# Results: North American Sprint CW — February 2010

The 66th North American CW Sprint took place February 7, 2010 (UTC). If we had held one per year, the first contest would have to have taken place before the end of World War II. Before talking too much about it, however, I want to pose a trivia question. *Ready?* Put on your thinking cap: What well-known CW Sprint operator has placed in every spot in the Top 10 — *except* for the top spot? Okay, chew on that one for awhile.

This event saw slightly fewer than 300 stations active, with 180 submitting logs. How do we know that many stations were active? One step during log checking is to create a database of stations that show up in at least two different logs. So, if someone gets on the air for the event and that call sign appears in at least *two* submitted logs, the station is considered "active." In this contest, well over half of the active stations submitted logs. Most contest sponsors would be happy to see a quarter of active stations send in a log.

No, it isn't N2NT or K5ZD. Both have won this contest.

Conditions were pretty good across the country this time. Twenty meters was not the best for the East Coast stations at the start, but it was good enough for NN1N to make 90 QSOs there before moving to 40 meters. There seemed to be a small number of stations who were loud on 20 meters, but the next layer was some 50 dB weaker, making it tough to work those weak signals while the loud ones were still on the band. This was a good test of your receiver's dynamic range. (It also was a good time to note which stations have key clicks.) Both 40 and 80 meters were in great shape, however, with some stations making more than 300 QSOs on those two bands combined!

Nope! It's not N5RZ. He won last year, remember? K1KI also won back in 1981 and 1999.

While scores from the Southwest dominated the top-score boxes, a few stations from the Northeast managed to break into the Top 10 in both the High Power and Low Power categories. For most of the country, two bands were available during most of the contest, enabling two-radio stations to stand out among the top scorers. We did not see a single-radio score in the High Power Top 10 this year, however.

Top 10 Scores														
Call Sign N5KO W6YI N2NT N6TV N3BB N2IC N6TR K5ZD N4OGW W9RE	Score 16,555 16,422 15,480 15,414 15,372 15,330 15,211 14,792 14,491 14,362	Bnd Chgs 123 149 162 42 146 144 92 44 165 56	Qs Lost 4 4 2 1 4 1 4 0 7 7	00Z 104 112 101 105 103 116 92 90 104 91	01Z 91 100 91 96 82 83 104 87 85 87	02Z 96 94 96 84 97 93 87 94 85	03Z 94 85 72 82 84 73 88 73 63 71							
Top Single-Radio Band Changes														
Call Sign K6NA K6XX NR5M K5MR N5RZ NN1N K1EA K5TR K4BAI W6YX	Score 14,276 14,104 13,889 13,803 13,416 13,230 12,936 12,880 12,814 12,760	Bnd Chgs 2 6 8 7 2 5 12 8 2 2	Qs Lost 2 7 0 0 5 3 10 2 2 3	00Z 86 85 89 84 71 79 84 80 82 83	01Z 82 80 84 77 87 70 83 91 81	02Z 72 80 70 81 77 84 82 80 59 78	03Z 92 83 80 79 77 82 59 71 76							

### **CW Sprint with Just a Vertical**

One operator who normally makes the Top 10 without breaking a sweat was missing from the list this time around. Ralph, N5RZ, decided to operate from his new location, where he had just built his new home. Instead of driving to K5TR's station he decided to operate from home with whatever antennas he could throw up. This was the first time in seven years that he had operated his own station.

He fished out his Butternut all-band vertical and put it up with four long radials. He tweaked the adjustments to get the SWR below 2:1 on the three bands. He then hooked up his new K3 and Alpha 87A, both of which came from the K5KA estate. After downloading the latest version of *N1MM* and getting the keying interface and radio control working, he was ready to roll. This was the first time he had used *N1MM*, and he experienced a bit of a learning curve. Having operated with "The Gator" on the same band from HC8, I can say I am happy no small children were within earshot.

The start of the contest did not go very well. Twenty meters was long, and one of his messages was programmed wrong, requiring Ralph to send most of his exchanges manually. He also learned that you needed to log a contact before turning the VFO knob, or the information goes away. After enduring the first hour on 20 meters with only 73 contacts in the log, the first of two band changes took place, and things started to improve. Conditions were much better for Ralph, and he was able to establish his rhythm some and put 88 QSOs in the log during the second hour. The third hour was also strong, with another 80 QSOs going into the log and half of the hour spent on 80 meters. The final hour clocked in at 78 QSOs, and the last number handed out was 317. All of the multipliers Ralph heard were put in the log, and he ended up with a very competitive total of 43 multipliers.

