



# ARRL November SSB Sweepstakes 2022 Results

By Scott Davis, K5TA ([scottk5ta@gmail.com](mailto:scottk5ta@gmail.com))



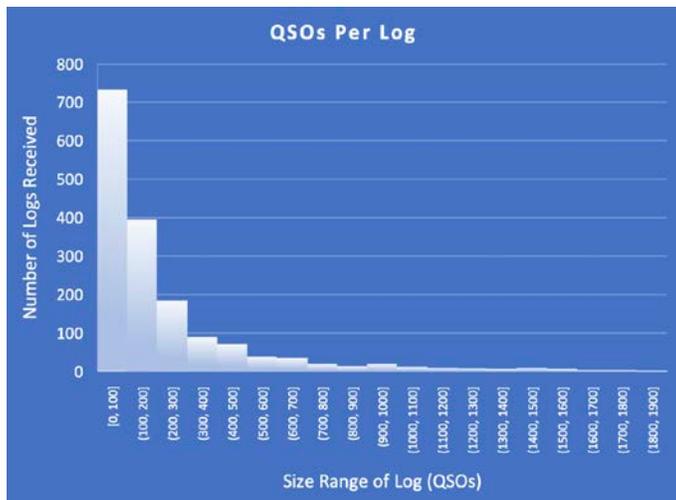
This is hard. Since 2015 I have had the pleasure and privilege of co-authoring the phone SS report with my neighbor, friend of 40 years, and sometimes-rival Bruce, AA5B, who passed away last October just before contest season began. We always had fun splitting up the topics and

categories, working to mimic each other's style, hoping the reader wouldn't notice any obvious transitions. So many memories surface as I review the old files – I hope I can do half as well by myself.

I'm just the front end, though – as always, I'm grateful for the work of Tree, N6TR; Trey, N5KO; Bruce, WA7BNM, and Paul, N1SFE, in preparing the logs and leader lists for this contest. Without them, and others working behind the scenes both at HQ and at home, there would be no Sweepstakes writeups. Behold the current episode:

## 2022 Overview

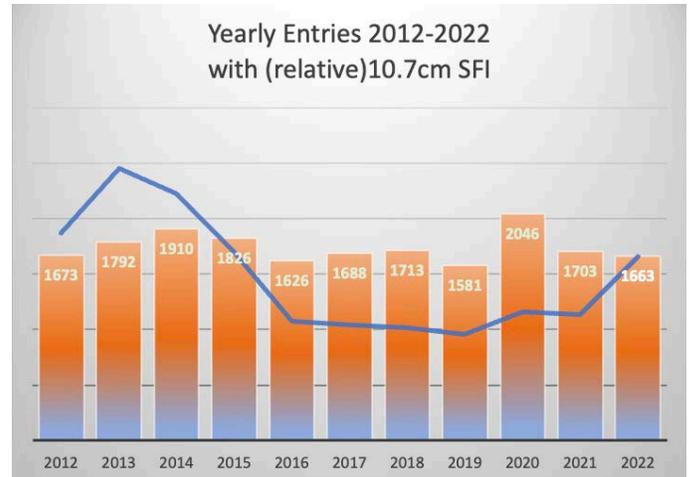
1,663 logs were received in this latest running of phone Sweepstakes, ranging in size from 0 to 1,873 QSOs (after log checking). The median number of contacts reported per log was 121, while the mean was 224. Consistent with those numbers, a histogram of all logs received shows an extremely skewed pattern favoring smaller entries:



Besides those who submit logs, there are many additional operators who participate without officially entering – a total of 8,517 unique call signs appear as having been

worked this year. Even allowing for a reasonable error rate, that indicates the total field is quite large.

Historically speaking, 2022 log submissions are relatively low -- 40 fewer than last year, and 84 below the 11-year (one sunspot cycle) average:



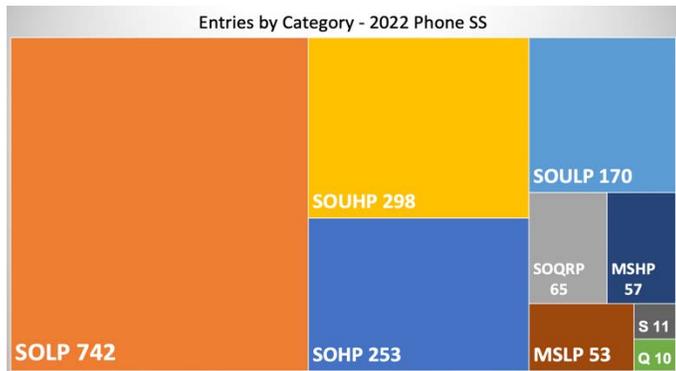
It is difficult to find a correlation between the number of entries per year and any other variable – 2012 through 2016 “sort of” follow the solar flux, but not so much after that. Go figure.

There are 9 distinct entry categories in this contest, based on number of operators, power level, and the use of spotting or other assistance. The exception is the school club designation, which is independent of all other constraints. Contestants transmit a single letter (the “precedence”) as part of the exchange to indicate their category. The category names, with their abbreviations and associated precedence as used throughout this report are as follows:

Category	Abbrev	Prec
Single-op High Power (>100W)	SOHP	B
Single-op Low Power (<=100W)	SOLP	A
Single-op QRP (<=5W)	SOQRP	Q
Single-op Unlimited High Power	SOUHP	U
Single-op Unlimited Low Power	SOULP	U
Single-op Unlimited QRP	SOUQRP	U
Multi-op High Power	MSHP	M
Multi-op Low Power	MSLP	M
School Club Station	S	S

“Unlimited” means only that the operator used assistance of some kind, typically spotting networks.

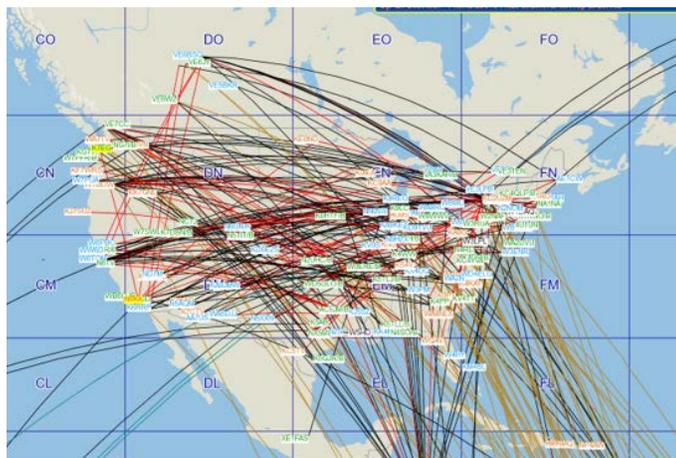
The distribution of entries among the categories has been relatively stable over time, with SOLP always dominating. This year was no exception, as shown in the chart below. Every so often a new category is introduced (most recently SOUQRP in 2020, [shown below in green as Q]) which shifts the balance, but usually only slightly. Generally speaking, the unassisted categories are the most competitive and where the highest scores are found.



## The Bands

Sweepstakes is one of the few contests that allow a station to be worked only once, regardless of band. That restriction dictates a different band strategy than would be used in the more common events. Generally speaking, it's best to run on the highest-rate-available band at all times, since most of your multipliers will call *you*, and various times of day will present opportunities for both high-band and low-band exposure at good rates.

Judging by the appearance of this screenshot of real-time 10-meter QSO reports from [dxmaps.com](http://dxmaps.com) taken just before the start of the contest, a person could get the idea that the band was *hot*. Not so much for SS ops -- there were indeed signals there, but many of the shorter intra-continental paths were weak at best.



