

Final Results: North American Sprint CW September 2023

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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.)

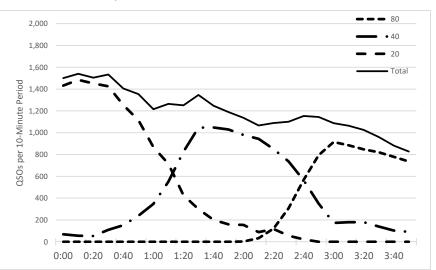
Eighty was noisy! Makes Sprinting a real pleasure... - KJ9C

Thanks to Jim George, N3BB for doing a great job in writing the CW Sprint results articles over the past five years and living up to Tree's long legacy of interesting and insightful coverage of the Sprints. Welcome to our new results author, John Pescatore, K3TN: "I grew up playing lacrosse, which we called "The Fastest Game on Two Feet" and have always thought of the Sprint as lacrosse with a paddle instead of a stick." Welcome also to Robert Brandon, K5PI who has volunteered to keep the CW Sprint records updated — they're available at <u>ncjweb.com/north-american-sprint</u> and new records are noted in the final results.

Strategy and Efficiency

The 93rd running of the CW North American Sprint played out on September 17th. Approximately 200 stations were active, and we received 161 logs, the same as in February. Just counting the ops who sent in logs, the highest possible QSO count would be 483, meaning N2NT's 339 Qs were 70% of what was theoretically achievable. Twenty years earlier, W4AN made 404 Qs when 202 logs were received, reaching "only"67% of the limit. The all-time efficiency record is held by N6TR who set the QSO record of 428 in a year when 180 logs were received, meaning Tree worked an impressive 79% of the limit. The "more the merrier" definitely holds true for contesting, and especially for the Sprints – getting more ops to get hooked on Sprinting means more fun for everyone.

For "Classic Sprinters" and even for SO2Rers, one of the biggest strategy decisions in the Sprint is when to QSY from 20 to 40 and from 40 to 80 meters. Conditions on 20 meters this time were excellent for most, especially compared to recent Sprints. 80 meters, not so much thunderstorms in many regions made the band very



noisy. This resulted in the QSO total for 80 dropping by 40% from the total QSOs on 20, very different from September where the 20 to 80 meter drop was only 14%.

A simple default QSY strategy is to split the four hours equally and spend 1:20 on each band. When 20 is poor, that strategy often falls apart quickly and it looks like this time the 20 meter exodus happened after about 1:15 but the move from 40 to 80 happened at the "traditional" 2:40 point, which for many proved to be too early for the 80 meter conditions. Even worse: 39 of the 160 logs had zero 80 meter contacts — if you didn't work them on 20 or 40, you missed them. The 1:30/1:30/1:00 strategy might have been good this year.

The Big Numbers

N2NT's total of 339 Qs was tops overall this time, with 40 meters his top band with 126Qs. Multipliers are often hit or miss in the Sprints but are worth about 6 Qs. TI7ØRC (N3KS) wins the Sprint WPX award for the most surprising multiplier call. N4AF was the mult-master with 55, edging out K5ZD, K7SV, and W2GD who had 54. Howie's multiplier count was just one short of Trey N5KO's record of 56 set in September 2022. N2IC just missed making the High Power Top Ten but did win the Twitchy Finger award with 128 band changes.

Top Ten QSO Totals				
Call Sign	QSOs			
N2NT	339			
N9RV	331			
KM7W	326			
N5KO	320			
W9RE	320			
N2IC	319			
N6MJ	314			
K4RO	313			
K5ZD	312			
K5GN	311			

Top Ten Number of Band				
Changes Call Sign	QSOs			
N2IC	128			
N9RV	124			
K4RO	120			
N5KO	113			
KM7W	112			
WD6T	105			
N4OGW	103			
NO3M	101			
N2NT	100			
W9RE	97			

The mythical "best mix and match" score in this Sprint would combine efforts from four different ops, all from the eastern side of the country:

- 20: 134 QSOs (N2NL)
- 40: 126 QSOs (N2NT)
- 80: 96 QSOs (K4RO)
- MULTS: 55 (N4AF)

That would be a total score of 356 X 55 = 19,580 — which has actually been exceeded 8 times in history, always in February: twice each by N2IC, W4AN, and N6TR, and once each by N5KO and N5TJ.

