



## Final Results: North American Sprint CW February 2022

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*(These are the final results and include the Top Ten scores from all categories and overlays. This is the complete results article. A summary article will be included in an upcoming issue of NCJ.)*

As an overview, not only did the February 2022 CW Sprint attract the “usual suspects,” expert ops who have made this one of the toughest contests not only to win but to place in the Top Ten, but in addition, we also enjoyed a large number of “Sprint first timers,” some twenty-five ops in all. Welcome aboard and welcome back!

*Ed, AI6O – A first-time participant in the CW Sprint. Welcome! (Photo courtesy Ed Felter, AI6O)*



The total number of logs making their way into the log-checking computer system caverns totaled 191. This was down 15% from 215 during the pandemic-powered surge a year earlier. But it was the same amount of increase over September's 160! Looking over the totals since 2012, we find a lot of volatility with the increases and decreases, yet the trend is steadily upward over this time frame. In fact, three of the four last years have seen three of the largest number of logs received in the past decade.

It's clear that radio club encouragement as well as wide-ranging promotions through email and social media make, and have made, a positive difference. If you enjoy this scramble, where high-level CW capability and constant QSYing make a difference, please join us in attracting more operators to the NA Sprints, both CW and RTTY! All it takes is a nudge and a little encouragement.

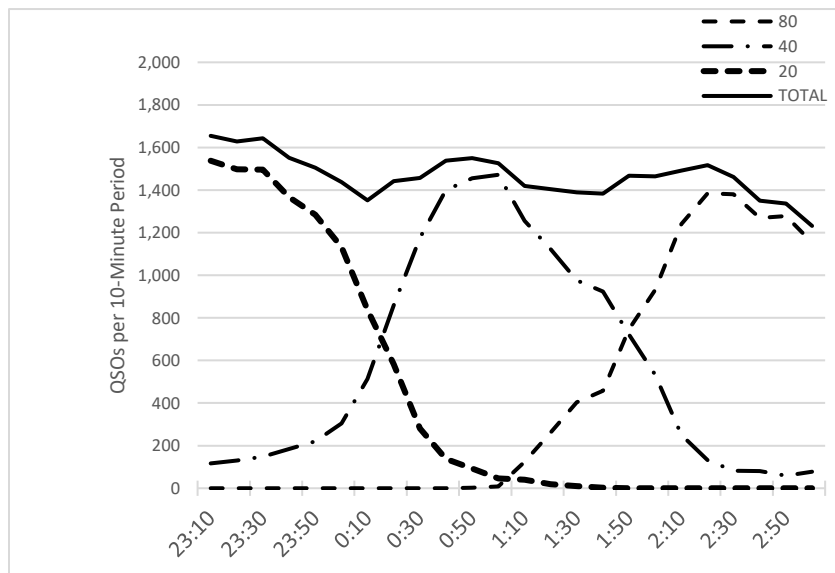
*Frequent contester Alan K6SRZ gets on from California for almost every Sprint. (Photo courtesy Alan Eshelman, K6SRZ)*



## Band-by-Band Action

Figure 1 at right shows the distribution of contacts in each ten-minute segment by band.

While the general idea is to start on 20 meters and “milk the contacts” while the band is open, good ol’ 40 meters contributed from the very start. Twenty meter activity peaked at the start in the 23:00-23:30Z slot and declined thereafter, while 40 meters peaked from 00:40-01:10Z, and 80 meters dominated after 02:10Z. The peak period on each band is roughly thirty minutes long.



What’s extra interesting about this view of the contest are the *cross-over points* where activity on the “next” band takes over. In this contest, 20 handed the baton to 40 at 00:15, about 1 hour and 15 minutes into the contest. Similarly, 80 surged into the lead just after 01:50. These cross-over times say a lot about conditions for the contest. In last year’s February contest, with somewhat disturbed conditions, 20 meters gave way to 40 meters only 45 minutes into the contest. That left 40 to carry the load but there are only so many contacts to be made on one band, so attention turned to 80 meters with 90 minutes to go. This year, with one hour of extra sunlight, 20 was busy longer at the start, so we had three more evenly balanced peaks.

Forty meters made up 40% of all QSOs while 20 and 80 meters contributed 30% each. All in all, approximately 35,000 contacts were submitted for log checking and make up the data set analysis.



Photo 2: Regular sprinters Howie N4AF, John K4BAI, and Dennis K2SX. We’re working on Jim K4QPL and Alan AA4FU! (Photo courtesy...)

## Top Ten Overall

The steep ramp-ups and fall-offs from band-to-band enables good SO1R operators to do very well — in fact, the overall winner, Tree N6TR, was a SO1R log with only two band changes as was Dave N2NL in sixth place. Tree and Dave are amazing ops, but this really is unusual in these days of interleaving two-band expertise. Mixed in were four actively-SO2R stations – N2IC, N9RV, N5KO, and NO6T. W9RE, K4RO, and N2NL in a north-south line were the farthest east with N6TR and N9RV the most northerly.