Still, lots of people gave it a try – 418 entrants showed up on 10 during the first hour, completing 6,162 QSOs. That was the high point, however. The contact total fell to 1,292

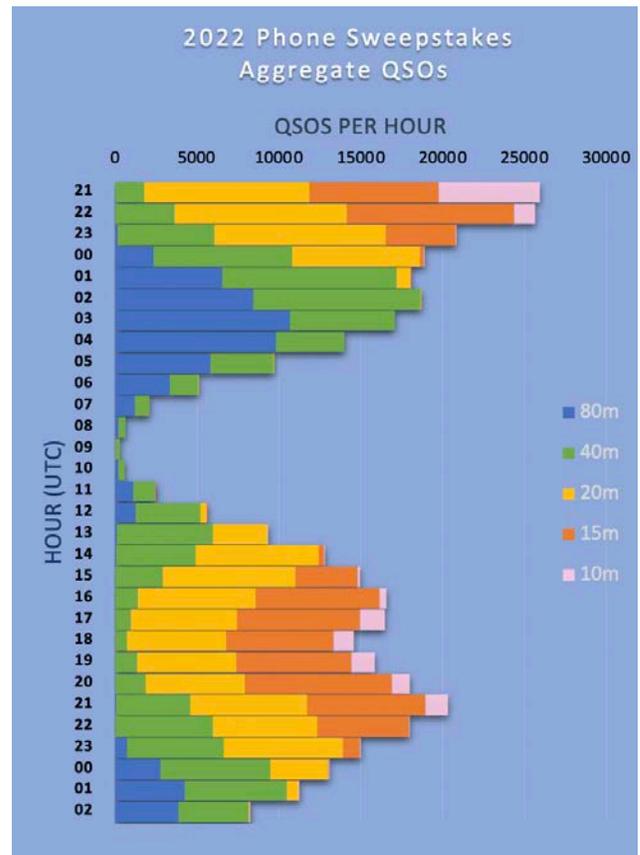
in hour 2, and declined rapidly thereafter. In the end, 10m QSOs accounted for just 3.9% of the total.

Fifteen meters fared much better, figuring in 20% of all contacts, including strong and consistent activity during 10 hours on Sunday. Twenty and forty were the workhorses as usual, splitting 59.8% of the load almost equally.

Conditions overall were generally decent but not exciting. WWV solar data for the contest period show a stable environment throughout, with SFI steady at 115-119, and the K-index at 0 or 1 until near the end.

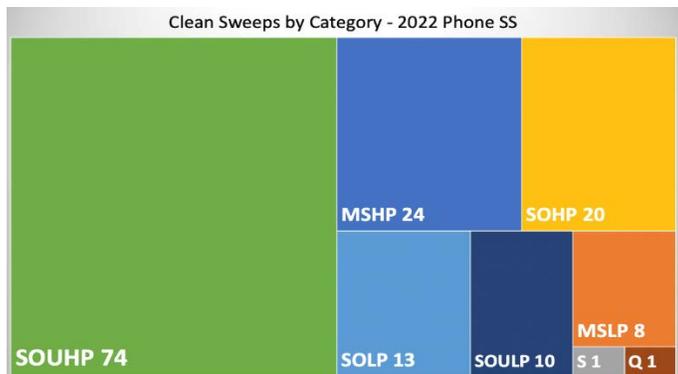
Date	UTC	SFI	A	K	Forecast
19-Nov-2022	15	116	7	1	Minor w/R1 -> Minor w/G1
19-Nov-2022	18	116	7	1	Minor w/R1 -> Minor w/G1
19-Nov-2022	21	115	9	1	Minor w/R1 -> Minor w/G1
20-Nov-2022	0	115	5	1	Minor w/R1 -> Minor w/G1
20-Nov-2022	3	115	5	1	Minor w/R1 -> Minor w/G1
20-Nov-2022	6	115	5	0	Minor w/R1 -> Minor w/G1
20-Nov-2022	9	115	5	0	No Storms -> Minor w/G1
20-Nov-2022	12	115	5	1	Minor w/R1 -> Minor w/G1
20-Nov-2022	15	115	5	1	No Storms -> Minor w/G1
20-Nov-2022	18	115	5	2	No Storms -> Minor w/G1
20-Nov-2022	21	119	10	3	No Storms -> Minor w/G1
21-Nov-2022	0	119	6	2	No Storms -> Minor w/G1
21-Nov-2022	3	119	6	4	No Storms -> Minor w/G1

Here's the "Big Picture" of hourly activity – a good map of when and where to run and when to sleep!



## Clean Sweeps

Working all 84 sections is known as a “clean sweep” and has always been highly prized by SS operators. There were 151 successful sweeps this year, split among the various categories as shown here:



As this chart reflects, high-power stations have a big advantage, as do those “unlimited” and multi-op entrants with access to cluster spots. Some of the pileups on rare sections can rise to “DXpedition level,” and low-power stations have a hard time breaking through. There are exceptions, however, at both extremes. This year WZ8P managed a sweep from the SOUQRP category with just 5 watts, while several top-ten SOHP entries ended up one short. That’s why we play the game!

Four ops (AA7V, K5TA, N4BP, and W2FMB) worked them all with just one QSO per section, which is harder than it sounds – no CQs allowed.

Congratulations to all the clean-sweepers:

AA4NU	AA7V	AB4EJ	AD5XD	AI4RF	AL4A
K0AD	K0EU	K0HC	K1AK	K1EP	K1JB
K1KD	K1RA	K2APD	K2KR	K3DNE	K3MD
K3MM	K3TC	K3WW	K4AB	K4OV	K4PV
K4WI	K4ZW	K5RT	K5TA	K5VIP	K5WA
K6MM	K7SS	K8NVR	K8ZM	K9DA	K9KE
K9NW	KA2K	KA6BIM	KB0V	KB1W	KB7HDX
KC1SQ	KD3TB	KD4D	KD9GY	KE2D	KG5VK
KI6QDH	KK0SD	KK4R	KP2M	KT4Q	KV7N
KW9E	KX7ID	N0XR	N1NQD	N1RP	N2NT
N2RC	N3AM	N3FJP	N3JT	N3LSJ	N3OC
N3XF	N4BP	N4OX	N4ROA	N5ZC	N6WM
N7DX	N7WY	N7XCZ	N7XU	N8CWU	ND7K
ND8DX	NG0C	NG1M	NG7M	NN2NN	NR6Q
NT3U	NU4E	NW0M	NW3Y	NX6T	VA3HDL
VA7RR	VE3GJP	VE3KTB	VE3PJ	VE5SF	VY2TT
W0ECC	W0MI	W0NO	W0PR	W1NG	W1OC
W1QK	W1SJ	W1SRD	W2FMB	W2RQ	W2ZQ
W3CB	W3IDT	W3YR	W3ZGD	W4AAA	W4NF
W4RM	W4TG	W5GAD	W5YO	W6KC	W6SR
W7BJN	W7DX	W7RN	W8BI	W8GX	W8MJ
W9DCT	W9QL	W9XT	WA0RVK	WA2BOT	WA6KHK
WB0N	WB0RUR	WB8REI	WC6H	WD6T	WD9CIR
WE6Z	WH7Z	WO4O	WR3R	WR9L	WT1A
WT9U	WV1M	WW4XX	WX4W	WZ5M	N4QS
WZ8P					

The level of difficulty in completing a sweep is highly dependent on the activity level in certain key sections, usually sparsely-populated remote areas like NT and NL, although western states like WY, and even some CA mults can be hard at times, like SDG and SB were this year.

The table below shows the ten rarest and most common sections of 2022, according to submitted logs:

|| **Ten Rarest** || **Ten Most Common** ||

Section	Entries	Total QSOs	Section	Entries	Total QSOs
NT **	1	28	MDC	62	21,124
NL	3	679	MN	75	17,854
MAR	5	774	VA	82	15,534
SDG	6	800	OH	75	12,665
SB	6	852	IL	57	11,721
ONN	3	899	NC	35	9,511
NM	7	940	WWA	42	9,118
ND	5	1,031	AZ	37	8,632
DE	5	1,073	SV	21	8,468
VI	2	1,187	KS	25	8,312

\*\* VY1FC was the only NT station to submit a timely log, with just 28 contacts. VY1AAA and VY1CO were also active however, bringing the unofficial NT QSO total closer to 1250.



We’ve all been chasing “sweeps” for a loong time!

## Rate

Because the number of possible multipliers is so small, and since serious entrants usually work them all or miss just one, final score tracks the total QSO number very closely. And, since stations are limited to 24 hours of operation, it becomes crucial to maximize the number of QSOs per hour, or “rate” throughout the contest in order to be competitive.

Here are this year’s top one-hour rates, with category and placement shown. Congrats to VE3CX, the only low-power entry in the box.

