



ARRL November Phone Sweepstakes 2017 Results

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This paragraph was copied verbatim from the 2009 Phone Sweepstakes online results article:

Just when you thought that interest in Sweepstakes couldn't possibly beat the record set just last year, 2009's 76th edition proved everyone wrong. The number of submitted entries increased by 9.5% over 2008, to a total of 2048 logs. Add to that the number of stations who were active, but did not submit a log, and you get 5266 participants! All of this activity filled the New Records table with 32 new section and 14 new division records, turned up many clean sweeps, and resulted in some very highly contested races. Every year, the bar gets set higher.

Back in 2009, there were 260 days, or 71% of the year, with ZERO sunspots. In 2017, there were only 104 such spotless days, or 28% (source: www.spaceweather.com). By that measure, you might expect hams in 2017 to be less discouraged by conditions, and more eager to get on the air for the contest.

But that's not what happened, so what's up with this picture? We all attribute the current low scores and lack of participation to "conditions," but is that all there is? Think about it for a minute, then continue reading the rest of our report.

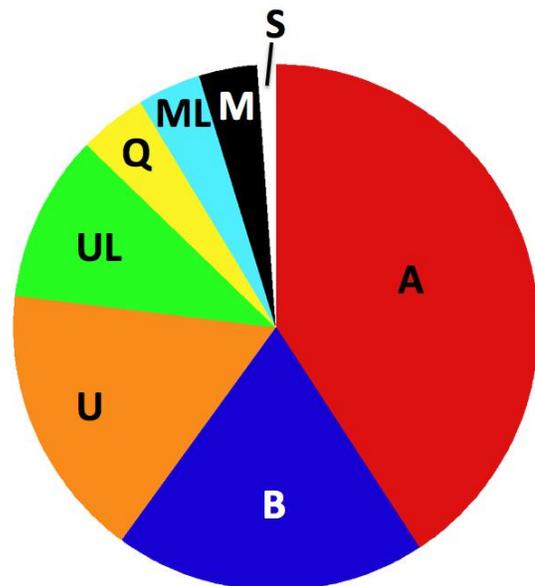
For those who would like to delve further into the results, a complete, fully searchable and sortable table of all entries received by ARRL is available at www.arrl.org/contest-results-articles. Look for 2017, then Phone Sweepstakes, and "Searchable Database." A complete set of records highlighting this year's new records is also available.

There were 1,674 logs submitted (up from 1,626 last year) with a combined total of ~398k QSOs (down just slightly from last year's ~400k). Once again, the leading category was SOLP (A) with 689 entries, virtually identical to 2016's total. Reversing the recent trend toward increased usage of spotting assistance, SOHP (B) entries outnumbered SOUHP (U) by 325 to 284. The pie chart at right shows the distribution of logs between the categories.

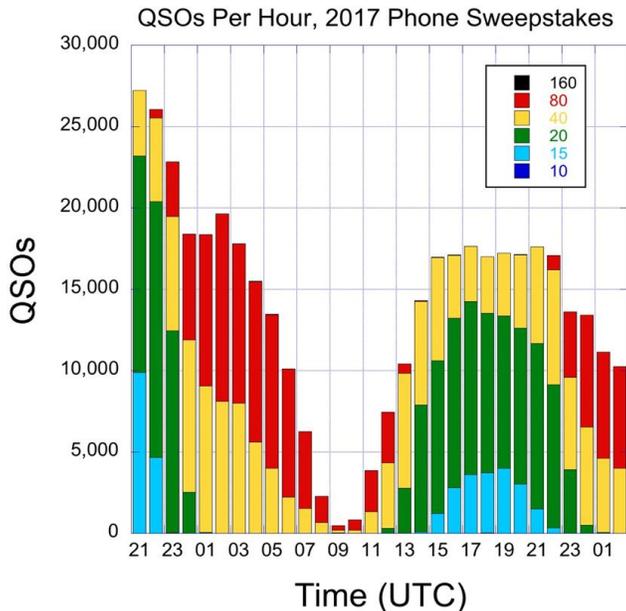
Sweepstakes Categories

Sweepstakes is unique in that the participants send their category as part of the contest exchange – it's called the **Precedence** (see the section "Accuracy Matters") and is represented by a single letter. This table lists the categories for Sweepstakes, the abbreviations used in the printed results, and their abbreviations used in the contest exchange.

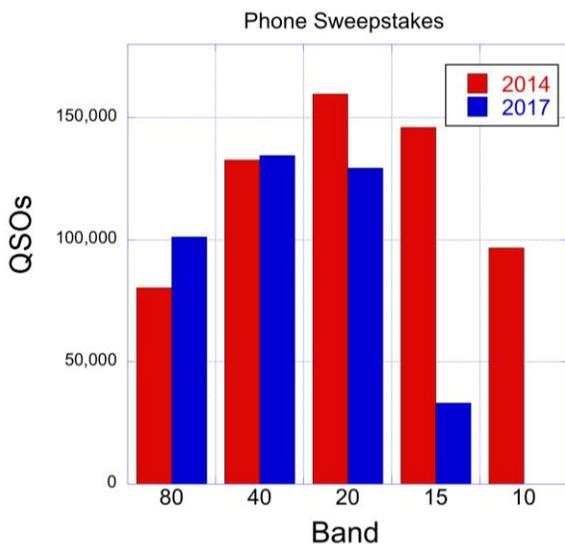
Category	Sent in Exchange
Single Operator, Low Power (SOLP)	A
Single Operator, High Power (SOHP)	B
Single Operator, QRP (SOQRP)	Q
Single Op Unlimited, Low Power (SOULP)	U
Single Op, Unlimited, High Power (SOUHP)	U
Multioperator, Low Power (MSLP)	M
Multioperator, High Power (MSHP)	M
School Club (S)	S



The graph below shows the number of QSOs on each band for each hour of the contest (thanks to Tree, N6TR, for the data!). Once again, the heavy use of the 40 meter band during daylight, the low QSO counts on 10 and 15 meters, and the early closing of 20 meters are characteristic of this part of the sunspot cycle.



We thought it would be interesting to compare 2017's QSO distribution by band to that of 2014 – the last time we were blessed with good high-band (20, 15, 10 meters) conditions. Most people would assume that activity would shift dramatically toward the low bands in low sunspot years, but the graph below tells a different story. Yes, there were a few extra QSOs made on 80 and 40 meters this year, but the big effect is a ton of QSOs missing on 10 and 15 meters! Good conditions, as in 2014, bring out more operators, and they like the high bands.



Clean Sweeps

With Puerto Rico and the U.S. Virgin Islands still reeling from a devastating hurricane season, Clean Sweeps (contacting all 83 ARRL/RAC sections) were at a premium. Many Top Ten finishers, even in the Unlimited and Multioperator categories, failed to find one or more multipliers. Only 78 contestants worked them all, compared to 162 last year and 296 in 2015.

For a good look at the effect the storms had on the Caribbean ham community, check out the extensive coverage presented in the CW Sweepstakes online report at www.arrl.org/contest-results-articles.

Propagation Effects

We thought last year's propagation conditions were bad, but please, bring them back! Average Top Ten scores continued their slide, and even the high-power categories suffered this year. The only bright spots were SOUHP (U), up by 5%, boosted by KH7XS's superb effort (beating all entrants regardless of category) and School Club (S) which managed a 15% increase. The table below summarizes the changes from last year's results:

Category	Top Ten 2017 Average	Top Ten 2016 Average	Change from 2016 to 2017
SOHP	275,944	305,471	-9.7%
SOLP	148,579	151,628	-2.0%
SOQRP	35,603	44,424	-19.8%
SOUHP	275,519	262,214	+5.1%
SOLUP	132,597	137,748	-3.7%
MSHP	240,181	252,486	-4.9%
MSLP	109,719	132,936	-17.5%
S	71,920	62,549	+15.0%

Oh well, a touch of grey / Kinda suits [us] anyway...