Overall Top Ten

Andy N2NT came in at the top of the heap this time, building a 19-QSO and one-multiplier lead over the first 3 hours that held off Pat N9RV's 74 Qs in the final hour to get Andy his 5th Sprint win — tying him with Pat and Randy K5ZD. Trey N5KO came in third at W6NL, starting strong but a slow second hour doomed his bid for an 11th win. With K5ZD coming in fourth and Mike W9RE fifth, we had every mainland US time zone represented in the top five of this year's running.

Top Ten Scores									
				Band	QSOs				
Call Sign	Score	QSOs	Mults	Chgs	Lost	00Z	01Z	02Z	03Z
N2NT	17,967	339	53	100	2	105	97	74	63
N9RV	17,212	331	52	124	5	103	84	70	74
N5KO	16,960	320	53	113	5	101	80	70	69
K5ZD	16,848	312	54	28	2	91	86	73	62
W9RE	16,640	320	52	97	1	90	89	78	63
KM7W	16,626	326	51	112	5	92	83	85	66
N4AF	16,390	298	55	76	7	104	80	63	51
N6MJ	16,328	314	52	2	5	94	73	75	72
N6TV	16,165	305	53	68	3	92	83	65	65
W2GD	16,038	297	54	13	9	81	70	73	73

	Top Ten High Power - Max 12 Band Changes								
N6MJ	16,328	314	52	2	5	94	73	75	72
N2NL	15,900	300	53	7	6	105	83	51	61
N6TR	15,351	301	51	6	3	91	74	65	71
K3LR	14,924	287	52	2	5	82	73	68	64
K8MR	14,847	303	49	2	2	82	83	73	65
N6AA	14,433	283	51	2	12	86	56	77	64
N4YDU	14,014	286	49	4	1	79	75	60	72
K6XX	13,988	269	52	4	3	79	71	54	65
W2RQ	13,818	294	47	4	6	89	84	64	57
N5TJ	13,450	269	50	6	3	88	70	57	54
N6MJ	16,328	314	52	2	5	94	73	75	72

High Power "Classic" — Max 12 Band Changes

Eschewing the use of his SO2R skills, Dan N6MJ only touched the band button on his radio twice and came in first in the "Classic" High Power competition, with a score that also placed 8th amongst the other Top Ten SO2R entrants. Dave N2NL had a 26-QSO lead over N6MJ going into the third hour but gave 24 of them back in the third hour and another 11 in the fourth hour to finish second from his growing station. Tree N6TR had a one-QSO lead over N2NL but suffered a two-mult deficit to finish third. Rounding out the top five, K3LR edged out K8MR for fourth, Tim's 3-mult lead cancelling out Bob's Jim's 16-QSO advantage.

Low Power

Lar K7SV improved on his 3rd place Low Power finish in February to take the reduced carbon footprint top spot, using a four-mult advantage to overcome a slow finish and stay ahead of Ken KØEU who finished second once again. Ken also finished second in the Low Power category of September's CW Sprint. Ray WQ5L came in third, and with only four band changes also came in first in the Low Power "Classic" category. Hal W1NN came in fourth, edging out Pat NAØN, who had the Golden Log with the highest number of QSOs.

Top Ten Low Power Scores									
				Band	QSOs				
Call Sign	Score	QSOs	Mults	Chgs	Lost	00Z	01Z	02Z	03Z
K7SV	15,012	278	54	16	11	83	82	61	52
KØEU	14,000	280	50	92	4	93	58	62	67
WQ5L	13,416	258	52	4	3	84	65	59	50
W1NN	12,720	240	53	9	3	65	62	57	56
NAØN	12,384	258	48	48	0	73	75	64	46
NØAT	11,472	239	48	18	6	67	55	56	61
W8WTS	11,408	248	46	86	2	74	69	58	47
W2LC	11,280	235	48	2	9	62	66	54	53
K3UA	11,139	237	47	4	5	62	69	61	45
AG9A	10,948	238	46	66	1	66	58	60	54

	Top Ten Low Power - Max 12 Band Changes								
WQ5L	13,416	258	52	4	3	84	65	59	50
W1NN	12,720	240	53	9	3	65	62	57	56
W2LC	11,280	235	48	2	9	62	66	54	53
K3UA	11,139	237	47	4	5	62	69	61	45
KG9X	10,810	235	46	2	11	55	66	49	65
K1GU	10,080	224	45	2	5	61	61	58	44
K4FN	9,450	210	45	3	11	51	65	50	44
K9NW	9,360	195	48	10	0	49	64	54	28
KG5U	7,644	182	42	4	6	57	51	43	31
W9CF	7,611	177	43	8	4	45	38	48	46
WQ5L	13,416	258	52	4	3	84	65	59	50

QRP

This time around, only seven operators felt life was actually long enough to Sprint QRP-style. Eric NO3M turned his power knob counter-clockwise for this one and used 101 band changes to dominate the category. W1FJ, WQ6X, K7SS, and K8CN made up the rest of the Top Five. Danny would have won the Single-Band-20 QRP category, if such a thing existed. N8HWV deserves an honorable QRP mention – he only had 10 QSOs but did come in with a Golden Log!