### Highest 60-minute rates, 2022 (>= 140/hour):

Call Sign	Category & Placement	Best Hour	From (UTC)	To (UTC)
W7WA	SOHP-2	176	2114	2213
ND7K	MSHP-1	175	2100	2159
K5TR	SOHP-1	169	2238	2337
KP2M	SOHP	166	2102	2201
N9RV	SOHP	166	1415	1514
VA7RR	SOHP-6	161	2104	2203
KP4AA	SOHP	159	2101	2200
WH7Z	SOHP-5	159	2215	2314
N7DX	MSHP-3	155	2101	2200
K5WA	SOHP-7	153	2103	2202
KØEU	SOUHP-1	152	2113	2212
WØNO	MSHP-4	152	2109	2208
WC6H	SOHP-10	152	2327	0026
KE2D	SOUHP	149	0244	0343
VE6AO	MSHP	147	2120	2219
NG7M	SOHP	145	2227	2326
VE3CX	SOULP-5	145	1711	1810
N5ZC	SOUHP	144	2100	2159
K5RT	SOUHP-10	142	2241	2340
N4OX	SOHP	142	2104	2203
AL7LO	SOHP	141	2218	2317
W7RN	SOUHP-2	140	2141	2240

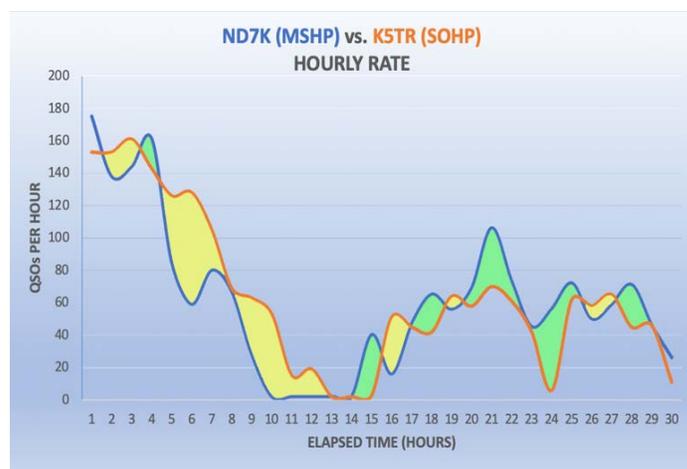
The long SS exchange creates a different running environment from the “59-04” style – it becomes exceedingly important to copy all the info correctly *on the first try*. A couple of repeats can kill a good hour. The maximum practical single-op rate seems to be around 200, but that number is rarely achieved. It requires good ears, efficient speech, and perfect timing, whether single or multi-op.

The closest anyone has come recently was K5TR in 2018, with a 197-hour in SOHP. So close. It’s interesting to read his description of that event at :

[https://www.3830scores.com/showrumor.php?arg=7xatzli\\_mfyfid](https://www.3830scores.com/showrumor.php?arg=7xatzli_mfyfid)

One might assume that multi-op entrants would have a distinct rate advantage, with two or more simultaneous operators, usually one running while others are tuning, watching spots, or CQing on other bands. That assumption would, more often than not, be wrong -- the top single-op score has beaten the top multi tally 6 out of the past 10 years. It appears that at least during the first half of the contest, when rates are higher, there is almost no time when a loud single-op is *not* involved in a QSO, so even if there were a second station searching, listening, ready to pounce, that action would interrupt the running flow and actually reduce the rate rather than help it. Sunday is a different story, though. There is a lot of time between unanswered run CQs that can be used to make new contacts, and that’s where the multi-op shines.

This chart shows the the hourly rates of the 2022 top scorers in SOHP and MSHP. The filled areas between the graph traces show the “winner” of that time period. There is a stark difference between Saturday and Sunday, with K5TR (SOHP--yellow fill) dominating the early hours, and ND7K (MSHP--green fill) reversing the trend on day two.



K5TR’s first 12 hours + ND7K’s last 12 hours ≈ 2031 QSOs before log checking, more than 100 better than either one alone. Is there some lesson in there?

For those of you who would like to analyze your own log, not just for rate, but also for other criteria, a good, free program can be found at:

<https://www.kkn.net/~n6tv/cbs>

This is the app used by many ops to generate those 3830 rate reports you’ve all seen. Versions are available for Linux, MacOS, and Windows.

## Accuracy Matters

Sweepstakes' unique exchange not only limits maximum rates, but also gives operators five "opportunities" per contact to make a logging error. Just one mistake will result in the QSO being removed from the log, and if the call sign is one of the miscopied elements, additional penalties apply, so overall accuracy is extremely important. Each year we publish a list of those stations completing 300+ QSOs with with an error rate of 1.0% or less -- the "Accuracy Honor Roll." Special kudos to the three stations with over 1,000 contacts – all finishing in the Top Ten in their respective categories.

### Accuracy Honor Roll - 2022

Call Sign	Net QSOs	Error Rate (%)
K8NVR	613	0.2
N8FYL	365	0.3
NWØM	470	0.4
WR9L	466	0.4
AL2F	459	0.6
AA3S	353	0.6
N9EAX	319	0.6
ND8DX	1,312	0.7
AB7YQ	963	0.7
KY7M	710	0.7
W9YK	589	0.7
NDØC	398	0.7
K9PW	514	0.8
WQ5L	499	0.8
VA6RCN	395	0.8
KI6QDH	366	0.8
WA2CP	364	0.8
VA7RR	1,664	0.9
K1KD	1,462	0.9
N4OO	890	0.9
W3UL	438	0.9
WE6Z	677	1.0
AE7AP	617	1.0
W9FZ	389	1.0

The log-checking process is sophisticated and accurate – if you make an error, it will be caught. It's interesting to review your own log after each contest to see if there is any pattern to your errors (e.g. number mistakes, problems with certain letters, etc.) in order to try to avoid the same issues next time.

The ARRL publishes a log-checking report ("LCR") for every entry, that becomes available a few months after the event. Those reports can be accessed at:

<https://contests.arrl.org/logcheckreports.php>

Errors don't always involve misunderstanding the over-the-air content – sometimes a simple typo can slip into the log. Still, if the submitted info is wrong, it will result in a penalty. So...is the example below (taken from an actual LCR in this year's SS) a mis-copy or a typo?

```
KB1YFH is a unique call. Received QSO# = 1.
No possible calls found.
KB3RIL is a unique call. Received QSO# = 3.
No possible calls found.
VO1KBT is a busted call. The correct call is VO1KVT.
K1AY is a unique call. Received QSO# = 1.
No possible calls found.
KC3SSC is a unique call. Received QSO# = 6.
No possible calls found.
```

Look down at your keyboard – V and B are adjacent. V and B also sound similar (without phonetics). Either way, it's a busted call, and in this case the loss of a juicy multiplier. *Ouch!*

In addition to the contesting aspect, the focus on accuracy in SS also has its roots in the design of the exchange. It is based on and closely mimics the preamble to the standard National Traffic System radiogram message.



After all, whom would you trust to copy high-volume emergency and priority traffic? A contester, of course!

## New Records

Almost all of the records broken this year were in new-ish categories and/or new-ish sections. In the category department, SOUQRP is starting to show up in more and more sections, but still hasn't filled out the entire slate. SOULP and MSLP are not quite as novel, but there are still plenty of spots there available for record-setting.

Another fertile ground for chasing records is Canada. The split-off sections from Ontario – GTA, ONS, ONE, and ONN saw 8 new section records set in 2022, and the other recent addition, PE, saw 2. Next year, NB and NS...!

In low-entry years like this one it's harder to challenge records in well-established categories and sections – overall scores follow activity levels closely, and it takes a good-to-great number to beat the existing record in most sections and divisions. Tell all your buddies and club members to get on the air this November!

Lists of the new 2022 records (Overall, Division, Call Area, and Section) appear on the following page.

## New Overall Record - 2022

Record Type	Category	Call Sign
Overall in Category	SOUQRP	ND4Y

## New Division Records - 2022

ARRL Division	Category	Call Sign
Central	SOUQRP	WE9R
Great Lakes	SOUQRP	ND4Y
Hudson	SOUQRP	K2AL
New England	SOULP	K1EP
New England	SOUQRP	K6UFO
Pacific	SOUQRP	K6GHA
West Gulf	SOUQRP	K5NZ
Southwestern	MSLP	NX6T

## New Call Area Records – 2022

Call Area	Category	Call Sign
US Call Area 1	SOUQRP	K6UFO
US Call Area 1	SOULP	K1EP
US Call Area 2	SOUQRP	K2AL
US Call Area 4	SOUQRP	ND4Y
US Call Area 5	SOUQRP	K5NZ
US Call Area 6	SOUQRP	K6GHA
US Call Area 6	MSLP	NX6T
US Call Area 9	SOUQRP	WE9R