In an op-ed appearing in the March/April 2018 issue of the *National Contest Journal* (NCJ), Al, KØAD and Bill, WØOR discuss their long history of SS participation, and ask "Is ARRL November Sweepstakes due for some changes?" They suggest that indeed it may be and put forth several ideas for consideration.

Most of their proposals involve modifying the time-on-air rules, either changing the start time to earlier in the day or shortening the contest altogether. As WØOR states, "A lot of us are aging and experience more fatigue. Staying in that chair for 24 hours out of 30 gets tougher and tougher."

The article was thought-provoking and led the authors to sort the current results table in a new way: by on-time. The results were surprising, and certainly align with the gist of the op-ed piece. Out of the 1,674 logs submitted, just 60

show a full-time, 24-hour effort. Within that group, 21 are Multioperator entries, leaving a paltry 39 Single-ops who went the distance — SAD!

As for the “aging” claim, we ran an analysis of what was sent for the *Check* for the past five years. The results appear in the table below. (“Check” is the Sweepstakes exchange element representing the year an operator’s first amateur license was issued.)

Contest Year	Years Licensed					
	0-10	11-20	21-30	31-40	41-50	>50
	Fraction of entrants (%)					
2013	16.0	10.6	13.6	17.7	19.0	23.1
2014	16.0	10.6	13.6	17.7	18.8	23.3
2015	18.1	9.8	14.1	16.0	18.2	23.7
2016	18.9	8.9	14.1	12.5	20.4	25.2
2017	19.3	8.7	13.9	10.4	21.3	26.4

There were several anecdotal comments on the score summary website 3830scores.com regarding the abundance of “newbies” worked. Indeed, the percentage of recently-licensed entries has been increasing, but not dramatically. The “old guys” still dominate the field, with nearly half of this year’s participants licensed prior to 1977.

Are KØAD and WØOR right? Are changes in order? Would such changes serve to encourage new, younger participants, or simply better accommodate the existing entrant population? As Scott, KØMD, the editor of *NCJ* says in the same issue, “If you feel strongly about this particular issue ... share your thoughts with your ARRL Division Director...”

Accuracy Matters

The Sweepstakes exchange has five distinct elements, none of which is a “gimme” (like “59”). All of the elements must be received and logged correctly to get credit for a QSO. The League’s log-checking regimen is thorough – mistakes are virtually always discovered. Considering the deductions and penalties imposed for busted contacts, just a few errors can add up to a huge difference between claimed and official scores.

Any operator completing hundreds of QSOs while maintaining a low error rate deserves special mention. Thus, we present our Accuracy Honor Roll of those stations with an error rate of 1.0% or less and more than 400 QSOs. The list continues to shrink. In 2015 there were 36 who qualified, 17 made the cut last year, but just 11 appear this time.

Call Sign	Category	QSOs	Error Rate (%)
AE7AP	SOLP	407	0.2
K5TA	SOHP	1,550	0.7
KF9US	SOHP	455	0.7
K4WW	SOUHP	442	0.7
N9LQ	SOUHP	423	0.7
KY7M	SOUHP	421	0.7
WØSD	SOHP	1,538	0.8
(WØDB, op)			
ND8DX	MSHP	1,363	0.9
(+WV8SW)			
W3WC	SOUHP	460	0.9
KD4D	SOHP	1,410	1.0
VA7RR	SOLP	1,166	1.0

Official Log Checking Reports (LCR) for your entry are available at www.arrl.org/contest-log-checking-reports.

Reviewing those reports can be extremely valuable in assessing where your weaknesses lie and what you might work on to improve your accuracy next time.

Accuracy Honor Roll 2017

Around the Categories

Single-Op, High Power

2017 Top Ten in SOHP

	Call	Score	QSOs	Sec- tions	Loca- tion	Err. Rate (%)
1	W7WA	330,838	1,993	83	WWA	1.7
2	NR5M	314,736	1,896	83	STX	1.9
3	K7RAT (N6TR, op)	280,276	1,709	82	OR	1.8
4	K5TR (K5OT, op)	269,944	1,646	82	STX	2.1
5	WC6H	269,452	1,643	82	SJV	4.3
6	N4OX	267,592	1,612	83	NFL	1.6
7	KW8N	266,596	1,606	83	OH	3.1
8	W5IP (AA5B, op)	254,810	1,535	83	NM	1.8
9	K5TA	254,200	1,550	82	NM	0.7
10	K8AZ (K5TR, op)	250,992	1,512	83	OH	3.0

This year, no one moved into or out of the Top Ten in SOHP during log checking and there was just a little jostling of positions. The top three spots all stayed the same with Dan, W7WA, reclaiming the #1 position he owned in 2014 and 2015. George, NR5M, piloted his big STX station to 2nd place, about 16k behind Dan, while Tree, N6TR, operated under the K7RAT club call on phone for a change and finished 3rd.

It's interesting to contrast the comments on 3830scores.com by the top two stations and realize that there are multiple paths to a great contest outing. Dan's reads, "Struggled out of the gate due to the heavy QRM and difficult propagation, but things went smoother on Sunday," while George noted "Great out of the gate, but the 80 meter Yagi failed at about 10:30 PM local...spent about 45 minutes of high rate time to fix it." BIC ("butt in chair") and fighting through adversity are always important.

Jay, N4OX, in NFL had his best finish ever in this category, slotting in at #6. He was bracketed by two very familiar figures in the Top Ten — WC6H (Rich, in the SJV section) in 5th place and KW8N (Bob, in Ohio) in 7th. Bob had terrible rain and snow static throughout the weekend.

Two operators from New Mexico made it into the Top Ten again this year. Scott, K5TA, fought through the bad propagation using only simple wire antennas and finished in 9th place. This time he also had to contend with some very nasty local RFI plaguing the low bands. Bruce, AA5B, ditched his dipoles at home and guest-operated W5IP's station. He ended up in 8th place, just a few QSOs ahead of Scott.

It's not very often that a particular call sign appears in a Top Ten box twice, but that's the case with "K5TR" this time. After winning this category from his home station last year, George, K5TR, hit the road again in his quest to operate Phone Sweepstakes from different parts of the country. This marks his 39th consecutive year operating the contest! He piloted K8AZ in Ohio this time, finishing in 10th place, while Larry, K5OT, manned George's station back home and fought his way to 4th place!



George, K5TR at the controls of the impressive K8AZ hardware. (Photo by Tom Lee, K8AZ)



The antenna system at K8AZ in Ohio (Photo by Tom Lee, K8AZ)

Single-Op, Low Power

2017 Top Ten in SOLP

	Call	Score	QSOs	Sec- tions	Loca- tion	Err. Rate (%)
1	VA7RR	191,224	1,166	82	BC	1.0
2	N4PN	178,948	1,078	83	GA	5.7
3	N8II	171,708	1,047	82	WV	1.8
4	K9ZO	171,644	1,034	83	IL	2.3
5	K9WZB	136,800	855	80	AZ	2.4
6	W3GRF (WR3R, op)	130,974	789	83	MDC	4.3
7	WD5K	128,904	786	82	NTX	2.2
8	WS9V	127,756	779	82	IL	3.3
9	ACØW	124,312	758	82	MN	4.3
10	VE5SF	123,520	772	80	SK	2.9

With conditions slipping, there were no SOLP scores over 200k in 2017 – the first time that’s happened since 2006. Yes, that’s an 11-year interval, right on cue.

Just as he did in 2016, VA7RR finished at the top of the heap this time around! This was the sixth low-power SS phone entry Gary has done from his city lot near Vancouver, BC. (He also won in 2011.) Almost two-thirds of his QSOs were on 20 meters, partly because of the better propagation there and partly because local powerline noise limits his ability to hear well on 40 and 80 meters. Why does he stick to the low power category? “I have neighbors close by in all directions except to the east, and interference to their electronics can be an issue if I am using an amp.”