	Top QRP Scores								
Call Sign	Score	QSOs	Mults	Band Chgs	QSOs Lost	00Z	01Z	02Z	03Z
NO3M	10,464	218	48	101	9	73	55	55	35
W1FJ	6,045	155	39	7	6	46	48	34	27
WQ6X	2,688	84	32	2	9	23	17	27	17
K7SS	2,555	73	35	0	2	70	3	0	0
K8CN	1,701	63	27	11	7	0	16	27	20
NN7SS	759	33	23	0	4	31	2	0	0
N8HWV	90	10	9	1	0	0	0	3	7



Eric NO3M: "I was gunning for the all-time QRP record. Unfortunately, 80m fell flat this go-around! Not sure if I'll ever try it again, though -- LP or HP is a lot more fun!" (Photo courtesy of Eric Tichansky, NO3M)

Team Competition

The top three teams all came in above 70,000 points and once again the Northern California Contest Club #1 juggernaut took the top spot. South East Coalition #1 came in second, with NCC MRRC Red, Trashmen, and Southern California Contest Club making up the rest of the Top Five. (All contributors are listed in the full table below.)

TEAM SCORES	
Northern California Contest Club #1	73,138
South East Sprint Coalition #1	72,070
NCC MRRC RED	71,477

Twenty-two teams were registered, meaning over 100 Sprint ops were **not** on a team. Try reaching out across your local club and joining or forming a Sprint team — it is a great way to increase activity. Here's an idea: sponsor a team of Night Owls that will only get on for the last 30 minutes and improve all the four-hour op's moods at the end – just like "fresh meat" ops on Sunday evening in Sweepstakes. I'll give them special recognition in *NCJ*!

Multipliers Make the Master

Multipliers were plentiful this time around. Howie N4AF topped everyone with $\frac{56}{55}$ and 6 ops tied for 10th with 52.

Top Ten Multipliers				
Call Sign	QSOs			
N4AF	55			
K5ZD	54			
K7SV	54			
W2GD	54			
N2NL	53			
N2NT	53			
N5KO	53			
N6TV	53			
W1NN	53			
K3LR, K6XX, NØAX,				
N6MJ, N9RV, W9RE	52			

The rarest five multipliers were:

Mult	QSOs
ME	18
ΥT	18
NV	15
UT	11
8P	1

And the easiest five multipliers were:

Mult	QSOs
CA	156
IL	154
FL	152
PA	150
TN	149

States and provinces completely absent include ND and VT from the US and MB, NL, and PE from Canada. If you want to be popular, operating from one of these perennial rarities would be a good idea! Thanks to all of our rare multiplier stations who made any number of QSOs — it really helps makes the contest more fun. While it's not a multiplier, we note a fine score from Dave G4BUO who writes, "Great to work many NA friends in the Sprint. 40m conditions weren't great so I went QRT after about 80 minutes."

J Allen VY1JA made an appearance in the Sprint, a welcome surprise for 18 lucky Sprinters that nabbed the YT multiplier. After overcoming some software configuration challenges, J took advantage of the

fine 20 meter conditions, using a 2-band Inverted V for 80 and 20 meters and a 40 meter ground plane. He is working to make remote operation possible, so VY1 may eventually have its very own record! Speaking of remote operation, the VYØERC station in Nunavut occasionally makes an appearance on the bands so the Sprint multiplier record may fall soon!

Golden Logs

Sprints are difficult environments for accurate copying and the QRN this year made it tougher. Only eight logs came out of log checking with the same number of QSOs they came in with. K9NW and KM3T joined NAØN with triple-digit QSO totals having no errors, while WDØT, N5RZ, VE3EJ, AA7V, and QRPer N8HWV were also error free.

Golden Logs				
(over 100 contacts)				
Call Sign	QSOs			
NAØN	258			
K9NW	195			
КМЗТ	155			
WDØT	88			
N5RZ	83			
VE3EJ	79			
AA7V	30			
N8HWV	10			

New Records

Two new records were set in the September Sprint, both in the QRP class:

- W1FJ nearly doubled NB1B's Sept 2003 QRP record score from MA
- In PA, NO3M's 10,464 peanut-powered points replaced K3MJW's September 2007 record but fell almost 500 points short of breaking the all-time Sprint QRP record held by KE3X that was set just last February.