This is an outstanding effort by one of the top CW Sprint operators. It demonstrates how operator ability can help overcome a less-than-booming signal, and it sets a high bar for other operators with similar stations to try to overcome.

A record number of "Kens" were active this time around — some 35 of them. This was a tribute to one Ken Adams, K5KA, who became a Silent Key during the Phone SS in November. Oklahoma now becomes a little tougher to work, and there will be one less big signal in our passbands as a result of K5KA's QSY to zone 41. Ken had become a supporter of this contest by making sure the winner received an appropriate award. This tradition will be continued. Rest in peace, my good friend.

#### **QRP**

We received four logs from stations who charged into battle while running five watts or less. Scott, KA9FOX, proved once again that having a long call sign can be an advantage if you are weak; he came out on top with 216 QSOs. Occasionally, a pile of loud four-letter calls will QRM each other, and afterward, a very clear (and weak) "FOX" can be heard in the noise. Second place went to Brian, NA4BW, with 126 QSOs, followed by Paul, AA4XX, with 117 contacts. N2ZN, a *real* Ken, ended up with 13 QSOs and fourth place.

## **Low Power**

Steve, N9CK, won the Low Power category for the fifth consecutive time. Colin, KU5B, came in second, just ahead of longtime Low Power Sprint veteran Dave, K1HT. Ray, WQ5L, placed fourth, while Steve, NA4K, came in fifth, edging out Joe, N8EA, by less than one QSO. Jeff, KU8E, hit 10,000 points on the nose for seventh place, followed closely two Pauls — K9AA and N4PN. Karl, N8NA, provided the Delaware multiplier for most stations and finished in 10th place.

## **High Power**

Two California operators battled it out for the top spot this time around. Their submitted scores were too close to declare a victory until log-checking was completed. In the end, both operators lost the same number of QSOs, and Trey, N5KO, edged out Dan, N6MJ, for first place. *Trey also is the answer to the trivia question!* He now has placed at least once in *all* positions of the High Power Top 10.

Trey operated the contest at the W6NL hilltop, while Dan operated from the W6YI hilltop. Coming in third was Andy, N2NT, followed by Bob, N6TV. Andy's QTH is only 120 feet above sea level, and, while Bob can see the W6NL hilltop from his location, his elevation is similar to Andy's. Jim, N3BB, just edged out Steve, N2IC, for fifth place, and Tree, N6TR, made it back into the Top 10 at seventh place. Randy, K5ZD, came in eighth place, marking his 35th showing in the Top 10. Tor, N4OGW, placed ninth. A 10th place finish from Mike, W9RE, demonstrated that it is possible to make the Top 10 from the "Black Hole."

#### **Team Scores**

1. Austin	Ditters	2. North	ern	3. South	nern California	4. Northe	ern California			
N3BB	15,372	Californi	a Contest	Contest	Club #1	Contest Club #2				
N2IC	15,330	Club #1		W6YI	16,422	N6DE	11,562			
N4OGW	14,491	N5KO	16,555	K6NA	14,276	W6EU	11,280			
NR5M	13,889	N6TV	15,414	N6AN	12,600	AJ6V	11,271			
K5MR	13,803	K6XX	14,104	N6AA	12,546	W6SX	11,193			
N4AF	13,760	AE6Y	12,936	K6LA	12,306	K6SRZ	10,760			
K5TR	12,880	W6YX	12,760	N6RT	11,320	K9YC	10,600			
WØBH	11,172	W0YK	12,013	AC6T	10,000	N3ZZ	10,560			
WQ5L	10,373	N6XI	11,720	K6ZH	9760	NI6T	9880			
N5QQ	9000	W6OAT	10,920	NE6I	5066	W6RGG	9720			
Total	130,070	K6AW	10,062	W4EF	2871	N6PN	7632			
		W7RN	9321	Total	107,167	Total	104,458			
		Total	125 805				- ,			