Perennial contender N4PN (Paul in GA) was the runner-up this time. He was followed by N8II (Jeff in WV) with the exact same QSO total as last year but one fewer section. In 3rd place, K9ZO (Ralph, IL) was separated from N8II by the equivalent of about one-half QSO! Not surprisingly, Jeff and Ralph made about three-quarters of their contacts on 80 and 40 meters: Paul’s distribution was a little more skewed toward 20 meters but he still had more than half of his contacts on the low bands. This is indeed the trough of the sunspot cycle, and it shows.

Rounding out the Top Ten were plenty of familiar call signs:

- K9WZB (Garry, AZ), 4th in 2016.
- WR3R (Gary, MDC) using the PVRC Club call sign W3GRF to honor one of the club’s founders. Two-thirds of his QSOs were on 80 meters!

- WD5K (Tom, NTX) with half his contacts on 20 and 15 meters.
- WS9V (Jim, IL) who made three-quarters of his QSOs on the low bands.
- ACØW (Bill, MN) had a pretty even 80/40/20 split.
- VE5SF (Sam, SK) made two-thirds of his contacts on 20/15 meters.



Gary, VA7RR, winner of the single-op low-power category. (Photo by Gary Caldwell, VA7RR)

Single-Op, QRP

2017 Top Ten in SOQRP

	Call	Score	QSOs	Sec- tions	Loca- tion	Err. Rate (%)
1	NDØC	56,210	365	77	MN	0.5
2	VE6EX	51,198	371	69	AB	3.8
3	NA2AA	37,050	247	75	NNJ	1.2
4	WAØMHJ	34,602	237	73	MN	0.0
5	K5KJ	34,080	240	71	NTX	2.8
6	W4IM	33,672	244	69	VA	2.0
7	KA8SMA	33,086	233	71	MI	1.7
8	N3UR	31,098	219	71	MDC	1.3
9	N7FLT	24,684	187	66	MT	2.2
10	WAØROI	20,352	159	64	IA	8.5

As propagation conditions continue to deteriorate, the fortitude needed to spend a weekend “scream[ing] into a microphone over and over again...” as NA2AA describes his experience, becomes harder and harder to find. Once again, like last year, none of the Top Ten finishers in this category took advantage of the full 24-hour operating period. “Typical slog,” “15 was a washout,” “95% S&P” were some of the comments describing the “joys” of QRP. This year’s average SOQRP Top Ten score declined by

about 20% compared to 2016, which was a pretty poor year itself.

Certain operators however, relish the challenge, and actually specialize in low-power communication. Randy, NDØC, this year’s category winner, describes himself on his QRZ.com page: “Since 1980 I have operated exclusively QRP from my home station using either an old Ten Tec Argonaut 509 (3 watts) or a Yaesu FT-897D (running 5 watts). I have now retired both of those rigs, moving up to a Yaesu FTdx3000 in July, 2014, which I run only at 5 watts.”

Randy and Dan, VE6EX traded places this year – Randy was 2nd to Dan in 2016 but came out on top this time, helped by an excellent 0.5% error rate. Dan actually had a few more QSOs but Randy more than made up the deficit by working 77 sections, 8 more than Dan, and the most of anyone in the category.

VE3HG was the only entrant to have a positive take on the weekend. He finished in 13th place. In part, his post on 3830scores.com read, “Superb conditions for QRP. Little fading and often very quiet conditions made for few repeats and dozens of unsolicited reports on the strength of the QRP signal out of the new Elecraft KX-2.”

Waiter, I’ll have what he’s having!

Single-Op Unlimited, High Power

2017 Top Ten in SOUHP

	Call	Score	QSOs	Sec-tions	Loca-tion	Err. Rate (%)
1	KH7XS	348,268	2,098	83	PAC	1.3
2	KØEU	301,622	1,817	83	CO	2.1
3	N8OO	292,658	1,763	83	LA	2.3
4	K9CT	287,180	1,730	83	IL	1.5
5	W7RN (WX5S, op)	286,350	1,725	83	NV	3.0
6	K5RT	276,888	1,668	83	NTX	2.1
7	VE6SV (VE4GV, op)	251,412	1,533	82	AB	2.8
8	NØXR (@NØNI)	237,214	1,429	83	IA	2.8
9	W1SRD	236,882	1,427	83	SV	3.0
10	K3MM	236,716	1,426	83	MDC	1.1

Historically, the highest scores in this contest usually come from the SOHP or MOHP categories, but not this time. K4XS, operating from the newly-built “Big Island Contest Club” station KH7XS, was the only entry in any category reporting over 2,000 QSOs. Bill beat the SOHP winner by 105 QSOs, the top MSHP station by more than 250, and set a new Pacific Division category record in the process. Recent and frequent 1st-place finisher KØEU moved down to 2nd place (consolation prize: he still won the category on CW).

The remainder of the Top Ten are all familiar call signs (and mostly big or bigger stations!) — this category has stabilized both “horizontally” (across time) and “vertically” (across mode). With the exception of KH7XS, a station that didn’t exist until recently, all of this year’s Top Ten have appeared in three or four of the past five year’s Top Ten tables. That’s consistency! The same people tend to enter the SOUHP category on CW as well — half of the Phone Top Ten show up in this year’s CW lists.



Randy, NDØC, winner of the QRP category, at his MN station. (Photo by Randy Shirbroun, NDØC)

Single-Operator, Low Power, Unlimited

2017 Top Ten in SOULP

	Call	Score	QSOs	Sec- tions	Loca- tion	Err. Rate (%)
1	N4TP (W4LT, op)	206,874	1,277	81	WCF	4.0
2	N4ZZ	196,046	1,181	83	TN	1.1
3	W4AAA (KK9A, op)	185,090	1,115	83	NC	2.8
4	WB2P	146,246	881	83	SNJ	1.8
5	W3LL	116,532	702	83	MDC	3.8
6	KK7AC	111,132	686	81	AZ	1.7
7	VA3DF	99,548	607	82	ONS	2.2
8	KØNEB	93,972	573	82	NE	1.5
9	K4GMH	85,478	541	79	VA	4.4
10	N9SD	85,050	525	81	WI	1.7

Introduced in 2011, this category is just beginning to stabilize and mature. Last year, there were just three repeat Top Ten entries; this year there are six. And, just as the current SOUHP winner beat the top SOHP score, so did the SOULP winner best his SOLP counterpart. As a matter of fact, even the second-place SOULP had a better score than the first-place SOLP score.



The antennas at N4TP, the Tampa ARC club station, where W4LT operated and won SOULP. (Photo by Lu Romero, W4LT)

Lu, W4LT first entered this category in 2015, and won it. He slipped to 5th last year due to equipment and internet problems. Declining sunspots also forced him to spend more time on the lower bands, where his home-station antennas (on a small city lot) are less than optimal. This year, Lu had the opportunity to operate from the Tampa ARC club station N4TP where the antenna system better suits the current conditions. As he notes in his detailed

analysis of the effort, "... I can easily hold a frequency with LP using the TARC EF240X beam on 40. This antenna is the difference for my success in SS as the propagation for the high bands continues to slide into the abyss between cycle peaks." It worked very well for him — Lu finished first again this year by a comfortable 10,000-point margin.

Last year's winner, Don, N4ZZ, in TN, dropped to #2, followed by KK9A/W4AAA in NC. It's interesting to note that only one Top Ten spot was captured by a western station — KK7AC in AZ who defended his #6 rank. This seems to be an overall trend — the low-power categories are dominated by Easterners, while higher power suits the West.