If you are a QRP enthusiast and can get to KS, ND or SD, just making one QRP Sprint contact in any one of those states will earn you a spot in the record books. Or take a KX-3 along on your vacation to AK, KY, or HI and a handful of contacts will do the same.

First-Time Sprint Goodness

Chad N9UNX: "I enjoyed the Sprint and look forward to doing more of them. It really is quite unique! To be honest, I was a little intimidated going into it. It seemed like it was going to be complicated/difficult, but that was before I gave it a shot. After 15–20 minutes, I got the hang of it, and it felt straightforward. I had some trouble with N1MM+ and generating a Cabrillo file so I ended up just being a check log.



"Special thanks to KY4ID, who invited me to be part of the Swamp Fox Special Ops team. I'm sure I ended up trying a little harder as a result of being invited to be part of his team. Overall, though, it was much more fun than I had anticipated, and it didn't feel stressful at all. If you are out there reading this, and are feeling like I was before last night, I say this: give it a shot, it's not as hard as it seems!" (Photo courtesy of Chad Brown, N9UNX)

Sprint Hint – It's Not a Rule, It's a Tradition

In almost all contests, common operating procedure is for the running station to acknowledge receipt of the answering station's exchange by sending TU, R, EE, etc. It is not a rule in any contest and is not in the Sprint rules, either. In Sprints that common courtesy serves a triple purpose: (1) Acknowledges the exchange; (2) Tells the CQer "you are free to QSY and find a new freq; and most importantly (3) Gives a green light to all the listening stations to fight for the jump ball. Quoting Tree N6TR from 1998: "...please be sure to stick around long enough to let the other guy know that you got the exchange. It is also helpful if the stations who are about to call STN B will "hold their breath" a second to allow the "QSL" message to be clearly heard (or request for repeat)."

Sprint Soapbox

Hard to concentrate on the contest while also watch Univ of Texas vs Alabama. Hook 'em horns! 80m was awful. Computer locked up with 7 minutes to go. Managed to reboot and work a few more stations. - K5ZD

Had a bad game this time. - KW8N

Last minute portable setup in Tree People Park above Studio City. K3 @80 watts, 100' doublet fed with CAT5e single twisted pair supported by 30' pole. - N6AN

Ran out of people to work. Too bad this contest didn't have more activity. - N6TV

FTDX-10, 200 IN WHIP OVER WOLF RIVER SB-1000 COIL, 100 WATTS - N7WY

Just an hour to see if remote CW working: 20m: 3 element Yagi at 72 feet Flex-6600 at 5 watts RemoteHamRadio.com First hour is the most fun anyway. As usual, hard to get heard around the Kilowatts, but eventually they want to work me. NN7SS Burt WA (op K6UFO)

Lots of thunderstorms in the area, making for noisy low bands here. Raised 40 meter antenna from about 40 feet to 65 feet. Hopefully that helped on that band. 20 seemed very good here. - W2RQ

Great way to spend 4 hours of fast paced CW. Thanks to all who got on. - W9RE

First Sprint ever tried, and just getting back into hobby last 2.5 years. Boy, is it a madhouse. Very difficult to get into proper rhythm. - WA2VIU

Many excuses for a mediocre score, but as usual extraordinary fun. K3TN

Operated remote from Tokyo, Japan - WA6URY

This is WQ6X's 1st-QRP Sprint from KN6NBT's QTH in Ramona, Ca. Band conditions were so-so throughout the event. 20-meters seemed to fold-up rather quickly, moving the morass of leap-froggers down to 40-meters. 80-meters was largely a Left-coast (CA & OR) affair. For whatever reason, 70+ of the stations worked asked for a REPEAT of the NR - EVERY TIME. REALLY? Wassup with that? Then while I am repeating my NR, the call-in VULTURES obliterate the frequency with their callsigns, requiring yet another repeat. Ad Nauseam. Look for a write-up on this at: **WQ6X.Blogspot.com** - WQ6X

Next Time

The next CW Sprint will take place on February 4 UTC (Saturday, February 3, in US time zones). The event starts at 0000 UTC and stations may operate from 0000 to 0359 UTC inclusive. If you start a QSO just before the clock ticks over to 0400, you may finish it and log it at 0359. For team registration, use the NCJ web page, <u>ncjweb.com</u>. Submit logs using the log submission form on the NCJ website. Logs are due 7 days after the contest! Final scores are typically posted on the NCJ website and on the CQ-Contest reflector within 2 weeks of the contest. Check out the web resources at <u>kkn.net/n6tr/ sprint.html</u> and rules, records and previous results on the NCJ website. Thanks again to N3BB for his efforts over the years and the Boring Amateur Radio Club for managing the detailed log checking and statistics. CQ Sprint!