5. SMC #1 (W9RE, WE9V, N9CK, WI9WI, K9AA, K9AY, K9MMS, KA9FOX, N9FC)	88,245
6. AOCC #1 (KO7AA, K6LL, N6VR, N5LZ, W2LC, N4DW, N7CW, K7HP, K7WP)	87,518
7. YCCC (K5ZD, K1EA, K1HT, N2GC, W1UJ, K1XM, K2KQ, W1JQ, KB1NRB)	84,798
8. SSC #1 (K4BAI, W4MR, W4NZ, NA4K, KU8E, N4PN, K1ZZI, NA4BW, N5VI)	84,326
9. FRC (N2NT, AA3B, N2NC, K3WW, W2RQ, W3KB, WW2Y)	76,289
10. Dashers (N5RZ, N1LN, K5WA, KU5B, N5DO, K1TN, NO5W, W5OV)	72,653
11. MRRC/NCC (KW8N, K8MM, N8EA, K8MR, K8NZ, N8SS, K9NW)	67,378
12. Forest (N6TR, K7ZSD, K4XU, WS7L, KI7Y, K7ZS, W2VJN, NE7D, N6TW, N7VS)	62,923
13. NCCC #3 (N6ML, N6ZFO, AD6E, K6MM, K6DGW, N6WM, K6NV, W6NF, K6CSL)	47,728
14. Snowshoe (KØEU, WØETT, KO7X, ACØDS, K6XT, KØUK)	41,593
15. TCG (K4RO, N4ZZ, WF7T)	30,343
16. CCO (VE3EJ, VE3EY, VE3FU, VE3MM, VE3RCN)	
17. SSC #2 (W4AU, K4NO, N4JIK)	18,307
18. NCCC #4 (KZ2V, W6CT, WE6Z, KA3DRR)	
19. SMC #2 (WW9R, K9GY, K9ZT)	4138
20. SCCC #2 (KQ6ES)	
21. AOCC #2 (KN5H)	

# **Guest Ops**

AC6T	@W6RFU	K9AA	K9PG	N6DE	@K6TD	W6YI	N6MJ
K5TR	K5OT	KZ2V	@W6TQG	N6ML	@N6RO	W6YX	N7MH
K6AW	@W6NV	N4AO	WC4E	NR5M	K5GA	W7CT	NG7M
K7ZSD	K7GK	N5KO	@W6NL	W4MR	AA4NC	W7RN	K7NV

# **Team Competition**

In team competition, the Austin Ditters finished in first place with an average score of just over 13,000 points per entry. Second place went to the Northern California Contest Club, followed by their long time rival, the Southern California Contest Club. All three teams contributed at least one score to the Top 10. The second team from the NCCC came in fourth place, which marks one of the few times the second string has finished among the top four. The only other team that managed to have 10 entries was the Tree and the Forest team from Oregon. Many thanks to those who organized the 14 teams. This is the best way to improve participation in the contest.

#### Golden Logs

It is nearly impossible to escape the red pen of the log checkers, but 20 logs got an A+ and a happy face this time around. Three operators managed to do this with more than 300 QSOs in their logs: K5ZD, K5GA (operating at NR5M) and K5MR. Those K5s sure can copy the code! Seven stations made the list with more than 200 QSOs. If you are interested in seeing how

your log was scored, you can get a copy of your log check report by sending a request to **tree@kkn.net**. Reports are available for the past few years as well.

# Records

W1WBB set a new record from Rhode Island in the Low Power category breaking the six-year-old record of AJ1M. N2ZN established the first QRP record for New York. AA4XX more than doubled the QRP record for North Carolina that he set last September. NØAX returned to his home state of Missouri to set a new Low Power record there, just edging out the score set by KAØGGI in 2002.

# **Next Time**

The next CW Sprint will be held September 12 UTC (Saturday, September 11, local time in North America). The starting time is 0000 UTC, and you may operate from 0000 to 0359 inclusive.

For team registration, use the NCJ Web page, www.ncjweb.com. You may submit logs via e-mail to cwsprint@kkn.net or by using the log submission form on the NCJ Web site. Logs are due seven days after the

contest! Final scores are typically posted within two weeks of the contest and are announced on the CQ-Contest reflector as well as on the NCJ Web site.

Check out the Web resources at http://n6tr.jzap.com/sprint.html as well as rules, records and previous results on the NCJ site, www.ncjweb.com. The CQ-Contest reflector also is a great place to ask questions about this contest; see http://lists.contesting.com/mailman/listinfo/CQ-Contest for additional details about this resource.