## New Section Records - 2022

ARRL Section	Category	Call Sign
NE	SOUHP	KVØI
ME	SOUQRP	K6UFO
VT	SOULP	K1EP
VT	MSLP	AF1R
WMA	SOUHP	WA2BOT
NNJ	SOUQRP	K2AL
AL	SOUHP	K4AB
KY	SOUQRP	ND4Y
KY	MSLP	WX4W
NFL	MSLP	WA1F
STX	SOUQRP	K5NZ
ORG	MSLP	NX6T
SDG	SOULP	KN6NBT
SF	SOUQRP	K6JS
SF	MSLP	KG6LHW
SCV	SOUQRP	K6GHA
ID	MSLP	KDØLHI
WWA	MSHP	N7DX
IN	MSLP	K9DA
WI	SOUQRP	WE9R
NT	SOLP	VY1FC
BC	SOUHP	VA7ST
GTA	SOHP	VE3TW
GTA	SOLP	VA3HDL
GTA	SOULP	VE3EJ
GTA	SOUQRP	VE3BFU
ONE	SOULP	VE3PJ
ONE	MSHP	VA3NW
ONN	SOULP	VE3CX
ONN	MSLP	VE3RUA
QC	SOULP	VA2CZ
PE	SOHP	VY2TT
PE	SOLP	VY2LI

For a searchable database of ARRL contest records, visit the ARRL contest portal at:

**[contests.arrl.org/records.php](https://contests.arrl.org/records.php)**

## Around the Categories

### Single-Op, High Power (SOHP)

#### Top Ten:

Call Sign (op)	Score	QSOs	Sec	Hours
<b>K5TR</b>	310,918	1873	83	24.0
<b>W7WA</b>	307,432	1852	83	24.0
<b>VY2TT</b>	287,280	1710	84	24.0
<b>K7RAT</b> (N6TR, op)	284,524	1714	83	23.0
<b>WH7Z</b> (WØCN, op @KH6YY)	283,416	1687	84	23.5
<b>VA7RR</b>	279,552	1664	84	23.6
<b>K5WA</b>	275,688	1641	84	24.0
<b>K4ZW</b>	261,072	1554	84	24.0
<b>W2RQ</b>	259,560	1545	84	23.7
<b>WC6H</b>	255,360	1520	84	24.0

Looking at the SOHP Top Ten, it would be impossible to name a “sweet spot” geographically – both ends (and the center) of the CONUS, both ends of Canada, and even Hawaii are represented.

As usual, first place in the category was decided in a duel between George, K5TR, and Dan, W7WA. George was wary of Dan’s scoreboard pressure, and in his 3830 post, commented:

*“I was pretty sure that W7WA would catch up with me and he got close. I think if he had gotten a sweep I suspect that Dan’s historical error rate would move him ahead of me after log checking.”*

He knew Dan had missed a mult, and was counting on that cushion. In a plot twist, however, George lost a multiplier during log-checking, equalizing their section totals. But his fear of an error differential did not materialize -- George’s error rate actually was 0.1% lower than Dan’s, so his lead held and he won by 19 QSOs.

It is quite a strange occurrence that 3 of the top 4 entries in SOHP (the biggest of the big-gun categories) ended up with 83 sections. Besides K5TR’s busted call, W7WA and K7RAT also missed NL, which was actually well-represented this year.

WØCN (at WH7Z) and N6TR (at K7RAT) both mentioned that they were using new Elecraft K4Ds, each commenting on the “easy on the ears” receiver. Be advised: from the other end, the transmit audio sounds sweet as well. This author spent quite a bit of time just listening to Tree while doing some paperwork in the shack!

### Single-Op, Low Power (SOLP)

#### Top Ten:

Call Sign	Score	QSOs	Sec	Hours
<b>VE5SF</b>	186,648	1111	84	22.5
<b>N8II</b>	164,008	988	83	15.5
<b>N4OO</b>	147,740	890	83	22.4
<b>WR3R</b>	124,656	742	84	22.6
<b>K1RA</b>	121,464	723	84	23.8
<b>KZ2I</b>	110,556	666	83	18.3
<b>K5TS</b>	109,892	662	83	16.2
<b>N1IXF</b>	107,520	672	80	18.4
<b>KW8N</b>	107,360	671	80	10.4
<b>WAØRVK</b>	104,664	623	84	22.6

Practice makes perfect: VE5SF has been moving monotonically up the leaderboard in this category since 2017, and this year he hit the top, even without using all the available time. Sam had several good rate periods, including a 133-hour at 2130-2229Z on Saturday.

N8II, in second place with only 15.5 hours on the clock, notes that many sections are too close or too far from his WV QTH for easy round-the-clock access, so he needs to be particularly aware of current band conditions to maximize exposure. Like many others (including HP ops), he never heard NL, most likely due to propagation.

KW8N was planning a full effort, but, as he posted on 3830: “[The] slow start was discouraging so quit and then just played around, trying out some different things.”

We’ve all been *there*....CU next year.



Andy, K1RA, and his dad Rich, K1HTV. Andy’s last serious phone SS was 26 years ago at Rich’s previous QTH in MD. At the new VA location, Andy reprised the 1996 operation, this time finishing 5<sup>th</sup> in SOLP. (K1RA photo)

## Single-Op, QRP (SOQRP)

### Top Ten:

Call Sign	Score	QSOs	Sec	Hours
NDØC	63,680	398	80	16.0
K6XX	55,680	348	80	11.9
K3TW	52,104	334	78	19.0
K9WZB	39,888	277	72	9.6
W7LG	37,962	333	57	8.6
K2YG	25,102	163	77	13.7
AA5KD	22,836	173	66	13.8
N8BB	21,840	201	70	11.7
WC7S	17,520	146	60	8.7
K2PI	16,884	134	63	9.1

Another year, another #1 finish for NDØC. Randy took advantage of the sunspots, starting off running on 15 meters to the tune of 62 Qs in the first hour. Roughly 45% of his contacts were on that band, and he split the rest pretty evenly among 20, 40, and 80. Zero on 10, however – openings there were not particularly widespread.

Number 2, Bob, K6XX, who called his 2021 SOUQRP entry “a silly thing to try,” seemed to like it well enough to return this year, albeit unassisted. Addicted? Interestingly, his was one of the locations where 10 meters lined up just right – he sat on 28.505 and racked up an impressive 71 QSOs in the hour beginning at 2112Z, mostly favoring the Midwest. *Watch out, Randy.*

Maybe next year conditions will improve enough to entice a few full-time efforts. Here’s some motivation, taken from the **2001** Phone Sweepstakes results article in *QST*:

### Single Operator, QRP

KL7Y (WA2GO,op)	189,920
K7MM	125,112
N7VY	110,880
WA8ZBT	93,132
N4RZ	89,428
KØFRP	81,744
NØUR	79,790
N3UR	67,032
N8WL	65,832
AD8J	65,676

**2001 + 11 + 11 = 2023.** Get the hint? Remember, there were only 80 sections in 2001. Next year, 85. Go for it!

## Single-Op Unlimited, High Power (SOUHP)

### Top Ten:

Call Sign (op)	Score	QSOs	Sec	Hours
KØEU	300,888	1791	84	24.0
W7RN (WX5S, op)	265,272	1579	84	24.0
K4AB	255,696	1522	84	23.9
K3MM	245,952	1464	84	23.9
K1KD	245,616	1462	84	24.0
W1SJ	243,936	1452	84	24.0
W4NF	239,064	1423	84	23.4
KD4D	228,312	1359	84	24.0
ND8DX	220,416	1312	84	24.0
K5RT	215,880	1285	84	19.8

That makes sense -- a clean sweep of clean sweeps. Looking at the SOUHP claimed scores on [www.3830scores.com](http://www.3830scores.com), you have to scan all the way down to #24 to find a station that missed a mult. Seems those spotting networks actually work.

Randy, KØEU, certainly has figured out how to make the most of this category. Since 2015 he has won every time he has entered, except once. On CW, his record goes even farther back with the same result. Impressive. His QSO total this year is 13.4% greater than the #2, W7RN (WX5S), who also has been a Top Ten SOUHP finisher every year over the same time period.



Karl, ND8DX, shown here, consistently shows up on the Accuracy Honor Roll. His error rate this year was just 0.7%, which boosted his placement from a claimed score just outside the Top Ten to an official 9<sup>th</sup> place finish in SOUHP. Interestingly, the same thing happened to K5RT, right behind Karl, climbing from 12<sup>th</sup> to 10<sup>th</sup> after log-checking. Yes...accuracy **does** matter! (Photo courtesy of ND8DX)

## Single-Op Unlimited, Low Power (SOULP)

### Top Ten:

Call Sign (op)	Score	QSOs	Sec	Hours
W4AAA (KK9A, op)	181,608	1081	84	24.0
W4LT	170,560	1040	82	20.5
K1EP	161,280	960	84	23.5
VE3PJ	141,456	842	84	15.5
VE3CX	115,038	693	83	11.5
VA6DJ	108,896	656	83	16.0
N7MZW	101,680	620	82	15.3
K7QA	101,426	611	83	17.4
W9QL	93,912	559	84	18.2
VE3MGY	89,280	558	80	14.3

In a re-run of last year, Lu, W4LT, and John, KK9A, at W4AAA fought it out for the top spot in SOULP, flipping the 2021 order this time around. Lu, recovering from a recent knee replacement (on his footswitch leg!) had some trouble sitting for extended periods. Unable to use VOX due to internet latency (he was remoting to W4DUG), he actually operated quite a bit standing up.