Line Scores

Call	Name	QTH	20	40	80	QSO	Mults	Score	Band Chgs	Team
K5ZD	RANDY	MA	122	113	77	312	54	16,848	28	Trashmen
кмзт	DAVE	NH	37	72	46	155	40	6,200	2	
W1FJ	**AL	MA	53	76	26	155	39	6,045	7	
KW1X	*MARK	MA	62	34	22	118	38	4,484	2	Trashmen
K1KI	TOM	СТ	99	0	0	99	40	3,960	0	
K1AR	JOHN	NH	0	34	34	68	30	2,040	1	
K8CN	**MIKE	NH	9	38	16	63	27	1,701	11	
N1LI	*DOUG	ME	0	0	17	17	12	204	0	
			-	-					-	
N2NT	ANDY	NJ	122	126	91	339	53	17,967	100	Trashmen
W2RQ	BILL	NJ	98	102	94	294	47	13,818	4	Trashmen
W2LC	*SCOTT	NY	78	81	76	235	48	11,280	2	
NM2A	*MARK	NY	44	71	51	166	41	6,806	2	
WA2VIU	*BARRY	NY	0	18	0	18	13	234	0	
W2GD	JOHN	PA	109	99	89	297	54	16,038	13	NCC MRRC RED
N3QE	TIM	MD	109	115	82	306	51	15,606	51	PVRC Paddle Pushers
K3LR	TIM	PA	88	107	92	287	52	14,924	2	NCC MRRC RED
K3TN	JOHN	MD	81	98	76	255	50	12,750	8	PVRC Paddle Pushers
K3MM	TY	MD	93	95	65	253	48	12,144	31	
K3UA	*PHIL	PA	62	93	82	237	47	11,139	4	NCC MRRC RED
NO3M	**TY	PA	67	100	51	218	48	10,464	101	
N3AD	ALAN	PA	55	89	59	203	43	8,729	6	
NC3Y	ТОМ	MD	49	76	31	156	42	6,552	2	
N3SD	*GREG	PA	22	46	42	110	33	3,630	2	
N4ZR	PETE	MD	55	4	0	59	31	1,829	1	
K3FH	MIKE	PA	6	33	17	56	26	1,456	2	TCG Sprinters
K3KU	*ART	MD	0	0	25	25	18	450	0	
			_	_		_			-	
N4AF	AL	NC	117	104	77	298	55	16,390	76	South East Sprint Coalition #1
										South East Sprint
N2NL	DAVE	FL	134	112	54	300	53	15,900	7	Coalition #1
K4RO	KIRK	TN	101	116	96	313	49	15,337	120	TCG Sprinters
K7SV	*LAR	VA	92	107	79	278	54	15,012	16	The Zoomers
N4YDU	NATE	NC	96	107	83	286	49	14,014	4	Trashmen
										South East Sprint
K4BAI	JOHN	GA	95	90	72	257	51	13,107	2	Coalition #1
AD4EB	JIM	TN	77	107	81	265	49	12,985	13	TCG Sprinters
						0				South East Sprint
N4OX	JAY	FL	107	73	70	250	50	12,500	3	Coalition #2
	0.1510									South East Sprint
W4WF	CHRIS	FL	103	88	68	259	48	12,432	8	Coalition #1
W4NZ	TED	TN	69	105	58	232	50	11,600	15	TCG Sprinters
KU8E	JEFF	GA	79	93	63	235	47	11,045	8	South East Sprint Coalition #2
KU8E K1GU	*NED	TN	79	86	66	235	47	-	8 2	
KIGO	INED	1 IN	12	00	00	224	45	10,080	2	TCG Sprinters
AA516		C^	70	07	50	207	16	0 = 2 2	2	South East Sprint
AA5JF	ANDY	GA	70	87	50	207	46	9,522	2	Coalition #2
N4DW	*DAVE	TN	74	74	46	194	49	9,506	21	CW Ops Warriors
	*DAN		F.0	04	F 7	210	45	0 450	2	South East Sprint
K4FN	*DAN	KY	59	94	57	210	45	9,450	3	Coalition #2