## Soapbox

Only got in nine minutes but couldn't miss a CW sprint. —  $K\emptyset OU$ 

Chest cold with headache, typical flu stuff but had fun. — KOUK

A nice way to spend Saturday evening during the "Blizzard of 2010." — K1TN

1. Arrived home from business trip one hour before start. 2. Sat down five minutes before start and couldn't turn 20/40 beam. 3. Contest starts. Finally get beam to point west. 4. Keep getting beat out on 20. Almost quit. 5. Somehow get 90+ in first hour. Decide to keep going. Ended much better than I ever would have expected after such a poor start. Conditions on 40 and 80 were good. We need more activity east of the Mississippi to help us out on the low bands. — K5ZD

Lost remote station power before the end of the Sprint. — K6VVA

Probably my highest QSO total, but mults way down from previous years. I really enjoy the "rhythm" of this contest, even when I'll sometimes sit on the sidelines waiting to get "my turn" at working someone on a given frequency. — K6ZH

My best score yet. Thanks to K8CC for the use of his station. — *K8MM* 

Weather meant staying home this time. Forty meter dipole at 25 feet used on all bands. — K9NW

Fun and frustrating as usual. See you next

time. - KW8N

My second serious sprint. Improved by about 20 percent. — NOAC

Got all confused and thought I was an hour late. This time zone thing is weird. This contest is really hard work with a low wire (105 foot dipole) and low power, but when you get done you definitely know you've done something!

— NOAX

Four fun hours after spending most of the day chasing mobiles In the Minnesota QSO Party. Thanks to NCJ! — N4PN

That was fun! I listened for Ken, K5KA, at 0359Z. I used *N1MM* in a Sprint for the first time. A bit fumbly until I got one message programmed correctly, then things started to click. Either the bands were in much better shape than last time or my K3 really made a difference on all bands. I was glad to crack the 300 QSO ceiling after a long dry spell. — *N6AN* 

Conditions seemed to favor the West Coast. Congrats to W6YI and N5KO; very tough competition here in CA. Missed SC for that 43<sup>rd</sup> mult. — *N6TV* 

Great to hear all of the stations honoring Ken, K5KA, and to be reminded of the camaraderie of radiosport. — NO5W

Good condx on all bands, with 40 being the best. Missed VE provinces except for Ontario. Missed only ND and AK for states west of the Mississippi. — *WØTT* 

First time over 200! — W1JQ

No doubt the fastest four hours of contesting I've been a part of. It was certainly fun and my hat is off to those with "Golden Logs." The practice with NS on Thursday nights has been a great intro to this unique contest form. I highly recommend it to newcomers. Great to work many NS regulars in this Sprint. Twenty was certainly open, but primarily to W6-land. Moved to 40 due to lack of mults. Low bands worked well but not many Midwest/Plains States mults here. Enjoyed providing the RI mult. — W1WBB

Best conditions in several years. Mults a little scarce. — W9RE

My best CW Sprint ever. Well, make that my second best CW sprint ever in 23 years. Last one was six years ago. — WE9V

Probably my best job ever in this contest.

Top 10 QSOS W6YI N5KO N6TR N6TV N3BB N2IC N2NT N9RV K5ZD	391 385 371 367 366 365 360 355 344	Golden Logs K5ZD NR5M K5MR N9CK K3WW K9BGL K7ZSD N2GC WQSL	344 323 321 287 282 281 280 253 253
N4OGW	337	NAØN K8MR	249 244
Top 10 Low I	Dower		
Top 10 Low F N9CK KU5B K1HT WQ5L NA4K N8EA KU8E K9AA N4PN N8NA	12,054 10,920 10,600 10,373 10,290 10,277 10,000 9922 9847 9800	W4EF W2LE VE3RCN K9GY N4AO W8WTS KN5H KA3DRR K6MI	87 86 63 42 35 25 22 7 6
Ton OPP		Changes N4OGW	165
Top QRP KA9FOX NA4BW AA4XX N2ZN	7992 4662 3861 130	N4OGW N2NT W6YI N3BB N2IC N5KO AA3B K4RO N6TR N9RV	165 162 149 146 144 123 102 98 92 92

Fewer lapses of concentration led to highest QSO total ever. Still multiplier poor, so not my best score ever. No frequency readout due to inability to get WriteLog to quit putting both radios on the same frequency, despite spending an hour before the contest trying to set it up. I finally had to disable both radio control boxes to keep the radios on separate bands. — WI9WI

