19	35	0	54	17	918	Elecraft	AD6TF	*JIM	CA	55	18	8	81	29	2349	NCCC #2
K4AAA	BILL	GA	120	166	92	378	47	17766	SSSC #1	W3SE	*WES	CA	39	20	8	67	25	1675	SCCC #2
W4PA	SCOTT	TN	106	175	84	365	47	17155	SSSC #1	AE6Y	*ANDY	CA	17	47	0	64	26	1664	
N2NL	DAVE	FL	156	133	72	361	43	15523	SSSC #1	K6OWL	*MARK	CA	20	6	0	26	19	494	
N4AF	AL	NC	116	125	75	316	45	14220	SSSC #1	NT6K	*DAVE	CA	13	14	0	27	15	405	NCCC #2
K4BAI	JOHN	GA	115	111	85	311	45	13995	SSSC #1	WA6PXU	*JIM	CA	16	13	1	30	13	390	
W4OC	DON	SC	104	113	81	298	44	13112	SSSC #1	N6TR	TREE	OR	137	124	74	335	45	15075	Corner
K4NNN	OJ	FL	142	92	43	277	47	13019		K4XU	DICK	OR	103	115	56	274	42	11508	
K5KG	GEO	FL	118	132	57	307	42	12894	SSSC #2	K5RC	TOM	NV	133	83	53	269	42	11298	NCCC #1
N4AO	JEFF	FL	120	105	66	291	43	12513	SSSC #3	K7NV	KURT	NV	118	105	39	262	40	10480	NCCC #1
K4RO	KIRK	TN	94	119	91	304	41	12464	SSSC #1	N0AX	*ED	WA	116	86	33	235	41	9635	Corner
KT3Y	PHIL	VA	87	111	81	279	44	12276	SSSC #1	N7LOX	*BRIAN	WA	95	75	41	211	39	8229	Corner
N4GN	TIM	KY	76	127	73	276	43	11868		N7WA	*DINK	WA	68	69	29	166	33	5478	Corner
K7SV	LARRY	VA	92	91	86	269	41	11029	SSSC #3	KI7Y	JIM	OR	59	67	18	144	35	5040	Corner
K07X	AL	NC	73	122	58	253	43	10879	SSSC #2	KY7M	LEE	AZ	72	0	0	72	30	2160	
NA4K	STEVE	TN	79	116	63	258	41	10578	SSSC #2	NG7Z	*PAUL	WA	51	27	5	83	23	1909	
K0EJ	*MARK	TN	59	120	70	249	42	10458	SSSC #2	K0CO	JACK	WY	7	0	0	7	4	28	
K4FXN	DAN	KY	72	116	62	250	41	10250	SSSC #2	N4ZR	PETE	WV	76	112	62	250	41	10250	SSSC #1
K9AY	GARY	GA	63	109	63	235	42	9870	SSSC #2	KW8N	BOB	OH	87	97	72	256	40	10240	MRRRC
W4NZ	TED	TN	59	107	60	226	40	9040	SSSC #2	N8EA	JOE	MI	75	116	52	243	41	9963	MRRRC
KU8E	*JEFF	GA	57	120	58	235	38	8930	SSSC #2	W8MJ	*KEN	MI	60	99	38	197	40	7880	MRRRC
N4BP	BOB	FL	138	79	0	217	40	8680	SSSC #3	K8NZ	*RON	OH	31	54	40	125	34	4250	NCC
K4MX	*JERI	VA	50	89	62	201	40	8040	SSSC #2	K8MR	JIM	OH	7	33	0	40	25	1000	MRRRC
K4OGG	*JAY	GA	54	103	45	202	39	7878	SSSC #3	N9RV	PAT	IN	103	147	86	336	42	14112	SMC #1
W4AA	*ART	FL	84	91	34	209	37	7733	SSSC #3	K9NW	MIKE	IN	98	131	86	315	42	13230	SMC #1
K4IQJ	*DICK	AL	39	102	47	188	40	7520	SSSC #4	K9ZO	RALPH	IL	84	113	72	269	44	11836	SMC #1
NJ4M	*RON	FL	115	67	21	203	37	7511	SSSC #4	KA9FOX	SCOTT	WI	81	112	65	258	41	10578	SMC #1
N4DW	DAVE	TN	45	101	35	181	39	7059		K9BGL	*KARL	IL	62	110	51	223	43	9589	SMC #1
W4ZW	*JON	FL	84	73	18	175	39	6825	SSSC #4	N9CK	*STEVE	WI	64	90	73	227	40	9080	SMC #1
WA4TT	JOHN	GA	53	61	45	159	38	6042	SSSC #4	K5OT	*LARRY	WI	53	84	52	189	37	6993	SMC #2
K4LQ	FRED	FL	79	61	11	151	40	6040	SSSC #4	KJ9C	*MEL	IN	42	84	48	174	37	6438	SMC #2
WW4R	DON	TN	59	108	0	167	36	6012	SSSC #5	N9NE	*TODD	WI	33	63	15	111	35	3885	
W4SAA	JOE	FL	67	45	7	119	38	4522	SSSC #4	K9GY	*MOJO	IL	32	2	0	34	10	340	SMC #2
AA4LR	*BILL	GA	43	50	21	114	35	3990	SSSC #4	N2IC	STEVE	CO	153	135	75	363	41	14883	Grand Mesa