Call Sign	Score	QSOs	Mults	Top Ten Scores		00Z	01Z	02Z	03Z
				Band Changes	QSOs Lost				
N6TR	18,326	374	49	2	3	106	98	89	81
N2IC	17,900	358	50	136	5	97	98	86	77
N9RV	17,376	362	48	116	2	104	82	89	87
N5KO	16,992	354	48	112	6	96	95	78	85
NO6T	16,560	345	48	132	12	87	93	85	80
N2NL	15,888	331	48	2	4	91	78	72	90
K5GN	15,840	330	48	122	6	95	78	81	76
N6TV	15,744	328	48	48	3	94	89	69	76
W9RE	15,744	328	48	116	5	92	75	87	74
K4RO	15,600	312	50	120	4	95	69	83	65

Call Sign	Score	QSOs	Mults	Top Ten Scores – Max 12 Band Changes		00Z	01Z	02Z	03Z
				Band Changes	QSOs Lost				
N6TR	18,326	374	49	2	3	106	98	89	81
N2NL	15,888	331	48	2	4	91	78	72	90
K5TR	15,453	303	51	2	7	88	70	70	75
K5ZD	15,024	313	48	6	0	88	80	77	68
K6XX	14,847	303	49	4	7	82	72	62	87
KP2M	14,536	316	46	3	5	88	83	78	67
K6LL	14,429	307	47	2	4	88	79	67	73
N5RZ	14,265	317	45	2	4	93	80	66	78
N5TJ	14,006	298	47	2	4	85	77	58	78
N7XU	13,892	302	46	2	2	85	79	56	82

It seems more and more entries are “SO1R-ish,” at least making very few band changes in the Sprint. Lots of activity helps — 300 QSOs were in-reach for both SO2R and SO1R stations. K5ZD’s 313-QSO Golden Log is also noteworthy.

## Top Ten — Low Power

KØEU, K7SS, and K7SV all cracked the very tough 13,000 score mark with 100 watts. Very impressive! A full half of the Top Ten, five ops, did it with only two band changes. Perhaps this SO2R interleaving thing is not what it’s cracked up to be! Also noted, two of the top LP ops had Golden Logs. There are some impressive ears in there as well.

Top Ten Scores – Low Power									
Call Sign	Score	QSOs	Mults	Band Changes	QSOs Lost	00Z	01Z	02Z	03Z
KØEU	13,950	310	45	41	2	88	77	70	75
K7SS	13,440	280	48	2	6	92	72	57	59
K7SV	13,066	278	47	54	5	82	59	71	66
WQ5L	10,994	239	46	2	4	73	58	52	56
KJ9C	10,912	248	44	2	2	61	58	66	63
W8WTS	10,578	246	43	114	6	69	53	62	62
NØAX	10,516	239	44	2	0	47	69	60	63
NAØN	9,800	245	40	78	0	66	59	61	59
W1NN	9,724	221	44	23	2	49	52	68	52
K1HT	9,717	237	41	2	2	57	69	50	61

Top Ten Scores – Low Power – Max 12 Band Changes									
Call Sign	Score	QSOs	Mults	Band Changes	QSOs Lost	00Z	01Z	02Z	03Z
K7SS	13,440	280	48	2	6	92	72	57	59
WQ5L	10,994	239	46	2	4	73	58	52	56
KJ9C	10,912	248	44	2	2	61	58	66	63
NØAX	10,516	239	44	2	0	47	69	60	63
K1HT	9,717	237	41	2	2	57	69	50	61
N5EE	9,553	233	41	2	3	53	66	55	59
K3UA	9,198	219	42	2	5	51	52	66	50
W2LC	9,198	219	42	2	5	52	55	59	53
K1GU	9,114	217	42	2	4	55	54	50	58
WW4XX	8,944	208	43	2	7	50	53	49	56

## Top Scores – QRP

Three stations went the full four hours with 5 watts. A fourth, David N6AN, was able to work in three serious hours before the mountain peak operation got to him. Dale WC7S was handing out the Wyoming multiplier to those with good ears and Dan VE6EX in Alberta was welcome, too. Our three new state records were all QRP: W4ER (AL), N5ER (AR), and VE6EX (AB). Nice work fellows!

Top Scores – QRP									
Call Sign	Score	QSOs	Mults	Band Changes	QSOs Lost	00Z	01Z	02Z	03Z
W4ER	4,940	130	38	6	2	27	38	26	39
NN7SS	4,900	140	35	2	10	44	34	37	25
K8CN	3,317	107	31	19	6	22	33	26	26
N6AN	2,025	75	27	3	0	35	22	18	0
N5ER	1,275	51	25	10	5	7	0	14	30
WC7S	1,224	51	24	5	5	19	15	17	0
VE6EX	920	46	20	1	10	12	21	13	0





*Phil, KP2M/KT3Y made a lot of sprinters happy this time with a big signal from the VI (Virgin Islands) multiplier. (Photo courtesy Phil Allardice, KT3Y)*

## Leader Summaries

The Top Ten total QSOs list was quite impressive. You had to make at least 328 contacts to make it into this group! Perhaps with a little more activity, the fabled “Page 9” (400 QSOs on the old 50-QSO paper logs sheets) could be within reach.

While the number of QSOs is important, the old “Mult Whammy” is really “key.” Larry, K5OT, at the key of the fine K5TR setup in central Texas, notched 51 mults to top the field. Eight ops had at least 49 mults. Good ears for sure, and perhaps a bit of good luck pixie dust, are necessary to reach that table. The five most-worked multiplier entities were CA, TX, CO, OR, and TN while the toughest five with at least one contact reported were SD, Cuba, SC, UT, and PR.

Top scores were made all across the continent. While there are always favored areas in any contest, it’s important to recognize that there can be terrific achievements from anywhere.