The fastest four hours of contesting! Thanks for all the fun. — WW9R

# **Scoring Summary**

Call Sign	Name	QTH	20	40	80	QSO	Mult	Score	Team	Call Sign	Name	QTH	20	40	80	QSO	Mult	Score	Team
K5ZD	RANDY	MA	82	149	113	344	43	14,792	YCCC	K4RO	KIRK	TN	80	120	121	321	43	13,803	TCG
NN1N	KEN	CT	90	125	100	315	42	13,230		N4AF	KEN	NC	73	133	114	320	43	13,760	Ditters
K1EA	KEN	MA	78	125	105	308	42	12,936	YCCC	K4BAI	JOHN	GA	58	141	99	298	43	12,814	SSC #1
K1DG	KEN	NH	75	117	115	307	41	12,587		N4ZZ	DON	TN	56	120	121	297	42	12,474	TCG
K1AR	KEN	NH	43	132	102	277	43	11,911		W4MR	WILL	NC	53	123	103	279	43	11,997	SSC #1
K1HT	*DAVE	MA	65	117	83	265	40	10,600	YCCC	N1LN	BRUCE	NC	67	116	97	280	42	11,760	Dashers
W1UJ	JAY	MA	60	94	105	259	40	10,360	YCCC	W4NZ	TED	TN	47	119	111	277	42	11,634	SSC #1
K1XM	*PAUL	MA	32	108	61	201	40	8040	YCCC	NA4K	*STEVE	TN	29	105	111	245	42	10,290	SSC #1
W1JQ	*MIKE	CT	37	81	83	201	36	7236	YCCC	N4CW	RENE	NC	56	99	89	244	42	10,248	
W1WBB	*BILL	RI	41	48	40	129	33	4257		KU8E	*JEFF	GA	58	103	89	250	40	10,000	SSC #1
KB1NRB	AL	CT	3	37	51	91	31	2821	YCCC	N4PN	*PAUL	GA	58	86	85	229	43	9847	SSC #1
										N4DW	DAVE	ΤN	21	108	105	234	40	9360	AOCC #1
N2NT	KEN	NJ	78	161	121	360	43	15,480	FRC	K8NZ	*RON	FL	28	113	78	219	41	8979	MRRC/
N2NC	KEN	NJ	73	124	102	299	41	12,259	FRC	NCC	DALBII	~ ^			00	000		0500	000 "4
W2RQ	KEN	NJ	40	109	124	273	43	11,739	FRC	K1ZZI	RALPH	GA	11	114	83	208	41	8528	SSC #1
N2GC	MIKE	NY	51	104	98	253	41	10,373	YCCC	W4AU	JOHN	VA	43	85	94	222	37	8214	SSC #2
W2LC	SCOTT	NY	59	98	79	236	41	9676	AOCC #1	K4NO	*GREG	AL	26	97	76	199	40	7960	SSC #2
K2KQ	*DON	NY	43	76	72	191	40	7640	YCCC	KY4F	*DOUG	AL	ı	72	91	164	39	6396	
K1TN	*JIM	NJ	15	87	61	163	40	6520	Dashers	K1GU	NED **PDIAN	TN	0	65 37	78	143	38 37	5434	000 #1
W2LE	PAUL	NJ	1	56	29	86	31	2666		NA4BW N5VI	**BRIAN *VAN	GA GA	19 28	58	70 52	126 138	33	4662 4554	SSC #1 SSC #1
N2ZN	**KEN	NY	0	2	11	13	10	130		WF7T	*BRAD	TN	28 2	62	52 43	107	38	4066	TCG
	51.15								<b>-</b> D0	AA4XX	**PAUL	NC	28	25	64	117	33	3861	100
AA3B	BUD	PA	75	127	108	310	40	12,400	FRC	AD4EB	JIM	TN	59	36	4	99	31	3069	
K3WW	CHAS	PA	52	121	109	282	43	12,126	FRC	N4LF	*LEX	FL	3	32	18	53	21	1113	
N8NA	*KARL	DE	52	113	80	245	40	9800		N4AO	*JEFF	FL	0	35	0	35	22	770	
K3TN	*JOHN	MD	16	112	113	241	40	9640		NAAO	JLII	'-	U	55	U	00	22	770	
NO3M	*TY	PA	18	88	105	211	41	8651	EDO.	N3BB	JIM	TX	98	151	117	366	42	15,372	Ditters
W3KB	*KEITH	PA	39	95	46	180	38	6840	FRC	N2IC	KEN	NM	99	157	109	365	42	15,330	Ditters
K3UA	*KEN	PA	3	6	67	76	33	2508		11210	11-14	. 4.01	00	.57	. 55	500	72	10,000	Dittolo
K3RWN	*RICH	PA	0	20	0	20	10	200											