Multioperator, High Power

2017 Top Ten in MSHP

	Call	Score	QSOs	Sec- tions	Loca- tion	Err. Rate (%)
1	W6YI	306,602	1,847	83	SDG	2.6
2	W5WZ	292,576	1,784	82	LA	3.7
3	WØNO	271,092	1,653	82	KS	5.3
4	NV9L	247,340	1,490	83	IL	1.3
5	ND8DX	226,258	1,363	83	OH	0.9
6	W1XX	225,926	1,361	83	RI	4.0
7	N3OC	215,136	1,296	83	MDC	2.1
8	KRØP	207,200	1,295	80	NE	7.7
9	W6PZ	205,010	1,235	83	SF	6.1
10	K8CC	204,672	1,248	82	MI	3.1

With a solid showing again this year, W6YI made it four wins in row in the MSHP category. The experienced Southern California Contest Club gang operating at Jim's station in the SDG section obviously has the teamwork, techniques, and hardware to weather even the roughest conditions.

Members of the Louisiana Contest Club often operate as W5RU (and often at KN50's station) but this year they invaded W5WZ's QTH. They had unusually good weather, no hardware problems at all, and finished a strong 2nd.

Familiar callsigns ABØS and KØWA teamed up with WØNO for a strong 3rd-place finish at WØNO's station in Kansas. Like many others, they missed the KP4 section.

The famous contesting couple of Val, NV9L, and Jerry, WB9Z, operated their way to 4th place from their very fine station in Illinois.

W1XX (K1XA and W1XX operating) discovered during the CW weekend that their 80 meter 4-square wasn't very

effective for stateside QSOs so they put up a dipole at 100 feet before the Phone weekend. It worked just fine, thanks, and they ended up with more contacts on 80 than on 20 meters. Bob and John provided the Rhode Island multiplier to enough folks to make it into 6th place this year.

Alan, K6SRZ, writes: “Saraj (KU6F) and I worked from my home station with club call W6PZ (a very good call for sideband contests). This year’s Phone Sweepstakes was memorable for coming within weeks of the huge wildfire that tore through Sonoma County, destroying some seven thousand homes. One of those destroyed homes was the KU6F QTH. Within minutes, their family lost everything save for the car that Saraj used to escape the flames. By the time of Sweepstakes, Saraj, her husband, her son, two cats, and Bailey the Dog were living with me and my wife and trying to put their lives back together. The Cory Family now has a new home and Saraj has some donated radio gear to help get back on the air. We all have our health and we’ll be back this fall.” Congratulations on the Top-Ten finish, Alan and Saraj.



KU6F operating W6PZ (@K6SRZ) while Bailey snoozes nearby. (Photo by Alan Eshleman, K6SRZ)



N6KI, N6WIN, and K6AM at the winning W6YI multi-op. (Photo by Jim Stevenson, W6YI)



Looking up through 46 elements of the W5WZ antenna farm. (Photo by Scott Dickson, W5WZ)



ABØS and KØWA at the WØNO multi-op. (Photo by Lee Buller, KØWA)

Multioperator, Low Power

2017 Top Ten in MSLP

	Call	Score	QSOs	Sec-tions	Loca-tion	Err. Rate (%)
1	WW4LL	211,982	1,277	83	GA	2.3
2	WZ8P	177,120	1,080	82	OH	4.5
3	K5KU	123,836	746	83	LA	2.7
4	K9KE	113,816	694	82	IL	1.5
5	W9ET	86,184	532	81	WI	4.9
6	K8TE	82,080	540	76	CO	6.3
7	WN1G	80,514	497	81	AL	2.3
8	W1QK	78,720	480	82	CT	3.4
9	WX4W	77,262	489	79	KY	2.2
10	VA2CZ	65,676	421	78	QC	11.7

In general, low-power operators get hit harder by the poor conditions, and the Multiop category was no exception — only one entry scored higher than 200k points in 2017. That entry was WW4LL in Georgia, winning the MSLP category for the 1st time and in only their second try! The team of K4NV, NN9DD, and WW4LL also managed a Clean Sweep, a rarity in the category.



Dennis, K4NV, crankin' away at the winning WW4LL multi-op. (Photo by Steve Jurasek, N9ZE)

WZ8P, winner of the MSLP category in 2015 and 2014, finished 2nd this time around. K5KU in Louisiana finished in 3rd place and had the only other Clean Sweep in the MSLP Top Ten.



Most of the crew at the K9KE Multiop: K9KE, KC9IUU, W9YK, and AC9QS. (Photo by Steve Jurasek, N9ZE)

School Club Station

2017 Top Ten in S

	Call	Score	QSOs	Sec-tions	Loca-tion	Err. Rate (%)
1	KØHC	211,152	1,272	83	KS	1.5
2	W4AQL	100,764	622	81	GA	3.3
3	WØEEE	91,692	566	81	MO	5.7
4	W8EDU	61,776	396	78	OH	6.0
5	W5YM	61,146	387	79	AR	3.5
6	W6RFU	43,792	322	68	SB	2.7
7	KF5CRF	40,080	334	60	OK	3.5
8	K9IU	38,544	264	73	IN	5.9
9	WD5AGO	35,624	244	73	OK	2.0
10	W4UAL	34,632	222	78	AL	7.6

As was the case in 2016, and 2015, and 2014, and 2013 (can you say “dynasty?”), the winner in the School Club Category in 2017 was KØHC, the club station of Hesston College. The team was captained by Bob, WØBH, but included six students from aviation, computer science, nursing, and disaster management. Bob says, “Gracie, Grace, Ryan, DJ, Amos and Tyson (all unlicensed), spent a good part of their weekend enjoying working all of you and chasing the Sweep. Before Sweeps, we got in two months of practice including evening sessions in the computer lab and operating the California QSO Party. The practice paid off. Our rates always seemed to pick up when Gracie and Grace took the microphone, so we gave them as much air time as possible.” The team at KØHC outdistanced its nearest competitor by more than a factor of 2 this year – wow!

Says David, AD8Y: “The Case Amateur Radio Club of Case Western Reserve University, W8EDU, has enjoyed

Phone Sweepstakes. We have had participants ranging from experienced amateurs to complete beginners, about twenty each session. Cleveland, Ohio weather in November is "iffy" at best; we have had sleet storms that stop our rotors, difficulty getting to our rooftop station, and so on – but we have gotten on the air, made contacts, taught new operators how to use our HF operating positions, and enjoyed ourselves quite a lot. The contest has certainly helped our cause as a student and departmental activity at the university. Department chairs and university presidents like seeing plaques and score listings with the university name.”

Other schools represented in the Top Ten were Georgia Tech (W4AQL), Missouri S&T (WØEEE), University of Arkansas (W5YM), University of California at Santa Barbara (W6RFU), Mangum (Oklahoma) Public Schools (KF5CRF), Indiana University (K9IU), Tulsa Community College (WD5AGO), and the University of Alabama (W4UAL). Congratulations to all!



Case Western club (W8EDU) vice-president Rachel, AC8XY (junior math major, electrical engineering minor), coaches a visitor in contest operation. (Photo by David Kazdan, AD8Y)

Club Competition

The lively competition among ARRL-affiliated clubs is often credited with generating extra activity on the bands – a welcome outcome for everyone! The coveted prize is a gavel, awarded to the top club in each of three categories.



The winners for 2017 are:

- Potomac Valley Radio Club – Unlimited Category (>50 entries, ≤175-mile radius)

- Mother Lode DX/Contest Club – Medium Category (≤50 entries, ≤175-mile radius)
- New Mexico Big River Contesters – Local Category (≤10 entries, ≤35-mile radius)

PVRC and Mother Lode are repeat winners (this makes three years in a row for Mother Lode, 10 years in a row for PVRC ... wow!). NMBRC managed to cobble together 10 entries this year and win the Local Club category for the first time since 2012.