Top Ten QSO Totals		Top Ten Multipliers		Call Area, Province, and DX Leaders		
Call Sign	QSOs	Call Sign	QSOs	Call	QTH	Score
N6TR	374	K5TR	51	K5ZD	MA	15,024
N9RV	362	K4RO	50	N2NT	NJ	15,410
N2IC	358	N2IC	50	K3LR	PA	13,524
N5KO	354	KØRF	49	N2NL	AL	15,888
NO6T	345	K3LR	49	N2IC	NM	17,900
N2NT	335	K6XX	49	N5KO	CA	16,992
N5ZO	332	N6TR	49	N6TR	OR	18,326
N2NL	331	W2GD	49	NA8V	MI	13,524
K5GN	330	Many	48	W9RE	IN	15,744
N6TV	328			KØRF	CO	15,190
				VE9AA	NB	9,711
				KP2M	PR	14,536
Golden Logs (more than 100 contacts)		While every entrant is aware of the comprehensive cross-checking and tries hard to “get it right” with the exchange, most of us are human and as some smart philosopher once said, thus err. Eight ops made at least 100 contacts with absolutely no errors, and these Golden Log stalwarts are listed at the left.		Top Ten Band Changes		
Call Sign	QSOs			Call Sign	Band Changes	
K5ZD	313			N4AF	140	
W6YX	312			K5PI	138	
K3LR	276			N2IC	136	
VE9AA	249			N2NT	136	
NAØN	245			NO6T	132	
NØAX	239			N4OGW	130	
NW2K	150			K5GN	122	
N4YDU	100			K4RO	120	
				N9RV	116	
				W9RE	116	

And just how many band changes are we talking about here for the SO2R operators? The bandswitches of those stations at right sure got a workout! N4AF switched bands every 2.3 QSOs. What will the next innovation bring to the CW Sprint?

## Team Scores

Team formation is both a lot of fun and probably the best way to encourage participation in the Sprints. Members of 29 teams posted scores, and this undoubtedly helped both the turn-out as well as some rare states and provinces, plus a couple of good DX spots. The top four teams are listed, but all are noted and appreciated.

NCCC #1		Gulf Coast Cats		SSC #1		FRC	
N5KO	16,992	K5TR	15,453	N2NL	15,888	N2NT	15,410
N6TV	15,744	K5PI	14,993	K4RO	15,600	W2GD	13,132
W6YX	13,728	N3BB	14,130	N4OGW	15,552	W2RQ	12,980
WD6T	13,432	N5TJ	14,006	K4BAI	11,835	N2NC	12,735
AE6Y	13,420	KZ5D	13,110	KØEJ	10,396	AA3B	12,555
<b>73,316</b>		<b>71,692</b>		<b>69,271</b>		<b>66,812</b>	

## Points of Interest

One of the many benefits of receiving the incredible data trove from the log checkers is all of the records from the start of the Sprint, in 1977. From the back room of the Boring Amateur Radio Club are these notable achievements:

Number of Sprint wins; five or more times:

N5TJ	15 (this includes a remarkable 11 in row before Jeff relocated to the Austin area)
N6TR	14 (three in a row)
N2IC	12 (three in a row)
N5KO	9 (three in a row)
W4AN (SK)	6 (four in a row)
K5ZD	5 (three in a row)

While we are sifting through the Sprint catacombs, which operators have the most Top Top finishes in the CW Sprints?

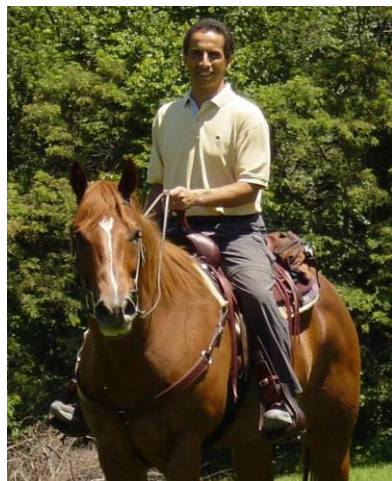
N6TR	67
N2IC	58
N2NT	45
N5RZ	41
N6TV	40
N5KO	40

And who were those masked call signs, anyway? Here are the guest ops!

K4VX (NN1N); K5TR (K5OT); KP2M (KT3Y); NAØN (NAØN @WØZT); NN7SS (K6UFO); NO6T (KI6RRN @WA6TQT); NP2X (K9VV); W6YX (N7MH); WD6T (WD6T @N6RO); WIØWA (NØAC); WW4XX (LZ4AX)

## New Faces in New Places

We certainly seemed to have a lot of new call signs in our logs this time from all over. It's really great to see (and hear) new stations in the mix, trying out the Sprint's unusual-but-exciting brand of activity.



A regular call in our non-Sprint logs is TI7W and the operator behind that call is Kam Sirageldin, N3KS. Kam isn't a regular Sprinter, but thought he could give it a try. As you can see, even though he was just "horsing around" (ahem), he made 68 QSOs in the first CW Sprint operation ever from Costa Rica. Now that he's gotten used to the QSY rule and the exchange, perhaps we'll see him again as TI7W! Thanks, Kam!