ND4AA	*NORM	FL	84	0	0	84	29	2436	SSSC #5	K0OU	STEVE	MO	90	117	66	273	43	11739	SMC #1
AK5E	*VAN	GA	10	49	10	69	25	1725		N0SS	TOM	MO	64	120	94	278	41	11398	Elecraft
W4EBA	*BOB	FL	23	22	0	45	23	1035		K0SR	STEVE	MN	76	112	86	274	36	9864	MWA
K4GA	*MAC	GA	10	22	12	44	22	968	SSSC #5	K0AD	AL	MN	81	88	52	221	43	9503	MWA
AA4S	RON	SC	9	25	0	34	21	714		W0ETT	*KEN	CO	96	79	23	198	38	7524	Grand Mesa
WB6BWZ	**MATT	GA	5	8	0	13	9	117		N0KE	PHIL	CO	80	64	28	172	38	6536	Grand Mesa
N5TJ	JEFF	TX	145	146	80	371	46	17066	Austin	KA0GGI	TOAD	MO	20	116	27	163	37	6031	SMC #1
K3LR	TIM	OK	120	117	95	332	45	14940	NCC	KF0U	LEN	CO	64	36	35	135	31	4185	
N6ZZ	PHIL	NM	156	112	76	344	43	14792	Azenmokers	N0UR	**JIM	MN	62	44	5	111	32	3552	
N5RZ	GATOR	TX	151	128	64	343	42	14406	Austin	N0SXX	*GARY	CO	78	21	9	108	31	3348	Grand Mesa
N3BB	JIM	TX	128	112	68	308	45	13860	Austin	K0RAY	RAY	MO	0	73	18	91	30	2730	SMC #2
W5KFT	ROB	TX	119	111	67	297	42	12474	Austin	K7RE	*BRIAN	SD	51	37	2	90	24	2160	Elecraft
K5NZ	MIKE	TX	99	116	80	295	42	12390	Austin	KT0R	DAVE	MN	7	50	17	74	29	2146	MWA
N5OT	OT	OK	86	138	64	288	42	12096	Azenmokers	K0UK	**BILL	CO	7	30	6	43	17	731	Grand Mesa
K5WA	BOB	TX	112	106	60	278	42	11676		N0AC	*BILL	IA	10	16	3	29	19	551	
K5KA	KEN	OK	91	112	80	283	41	11603	Azenmokers	NA0N	*PAT	MN	30	3	0	33	13	429	MWA
K5YAA	JERRY	OK	72	122	82	276	41	11316	Azenmokers	VE3EJ	JOHN	VE3	83	89	68	240	40	9600	CCO
W5WMU	PAT	LA	102	96	51	249	43	10707		VE3NE	*LALI	VE3	82	80	36	198	38	7524	CCO
WQ5L	RAY	MS	80	150	15	245	43	10535	SSSC #1	VE3DZ	*YURI	VE3	81	70	57	208	36	7488	CCO
K5AF	*PAUL	TX	93	98	53	244	41	10004	Austin	VE3KZ	BOB	VE3	57	60	46	163	33	5379	CCO
N5DO	*DAVE	TX	95	91	32	218	40	8720		VE3KP	*KEN	VE3	59	18	26	103	30	3090	CCO
K5TR	GEO	TX	97	82	30	209	35	7315		VE3FWA	ED	VE3	28	27	0	55	19	1045	CCO
N1LN	*ED	TX	78	75	37	190	37	7030		VE3FU	*CHRIS	VE3	9	25	12	46	22	1012	CCO
K7UP	**JOHN	NM	98	60	11	169	38	6422	Elecraft	VE3IAY	*RICH	VE3	6	16	17	39	22	858	CCO
K5CM	CONNIE	OK	63	68	29	160	38	6080	Azenmokers	VE3CR	*ERIC	VE3	16	20	4	40	21	840	CCO
N6NF	TOM	TX	86	44	19	149	39	5811		VE5SF	*SAM	VE5	37	0	0	37	11	407	
NO5W	*CHUCK	TX	58	88	0	146	37	5402		VE7ASK	*BUD	VE7	24	11	3	38	10	380	
KC5R	**AL	LA	46	51	0	97	33	3201		VE3ZT	*PAUL	VE3	14	13	0	27	14	378	CCO
K0CIE	*KARL	OK	26	48	14	88	32	2816	Azenmokers	8P9JG	TREY	8P	164	105	8	277	42	11634	
AB5EU	*EV	TX	29	30	15	74	25	1850	Austin										
K6RO	DAN	CA	144	129	65	338	47	15886	SCCC #1										
W6EEN	DOUG	CA	148	132	76	356	44	15664	SCCC #1										
N6TV	BOB	CA	141	132	59	332	45	14940	NCCC #1										
K6NA	GLEN	CA	133	128	62	323	45	14535	SCCC #1										
N6AA	DICK	CA	148	128	34	310	45	13950	SCCC #1										
K6LA	KEN	CA	142	113	53	308	45	13860	SCCC #1										
N6AN	REX	CA	126	109	59	294	42	12348	SCCC #1										
N6VR	RAY	CA	111	103	59	273	45	12285	SCCC #1										
N6RO	KEN	CA	131	108	50	289	42	12138	NCCC #1										
N6X1	RICK	CA	131	110</															