Affiliated Club Competition

Club	Score	Entries
Unlimited		
Potomac Valley Radio Club	16,051,259	289
Society of Midwest Contesters	7,162,422	138
Minnesota Wireless Assn	4,656,992	116
Yankee Clipper Contest Club	4,485,088	87
Frankford Radio Club	4,334,800	61
Medium		
Mother Lode DX/Contest Club	3,824,930	48
Mad River Radio Club	3,031,784	47
Southern California Contest Club	2,732,196	34
Florida Contest Group	2,290,130	34
DFW Contest Group	2,281,624	36
Arizona Outlaws Contest Club	2,271,784	39
Northern California Contest Club	2,054,080	39
Contest Club Ontario	1,900,784	41
Alabama Contest Group	1,779,284	30
Western Washington DX Club	1,424,954	19
Tennessee Contest Group	1,385,544	20
Central Texas DX and Contest Club	1,080,210	15
Big Sky Contesters	1,044,618	11
Kentucky Contest Group	864,768	16
Kansas City Contest Club	834,250	12
South East Contest Club	807,990	8
Hudson Valley Contesters and DXers	777,080	16
North Coast Contesters	722,530	9
Mississippi Valley DX/Contest Club	689,108	9
Grand Mesa Contesters of Colorado	637,162	12
Willamette Valley DX Club	636,068	11
Georgia Contest Group	616,490	7
Sussex County ARC	570,786	6
North Texas Contest Club	548,598	7
Northeast Maryland Amateur Radio Contest Society	541,374	16
Niagara Frontier Radiosport	444,914	16
Texas DX Society	352,200	8
Radiosport Manitoba	337,388	5
Order of Boiled Owls of New York	305,336	8
South Jersey DX Assn	254,862	6
Carolina DX Association	242,756	5
Contoocook Valley Radio Club	240,273	3
Rochester (NY) DX Assn	218,930	7
South Jersey Radio Assn	218,524	7
Swamp Fox Contest Group	176,142	5
Allegheny Valley Radio Association	170,184	3
West Park Radiops	146,632	4
Metro DX Club	89,372	4
Portage County Amateur Radio Service	88,958	5
Skyview Radio Society	73,856	5
Spokane DX Association	37,764	3
Southern Berkshire ARC	30,578	5
Bergen ARA	19,350	3

Local		
New Mexico Big River Contesters	1,456,806	10
Pizza Lovers 259	1,299,960	10
Redwood Empire DX Assn	620,206	8
Iowa DX and Contest Club	569,110	4
CTRI Contest Group	441,812	5
Midland ARC	319,804	4
Bristol (TN) ARC	275,064	8
Nashoba Valley ARC	173,318	5
Silver Comet Amateur Radio Society	143,018	6
Hilltop Transmitting Assn	74,842	4
Sunday Creek Amateur Radio Federation	70,240	5
Peace River Radio Assn	51,472	3
Hazel Park ARC	45,008	3
Stoned Monkey VHF ARC	15,802	3



Members of the New Mexico Big River Contesters, winner of the “Local” club competition. From left to right: (back) K5WO, NN5K, K5TQ, KE5AKL, W7QQ, (front) K5TA, AA5B, W5IP, and KK6MC. Missing at the time the photo was taken: N5HC. (Photo by Bruce Draper, AA5B)

Using Spots on Phone

How do you use the spotting network information on Phone? On CW, there is a wealth of accurate spots emanating from the network of Reverse Beacon Net nodes running *CW Skimmer* network, reversebeacon.net. As a result, the second-radio bandmap is usually populated with a number of point-and-shoot opportunities which can be worked with a click or a keystroke. Not so on SSB. In preparing this report, we posed that question to the Top Ten finishers in the Unlimited categories and the responses tended to focus on a few key issues:

1. Hunting multipliers

Almost everyone cited “fear of missing a section” or an equivalent sentiment as the first and foremost reason for using spots. Most people ignore or just casually watch them for the first 6-10 hours of the contest. This is when rates are high and it’s not good practice to risk losing a run

frequency to chase a mult unless it’s a known rare one (KP4?) or a difficult path (KH7XS remarked that “VO1/VO2/VE1 are over a thousand miles further away than JA...”). That calculus changes, however, when things slow down.

2. Checking propagation

Another popular use of the cluster is keeping an eye on conditions and activity on bands other than the current run band. (A text-based panadapter?) If loads of stations from densely-populated areas begin appearing, it may be advantageous to QSY. Alternatively, if spots from a direction of a much-needed mult show up, it’s probably time to pay attention. With apologies to Percy Bysshe Shelley, “...if [VE7] comes, can [VY1] be far behind?”

3. Choosing when (not) to take a break or change bands

In addition to paying attention to reports of potential new QSOs or multipliers, a number of respondents indicated that they watch for their own call to be spotted by others while they are running. As long as those spots keep appearing, they tend to stay on the air, on the spotted frequency, until any callers alerted by those spots have had a chance to call in.



Paul Blumhardt, K5RT submitted this photo with the question “Does this reclassify me to Multi-Op?” No, but definitely Assisted.

4. Surviving Sunday

On Sunday, things change dramatically and spots become much more meaningful as rates drop and the number of needed sections dwindles to a handful. Then every new QSO is gold so spots can be extremely useful. They are

useful even given the awkwardness many people noted, whether equipped for SO2R or not, in switching to S&P, working the station (actually having to speak!), and returning to the run frequency. An interesting point mentioned by several participants is the questionable quality of cluster information compared to CW. Skimmers don't generally miscopy call signs; people sometimes do!

Most of the responses we received concentrated on those four areas, with just a few additional topics raised. Craig, K9CT enjoys spotting the stations he works to help the overall data stream. He also likes to help boost his club's score by spotting fellow SMCers whenever he runs across them. Randy, KØEU, says he enters the SOUHP category to have a better chance at a Top Ten finish and maybe a plaque.

A Reminder About the Rules

The posted rules seem clear to most operators, but there are always some whose interpretation stretches the boundaries. This year, as usual, the most violated rule involved the elements of the exchange. Here's the exact rule:

“The required exchange consists of (1) a consecutive serial number, (2) precedence (Q/A/B/U/M/S), (3) your call sign, (4) check (2-digit year), and (5) ARRL/RAC Section. For example: K1AAA would respond to W1AW's call by sending: W1AW 123 B K1AAA 71 CT, which indicates QSO number 123, B for Single Op High Power, K1AAA, first licensed in 1971, and in the Connecticut section.”

Despite the clarity of those couple of sentences, many folks repeatedly left out their call sign in order to speed up the exchange. It's an understandable gaff for casual or inexperienced operators who are just jumping in to make a few contacts, but not for others who are vying for the top positions. Leaving out any element of the exchange is not okay and grounds for disqualification.

Final Thoughts

If you've read this far, you've seen the data and had time to think about it. Is Sweepstakes broken? No! There were 400,000 QSOs in almost 1,700 logs submitted this year, some new section/division records were set, and new blood participated. Yes, some tweaks might be in order — we could use some timely advertising and coaching next October, and might welcome some new incentives that would increase activity on Sunday (how about a new 12-hour category that starts at 1000Z?), but major changes that would alter the character of this time-honored contest aren't needed and would be a mistake.

See You Again In November!

What surprises will the bands bring in 2018's edition of Phone Sweepstakes? Will 10 and 15 meters rebound? Will 40 stay solid all night? Will there be another uptick in participation? Tune in on November 17-18 and find out!

ARRL Sweepstakes 2018 — Sponsored Plaque Winners

ARRL is pleased to award a Sweepstakes Plaque to the Overall and Division Leaders in each category, thanks to Icom America and numerous clubs and individuals who sponsor these awards. For more information on plaque sponsorship, or to order a duplicate plaque, contact ARRL Contest Branch Manager Bart Jahnke, W9JJ, at 860-594-0232 or w9jj@arrl.org. Plaques cost \$75, which includes all shipping charges.