*Kam, TI5/N3KS made 68 QSOs in the first-ever CW Sprint operation from Costa Rica. (Photo courtesy Kam Sirageldin, N3KS, via [qrz.com](http://qrz.com))*

## Maritime Contest Club (MCC)

You may have noticed more NA Sprint activity from the far northeastern reaches of what constitutes NA. That's at least partially due to the efforts of the Maritime Contest Club ([www.maritimecontestclub.ca](http://www.maritimecontestclub.ca)). This February we were especially delighted to hear not only Sprint regular and MCC President, Mike VE9AA calling in but two brand-new-to-Sprint calls; VO1BQ and VO2AC! When was the last time we had TWO VO-something stations in the contest? So, Mike was asked about the MCC...

"As far as I know, it was started in the mid-2000s by VE1OP (SK), VE1RGB (SK), VE1JS, and VE1JF but early on, OP and RGB both played key roles. I was VP since 2003 then President since VE1OP passed suddenly. We've recently adopted some VO1s and VO2s and currently have about 23 members, about half of which are active. If you're in VE1/9/VO1/2/VY2 and would like to join..."

One of those new members, Joe VO1BQ, jumped in and handed out the NL multiplier. "I'm more of a participant than a competitor. Often, I can sense the excitement in the other operator when he's snagged a VO1! That FB or dit-dit I sometimes receive is a motivator to keep my BIC a little longer." Joe is an ex-Navy radioman and 911 dispatcher who started on CB in the late 70s and got interested in ham radio soon after. He enjoys getting on the air to work New Ones and "pass out those VO1s."

*Joe VO1BQ operates from a city lot in St John's with a Butternut HF-9V and 80-10 EFHW. He has plans for bigger and better antennas (don't we all) in the months to come. He's just 1 km from Signal Hill where Marconi received the first transatlantic signals in 1901. (Photo courtesy, Joe VO1BQ)*



Mike VE9AA spent most of Saturday before CW Sprint dealing with high winds and snow before the contest! "After all that, I snowshoed out to various 4-square arrays here and got them repaired best I

could in the cold and snow. By the time Sprint time rolled around, I was beat! I saw the K index was high and someone in MCC told me the A index was "way up". I sure felt it. It was very hard to make QSOs. Even with the Sprint starting an hour earlier. (tu vy much!) it was really tough to scrape together 52 Qs on 20 meters in 1.5 hrs. I started scouring 40 right from the start. I always get the weird sensation I am way up here looking down on the activity. Very few are what I could call loud. Thanks for the hour extra on 20m (otherwise it's just a 2-band affair from up here) and CU (all of a sudden!) in the next one." Mike runs a pair of IC-7410s with wire 4-squares on most bands.



*Most pictures of contesters' feet are on a tower rung but Mike shows us a different perspective. (Photo courtesy of Mike Smith, VE9AA)*

## New Calls

Aren't computers great? I asked the Boring Amateur Radio Club's database manager if he would please give me a list of new calls and look at these! Welcome to all — we are glad to have you, no matter how you came to the Sprint! We hope to see you again, too — thanks for joining in!

AAØAJ, AI6O, K6EI, K8LF, KA3TTT, KA5M, KD2KW, KD9KHA, KK9V, KYØQ, N3CW, TI5/N3KS, N5EP, N6TTV, N8HWV, ND9M, NNØG, VE3OMV, VE6RST, VO1BQ, W4EE, W4WF, W9TD, WS5D, WX8C, WZØW

## Sprint Soapbox Sagas

How about a few selected comments from the current Sprinters?

**K1HT:** I wound up with fewer multipliers than usual (Ed: read and weep when you read the next one!)

**K5OT,** op at K5TR: Found Hawaii unassigned in initial log — Wow!

**KP2M:** Stumbled right out of the gate (as I sent) SN #34, so I sent the first Qs by hand and opened a new log. My bad.

**N6AN:** Flint Peak, SOTA W6/CT-225, "hiking portable" with a KX3 (5W), 100-foot doublet fed with CATS twisted pair. Paper log, sending all by hand. (Ed: Hard core indeed! See the Sep 2021 results for a photo.)

**NNØG:** First Sprint. Started getting the hang of it near the end.

**WA6URY:** Operated remote from Japan (Ed: Dan is a regular in many NCCC Sprints and the NA Sprint), approximately a half-day timewise from those of us in North America.

**WQ6X:** I was frustrated by stations who need to SLOW DOWN. Also, the ops who started sending their exchange before I was done transmitting. By the time I had finished, they have already sent the number, which now requires a repeat ... a waste of six seconds. (Easy does it, Sprinters!)



## From the Management

First, thanks to everyone for making sure their QSO “ack” transmissions are long enough to be heard. That really helps as does allowing the receiving station to get fills if needed. Good job!

## QRM

You might have noticed the bands are extra busy during the February CW Sprints. Along with the FOC Marathon, the state QSO parties for MN, VT, and the province of BC are also held on the same weekend. While there’s room for everybody, a few elbows get thrown here and there. The one-hour earlier start also surprised some folks. We do need to remember that while Sprint is fun, it doesn’t have exclusive access to the spectrum. Dial back the adrenaline a little bit (even during that first hour!) and listen first. If a non-Sprint station is CQing, give them a little extra room — or call them for a QSO in their contest.