WF7T	*BRAD	TN	57	79	57	193	46	8,878	45	
ND8L	RAY	FL	86	45	61	192	45	8,640	4	NCC MRRC WHITE
N400	*BRIAN	GA	55	83	58	196	40	7,840	26	
KY4ID	*MIKE	SC	65	69	41	175	42	7,350	11	Swamp Fox Special Ops
KQ4R	*ED	FL	76	69	21	166	44	7,304	8	
NF4A	BUBBA	FL	78	66	0	144	43	6,192	1	
N4IJ	*DOUG	NC	42	41	0	83	39	3,237	5	
W4ER	*JOHN	AL	47	0	0	47	27	1,269	0	
KE4KY	*TOM	KY	16	16	0	32	20	640	2	
N2IC	STEVE	NM	121	125	73	319	50	15,950	128	NCC MRRC RED
K5GN	DAVE	ТΧ	134	103	74	311	49	15,239	86	TDXS
										South East Sprint
N4OGW	TOR	MS	112	110	81	303	47	14,241	103	Coalition #1
KZ5D	ART	LA	115	99	70	284	50	14,200	54	CW Ops Warriors
N5TJ	JEFF	TX	124	101	44	269	50	13,450	6	
										South East Sprint
WQ5L	*RAY	MS	113	100	45	258	52	13,416	4	Coalition #2
K5PI	ROB	TX	76	69	66	211	45	9,495	82	
KG5U	*DALE	TX	65	59	58	182	42	7,644	4	TDXS
N5OT	MARK	ОК	92	47	11	150	50	7,500	2	CW Ops Bandits
K5WA	BOB	TX	86	26	0	112	41	4,592	3	
K5TR	GEO	TX	70	11	0	81	38	3,078	1	
N5RZ	GATOR	TX	83	0	0	83	33	2,739	0	The Zoomers
N5FZ	*PAUL	TX	4	0	0	4	4	16	0	
										Northern California
N5KO	TREY	CA	124	122	74	320	53	16,960	113	Contest Club #1
N6MJ	DAN	CA	126	122	66	314	52	16,328	2	SCCC #1
NOT			110	445		205	50	46.465	60	Northern California
N6TV	BOB	CA	116	115	74	305	53	16,165	68	Contest Club #1
N5ZO	MARK	CA	118	110	77	305	50	15,250	72	SCCC #1
N6AA	DICK	CA	115	104	64	283	51	14,433	2	SCCC #1 Northern California
КбХХ	вов	СА	95	105	69	269	52	12 000	4	Contest Club #1
NUAA	вов	CA	95	105	09	209	52	13,988	4	Northern California
W6YX	MIKE	СА	109	99	59	267	51	13,617	30	Contest Club #1
WUIX	IVIIKL	CA	109	33	35	207	51	13,017	30	Northern California
WD6T	DAVE	CA	99	105	60	264	47	12,408	105	Contest Club #1
WBOT	DAVE		55	105	00	204		12,400	105	Northern California
N6ZFO	BILL	CA	102	89	58	249	49	12,201	9	Contest Club #2
K6LA	KEN	CA	104	82	51	237	50	11,850	12	SCCC #1
ROER		0,1	101	02	51	237	50	11,000		Northern California
көүс	JIM	CA	96	86	59	241	47	11,327	2	Contest Club #2
		-						,-		Northern California
AJ6V	ED	CA	88	87	55	230	46	10,580	2	Contest Club #2
W4EF	MIKE	CA	101	70	2	173	47	8,131	14	SCCC #1
WA6URY	DAN	CA	56	36	13	105	36	3,780	2	
N6AN	*REX	CA	79	10	0	89	34	3,026	2	SCCC #2
WQ6X	**RON	CA	29	44	11	84	32	2,688	2	SCCC #2
			1	-					1	Northern California
N6WM	CHRIS	CA	19	41	26	86	28	2,408	6	Contest Club #2
K6AW	STEVE	CA	40	18	17	75	31	2,325	2	SCCC #2
NE6I	DENNIS	CA	58	0	0	58	31	1,798	0	SCCC #2
N6TTV	*CJ	CA	45	0	0	45	26	1,170	0	
K6LRN	DICK	CA	32	0	0	32	22	704	0	1