Winner	Division	Category	Sponsor
W7WA	Overall	Single Operator High Power Phone	Icom America
VA7RR	Overall	Single Operator Low Power Phone	ARRL Contest Branch - Ken Adams, K5KA Memorial
NDØC	Overall	Single Operator QRP Phone	Icom America
KH7XS	Overall	Single Operator Unlimited High Power Phone	Icom America
N4TP (W4LT, op)	Overall	Single Operator Unlimited Low Power Phone	Icom America
W6YI	Overall	Multioperator High Power Phone	Icom America
WW4LL	Overall	Multioperator Low Power Phone	Icom America
KØHC (WØBH, op)	Overall	School Club Phone	Icom America
KD4D	Atlantic Division	Single Operator High Power Phone	Icom America
W3GRF (WR3R, op)	Atlantic Division	Single Operator Low Power Phone	Potomac Valley Radio Club
N3UR	Atlantic Division	Single Operator QRP Phone	Icom America
K3MM	Atlantic Division	Single Operator Unlimited High Power Phone	Icom America
WB2P	Atlantic Division	Single Operator Unlimited Low Power Phone	Icom America
N3OC	Atlantic Division	Multioperator High Power Phone	Icom America
W3ZGD	Atlantic Division	Multioperator Low Power Phone	Icom America
K2ZWI (NW2K, op)	Atlantic Division	School Club Phone	Icom America
KØPJ	Central Division	Single Operator High Power Phone	Society Of Midwest Contesters
K9ZO	Central Division	Single Operator Low Power Phone	Society Of Midwest Contesters
K9ARF	Central Division	Single Operator QRP Phone	Icom America
K9CT	Central Division	Single Operator Unlimited High Power Phone	Society of Midwest Contesters
N9SD	Central Division	Single Operator Unlimited Low Power Phone	Society of Midwest Contesters
NV9L	Central Division	Multioperator High Power Phone	Icom America
K9KE	Central Division	Multioperator Low Power Phone	Icom America
K9IU	Central Division	School Club Phone	Icom America
WØSD (WØDB, op)	Dakota Division	Single Operator High Power Phone	Minnesota Wireless Association - In memory of Tod Olson, KØTO
ACØW	Dakota Division	Single Operator Low Power Phone	Minnesota Wireless Association
NDØC	Dakota Division	Single Operator QRP Phone	Icom America
K1KD	Dakota Division	Single Operator Unlimited High Power Phone	Minnesota Wireless Association
NØUR	Dakota Division	Single Operator Unlimited Low Power Phone	Minnesota Wireless Association
KØFVF	Dakota Division	Multioperator High Power Phone	Icom America
KØAJW	Dakota Division	Multioperator Low Power Phone	Icom America
KØEJ	Delta Division	Single Operator High Power Phone	Icom America
K5FUV	Delta Division	Single Operator Low Power Phone	Icom America
N8OO	Delta Division	Single Operator Unlimited High Power Phone	Icom America
N4ZZ	Delta Division	Single Operator Unlimited Low Power Phone	Icom America
W5WZ	Delta Division	Multioperator High Power Phone	Icom America

K5KU	Delta Division	Multioperator Low Power Phone	Icom America
W5YM	Delta Division	School Club Phone	Icom America
KW8N	Great Lakes Division	Single Operator High Power Phone	Icom America
WB8WKQ	Great Lakes Division	Single Operator Low Power Phone	Icom America
KA8SMA	Great Lakes Division	Single Operator QRP Phone	Icom America
W8MJ	Great Lakes Division	Single Operator Unlimited High Power Phone	Icom America
KØACP	Great Lakes Division	Single Operator Unlimited Low Power Phone	Icom America
ND8DX	Great Lakes Division	Multioperator High Power Phone	Icom America
WZ8P	Great Lakes Division	Multioperator Low Power Phone	Icom America
W8EDU (AD8Y, op)	Great Lakes Division	School Club Phone	Icom America
W2RQ	Hudson Division	Single Operator High Power Phone	Icom America
KS2G	Hudson Division	Single Operator Low Power Phone	Icom America
NA2AA	Hudson Division	Single Operator QRP Phone	Icom America
KD2RD	Hudson Division	Single Operator Unlimited High Power Phone	Icom America
N2SQW	Hudson Division	Single Operator Unlimited Low Power Phone	Icom America
WA2CP	Hudson Division	Multioperator High Power Phone	Icom America
NY6DX	Hudson Division	Multioperator Low Power Phone	Icom America
WØEWD	Midwest Division	Single Operator High Power Phone	Icom America
WAØRVK	Midwest Division	Single Operator Low Power Phone	Icom America
WAØROI	Midwest Division	Single Operator QRP Phone	Icom America
NØXR (@NØNI)	Midwest Division	Single Operator Unlimited High Power Phone	Icom America
KØNEB	Midwest Division	Single Operator Unlimited Low Power Phone	Icom America
WØNO	Midwest Division	Multioperator High Power Phone	Icom America
NØPVZ	Midwest Division	Multioperator Low Power Phone	Icom America
KØHC (WØBH, op)	Midwest Division	School Club Phone	Icom America
NC1I (K9PW, op)	New England Division	Single Operator High Power Phone	Icom America
KC1SQ	New England Division	Single Operator Low Power Phone	Icom America
KJ2G	New England Division	Single Operator QRP Phone	Icom America
W1SJ	New England Division	Single Operator Unlimited High Power Phone	Icom America
K1DJ	New England Division	Single Operator Unlimited Low Power Phone	Icom America
W1XX	New England Division	Multioperator High Power Phone	Icom America
W1QK	New England Division	Multioperator Low Power Phone	Icom America
W1YK	New England Division	School Club Phone	Icom America
W7WA	Northwestern Division	Single Operator High Power Phone	Icom America
AA7UN	Northwestern Division	Single Operator Low Power Phone	Icom America
N7FLT	Northwestern Division	Single Operator QRP Phone	Icom America
K7RI	Northwestern Division	Single Operator Unlimited High Power Phone	Icom America
KB7HDX	Northwestern Division	Single Operator Unlimited Low Power Phone	Icom America
NK7J	Northwestern Division	Multioperator High Power Phone	Icom America
KL4SD	Northwestern Division	Multioperator Low Power Phone	Icom America
WC6H	Pacific Division	Single Operator High Power Phone	Icom America
NJ6G	Pacific Division	Single Operator Low Power Phone	Icom America