There was a distinct lack of MN/VT/BC QSOs in our logs this time around, which is unfortunate. The Sprint exchange is valid for all three contests which only need a signal report and state abbreviation from out-of-state stations. We would like to recognize that some of the contests do have a Plan B strategy to move up and away from the Sprinters and FOCers or else jump in and make QSOs with everybody. An inspection of the CW Sprint’s 20 meter activity shows that there is very little going on above 14055 kHz. From this point on, let’s consider “025 and up” to be the recommended CW Sprint frequency range. This is where Sprint activity takes place anyway, so maybe we can “lean lower” to keep more of the band available for others to contest if the CW Sprint isn’t their cup of tea.

## Non-Sprint Station QSOs

Part of the problem might be due to a misunderstanding that QSOs with non-Sprint stations don’t count or are improper if the “other” station doesn’t QSY according to the Sprint rules. One of the Sprint founders was asked if this was considered in the original rules. His response? “If you (find) somebody you wanted to work (multiplier or not), and were able to coax a valid exchange from that station, then (it would count) for a QSO in the contest. That the other station wasn’t following the Sprint rules by QSYing was (their) problem, not yours. It’s okay even if the non-QSYer does submit a Sprint score. The problem will be in (their) log, not yours. All you need to do is be in (their) log at the date and time you claim the QSO took place.” So there is no reason not to call a MN, BC, or VT station that is CQing for their state’s QSO party. (You also might want to slow down a little...)

## Looking Forward to Next Time

Another CW Sprint in the books with great efforts and accomplishments. Thanks to the North American CW Sprint team for processing logs and scores quickly, allowing us to produce results promptly and with a high confidence. Not bad for a Boring Amateur Radio Club!

What about the next one? Heard frequently, about the time the contest starts being over, we’ve just gotten the hang of it! Well, there is a RTTY Sprint coming up on March 12-13 (starting time is 2300 UTC) and the next CW Sprint will start at 0000 UTC on September 11<sup>th</sup>. We hope to see your log in either or both. The NS Sprint on Thursday nights is a good way to keep the QSY rust from building up, too. See you in the next one and CQ Sprint!

## Line Scores – February 2022 – CW Sprint

\* - Low Power, \*\* - QRP

Call	Name	QTH	20	40	80	QSO	Mults	Score	Band Chgs	Team
K5ZD	RANDY	MA	98	113	102	313	48	15,024	6	
K1DG	DOUG	NH	69	129	93	291	44	12,804	2	CODE GUYS
W1WEF	JACK	CT	81	99	89	269	44	11,836	2	Bill Lunch
K1HT	*DAVE	MA	64	108	65	237	41	9,717	2	
W1FJ	AL	MA	43	89	78	210	43	9,030	4	Bill Lunch
W1UJ	JAY	MA	39	86	85	210	43	9,030	60	
AJ1DM	*JOHN	RI	42	64	32	138	35	4,830	2	
K8CN	**MIKE	NH	10	51	46	107	31	3,317	19	
K1KI	TOM	CT	0	76	0	76	35	2,660	0	
N2NT	ANDY	NJ	89	139	107	335	46	15,410	136	FRC
W2RQ	BILL	NJ	83	99	113	295	44	12,980	2	FRC
N2NC	JOHN	NJ	79	104	100	283	45	12,735	6	FRC
K2UA	RUS	NY	73	96	92	261	41	10,701	2	GOOD GUYS
W2LC	*SCOTT	NY	65	83	71	219	42	9,198	2	
NW2K	*DEAN	NY	48	52	50	150	38	5,700	2	TEAM HIRAM
W2MKM	ED	NJ	5	53	47	105	33	3,465	4	
K3LR	TIM	PA	87	96	93	276	49	13,524	2	CODE GUYS
N3QE	TIM	MD	88	111	100	299	44	13,156	18	PVRC
W2GD	JOHN	PA	65	103	100	268	49	13,132	2	FRC
AA3B	BUD	PA	95	88	96	279	45	12,555	75	FRC
K3UA	*PHIL	PA	51	53	115	219	42	9,198	2	GOOD GUYS
NO3M	TY	PA	0	0	84	84	38	3,192	0	
N4ZR	PETE	MD	41	46	0	87	30	2,610	1	PVRC
N3SD	*GREG	PA	0	0	60	60	29	1,740	0	TEAM HIRAM
AC5XK	*DON	DC	7	36	8	51	22	1,122	2	PVRC
KA3TTT	**AUSTIN	PA	0	0	3	3	3	9	0	
N2NL	DAVE	AL	102	123	106	331	48	15,888	2	SSC #1
K4RO	KIRK	TN	79	124	109	312	50	15,600	120	SSC #1
N4AF	AL	NC	87	137	95	319	46	14,674	140	
K8MR	JIM	FL	89	112	91	292	46	13,432	10	GOOD GUYS
K7SV	*LAR	VA	82	110	86	278	47	13,066	54	Bill Lunch
K4ZW	KEN	VA	67	116	105	288	45	12,960	95	
W4NZ	TED	TN	79	94	89	262	46	12,052	22	SSC #2
K4BAI	JOHN	GA	60	107	96	263	45	11,835	2	SSC #1
KU8E	JEFF	GA	74	95	98	267	44	11,748	4	SSC #2
N4ZZ	DON	TN	71	116	87	274	42	11,508	6	AOCC
KØEJ	MARK	TN	0	113	113	226	46	10,396	3	SSC #1
AD4EB	JIM	TN	55	81	98	234	44	10,296	26	
N4OX	JAY	FL	73	67	88	228	44	10,032	2	SSC #2
K1GU	*NED	TN	66	75	76	217	42	9,114	2	SSC #3
WW4XX	*ALEX	GA	55	80	73	208	43	8,944	2	SSC #3
W4WF	CHRIS	FL	10	82	94	186	43	7,998	5	SSC #3
N4OO	*BRIAN	GA	43	73	66	182	43	7,826	13	SSC #2
NA4J	JIM	NC	19	64	88	171	43	7,353	4	
WF7T	*BRAD	TN	41	72	56	169	40	6,760	5	
NK4O	*AJ	FL	69	68	30	167	39	6,513	2	SSC #3
KQ4R	ED	FL	40	77	42	159	38	6,042	8	SSC #4
W4ER	**JOHN	AL	35	62	33	130	38	4,940	6	
N4CW	BERT	NC	0	57	62	119	39	4,641	1	
KG3V	*TOM	VA	18	45	51	114	35	3,990	6	
AA5JF	ANDY	GA	7	57	35	99	38	3,762	2	SSC #4
N4YDU	NATE	NC	15	41	44	100	37	3,700	2	
AF4T	DOUG	TN	33	24	47	104	34	3,536	2	
N4NTO	*TRIPP	NC	11	16	55	82	35	2,870	2	
W4EE	*JIM	FL	38	39	28	105	27	2,835	3	