NSK   TREY   CA   110   156   119   385   42   16.255   NCC #1   WORTH   SALE	N4OGW NR5M K5MR N5RZ K5TR K5WA KU5B WQ5L N5QQ N5DO NO5W W5OV AA5JG N4JIK K3LR	Name TOR TOR TOR TOR TOR KEN KEN BOB *BOB *BAY KEN *DAVE *CHUCK BOB *JAY *KEN *JAY *KEN *TREY	QTH MS TX TX TX TX TX TX TX TX TX TX TX OK OK	20 73 95 75 72 80 61 84 59 44 66 36 18 3 0	40 149 114 126 129 126 128 109 105 98 111 83 77 39 51 23	80 115 114 120 111 116 97 80 89 83 59 52 12 37 25 0	QSO 337 323 321 312 322 286 273 253 225 236 171 107 94 79 23	Mult 43 43 43 40 41 40 36 38 31 32 27 13 43	Score 14,491 13,889 13,803 13,416 12,880 11,726 10,920 10,373 9000 8496 6498 3317 3008 2133 299	Team Ditters Ditters Ditters Dashers Dashers Dashers Dashers Ditters Dashers Ditters Dashers Source Dashers	Call Sign W7RN N7CW K4XU K07X W7CT K7HP WS7L K7WP K17Y K7ZS W2VJN W7WHY K7WA NE7D N6TW N7VS W6NF	Name TOM *BUD DICK AL JIM HANK KEN JOHN KEN *JOE *GEO TOM *IJIM *KEN KEN *SEEVE JACK	QTH NV AZ OR WY UT AZ OR AZ OR OR OR OR OR OR OR	20 75 50 26 8 27 49 45 33 48 41 16 2 38 26 42 10 5	40 96 115 89 105 77 105 77 75 80 79 73 68 63 55 27 42	80 68 62 100 94 75 38 61 41 28 36 65 48 19 9 5	QSO 239 227 215 207 199 192 183 149 156 155 135 149 100 78 61 57	Mult 39 40 39 37 36 37 37 37 32 32 36 29 30 25 26 24	Score 9321 9080 8385 7659 7164 6771 5513 5148 4992 4960 4860 4321 3000 1950 1586	Team  NCCC #1 AOCC #1 Forest Snowshoe  AOCC #1 Forest AOCC #1 Forest FOR
RESY	W6YI N6TV	KEN BOB	CA CA	89 92	168 145	134 130	391 367	42 42	16,422 15,414	SCCC #1 NCCC #1	KN5H			0		0				AOCC #2
Miscropage   Mis	K6XX	BOB	CA	98	125	105	328	43	14,104	NCCC #1		IAN	МІ	40	98	124	262	43	11,266	MRRC/
NEAL A DICK CA 102 115 89 306 41 12.545 SCC #1 NCC	W6YX	MIKE	CA	104	109	106	319	40	12,760	NCCC #1		*JOE	МІ	46	91	102	239	43	10,277	MRRC/
NOTE	N6AA	DICK	CA	102	115	89	306	41	12,546	SCCC #1		JIM	ОН	26	114	104	244	41	10,004	MRRC/
NORT   KEN   CA   67   126   69   282   41   11,562   NCC   #12   NCC   #12   NCC   #12   NCC   #13   NCC   #14   NCC   *14	W0YK	ED	CA	95	108	90	293	41	12,013	NCCC #1	N8SS	EARL	MI	51	83	84	218	40	8720	MRRC/
Alby   ED	N6DE N6RT	DEAN KEN	CA CA	97 87	126 120	59 76	282 283	41 40	11,562 11,320	SCCC #1	K8JQ									MRRC/
KBSRZ   ALAN   CA   94   92   83   269   40   10,760   NCCC #2   WE9V   CHAD   WI   66   106   124   296   41   12,136   SMC #1	AJ6V	ED	CA	95	113	81	289	39	11,271	NCCC #2		*JIM	ОН	1	15	9	25	14	350	