This year's Top Ten includes four Canadian stations – an interesting and rare occurrence indeed.

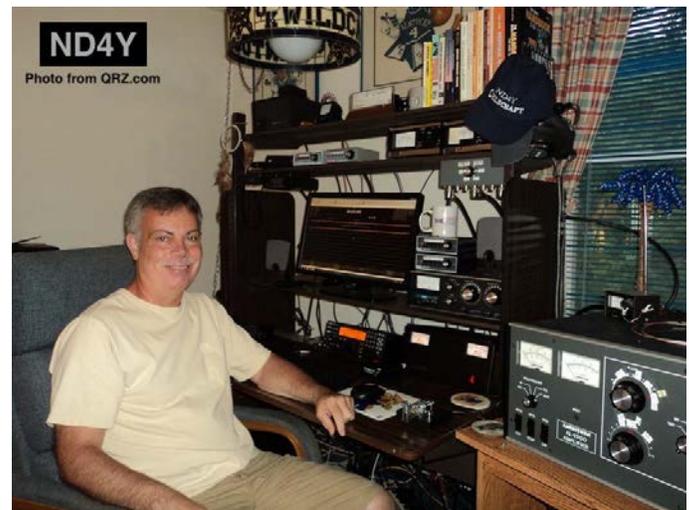


Number 3 SOULP – Ed, K1EP, traveled to K2LE's VT station and brought his K4D – yet another early adopter. Starting on 10m, he worked a bunch of semi-rare sections including NM, WY, PAC, and PR (and...5 Colorados) in the first 20 minutes, then moved on to other bands. Speaking as a true Easterner, he commented "Once you get a sweep, there is no need for 10m." Ed lives in a restricted neighborhood in MA, so he regularly guest-operators from various locations around New England. He notes that it is easy to guess which ops are using call history files by their delayed response when the pre-fill doesn't match his current exchange! (K1EP photo)

## Single-Op Unlimited, QRP (SOUQRP)

### Top Ten:

Call Sign	Score	QSOs	Sec	Hours
ND4Y	78,894	487	81	20.7
WZ8P	64,176	382	84	21.3
WE9R	53,452	322	83	17.4
K6GHA	49,302	297	83	21.7
K5NZ	38,560	241	80	9.8
K6JS	23,236	157	74	10.2
K2AL	15,972	121	66	12.0
K2GMY	9,200	97	50	6.1
VE3BFU	532	19	14	1.9
K6UFO	364	14	13	0.7



If you search the 3830 site by call sign, entering "ND4Y" will display a list of *hundreds* of postings since 2014, including all types of contests – DX, domestic, State QSO parties, ARRL, CQ, CW, SSB, RTTY, 160m, 10m, VHF, you name it. If you do a <FIND> to look for "QRP" within that list, you'll see just two instances: the 2022 Sweepstakes, CW and Phone. It's unclear what motivated this behavior, but the result was positive: #1 in the SOUQRP category, and a new overall record.

Last year's winner WZ8P dropped to 2<sup>nd</sup> place, but was the only station in either QRP category to achieve a clean sweep. Congratulations – that's not easy.

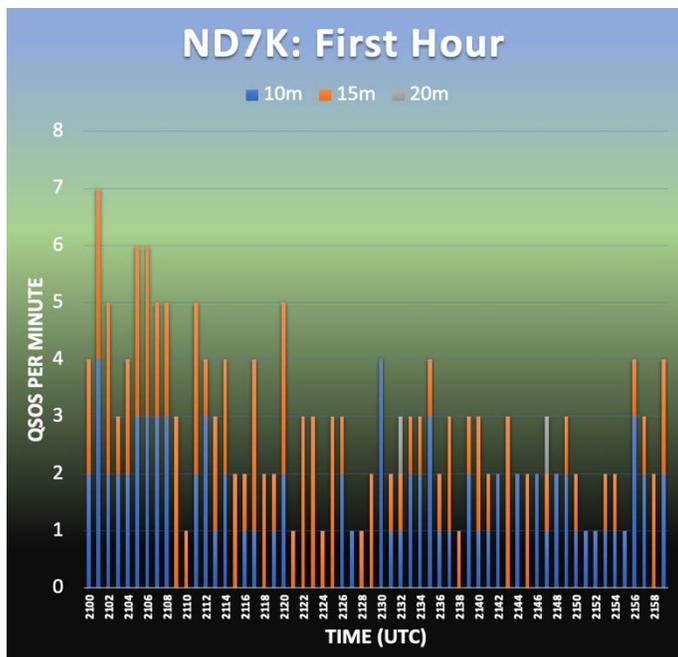
Number 3 WE9R had this surprising 3830 post: "*I believe this was my first Sweepstakes SSB contest in 48 years of being a Ham!*" Wow. See you next November.

## Multi-Op, High Power (MSHP)

Top Ten:

Call Sign	Score	QSOs	Sec	Hours
ND7K	296,856	1767	84	24.0
K4OV	283,080	1685	84	24.0
N7DX	259,728	1546	84	24.0
WØNO	249,144	1483	84	24.0
N2NT	232,848	1386	84	20.8
W6LP	227,934	1407	81	23.4
KRØP	226,424	1364	83	24.0
WØECC	207,312	1234	84	24.0
N3OC	200,256	1192	84	20.5
W7DX	198,240	1180	84	22.3

Since their first SS effort in 2020, the ND7K-N6WIN group has been busy refining the station, both inside and out. The current setup allows exotic operation like 2 radios on the same band, and a multi version of 2BSIQ. That's quite a trick given the difference in duration between a CQ/QRZ and an exchange! Looks like it might be hard to maintain over the long run – they had 7 Qs in minute #2, 6 Qs in each of minutes 6 and 7, but never hit those rates again. More design work for next year!



Given their resources and enthusiasm, it looks like any potential competition will face a very high bar!

It was great to read several remarks regarding revival of in-person multi-ops this year. *Good-bye, Covid.*

## Multi-Op, Low Power (MSLP)

Top Ten:

Call Sign	Score	QSOs	Sec	Hours
NX6T	181,608	1081	84	23.5
NGØC	155,232	924	84	24.0
WX4W	153,888	916	84	22.8
K9KE	132,216	787	84	20.1
K9DA	117,936	702	84	20.7
W4TG	99,120	590	84	19.7
KT4XA	83,640	510	82	24.0
K2APD	78,120	465	84	21.5
KØAJW	73,852	499	74	14.7
W3ZGD	71,904	428	84	20.5

The sheer size of this antenna farm makes it difficult to display in such a small picture, but this is the QTH of WA6TQT, home of the NX6T remote operation (*photo from QRZ.com*):



There are 4 x 190-foot rotating towers with Yagi stacks, plus an 80m 4-square, etc. No surprise that a good score resulted, even with some reported squabbles with Murphy.

Eeking out a 2<sup>nd</sup> place finish by just 8 QSOs was a 3-man crew from MN, operating from the NØHJZ station under the call sign NGØC. This was their first attempt at multi-op. There was some occasional confusion when both NGØC and fellow Minnesotan NDØC, the SQRP winner, found themselves calling in the same pileup!

In 3<sup>rd</sup>, the WX4W group from KY noted that “80M was fantastic on Saturday night with low noise and very clear signals from all over,” making 325 net contacts on that band, more than tripling most western LP stations’ numbers.

## School Club Station (S)

### Top Ten:

Call Sign	Score	QSOs	Sec	Hours
<b>KØHC</b>	242,592	1444	84	23.8
<b>W1YK</b>	83,096	611	68	14.9
<b>W2UB</b>	72,874	439	83	10.3
<b>WØEEE</b>	70,848	432	82	22.1
<b>W3EAX</b>	51,520	322	80	5.6
<b>K3CR</b>	43,836	281	78	14.0
<b>W1KBN</b>	31,320	261	60	8.9
<b>W9JWC</b>	30,084	218	69	17.1
<b>W8EDU</b>	18,910	155	61	11.4
<b>W4UAL</b>	6,912	72	48	9.0

“After the pandemic years with no student operators, it was great to bring back some students again this year! Our 2022 Hesston College ARC Sweepstakes team included two aviation students and one air traffic control student, all unlicensed.”