N3CW	ED	VA	25	40	0	65	32	2,080	1	
K8LF	JAY	VA	10	39	8	57	26	1,482	2	PVRC
AC6ZM	JUAN	TN	40	11	0	51	22	1,122	3	SSC #3
ND9M	*JIM	FL	0	11	0	11	7	77	0	
N2IC	STEVE	NM	110	146	102	358	50	17,900	136	AOCC
K5GN	DAVE	TX	106	117	107	330	48	15,840	122	TDXS
N4OGW	TOR	MS	87	133	104	324	48	15,552	130	SSC #1
K5TR	GEO	TX	108	101	94	303	51	15,453	2	Gulf Coast Cats
K5PI	ROB	TX	94	137	88	319	47	14,993	138	Gulf Coast Cats
N5RZ	GATOR	TX	115	111	91	317	45	14,265	2	
N3BB	JIM	TX	98	114	102	314	45	14,130	104	Gulf Coast Cats
N5TJ	JEFF	TX	103	118	77	298	47	14,006	2	Gulf Coast Cats
N5OT	MARK	OK	83	132	94	309	44	13,596	2	
AA5B	BRUCE	NM	101	100	91	292	45	13,140	2	
KZ5D	ART	LA	79	124	82	285	46	13,110	106	Gulf Coast Cats
WQ5L	*RAY	MS	92	95	52	239	46	10,994	2	SSC #2
N5EE	*KEN	AR	59	77	97	233	41	9,553	2	
KØNM	*NIZ	TX	43	66	36	145	36	5,220	2	TDXS
N9NM	*BARB	TX	24	48	15	87	30	2,610	4	Texas Two Steppers
N5ER	**JOHN	AR	7	19	25	51	25	1,275	10	
K5GQ	*MARK	TX	5	26	19	50	25	1,250	2	TDXS
KA5M	*MARSH	LA	0	39	8	47	26	1,222	1	
N5CHA	*TODD	TX	13	9	0	22	8	176	1	
KD2KW	*KEN	TX	0	15	0	15	9	135	0	
WS5D	JACK	NM	7	1	0	8	6	48	1	
N5KO	TREY	CA	115	139	100	354	48	16,992	112	NCCC #1
NO6T	AL	CA	102	139	104	345	48	16,560	132	SCCC #1
N6TV	BOB	CA	113	118	97	328	48	15,744	48	NCCC #1
N5ZO	MARK	CA	102	131	99	332	45	14,940	87	
K6XX	BOB	CA	105	114	84	303	49	14,847	4	NCCC #4
W6YX	MIKE	CA	103	128	81	312	44	13,728	22	NCCC #1
N6AA	DICK	CA	113	109	70	292	47	13,724	2	SCCC #1
W4EF	MIKE	CA	107	102	75	284	48	13,632	2	SCCC #1
WD6T	DAVE	CA	91	126	75	292	46	13,432	87	NCCC #1
AE6Y	ANDY	CA	98	124	83	305	44	13,420	27	NCCC #1
K6LA	KEN	CA	95	117	74	286	44	12,584	3	SCCC #1
K9YC	JIM	CA	95	93	85	273	45	12,285	2	NCCC #2
AJ6V	ED	CA	95	110	66	271	45	12,195	2	NCCC #2
W6SX	HANK	CA	86	115	76	277	42	11,634	5	NCCC #3
K6NR	DANA	CA	99	87	68	254	45	11,430	2	SCCC #2
AC6T	STEVE	CA	87	105	41	233	43	10,019	2	SCCC #2
K6ZH	JIM	CA	75	90	63	228	43	9,804	2	SCCC #1
N3ZZ	TOM	CA	74	78	59	211	44	9,284	2	NCCC #3
K6SRZ	ALAN	CA	83	78	45	206	42	8,652	2	NCCC #3
K6MM	JOHN	CA	80	78	48	206	40	8,240	2	NCCC #2
K6LRN	DICK	CA	64	54	23	141	43	6,063	2	NCCC #5
N6ZFO	BILL	CA	68	53	0	121	40	4,840	1	NCCC #2
WQ6X	*RON	CA	34	60	11	105	35	3,675	2	SCCC #2
W6RGG	BOB	CA	65	0	35	100	35	3,500	1	NCCC #4
WA6URY	DAN	CA	37	44	23	104	31	3,224	2	
N6XI	RICK	CA	84	0	0	84	37	3,108	0	NCCC #3
K6NV	BOB	CA	37	36	27	100	27	2,700	2	NCCC #3
N6TTV	CARL	CA	48	31	0	79	32	2,528	3	NCCC #4
N6AN	**REX	CA	47	28	0	75	27	2,025	3	
K6EI	*JIM	CA	20	26	17	63	22	1,386	4	NCCC #4
K6MI	JOHN	CA	9	10	0	19	12	228	1	
K6KM	ROB	CA	6	0	0	6	6	36	0	NCCC #2
KN6BAZ	*ALEX	CA	5	1	0	6	4	24	1	
N6TR	TREE	OR	131	139	104	374	49	18,326	2	Oregon Sprinters
N9RV	PAT	MT	112	149	101	362	48	17,376	116	Big Sky
K6LL	DAVE	AZ	112	134	61	307	47	14,429	2	AOCC
N7XU	DICK	OR	91	128	83	302	46	13,892	2	Oregon Sprinters
K7SS	*DAN	WA	107	122	51	280	48	13,440	2	Greg Lunch