										Northern California
W6RGG	вов	CA	31	0	0	31	22	682	0	Contest Club #2
K6NA	GLEN	CA	29	0	0	29	23	667	0	
KH6CJJ	*KENT	HI	33	0	0	33	20	660	0	
WU6P	*NIAN	CA	28	0	0	28	17	476	0	
										Northern California
K6EI	*JIM	CA	10	11	0	21	14	294	1	Contest Club #3
N9RV	PAT	MT	127	122	82	331	52	17,212	124	Big Sky Sprinters
KM7W	CHRIS	MT	128	121	77	326	51	16,626	112	Big Sky Sprinters
N6TR	TREE	OR	113	109	79	301	51	15,351	6	Oregon Sprinters
N7XU	DICK	OR	86	101	71	258	48	12,384	6	Oregon Sprinters
WJ9B	WILL	ID	87	96	72	255	48	12,240	38	
K7RL	МІТСН	WA	93	93	64	250	46	11,500	75	
WS7L	CARL	OR	82	98	51	231	47	10,857	2	Oregon Sprinters
K7QA	том	MT	86	79	56	221	46	10,166	2	Big Sky Sprinters
KJ9C	MEL	MT	79	82	70	231	44	10,164	4	Big Sky Sprinters
KI7Y	JIM	OR	71	77	49	197	42	8,274	2	Oregon Sprinters
W9CF	*KEVIN	AZ	66	75	36	177	43	7,611	8	AOCC Scoundrels
N7WA	*MIKE	WA	62	84	27	173	41	7,093	6	
N7DX	*TONY	WA	72	50	24	146	41	5,986	2	
KC7V	MIKE	AZ	76	28	0	104	41	4,264	9	AOCC Scoundrels
K7SS	**DAN	WA	73	0	0	73	35	2,555	0	
W7ZRC	*ROD	ID	2	39	45	86	26	2,236	2	
N7WY	*BOB	WY	37	25	45	62	28	1,736	1	
KI6RRN/KL7	*AXEL	AK	38	20	1	59	28	1,730	3	
NN7SS	**BURT	WA	33	0	0	33	24	759	0	
AA7V	*STEVE	AZ	15	11	4	30	20	600	6	
KD7MT	*CHARLES	MT	15	11	4	27	12	324	3	Pig Clay Sprinters
	*PAUL	WY	15	0	0	17	12	324 170	0	Big Sky Sprinters
K7SHR K2RD	*IRA	NV	17	0	0	17	10	170	0	
AL1G	*CAT		14	0	0	14		140	0	
		AK		-	-		10		-	
KE6K	*JOHN	AZ	2	0	0	2	2	4	0	
KONAD		011	00	100	05	202	40	44.047	2	
K8MR	JIM	OH	99	109	95	303	49	14,847	2	NCC MRRC WHITE
NA8V	GREG	MI	101	107	83	291	51	14,841	32	The Zoomers
KW8N	BOB	OH	83	110	81	274	49	13,426	14	NCC MRRC RED
W1NN	*HAL	OH	84	81	75	240	53	12,720	9	NCC MRRC WHITE
W8WTS	*JIM	OH	75	98	75	248	46	11,408		NCC MRRC WHITE
K9NW	*MIKE	ОН	44	120	31	195	48	9,360	10	NCC MRRC WHITE
W8ZDT	*KEVIN	MI	31	50	47	128	38	4,864	10	
WA8Y	STEVE	MI	31	38	25	94	32	3,008	2	
NF8M	*FRANK	MI	0	22	27	49	27	1,323	1	
							_			
W9RE	MIKE	IN	114	111	95	320	52	16,640	97	The Zoomers
К9СТ	CRAIG	IL	86	111	89	286	50	14,300	18	SMC Shuckers
K9BGL	KARL	IL	84	102	73	259	48	12,432	34	
AG9A	*MARK	IL	67	109	62	238	46	10,948	66	CW Ops Bandits
KG9X	*FRED	IL	68	102	65	235	46	10,810	2	
K4VX	DAVE	IL	78	84	38	200	48	9,600	2	SMC Shuckers
WI9WI	JIM	WI	66	80	64	210	43	9,030	2	SMC Shuckers
N8HWV	**TODD	WI	2	8	0	10	9	90	1	
KD9KHA	*ANDY	IL	0	10	0	10	8	80	0	Swamp Fox Special Ops
KØEU	*KEN	CO	106	111	63	280	50	14,000	92	GMCC Aspen Ski
NØAX	WARD	MO	87	96	82	265	52	13,780	21	SMC Shuckers