That was the opening comment from Bob Harder WØBH, club trustee at KØHC in his 3830 writeup this year. His sentiment has surely echoed and resonated throughout the country.

The Hesston team really performed well – their winning “S” score would have placed 5<sup>th</sup> in the MSHP category, and 7<sup>th</sup> in SOUHP.

It is interesting how the school’s aviation and air traffic control programs incorporate amateur radio elements into the curriculum. There is no question that the skill sets of ATC professionals and phone contesters overlap significantly. On the college’s web site there is even an article addressing that nexus:

<https://www.hesston.edu/2018/05/air-traffic-control-with-a-side-of-ham-radio-a-recipe-for-success/>

Bob concludes: “And Sam borrowed my ARRL Ham Radio License Manual to start studying over Thanksgiving break!”



## Affiliated Club Scores

What odds would make a bet *against* PVRC attractive? They continued their dominance this year, posting a score of 2 ¼ times the nearest rival. The rest of the Unlimited race was super-close, however – last place was just 2.6% behind 2<sup>nd</sup>.

Mother Lode DX/Contest Club continued their streak in the Medium category, with a mean score of 101K per log over 48 entries, an excellent effort. Florida Contest Group moved down from Unlimited to Medium this year, placing at number two.

The Local category was shaken up by the untimely passing of Bruce, AA5B, trustee and prime mover of New Mexico Big River Contesters, a frequent Local winner -- nobody in the club was in the mood for SS this year. The other top competitor, Pizza Lovers 259 in Silicon Valley, posted just 3 logs. Iowa DX and Contest Club, anchored by NØXR, stepped up to win the category with 5 entries.

### ARRL Affiliated Club Scores - 2022 SS [CW and SSB scores combined]

Unlimited (>50 entries, 175-mile circle)	Score	Entries
Potomac Valley Radio Club	12,228,356	195
Minnesota Wireless Assn	5,409,052	115
Yankee Clipper Contest Club	5,318,568	92
Frankford Radio Club	5,274,264	93
Society of Midwest Contesters	5,273,674	107
Medium (<=50 entries, 175-mile circle)	Score	Entries
Mother Lode DX/Contest Club	4,869,324	48
Florida Contest Group	3,216,442	49
South East Contest Club	2,502,368	36
Southern California Contest Club	1,988,478	31
Tennessee Contest Group	1,976,250	39
DFW Contest Group	1,950,140	28
Arizona Outlaws Contest Club	1,814,800	29
Western Washington DX Club	1,798,104	23
Contest Club Ontario	1,785,474	34
Mad River Radio Club	1,780,902	33
Central Texas DX and Contest Club	1,771,654	24
Alabama Contest Group	1,594,204	18
Northern California Contest Club	1,460,600	36
Kentucky Contest Group	1,370,480	25
Grand Mesa Contesters of Colorado	1,329,352	17
Kansas City Contest Club	1,158,236	15
Big Sky Contesters	1,093,024	14
Willamette Valley DX Club	914,252	9
Swamp Fox Contest Group	729,208	16

Hudson Valley Contesters and DXers	704,668	22
Radiosport Manitoba	648,646	9
Niagara Frontier Radiosport	641,438	15
Orca DX and Contest Club	512,334	6
Saskatchewan Contest Club	506,780	8
North Coast Contesters	470,742	7
Great Places Contest Club	427,854	5
Central Virginia Contest Club	400,676	11
Bay Area DXers	379,936	5
Rochester (NY) DX Assn	364,420	9
Idaho Mountain Amateur Radio Society	318,068	4
Order of Boiled Owls of New York	314,378	7
599 DX Association	286,356	3
Candlewood ARA	286,254	4
Heartland DX Association	283,990	5
Driftless Zone Contesters	273,576	7
Arkansas DX Assn	269,572	3
South Jersey Radio Assn	265,720	9
Northeast Maryland Amateur Radio Contest Society	213,500	9
Deep Dixie Contest Club	201,376	4
Texas DX Society	190,640	5
Lake Area Radio Klub (SD)	184,802	5
Allegheny Valley Radio Association	184,442	4
Maritime Contest Club	182,092	6
Dupage ARC	177,652	4
Motor City Radio Club	143,210	8
Carolina DX Association	142,920	9
Badger Contesters	137,716	3
Skyview Radio Society	118,276	4
Oklahoma City Autopatch Association	113,308	3
New Providence ARC	96,952	5
Western Kansas ARC	89,604	4
Granite State ARA	72,650	6
American Red Cross Emergency Communications Service	64,774	3
L'anse Creuse ARC	53,178	3
Northern Arizona DX Assn	48,894	3
Oklahoma DX Assn	33,006	5
Portage County Amateur Radio Service	31,514	4
Phil-Mont Mobile Radio Club	11,252	4
<b>Local</b> (<=10 entries, 35-mile circle)	Score	Entries
Iowa DX and Contest Club	534,682	5
CTRI Contest Group	379,764	8
Pizza Lovers 259	370,836	3
Redwood Empire DX Assn	324,106	6
Bristol (TN) ARC	219,010	8
Boulder Amateur Radio Club	168,752	3
The Villages Amateur Radio Club	155,344	6
Hilltop Transmitting Assn	138,328	4

Providence Radio Assn	116,686	3
Alexandria Radio Club	106,580	7
Midland ARC	103,520	3
OH-KY-IN ARS	95,658	3
Stoned Monkey VHF ARC	83,570	3
Meriden ARC	83,478	4
Central Michigan Amateur Radio Club	62,256	3
Hazel Park ARC	56,786	3
Metro DX Club	36,748	4
Silver Comet Amateur Radio Society	32,282	3
Fort Myers ARC	15,424	4

## That's a Wrap!

Another Phone SS is in the books. For more detailed information including complete line scores, a searchable score database, LCRs, rules, previous results and more, visit [contests.arrrl.org/ssph](https://contests.arrrl.org/ssph).

The next round takes place on 18-20 November, 2023. Be there.

**The 2023 ARRL November Sweepstakes phone weekend is November 18 – 20, 2023. For rules, previous year's results articles and more, visit [contests.arrrl.org/ssph](https://contests.arrrl.org/ssph)**

## Regional Leaders

### West Coast Region

(Pacific, Northwestern and Southwestern Divisions; Alberta, British Columbia and NT Sections)

W7WA	307,432	SOHP
K7RAT (N6TR, op)	284,524	SOHP
WH7Z (WØCN, op @KH6YY)	283,416	SOHP
VA7RR	279,552	SOHP
WC6H	255,360	SOHP
AE7AP	101,188	SOLP
N7XU (K4XU, op)	96,936	SOLP
W1DGL	70,310	SOLP
WH7T	65,400	SOLP
VA6RCN (VE3RCN, op)	62,410	SOLP
K6XX	55,680	SOQRP
K9WZB	39,888	SOQRP
N7JI	14,076	SOQRP
K7FR	9,940	SOQRP
KB7GK	6,536	SOQRP
W7RN (WX5S, op)	265,272	SOUHP
W1SRD	180,432	SOUHP
WD6T (@N6RO)	138,936	SOUHP
KA6BIM	136,080	SOUHP
K7SS	135,576	SOUHP
VA6DJ	108,896	SOULP
K7QA	101,426	SOULP
WZ8T	87,360	SOULP
AL1VE	58,058	SOULP
KN6NBT	50,078	SOULP
K6GHA	49,302	SOUQRP
K6JS	23,236	SOUQRP
K2GMY	9,200	SOUQRP
ND7K	296,856	MSHP
N7DX	259,728	MSHP
W6LP	227,934	MSHP
W7DX	198,240	MSHP
VE6AO	180,608	MSHP
NX6T	181,608	MSLP
K7RDG	36,646	MSLP
KG6LHW	25,326	MSLP
N6ACL	24,360	MSLP
KDØLHI	16,836	MSLP

### Midwest Region

(Dakota, Midwest, Rocky Mountain and West Gulf Divisions; Manitoba and Saskatchewan Sections)