WJ9B	WILL	ID	82	109	68	259	46	11,914	2	
K7QA	TOM	MT	88	103	66	257	44	11,308	2	Big Sky
KJ9C	*MEL	MT	83	84	81	248	44	10,912	2	Big Sky
WS7L	CARL	OR	85	107	55	247	41	10,127	2	Oregon Sprinters
KI7Y	JIM	OR	57	93	48	198	41	8,118	2	Oregon Sprinters
W9CF	*KEVIN	AZ	56	81	50	187	41	7,667	2	AOCC
N7DX	*TONY	WA	59	70	31	160	36	5,760	2	
NN7SS	**BURT	WA	60	62	18	140	35	4,900	2	
W6OAT	*RUSTY	WA	86	9	0	95	35	3,325	1	
N4DW	*DAVE	AZ	0	85	0	85	34	2,890	0	
AC7AF	*BRIAN	WY	32	20	22	74	26	1,924	2	
WC7S	**DALE	WY	20	24	7	51	24	1,224	5	GM Jumpers
N9NA	JOHN	AZ	11	33	4	48	24	1,152	2	AOCC
AL1G	*CAT	AK	14	0	0	14	8	112	0	
N7GP	*TOM	AZ	0	9	0	9	8	72	0	
KQ7TJ	*TOM	NV	2	5	0	7	6	42	1	
NA8V	GREG	MI	72	111	111	294	46	13,524	18	GOOD GUYS
KW8N	BOB	OH	83	105	84	272	44	11,968	6	CODE GUYS
N8EA	JOE	MI	76	78	106	260	41	10,660	2	
W8WTS	*JIM	OH	68	90	88	246	43	10,578	114	GOOD GUYS
W1NN	*HAL	OH	34	96	91	221	44	9,724	23	TEAM HIRAM
W3YQ	TIM	WV	46	68	97	211	42	8,862	8	TEAM HIRAM
K3JT	*TERRY	WV	23	73	24	120	36	4,320	2	
K9NW	*MIKE	OH	0	56	21	77	32	2,464	1	CODE GUYS
WX8C	HARRY	MI	0	42	7	49	24	1,176	1	
W9RE	MIKE	IN	94	137	97	328	48	15,744	116	SMC Long
K9CT	CRAIG	IL	69	111	113	293	48	14,064	32	SMC Long
WT9U	JIM	IN	66	98	118	282	46	12,972	33	SMC Long
N9LQ	JOEL	IL	52	76	89	217	41	8,897	2	SMC Long
WI9WI	*JIM	WI	53	83	65	201	42	8,442	2	SMC Long
K9PG	*PAUL	IL	31	96	73	200	42	8,400	19	
KYØQ	*RICK	IL	27	54	61	142	35	4,970	4	
W9TD	*GARY	IL	20	43	24	87	31	2,697	2	
W8LVN	*BILL	IL	18	49	7	74	30	2,220	6	SMC Strong
KK9V	*MIKE	IN	0	21	8	29	19	551	1	
K4VX	DAVE	IL	20	0	0	20	8	160	0	
K9GY	*YOGI	IL	6	6	0	12	8	96	1	SMC Strong
KD9KHA	*ANDY	IL	0	5	0	5	5	25	0	
N8HWV	*TODD	WI	2	1	0	3	3	9	1	
N5EP	STEVE	IL	0	2	0	2	2	4	0	
W9RE	MIKE	IN	94	137	97	328	48	15,744	116	SMC Long
KØRF	CHUCK	CO	90	120	100	310	49	15,190	114	GM Jumpers
KØEU	*KEN	CO	100	119	91	310	45	13,950	41	GM Jumpers
NØTA	JOHN	CO	79	112	81	272	42	11,424	2	GM Jumpers
NØAX	*WARD	MO	50	95	94	239	44	10,516	2	SMC Strong
WØETT	KEN	CO	70	92	59	221	45	9,945	7	GM Jumpers
NAØN	*PAT	MN	57	105	83	245	40	9,800	78	
WØBH	BOB	KS	54	74	66	194	41	7,954	2	
WØCO	*BRAD	CO	41	95	50	186	39	7,254	2	
N7WY	BOB	MO	51	57	46	154	37	5,698	2	
AI6O	*ED	MO	28	26	72	126	39	4,914	2	Greg Lunch
NØKQ	BILL	CO	39	48	23	110	34	3,740	3	GM Slalom
NNØG	*DANA	CO	33	54	21	108	32	3,456	2	GM Slalom
WZØW	*SCOTT	MO	3	48	47	98	35	3,430	2	SMC Strong
N9HDE	*SCOTT	IA	0	70	19	89	33	2,937	1	
KØUK	*BILL	CO	33	34	0	67	33	2,211	20	GM Slalom
NØAC	*BILL	IA	0	0	53	53	30	1,590	0	
WØAAE	*BOB	MN	10	39	5	54	27	1,458	12	
WIØWA	*LARRY	IA	0	54	0	54	24	1,296	0	
KKØU	*JIM	MO	7	34	0	41	28	1,148	7	SMC Strong
NØGN	PAUL	NE	6	11	10	27	14	378	3	
AAØAJ	*AJ	MN	0	2	0	2	2	4	0	