KØRF	СНИСК	со	117	92	68	277	47	13,019	76	GMCC Aspen Ski
NAØN	*PAT	MN	93	96	69	258	48	12,384	48	омее Азрен экі
NØAT	*RON	MN	80	97	62	239	48	11,472	18	
KØVBU	BILL	KS	73	100	67	240	47	11,280	6	
NØTA	JOHN	CO	82	76	53	211	43	9,073	3	GMCC Aspen Ski
KKØU	*JIM	MO	53	81	37	171	40	6,840	24	SMC Shuckers
NØAC	*BILL	IA	50	56	40	146	41	5,986	5	
ACØW	*BILL	MN	56	64	23	143	36	5,148	2	
KØUK	*BILL	CO	58	46	23	127	37	4,699	21	GMCC Aspen Ski
NØLY	*JON	MO	44	66	0	110	40	4,400	1	
ĸvøi	*BILL	NE	53	56	6	115	38	4,370	6	
WØBH	BOB	KS	30	36	42	108	35	3,780	5	
N9HDE	*SCOTT	IA	0	81	13	94	35	3,290	1	
WDØT	TODD	SD	73	15	0	88	33	2,904	3	
WØETT	*KEN	CO	23	6	0	29	18	522	2	
VE9AA	MIKE	NB	97	95	67	259	42	10,878	2	
VE3YT	VIC	ON	65	92	77	234	46	10,764	22	The Zoomers
KP2M	PHIL	KP2	110	94	0	204	48	9,792	1	
VE7KW	KEITH	BC	53	76	35	164	41	6,724	6	
TI7ØRC	KAM	TI	66	73	4	143	39	5,577	4	
VE3EJ	JOHN	ON	53	26	0	79	34	2,686	3	
VA6RCN	*KEVIN	AB	40	32	11	83	30	2,490	12	
VE5MX	TODD	SK	73	0	0	73	31	2,263	0	
G4BUO	DAVE	G	45	5	0	50	24	1,200	5	
VE3KTB	*PIERRE	ON	0	24	18	42	23	966	1	
VA3TMV	*TIM	ON	10	13	2	25	18	450	2	
VE3JZT	*JEFF	ON	9	2	0	11	10	110	8	

TEAM SCORES	
Northern California Contest Club #1	
N5KO	16,960
N6TV	16,165
КбХХ	13,988
W6YX	13,617
WD6T	12,408
Total	73,138
South East Sprint Coalition #1	
N4AF	16,390
N2NL	15,900
N4OGW	14,241
K4BAI	13,107
W4WF	12,432
Total	72,070
NCC MRRC RED	
W2GD	16,038
N2IC	15,950
K3LR	14,924
KW8N	13,426
K3UA	11,139
Total	71,477

A Trackman (NONT KEZD NAVDU NADO KNAV)	(7 1 2 1
4. Trashmen (N2NT, K5ZD, N4YDU, W2RQ, KW1X)	67,131
5. SCCC #1 (N6MJ, N5ZO, N6AA, K6LA, W4EF)	65,992
6. The Zoomers (W9RE, K7SV, NA8V, VE3YT, N5RZ)	59,996
7. NCC MRRC WHITE (K8MR, W1NN, W8WTS, K9NW, ND8L)	56,975
8. South East Sprint Coalition #2 (WQ5L, N4OX, KU8E, AA5JF, K4FN)	55 <i>,</i> 933
9. Big Sky Sprinters (N9RV, KM7W, K7QA, KJ9C, KD7MT)	54,492
10. SMC Shuckers (K9CT, NØAX, K4VX, WI9WI, KKØU)	53,550
11. TCG Sprinters (K4RO, AD4EB, W4NZ, K1GU, K3FH)	51,458
12. Oregon Sprinters (N6TR, N7XU, WS7L, KI7Y)	46,866
13. GMCC Aspen Ski (KØEU, KØRF, NØTA, KØUK)	40,791
14. Northern California Contest Club #2 (N6ZFO, K9YC, AJ6V, N6WM, W6RGG)	37,198
15. PVRC Paddle Pushers (N3QE, K3TN)	28,356
16. CW Ops Warriors (KZ5D, N4DW)	23,706
17. TDXS (K5GN, KG5U)	22,883
18. CW Ops Bandits (AG9A, N5OT)	18,448
19. AOCC Scoundrels (W9CF, KC7V)	11,875
20. SCCC #2 (N6AN, WQ6X, K6AW, NE6I)	9,837
21. Swamp Fox Special Ops (KY4ID, KD9KHA)	7,430
22. Northern California Contest Club #3 (K6EI)	294