K6DGW SKIP CA 45 79 44 168 36 6048 NCCC #3 KØEU KEN CO 49 136 105 290 43 12,470 Snowshoe NEGI DENNIS CA 50 99 0 149 34 5066 SCCC #1 NAØN 'PAT MN 56 100 93 249 38 9462 W4EF MIKE CA 0 0 87 87 33 2871 SCCC #1 NAØN 'PAT MN 56 100 93 249 38 9462 W4EF MIKE CA 27 38 27 92 31 2852 NCCC #3 NØAX *KEN CO 43 117 75 235 40 9400 Snowshoe N6WM CHRIS CA 27 38 27 92 31 2852 NCCC #3 NØAX *KEN MO 21 104 100 225 38 8550 K6NV BOB CA 7 52 33 92 30 2760 NCCC #3 NØAX *KEN MO 21 104 100 225 38 8550 K6NV BOB CA 7 52 33 99 26 2574 NCCC #4 NØAC *BILL IA 35 73 76 184 38 6992 W6CT *SCOTT CA 14 46 39 99 25 2475 NCCC #4 NØAC *BILL IA 35 73 76 184 38 6992 W6CT *SCOTT CA 14 46 39 99 25 2475 NCCC #4 NØAC *BILL IA 35 73 76 184 38 6992 W6CT *SCOTT CA 14 46 39 99 25 2475 NCCC #4 NØAC *BILL IA 35 73 76 184 38 6574 Snowshoe K6III *JERRY CA 15 10 32 57 21 1197 NCCC #4 NØAC *BILL IA 35 73 76 184 38 6574 Snowshoe K6CSL *BERT CA 4 12 5 21 12 252 NCCC #3 NØAC *BILL CO 15 91 67 173 38 6574 Snowshoe K6CSL *BERT CA 4 12 5 21 12 252 NCCC #3 NØAC *BILL CO 15 43 27 85 30 2550 Snowshoe K6MI *JOHN CA 4 0 2 6 6 6 36 NCCC #4 KØUK *BILL CO 15 43 27 85 30 2550 Snowshoe K6MI *JOHN CA 4 0 2 6 6 6 36 NCCC #4 KØUK *STEVE MO 5 0 4 9 7 63 NOWSHOE KGOL *TOM CO 15 91 67 174 41 7134 CCO NGAN CO 15 91 67 174 41 7134 CCO NGAN CO 15 91 67 174 41 7134 CCO NGAN CO 15 91 67 174 41 7134 CCO NGAN CO 15 91 67 174 41 7134 CCO NGAN CO 15 91 77 174 115 115 NGAN CO NGAN MEG NGAN CO 15 91 77 174 115 NGAN CO NGAN MEG NGAN CO 15 91 77 174 115 NGAN CO 15 91 77 174 115 NGAN MEG NGA	W6OAT K6SRZ K9YC N3ZZ K6AW AC6T NI6T K6ZH W6RGG N6ML N6ZFO AD6E K6VVA N6PN	RUSTY ALAN JIM TOM KEN STEVE GARRY *JIM BOB MIKE *BILL AL *RICK *MATT	CA CA CA CA CA CA CA CA CA CA CA CA CA	90 94 71 76 72 77 63 69 79 80 44 71 65 36	106 92 113 100 97 117 96 115 98 84 110 104 100 105	84 83 81 88 89 56 88 60 66 81 82 71 74 71	280 269 265 264 258 250 247 244 243 245 236 246 239 212	39 40 40 40 39 40 40 40 39 40 38 39 36	10,920 10,760 10,600 10,560 10,062 10,000 9880 9760 9720 9555 9440 9348 9321 7632	NCCC #1 NCCC #2 NCCC #2 NCCC #1 SCCC #1 NCCC #2 SCCC #1 NCCC #2 NCCC #3 NCCC #3 NCCC #3	WE9V N9CK K9BGL WI9WI K9AA K9AY K9MMS KA9FOX WW9R N9FC K9GY	CHAD *STEVE KARL JIM *PAUL GARY *GARY *TSCOTT *PAT JOHN *KIGGY	WI WI IL WI IL WI IN IN	66 46 56 57 47 50 49 42 1 7	106 121 95 114 109 105 96 95 64 41 42	124 120 130 94 86 100 85 79 28 39 0	296 287 281 265 242 255 230 216 93 87 42	41 42 42 39 41 38 39 37 32 32 16	12,136 12,054 11,802 10,335 9922 9690 8970 7992 2976 2784 672	SMC #1 SMC #1 SMC #1 SMC #1 SMC #1 SMC #1 SMC #1 SMC #2 SMC #1 SMC #2