WB6CZG	Pacific Division	Single Operator QRP Phone	Icom America
KH7XS	Pacific Division	Single Operator Unlimited High Power Phone	Icom America
K6GHA	Pacific Division	Single Operator Unlimited Low Power Phone	Icom America
W6PZ	Pacific Division	Multioperator High Power Phone	Icom America
N6ACL	Pacific Division	Multioperator Low Power Phone	Icom America
WØCN	Roanoke Division	Single Operator High Power Phone	Icom America
N8II	Roanoke Division	Single Operator Low Power Phone	Icom America
W4IM	Roanoke Division	Single Operator QRP Phone	Icom America
W4MYA	Roanoke Division	Single Operator Unlimited High Power Phone	Icom America
W4AAA (KK9A, op)	Roanoke Division	Single Operator Unlimited Low Power Phone	Icom America
NWØG	Roanoke Division	Multioperator High Power Phone	Icom America
W4TG	Roanoke Division	Multioperator Low Power Phone	Icom America
K4KDJ (KK4BSM, op)	Roanoke Division	School Club Phone	Icom America
W5IP (AA5B, op)	Rocky Mountain Division	Single Operator High Power Phone	Icom America
N7MZW	Rocky Mountain Division	Single Operator Low Power Phone	Icom America
K7DLX	Rocky Mountain Division	Single Operator QRP Phone	Icom America
KØEU	Rocky Mountain Division	Single Operator Unlimited High Power Phone	Icom America
KØUK	Rocky Mountain Division	Single Operator Unlimited Low Power Phone	Icom America
NN5K	Rocky Mountain Division	Multioperator High Power Phone	Icom America
K8TE	Rocky Mountain Division	Multioperator Low Power Phone	Icom America
KUØC	Rocky Mountain Division	School Club Phone	Icom America
N4OX	Southeastern Division	Single Operator High Power Phone	Icom America
N4PN	Southeastern Division	Single Operator Low Power Phone	Icom America
KJ4M	Southeastern Division	Single Operator QRP Phone	Icom America
KT4Q	Southeastern Division	Single Operator Unlimited High Power Phone	Icom America
N4TP (W4LT, op)	Southeastern Division	Single Operator Unlimited Low Power Phone	Icom America
KG4QIV	Southeastern Division	Multioperator High Power Phone	Icom America
WW4LL	Southeastern Division	Multioperator Low Power Phone	Icom America
W4AQL	Southeastern Division	School Club Phone	Icom America
W6AFA	Southwestern Division	Single Operator High Power Phone	Icom America
K9WZB	Southwestern Division	Single Operator Low Power Phone	Icom America
KK6ABZ	Southwestern Division	Single Operator QRP Phone	Icom America
NX6T (KK6NON, op)	Southwestern Division	Single Operator Unlimited High Power Phone	Icom America
KK7AC	Southwestern Division	Single Operator Unlimited Low Power Phone	Icom America
W6YI	Southwestern Division	Multioperator High Power Phone	Icom America
AG6IT	Southwestern Division	Multioperator Low Power Phone	Icom America
W6RFU (W6AAF, op)	Southwestern Division	School Club Phone	Icom America
NR5M	West Gulf Division	Single Operator High Power Phone	Icom America
WD5K	West Gulf Division	Single Operator Low Power Phone	Icom America
K5KJ	West Gulf Division	Single Operator QRP Phone	Icom America
K5RT	West Gulf Division	Single Operator Unlimited High Power Phone	Icom America
NT5V	West Gulf Division	Single Operator Unlimited Low Power Phone	Icom America

W5RRR	West Gulf Division	Multioperator High Power Phone	Icom America
W5QGG	West Gulf Division	Multioperator Low Power Phone	Icom America
KF5CRF	West Gulf Division	School Club Phone	Icom America
VE3YT	Canada Division	Single Operator High Power Phone	Icom America
VA7RR	Canada Division	Single Operator Low Power Phone	Icom America
VE6EX	Canada Division	Single Operator QRP Phone	Icom America
VE6SV (VE4GV, op)	Canada Division	Single Operator Unlimited High Power Phone	Icom America
VA3DF	Canada Division	Single Operator Unlimited Low Power Phone	Icom America
CG6AO	Canada Division	Multioperator High Power Phone	Icom America
VA2CZ	Canada Division	Multioperator Low Power Phone	Icom America
VE9UNB	Canada Division	School Club Phone	Icom America

Division Winners

Single Operator, High Power

Atlantic	KD4D	234,060
Central	KØPJ	216,298
Dakota	WØSD (WØDB, op)	249,156
Delta	KØEJ	97,736
Great Lakes	KW8N	266,596
Hudson	W2RQ	217,792
Midwest	WØEWD	229,878
New England	NC1I (K9PW, op)	248,502
Northwestern	W7WA	330,838
Pacific	WC6H	269,452
Roanoke	WØCN	213,516
Rocky Mountain	W5IP (AA5B, op)	254,810
Southeastern	N4OX	267,592
Southwestern	W6AFA	125,424
West Gulf	NR5M	314,736
Canada	VE3YT	111,188

Single Operator, Low Power

Atlantic	W3GRF (WR3R, op)	130,974
Central	K9ZO	171,644
Dakota	ACØW	124,312
Delta	K5FUV	58,016
Great Lakes	WB8WKQ	122,766
Hudson	KS2G	34,848
Midwest	WAØRVK	39,026
New England	KC1SQ	58,800
Northwestern	AA7UN	107,092
Pacific	NJ6G	78,526
Roanoke	N8II	171,708
Rocky Mountain	N7MZV	89,550
Southeastern	N4PN	178,948
Southwestern	K9WZB	136,800
West Gulf	WD5K	128,904
Canada	VA7RR	191,224

Single Operator, QRP

Atlantic	N3UR	31,098
Central	K9ARF	19,698
Dakota	NDØC	56,210
Great Lakes	KA8SMA	33,086
Hudson	NA2AA	37,050
Midwest	WAØROI	20,352
New England	KJ2G	10,800
Northwestern	N7FLT	24,684
Pacific	WB6CZG	15,048
Roanoke	W4IM	33,672
Rocky Mountain	K7DLX	7,200
Southeastern	KJ4M	9,604
Southwestern	KK6ABZ	2,112
West Gulf	K5KJ	34,080
Canada	VE6EX	51,198

Single Operator Unlimited, High Power

Atlantic	K3MM	236,716
Central	K9CT	287,180
Dakota	K1KD	211,982
Delta	N8OO	292,658
Great Lakes	W8MJ	203,682
Hudson	KD2RD	199,680
Midwest	NØXR (@NØNI)	237,214
New England	W1SJ	224,764

Northwestern	K7RI	175,152
Pacific	KH7XS	348,268
Roanoke	W4MYA	202,520
Rocky Mountain	KØEU	301,622
Southeastern	KT4Q	156,206
Southwestern	NX6T (KK6NON, op)	209,990
West Gulf	K5RT	276,888
Canada	VE6SV (VE4GV, op)	251,412

Single Operator Unlimited, Low Power

Atlantic	WB2P	146,246
Central	N9SD	85,050
Dakota	NØUR	62,568
Delta	N4ZZ	196,046
Great Lakes	KØACP	57,186
Hudson	N2SQW	59,840
Midwest	KØNEB	93,972
New England	K1DJ	35,076
Northwestern	KB7HDX	41,144
Pacific	K6GHA	73,720
Roanoke	W4AAA (KK9A, op)	185,090
Rocky Mountain	KØUK	27,040
Southeastern	N4TP (W4LT, op)	206,874
Southwestern	KK7AC	111,132
West Gulf	NT5V	70,356
Canada	VA3DF	99,548

Multioperator, Single Transmitter, High Power

Atlantic	N3OC	215,136
Central	NV9L	247,340
Dakota	KØFVF	116,112
Delta	W5WZ	292,576
Great Lakes	ND8DX	226,258
Hudson	N2NC	171,810
Midwest	WØNO	271,092
New England	W1XX	225,926
Northwestern	NK7J	153,668
Pacific	W6PZ	205,010
Roanoke	NWØG	126,444
Rocky Mountain	NN5K	187,912
Southeastern	KG4QIV	36,010
Southwestern	W6YI	306,602
West Gulf	W5RRR	108,230
Canada	CG6AO	196,480

Multioperator, Single Transmitter, Low Power

Atlantic	W3ZGD	40,736
Central	K9KE	113,816
Dakota	KØAJW	27,738
Delta	K5KU	123,836
Great Lakes	WZ8P	177,120
Hudson	NY6DX	36,354
Midwest	NØPVZ	30,000
New England	W1QK	78,720
Northwestern	KL4SD	29,568
Pacific	N6ACL	16,610
Roanoke	W4TG	56,826
Rocky Mountain	K8TE	82,080
Southeastern	WW4LL	211,982
Southwestern	AG6IT	24,978
West Gulf	W5QGG	49,140
Canada	VA2CZ	65,676

School Club

Atlantic	K2ZWI	33,098
Central	K9IU	38,544
Delta	W5YM	61,146
Great Lakes	W8EDU	61,776
Midwest	KØHC	211,152
New England	W1YK	16,348
Roanoke	K4KDJ	572
Rocky Mountain	KUØC	13,456
Southeastern	W4AQL	100,764
Southwestern	W6RFU	43,792
West Gulf	KF5CRF	40,080
Canada	VE9UNB	8,600