Statistical Study of W4AN, N6TR and N6ZZ's Sprint Experiences

One of the comments often heard after a CW Sprint on 3830 is something like, "I got beat out every time on 20 meters." Thanks to the hard work of several of the CW Sprinters this time around, we have some actual statistics that we can show you.

First off – some definitions:

Stations Called—this is when you find a station calling CQ or finishing up a QSO and call him. We did not include "blind calls" where you dumped your call without clearly having a specific station in your sights. It also doesn't count times that you called, but were out of sync with what was going on (i.e., when you send your call to someone who is actually trying to copy an exchange at that point in time).

Came Back—This is when a station comes back when called.

Tail End—A QSO that starts up after you have finished your first QSO on a frequency. You did nothing to start the QSO except send your exchange. If you send anything else to solicit the QSO, it is an answered CQ (see below).

CQs—any kind of solicitation (other than sending your exchange). This includes things like *QRZ?*, *NA K7RAT*, or the more typical *CQ NA K7RAT K7RAT NA*. It also counts CQs made on a second radio.

Answered CQ—the number of stations that responded to your CQs.

Table 6 shows the raw data for the three stations, with data shown for each hour of the contest.

Probably one of the biggest differences in these numbers is the number of CQs that were called. W4AN was using two radios for most of the contest period and this allowed him to

be calling CQ while tuning with the other radio. Even though he called 476 CQs (an average of almost 2/minute), he still had a respectable answer percentage (33.8 percent). N6ZZ probably didn't call CQ enough with "only" 302 of them and a very high 41.4% answer percentage. N6TR was throwing lots of CQs out with the second radio—especially during the third hour—with a pretty low success rate. W4AN's ability to call more than 100 CQs/hour and have over a third of them answered is one of the reasons he was able to win this contest.

It is surprising how close some of the numbers are. While N6TR called the most stations (193), N6ZZ isn't that far behind at 177. The answer percentages for all three stations are very close – 80.3, 80.2 and 82.2 percent. This means 4 out of 5 times these stations called someone, a QSO took place. The percentage of these QSOs that had an immediate "tail end" QSO take place is also pretty consistent, with the average just over 50 percent.

Finally, Table 7 takes a look of the percentage of QSOs made using the three different techniques for initiating them.

Many thanks to N6ZZ, W4AN and N6TR for recording the contest and tabulating this data.

Table 7

Percentage of QSOs vs. Manner Earned

	CQ called	Station Called	Tail End
N6TR	30.1%	45.3%	24.6%
N6ZZ	36.2%	41.2%	22.6%
W4AN	42.1%	38.8%	19.1%

Table 6

Breakdown of N6TR, N6ZZ and W4AN's QSO Solicitations and Answers

	Stations Called	Came back	Tail end	CQs	Answered CQ	Called Success %	Tail End%	CQ Success%
N6TR								
Hour 1	66	49	21	67	24	74.2%	42.9%	35.8%
Hour 2	41	33	21	74	21	80.5%	63.6%	28.4%
Hour 3	36	32	16	146	36	88.9%	50.0%	24.7%
Hour 4	50	41	26	89	22	82.0%	63.4%	24.7%
Total	193	155	84	376	103	80.3%	54.2%	27.4%
N6ZZ								
Hour 1	53	41	23	52	31	77.4%	56.1%	59.6%
Hour 2	36	28	14	112	39	77.8%	50.0%	34.8%
Hour 3	34	29	14	100	37	85.3%	48.3%	37.0%
Hour 4	54	44	27	38	18	81.5%	61.4%	47.4%
Total	177	142	78	302	125	80.2%	54.9%	41.4%
W4AN								
Hour 1	55	41	18	102	45	74.5%	43.9%	44.1%
Hour 2	43	37	18	133	39	86.0%	48.6%	29.3%
Hour 3	39	33	21	137	33	84.6%	63.6%	24.1%
Hour 4	43	37	16	104	44	86.0%	43.2%	42.3%
Total	180	148	73	476	161	82.2%	49.3%	33.8%