N6TR KEN OR 109 140 122 371 41 15,211 Forest VE3FU CHRIS VE3 6 95 63 164 37 6068 CCO N9RV PAT MT 96 151 108 355 40 14,200 KO7AA BILL AZ 89 117 107 313 42 13,146 AOCC #1 K6LL DAVE AZ 99 127 86 312 40 12,480 AOCC #1 K6LL DAVE AZ 75 108 84 267 42 11,214 AOCC #1 K7ZSD KEN OR 79 107 94 280 39 10,920 Forest  VE3FY *NICK VE3 22 72 80 174 41 7134 CCO VE3FU CHRIS VE3 6 95 63 164 37 6068 CCO VA7ST *BUD VE7 70 67 8 145 34 4930 VA7ST *BUD VE7 70 67 8 145 34 4930 VE3RM RICK VE3 6 51 47 104 33 3432 CCO VE3RCN *KEVIN VE3 0 29 34 63 30 1890 CCO	K6DGW NE61 KQ6ES W4EF N6WM K6NV KZ2V W6CT K6III NK6A K6CSL K6MI	SKIP DENNIS JOHN MIKE CHRIS BOB *NICK *SCOTT *JERRY *DON *BERT *JOHN	CA CA CA CA CA CA CA CA CA	45 50 29 0 27 7 18 14 15 17 4	79 99 55 0 38 52 38 46 10 9 12 0	44 0 25 87 27 33 43 39 32 0 5	168 149 109 87 92 99 99 57 26 21	36 34 31 33 31 30 26 25 21 16 12 6	6048 5066 3379 2871 2852 2760 2574 2475 1197 416 252 36	NCCC #3 SCCC #1 SCCC #2 SCCC #1 NCCC #3 NCCC #4 NCCC #4	WØBH NAØN WØETT NØAX ABØS NØAC ACØDS WW2Y K6XT KØUK	BOB *PAT *KEN *KEN *TIM *BILL *TOM PETER *ART *BILL	KS MN CO MO KS IA CO NE CO CO	52 56 43 21 40 35 15 15 21 15	100 100 117 104 67 73 91 46 64 43	114 93 75 100 84 76 67 104 20 27	266 249 235 225 191 184 173 165 105 85	42 38 40 38 40 38 38 38 33 28 30	11,172 9462 9400 8550 7640 6992 6574 5445 2940 2550	Snowshoe Snowshoe FRC Snowshoe
N9RV PAT MT 96 151 108 355 40 14,200 VA7ST *BUD VE7 70 67 8 145 34 4930 KO7AA BILL AZ 89 117 107 313 42 13,146 AOCC #1 VE3MM RICK VE3 6 51 47 104 33 3432 CCO K6LL DAVE AZ 99 127 86 312 40 12,480 AOCC #1 VE3RCN *KEVIN VE3 0 29 34 63 30 1890 CCO N6VR RAY AZ 75 108 84 267 42 11,214 AOCC #1 K7ZSD KEN OR 79 107 94 280 39 10,920 Forest *Low Power*	KA3DRR	*SCOT	CA		0	0	7	3	21	NCCC #4	VE3EY	*NICK	VE3	22	72	80	174	41	7134	CCO
K6LL DAVE AZ 99 127 86 312 40 12,480 AOCC#1 VE3RCN *KEVIN VE3 0 29 34 63 30 1890 CCO N6VR RAY AZ 75 108 84 267 42 11,214 AOCC#1 K7ZSD KEN OR 79 107 94 280 39 10,920 Forest *Low Power	N9RV	PAT	MT	96	151	108	355	40	14,200		VA7ST	*BUD	VE7	70	67	8	145	34	4930	
K7ZSD KEN OR 79 107 94 280 39 10,920 Forest LOW POWER	K6LL	DAVE	ΑZ	99	127	86	312	40	12,480	AOCC #1										
	K7ZSD	KEN	OR	79	107	94	280	39	10,920	Forest		er								NCI