Regional Leaders

West Coast Region

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

W7WA	330,838	SOHP
K7RAT (N6TR, op)	280,276	SOHP
WC6H	269,452	SOHP
N9RV	217,792	SOHP
N6JS	185,760	SOHP
VA7RR	191,224	SOLP
K9WZB	136,800	SOLP
AA7UN	107,092	SOLP
WN6K	103,356	SOLP
WZ8T	92,340	SOLP
VE6EX	51,198	SOQRP
N7FLT	24,684	SOQRP
WB6CZG	15,048	SOQRP
K2GMY	7,310	SOQRP
W6VH	4,680	SOQRP
KH7XS	348,268	SOUHP
W7RN (WX5S, op)	286,350	SOUHP
VE6SV (VE4GV, op)	251,412	SOUHP
W1SRD	236,882	SOUHP
NX6T (KK6NON, op)	209,990	SOUHP
KK7AC	111,132	SOUHP
K6GHA	73,720	SOUHP
KD6WKY	62,832	SOUHP
KØRG	48,640	SOUHP
W6OAT	48,506	SOUHP
W6YI	306,602	MSHP
W6PZ	205,010	MSHP
CG6AO	196,480	MSHP
NK7J	153,668	MSHP
W1RH	152,848	MSHP
KL4SD	29,568	MSLP
AG6IT	24,978	MSLP
N6ACL	16,610	MSLP
VE7NA	11,232	MSLP
W6ZZK	7,544	MSLP
W6RFU	43,792	S

Midwest Region

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

NR5M	314,736	SOHP
K5TR (K5OT, op)	269,944	SOHP
W5IP (AA5B, op)	254,810	SOHP
K5TA	254,200	SOHP
WØSD (WØDB, op)	249,156	SOHP
WD5K	128,904	SOLP
ACØW	124,312	SOLP
VE5SF	123,520	SOLP
NØKK (@NØAT)	103,806	SOLP
N7MZW	89,550	SOLP

NDØC	56,210	SOQRP
WAØMHJ	34,602	SOQRP
K5KJ	34,080	SOQRP
WAØROI	20,352	SOQRP
N5SEZ	11,000	SOQRP
KØEU	301,622	SOUHP
K5RT	276,888	SOUHP
NØXR (@NØNI)	237,214	SOUHP
VE4VT (VE4EAR, op)	214,812	SOUHP
K1KD	211,982	SOUHP
KØNEB	93,972	SOUHP
VE5ZX	83,930	SOUHP
NWØM	74,620	SOUHP
NT5V	70,356	SOUHP
NØUR	62,568	SOUHP
WØNO	271,092	MSHP
KRØP	207,200	MSHP
NN5K	187,912	MSHP
NØMA	164,492	MSHP
KØFVF	116,112	MSHP
K8TE	82,080	MSLP
W5QGG	49,140	MSLP
NØPVZ	30,000	MSLP
K5LRW	28,842	MSLP
KØAJW	27,738	MSLP
KØHC	211,152	S
WØEEE	91,692	S
KF5CRF	40,080	S
WD5AGO	35,624	S
KUØC	13,456	S

Central Region

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

KW8N	266,596	SOHP
K8AZ (K5TR, op)	250,992	SOHP
KØPJ	216,298	SOHP
ND4Y	204,014	SOHP
W8PSP	132,516	SOHP
K9ZO	171,644	SOLP
WS9V	127,756	SOLP
WB8WKQ	122,766	SOLP
W8MET	85,020	SOLP
VE3WRL	62,928	SOLP
KA8SMA	33,086	SOQRP
K9ARF	19,698	SOQRP
VE3HG	17,980	SOQRP
K9SE	13,416	SOQRP
K8ZR	3,720	SOQRP
K9CT	287,180	SOUHP
W8MJ	203,682	SOUHP
VE3CX	197,802	SOUHP
N2BJ	167,992	SOUHP
WT9U	159,080	SOUHP

VA3DF	99,548	SOULP	W4AQL	100,764	S
N9SD	85,050	SOULP	W5YM	61,146	S
W9QL	83,040	SOULP	W4UAL	34,632	S
W9XT	58,968	SOULP	K5LSU	11,110	S
KØACP	57,186	SOULP	K4KDJ	572	S
NV9L	247,340	MSHP	Northeast Region		
ND8DX	226,258	MSHP	(New England, Hudson and Atlantic Divisions; Maritime and		
K8CC	204,672	MSHP	Quebec Sections)		
N9SJ	188,436	MSHP	NC1I (K9PW, op)	248,502	SOHP
KB8ZGL	122,508	MSHP	KD4D	234,060	SOHP
WZ8P	177,120	MSLP	W2RQ	217,792	SOHP
K9KE	113,816	MSLP	AF1T	210,845	SOHP
W9ET	86,184	MSLP	N2RJ	184,336	SOHP
WX4W	77,262	MSLP	W3GRF (WR3R, op)	130,974	SOLP
VE3MGY	64,970	MSLP	KZ2I	110,700	SOLP
W8EDU	61,776	S	W3MMM	97,760	SOLP
K9IU	38,544	S	NM2O	81,340	SOLP
W9JWC	33,796	S	VE9OA	63,936	SOLP
W9GRS	23,048	S	NA2AA	37,050	SOQRP
Southeast Region			N3UR	31,098	SOQRP
(Delta, Roanoke and Southeastern Divisions)			K2NV	19,584	SOQRP
N4OX	267,592	SOHP	KZ3I	14,706	SOQRP
K4PV	242,392	SOHP	KJ2G	10,800	SOQRP
WØCN	213,516	SOHP	K3MM	236,716	SOUHP
K4BAI	195,696	SOHP	W1SJ	224,764	SOUHP
K5KG	178,524	SOHP	N2MM	202,852	SOUHP
N4PN	178,948	SOLP	KD2RD	199,680	SOUHP
N8II	171,708	SOLP	W3IDT	192,394	SOUHP
KP2XX	101,178	SOLP	WB2P	146,246	SOULP
K7SV	81,180	SOLP	W3LL	116,532	SOULP
KD3GC	74,724	SOLP	N2SQW	59,840	SOULP
W4IM	33,672	SOQRP	W3RGA	58,940	SOULP
KJ4M	9,604	SOQRP	K2DFC	57,072	SOULP
AC2N	2,726	SOQRP	W1XX	225,926	MSHP
N4WDC	2,300	SOQRP	N3OC	215,136	MSHP
VE3SHO/W4 (VE3SHO, op)	680	SOQRP	NJ1F	184,426	MSHP
N8OO	292,658	SOUHP	N2NC	171,810	MSHP
W4MYA	202,520	SOUHP	W2R	148,878	MSHP
N1LN	159,858	SOUHP	W1QK	78,720	MSLP
KT4Q	156,206	SOUHP	VA2CZ	65,676	MSLP
KC4NX	137,440	SOUHP	N2GZ	62,484	MSLP
N4TP (W4LT, op)	206,874	SOULP	N1SOH	47,952	MSLP
N4ZZ	196,046	SOULP	W3ZGD	40,736	MSLP
W4AAA (KK9A, op)	185,090	SOULP	K2ZWI	33,098	S
K4GMH	85,478	SOULP	W1YK	16,348	S
N4CF	69,420	SOULP	W3EAX	12,852	S
W5WZ	292,576	MSHP	VE9UNB	8,600	S
W5AHS	201,556	MSHP			
NWØG	126,444	MSHP			
NR4M	107,092	MSHP			
KG4QIV	36,010	MSHP			
WW4LL	211,982	MSLP			
K5KU	123,836	MSLP			
WN1G	80,514	MSLP			
W4TG	56,826	MSLP			
KK4R	46,800	MSLP			