K5TR	310,918	SOHP
K5WA	275,688	SOHP
NG7M	218,904	SOHP

VE4VT	182,434	SOHP
AD5XD	180,600	SOHP
VE5SF	186,648	SOLP
WAØRVK	104,664	SOLP
KØXF	102,546	SOLP
KKØSD	99,288	SOLP
W4IFI	95,094	SOLP
NDØC	63,680	SOQRP
AA5KD	22,836	SOQRP
WC7S	17,520	SOQRP
WSØY	3,552	SOQRP
NØZIB	2,760	SOQRP
KØEU	300,888	SOUHP
K1KD	245,616	SOUHP
K5RT	215,880	SOUHP
NØXR (@NØNI)	188,496	SOUHP
N5ZC	172,872	SOUHP
N7MZW	101,680	SOULP
WA8ZBT	62,884	SOULP
K4IU	48,160	SOULP
WØUC	42,028	SOULP
AEØDX	41,760	SOULP
K5NZ	38,560	SOUQRP
WØNO	249,144	MSHP
KRØP	226,424	MSHP
WØECC	207,312	MSHP
NJ8M	170,980	MSHP
KG5VK	164,640	MSHP
NGØC	155,232	MSLP
KØAJW	73,852	MSLP
K5LRW	65,664	MSLP
NØEO	63,960	MSLP
AEØPN	41,588	MSLP
KØHC	242,592	S
WØEEE	70,848	S

### Central Region

(Central and Great Lakes Divisions; Ontario East, Ontario North, Ontario South, and Greater Toronto Area Sections)

VE3YT	164,328	SOHP
K9BGL	141,760	SOHP
K8AO	127,008	SOHP
K9GX	108,564	SOHP
WA8Y	94,288	SOHP
KW8N	107,360	SOLP
K8NVR	102,984	SOLP
WR9L	78,288	SOLP



K1EP	161,280	SOULP
VA2CZ	64,242	SOULP
VE9OA	36,960	SOULP
N1DID	36,960	SOULP
W2FDJ	36,288	SOULP
K2AL	15,972	SOUQRP
K6UFO	364	SOUQRP
N2NT	232,848	MSHP
N3OC	200,256	MSHP
W1OC	140,448	MSHP
W1QK	118,104	MSHP
NC1CC	110,058	MSHP
K2APD	78,120	MSLP
W3ZGD	71,904	MSLP
AD2P	65,280	MSLP
AF1R	49,454	MSLP
W1OP	48,150	MSLP
W1YK	83,096	S
W2UB	72,874	S
W3EAX	51,520	S
K3CR	43,836	S
W1KBN	31,320	S

Dakota	KKØSD	99,288
Delta	K5TS	109,892
Great Lakes	KW8N	107,360
Hudson	AH2O	101,094
Midwest	WAØRVK	104,664
New England	N1XF	107,520
Northwestern	AE7AP	101,188
Pacific	WH7T	65,400
Roanoke	N8II	164,008
Rocky Mountain	KØXF	102,546
Southeastern	N4OO	147,740
Southwestern	W1DGL	70,310
West Gulf	W5ACQ (WA5POK, op)	59,292
Canada	VE5SF	186,648

### Single Operator, QRP

Atlantic	W7LG	37,962
Central	K9ARF	15,444
Dakota	NDØC	63,680
Great Lakes	N8BB	21,840
Hudson	K2YG	25,102
Midwest	NØZIB	2,760
New England	W1IG	1,386
Northwestern	N7JI	14,076
Pacific	K6XX	55,680
Roanoke	K2PI	16,884
Rocky Mountain	WC7S	17,520
Southeastern	K3TW	52,104
Southwestern	K9WZB	39,888
West Gulf	AA5KD	22,836
Canada	VE3RGO	570

### Single Operator Unlimited, High Power

Atlantic	K3MM	245,952
Central	WT9U	108,192
Dakota	K1KD	245,616
Delta	NJ4P (K9TI, op)	191,398
Great Lakes	ND8DX	220,416
Hudson	WA2CP (KC2GOW, op)	60,424
Midwest	NØXR (@NØNI)	188,496
New England	W1SJ	243,936
Northwestern	KA6BIM	136,080
Pacific	W7RN (WX5S, op)	265,272
Roanoke	W4NF	239,064
Rocky Mountain	KØEU	300,888
Southeastern	K4AB	255,696

## Division Winners

### Single Operator, High Power

Atlantic	K3ZO	202,188
Central	K9BGL	141,760
Dakota	KØTT	156,128
Delta	KØEJ	157,932
Great Lakes	K8AO	127,008
Hudson	W2RQ	259,560
Midwest	N7WY	99,120
New England	K1AK (W2ID, op)	225,792
Northwestern	W7WA	307,432
Pacific	WH7Z (WØCN, op @KH6YY)	283,416
Roanoke	K4ZW	261,072
Rocky Mountain	NG7M	218,904
Southeastern	KP4AA	243,356
Southwestern	KH7X (KH6ND, op)	236,052
West Gulf	K5TR	310,918
Canada	VY2TT	287,280

### Single Operator, Low Power

Atlantic	WR3R	124,656
Central	WR9L	78,288

Southwestern	KY7M	116,440	Midwest	WØNO	249,144
West Gulf	K5RT	215,880	New England	W1OC	140,448
Canada	VA7ST	76,692	Northwestern	N7DX	259,728

### Single Operator Unlimited, Low Power

Atlantic	W2FDJ	36,288
Central	W9QL	93,912
Dakota	K4IU	48,160
Delta	WBØRUR	50,568
Great Lakes	N8HRZ	85,490
Hudson	KD2PTX	5,800
Midwest	AEØDX	41,760
New England	K1EP	161,280
Northwestern	K7QA	101,426
Pacific	WQ6X	32,240
Roanoke	W4AAA	181,608
Rocky Mountain	N7MZW	101,680
Southeastern	W4LT	170,560
Southwestern	KN6NBT	50,078
West Gulf	WA8ZBT	62,884
Canada	VE3PJ	141,456

### Single Operator Unlimited, QRP

Central	WE9R	53,452
Great Lakes	ND4Y	78,894
Hudson	K2AL	15,972
New England	K6UFO	364
Pacific	K6GHA	49,302
West Gulf	K5NZ	38,560
Canada	VE3BFU	532

### Multioperator, Single Transmitter, High Power

Atlantic	N3OC	200,256
Central	WD9CIR	165,648
Dakota	WØZWY	9,894
Delta	W5YO	180,264
Great Lakes	W8BI	108,192
Hudson	N2NT	232,848

Pacific	W6LP	227,934
Roanoke	K4OV	283,080
Rocky Mountain	K2KR	138,432
Southeastern	WW4LL	196,212
Southwestern	ND7K	296,856
West Gulf	KG5VK	164,640
Canada	VE6AO	180,608

### Multioperator, Single Transmitter, Low Power

Atlantic	K2APD	78,120
Central	K9KE	132,216
Dakota	NGØC	155,232
Delta	W4ETA	23,800
Great Lakes	WX4W	153,888
Hudson	AD2P	65,280
Midwest	AEØPN	41,588
New England	AF1R	49,454
Northwestern	KDØLHI	16,836
Pacific	KG6LHW	25,326
Roanoke	W4TG	99,120
Rocky Mountain	K5LRW	65,664
Southeastern	KT4XA	83,640
Southwestern	NX6T	181,608
West Gulf	KI5QBQ	18,360
Canada	VE3RUA	29,700

### School Club

Atlantic	W2UB	72,874
Central	W9JWC	30,084
Great Lakes	W8EDU	18,910
Midwest	KØHC	242,592
New England	W1YK	83,096
Southeastern	W4UAL	6,912

## ARRL November Sweepstakes SSB - Sponsored Plaque Winners

ARRL is pleased to award a Sweepstakes Plaque to the Overall and Division Leaders in each category, thanks to Icom America, clubs, and individuals who sponsor these awards. For more information on plaque sponsorship or to order a duplicate plaque, contact the ARRL Contest Program at 860-594-0232 or [contests@arrl.org](mailto:contests@arrl.org). Plaques cost \$80, which includes all shipping charges.