KP2M	PHIL	KP2	123	127	66	316	46	14,536	3	
NP2X	ED	KP2	92	103	82	277	46	12,742	14	CODE GUYS
VE9AA	MIKE	NB	52	99	98	249	39	9,711	34	MCC Snow
VE3YT	VIC	ON	52	93	85	230	42	9,660	14	Bill Lunch
VE5SF	*SAM	SK	78	73	30	181	38	6,878	2	
TI5/N3KS	KAM	TI	25	29	14	68	28	1,904	2	
VA6RCN	*KEVIN	AB	25	27	0	52	22	1,144	3	
VE6EX	**DAN	AB	19	27	0	46	20	920	1	
VO2AC	CHRIS	NFLB	8	30	0	38	22	836	1	MCC Snow
VE6RST	MAX	AB	18	6	0	24	16	384	1	
VO1BQ	JOE	NFLB	0	17	0	17	13	221	0	MCC Snow
VE3OMV	*MARIA	ON	11	5	0	16	9	144	3	

## TEAM SCORES

<b>NCCC #1</b>		
	<b>N5KO</b>	16,992
	<b>N6TV</b>	15,744
	<b>W6YX</b>	13,728
	<b>WD6T</b>	13,432
	<b>AE6Y</b>	13,420
		73,316
<b>Gulf Coast Cats</b>		
	<b>K5TR</b>	15,453
	<b>K5PI</b>	14,993
	<b>N3BB</b>	14,130
	<b>N5TJ</b>	14,006
	<b>KZ5D</b>	13,110
		71,692
<b>SSC #1</b>		
	<b>N2NL</b>	15,888
	<b>K4RO</b>	15,600
	<b>N4OGW</b>	15,552
	<b>K4BAI</b>	11,835
	<b>KØEJ</b>	10,396
		69,271
<b>FRC</b>		
	<b>N2NT</b>	15,410
	<b>W2GD</b>	13,132
	<b>W2RQ</b>	12,980
	<b>N2NC</b>	12,735
	<b>AA3B</b>	12,555
		66,812

5. SCCC #1 (NØ6T, N6AA, W4EF, K6LA, K6ZH)	66,304
6. SMC Long (W9RE, K9CT, WT9U, N9LQ, WI9WI)	60,119
7. GOOD GUYS (NA8V, K8MR, K2UA, W8WTS, K3UA)	57,433
8. CODE GUYS (K3LR, K1DG, NP2X, KW8N, K9NW)	53,502
9. AOCC (N2IC, K6LL, N4ZZ, W9CF, N9NA)	52,656
10. SSC #2 (W4NZ, KU8E, WQ5L, N4OX, N4OO)	52,652
11. GM Jumpers (KØRF, KØEU, NØTA, WØETT, WC7S)	51,733
12. Oregon Sprinters (N6TR, N7XU, WS7L, KI7Y)	50,463
13. Bill Lunch (K7SV, W1WEF, VE3YT, W1FJ)	43,592
14. Big Sky (N9RV, K7QA, KJ9C)	39,596
15. NCCC #2 (K9YC, AJ6V, K6MM, N6ZFO, K6KM)	37,596
16. NCCC #3 (W6SX, N3ZZ, K6SRZ, N6XI, K6NV)	35,378
17. SSC #3 (K1GU, WW4XX, W4WF, NK4O, AC6ZM)	33,691
18. TEAM HIRAM (W1NN, W3YQ, NW2K, N3SD)	26,026

19. SCCC #2 (K6NR, AC6T, WQ6X)	25,124
20. TDXS (K5GN, K0NM, K5GQ)	22,310
21. NCCC #4 (K6XX, W6RGG, N6TTV, K6EI)	22,261
22. PVRC (N3QE, N4ZR, K8LF, AC5XK)	18,370
23. Greg Lunch (K7SS, AI6O)	18,354
24. SMC Strong (N0AX, WZ0W, W8LVN, KK0U, K9GY)	17,410
25. MCC Snow (VE9AA, VO2AC, VO1BQ)	10,768
26. SSC #4 (KQ4R, AA5JF)	9,804
27. GM Slalom (N0KQ, NN0G, K0UK)	9,407
28. NCCC #5 (K6LRN)	6,063
29. Texas Two Steppers (N9NM)	2,610