Winner	Division	Category	Sponsor
K5TR	Overall	Single Operator High Power	Icom America
VE5SF	Overall	Single Operator Low Power	Icom America
NDØC	Overall	Single Operator QRP	Icom America
KØEU	Overall	Single Operator Unlimited High Power	Icom America
W4AAA	Overall	Single Operator Unlimited Low Power	Icom America
ND4Y	Overall	Single Operator Unlimited QRP	Icom America
ND7K	Overall	Multioperator High Power	Icom America
NX6T	Overall	Multioperator Low Power	Icom America
KØHC	Overall	School Club	Robert Tuttle, N8YXR & Jennie Tuttle, KCØRBV
K3ZO	Atlantic	Single Operator High Power	Icom America
WR3R	Atlantic	Single Operator Low Power	Potomac Valley Radio Club
W7LG	Atlantic	Single Operator QRP	Icom America
K3MM	Atlantic	Single Operator Unlimited High Power	Icom America
W2FDJ	Atlantic	Single Operator Unlimited Low Power	Icom America
N3OC	Atlantic	Multioperator High Power	Icom America
K2APD	Atlantic	Multioperator Low Power	Icom America
W2UB	Atlantic	School Club	Icom America
K9BGL	Central	Single Operator High Power	Society Of Midwest Contesters
WR9L	Central	Single Operator Low Power	Society Of Midwest Contesters
K9ARF	Central	Single Operator QRP	Icom America
WT9U	Central	Single Operator Unlimited High Power	Society of Midwest Contesters
WQ9L	Central	Single Operator Unlimited Low Power	Society of Midwest Contesters
WE9R	Central	Single Operator Unlimited QRP	Icom America
WD9CIR	Central	Multioperator High Power	Icom America
K9KE	Central	Multioperator Low Power	Icom America
W9JWC	Central	School Club	Icom America
KØTT	Dakota	Single Operator High Power	Minnesota Wireless Association – In memory of Tod Olson, KØTO
KKØSD	Dakota	Single Operator Low Power	Minnesota Wireless Association
NDØC	Dakota	Single Operator QRP	Icom America
K1KD	Dakota	Single Operator Unlimited High Power	Minnesota Wireless Association
K4IU	Dakota	Single Operator Unlimited Low Power	Minnesota Wireless Association
WØZWY	Dakota	Multioperator High Power	Icom America
NGØC	Dakota	Multioperator Low Power	Icom America
KØEJ	Delta	Single Operator High Power	Icom America
K5TS	Delta	Single Operator Low Power	Icom America
NJ4P (K9TI, op)	Delta	Single Operator Unlimited High Power	Icom America
WBØRUR	Delta	Single Operator Unlimited Low Power	Icom America

W5YO	Delta	Multioperator High Power	Icom America
W4ETA	Delta	Multioperator Low Power	Icom America
K8AO	Great Lakes	Single Operator High Power	Icom America
KW8N	Great Lakes	Single Operator Low Power	Icom America
N8BB	Great Lakes	Single Operator QRP	Icom America
ND8DX	Great Lakes	Single Operator Unlimited High Power	Icom America
N8HRZ	Great Lakes	Single Operator Unlimited Low Power	Icom America
ND4Y	Great Lakes	Single Operator Unlimited QRP	Icom America
W8BI	Great Lakes	Multioperator High Power	Icom America
WX4W	Great Lakes	Multioperator Low Power	Icom America
W8EDU	Great Lakes	School Club	Robert Tuttle, N8YXR & Jennie Tuttle, KCØRBV
W2RQ	Hudson	Single Operator High Power	Icom America
AH2O	Hudson	Single Operator Low Power	Icom America
K2YG	Hudson	Single Operator QRP	Icom America
WA2CP (KC2GOW, op)	Hudson	Single Operator Unlimited High Power	Icom America
KD2PTX	Hudson	Single Operator Unlimited Low Power	Icom America
K2AL	Hudson	Single Operator Unlimited QRP	Icom America
N2NT	Hudson	Multioperator High Power	Icom America
AD2P	Hudson	Multioperator Low Power	Icom America
N7WY	Midwest	Single Operator High Power	Icom America
WAØRVK	Midwest	Single Operator Low Power	Icom America
NØZIB	Midwest	Single Operator QRP	Icom America
NØXR (@NØNI)	Midwest	Single Operator Unlimited High Power	Icom America
AEØDX	Midwest	Single Operator Unlimited Low Power	Icom America
WØNO	Midwest	Multioperator High Power	Icom America
AEØPN	Midwest	Multioperator Low Power	Icom America
KØHC	Midwest	School Club	Icom America
KA1K (W2ID, op)	New England	Single Operator High Power	Icom America
N1IXF	New England	Single Operator Low Power	Icom America
W1IG	New England	Single Operator QRP	Icom America
W1SJ	New England	Single Operator Unlimited High Power	Icom America
K1EP	New England	Single Operator Unlimited Low Power	Icom America
K6UFO	New England	Single Operator Unlimited QRP	Icom America
W1OC	New England	Multioperator High Power	Icom America
AF1R	New England	Multioperator Low Power	Icom America
W1YK	New England	School Club	Icom America
W7WA	Northwestern	Single Operator High Power	Icom America
AE7AP	Northwestern	Single Operator Low Power	Icom America
N7JI	Northwestern	Single Operator QRP	Icom America
KA6BIM	Northwestern	Single Operator Unlimited High Power	Icom America
K7QA	Northwestern	Single Operator Unlimited Low Power	Icom America
N7DX	Northwestern	Multioperator High Power	Icom America
KDØLHI	Northwestern	Multioperator Low Power	Icom America
WH7Z (WØCN, OP @KH6YY)	Pacific	Single Operator High Power	Icom America

WH7T	Pacific	Single Operator Low Power	Icom America
K6XX	Pacific	Single Operator QRP	Icom America
W7RN (WX5S, op)	Pacific	Single Operator Unlimited High Power	Icom America
WQ6X	Pacific	Single Operator Unlimited Low Power	Icom America
K6GHA	Pacific	Single Operator Unlimited QRP	Icom America
W6LP	Pacific	Multioperator High Power	Icom America
KG6LHW	Pacific	Multioperator Low Power	Icom America
K4ZW	Roanoke	Single Operator High Power	Icom America
N8II	Roanoke	Single Operator Low Power	Icom America
K2PI	Roanoke	Single Operator QRP	Icom America
W4NF	Roanoke	Single Operator Unlimited High Power	Icom America
W4AAA	Roanoke	Single Operator Unlimited Low Power	Icom America
K4OV	Roanoke	Multioperator High Power	Icom America
W4TG	Roanoke	Multioperator Low Power	Icom America
NG7M	Rocky Mountain	Single Operator High Power	Icom America
KØXF	Rocky Mountain	Single Operator Low Power	Icom America
WC7S	Rocky Mountain	Single Operator QRP	Icom America
KØEU	Rocky Mountain	Single Operator Unlimited High Power	Icom America
N7MZW	Rocky Mountain	Single Operator Unlimited Low Power	Icom America
K2KR	Rocky Mountain	Multioperator High Power	Icom America
K5LRW	Rocky Mountain	Multioperator Low Power	Icom America
KP4AA	Southeastern	Single Operator High Power	Icom America
N4OO	Southeastern	Single Operator Low Power	Icom America
K3TW	Southeastern	Single Operator QRP	Icom America
K4AB	Southeastern	Single Operator Unlimited High Power	Icom America
W4LT	Southeastern	Single Operator Unlimited Low Power	Icom America
WW4LL	Southeastern	Multioperator High Power	Icom America
KT4XA	Southeastern	Multioperator Low Power	Icom America
W4UAL	Southeastern	School Club	Icom America
KH7X (KH6ND, op)	Southwestern	Single Operator High Power	Icom America
W1DGL	Southwestern	Single Operator Low Power	Icom America
K9WZB	Southwestern	Single Operator QRP	Icom America
KY7M	Southwestern	Single Operator Unlimited High Power	Icom America
KN6NBT	Southwestern	Single Operator Unlimited Low Power	Icom America
ND7K	Southwestern	Multioperator High Power	Icom America
NX6T	Southwestern	Multioperator Low Power	Icom America
K5TR	West Gulf	Single Operator High Power	Icom America
W5ACQ (WA5POK, op)	West Gulf	Single Operator Low Power	Icom America
AA5KD	West Gulf	Single Operator QRP	Icom America
K5RT	West Gulf	Single Operator Unlimited High Power	Icom America
WA8ZBT	West Gulf	Single Operator Unlimited Low Power	Icom America
K5NZ	West Gulf	Single Operator Unlimited QRP	Icom America
KG5VK	West Gulf	Multioperator High Power	Icom America
KI5QBQ	West Gulf	Multioperator Low Power	Icom America
VY2TT	Canada	Single Operator High Power	Icom America

VE5SF	Canada	Single Operator Low Power	Icom America
VE3RGO	Canada	Single Operator QRP	Icom America
VA7ST	Canada	Single Operator Unlimited High Power	Icom America
VE3PJ	Canada	Single Operator Unlimited Low Power	Icom America
VE3BFU	Canada	Single Operator Unlimited QRP	Icom America
VE6AO	Canada	Multioperator High Power	Icom America
VE3RUA	Canada	Multioperator Low Power	Icom America