

# 2019 ARRL November Sweepstakes, Phone Results

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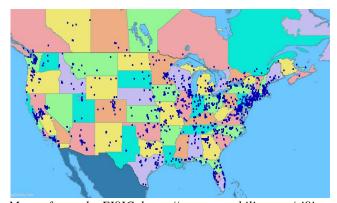
Instead of sticking this at the end where few readers would find it, allow us to acknowledge right up front the



great work of Tree N6TR, Trey N5KO, and Paul N1SFE in preparing the logs and leader lists for this and many other contests. Without people like that, there would be no Sweepstakes writeup. Thank you, guys.

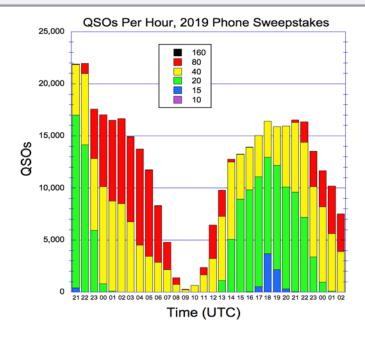
The view from 30,000 feet: Despite the poor conditions, at least a few bands were packed, and at least 2000 unique stations participated. Just under 1600 of them submitted logs, reporting 346,000 valid QSOs.

In this contest, because of the small multiplier set, it usually turns out that the person with the most QSOs wins. To design a station and develop a strategy for maximizing the exposure to available contacts, several factors need to be considered. First, geography. The map below shows the station location of each submitted log, regardless of category. The densest region is roughly from DC to Boston. Anyone wanting to score big needs to target that region.



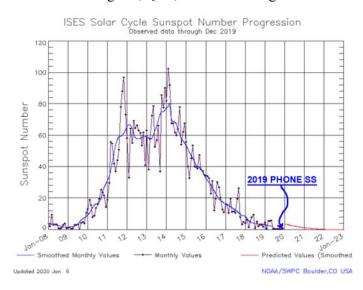
Map software by EI8IC https://www.mapability.com/ei8ic

The second factor is propagation. Once you know where the stations are in space, it helps to know where they are in time and frequency. The graph below shows the number of QSOs per hour, per band, for the entire contest period. It looks a lot like the other ones from recent years – highest activity at the start, a deep lull in the middle of the night, and another solid peak in the middle of the second day. But this year the 15-meter activity is just a few tiny blips on the graph. There were 40-meter QSOs made in every hour of the contest, and 80 wasn't too far behind.



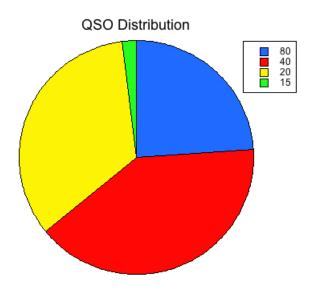
#### **Conditions**

If there were a casino or lottery game called "Find The Bottom" where people placed their bets and tried to pick the date of the sunspot-cycle minimum, a good strategy for winning that game would have been "Let's choose the 2019 SS Phone weekend...." You win. Your prize is 24 hours of weak signals, QSB, and noise. Congratulations.



The F10.7 index was steady at 70 and the sunspot number was zero (as in  $\emptyset$ ) throughout the weekend. As it should be, band usage was consistent with the low solar activity (in SS, multipliers and QSOs count only once – not once per band – so why would you want to be

operating on a marginal band?), and closely matched the patterns from recent years. The 40-meter band led the way again, followed closely by 20. 15 meters accounted for less than 2% of the reported contacts, while 160 and 10 meters combined for only about 50 of the 345,000 reported QSOs.



### **Sweepstakes Categories**

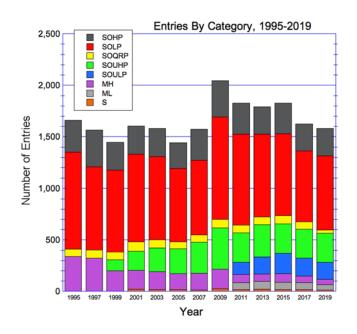
There are currently 8 operating categories in the November Sweepstakes:

Category	Abbreviation	Precedence
Single-op high power	SOHP	В
Single-op low power	SOLP	A
Single-op QRP	SOQRP	Q
Single-op unlimited, high pow	er SOUHP	U
Single-op unlimited, low power	er SOULP	U
Multi-op, high power	MH	M
Multi-op, low power	ML	M
School	S	S

The chart below shows the number of logs submitted in each of the categories in the odd-numbered years from 1995 through 2019. The total has varied from about 1500 to 1800 entries each year, with only a few small excursions outside that range. The relative popularities of the categories have changed very little in the last decade. (Note that the multi-op category was split into high and low power in 2011, the "unlimited" category was created in 1999 and then split into high and low power categories in 2011, and the School category didn't exist before 2000.)

Once again with more logs than the two other singleoperator categories combined, Single Operator Low Power (SOLP) was the most popular category in 2019. The "no internet connections and no amplifiers" operation continues to appeal to a great many hams.

#### **New Records**



There were no new overall or Division records set this time, but 11 new Section records made it into the books! Congratulations to the folks listed below. The complete set of records for this and all other ARRL contests is at https://contests.arrl.org.

#### **New Records**

Call Sign	Category	Section
AB1EP	ML	ME
KO2WW	SOUHP	NH
W3NX	MH	DE
NO3U	SOULP	WPA
K3DNE	SOUHP	SC
AF5Q	SOULP	OK
W7UNR	S	NV
WZ8T	SOULP	WWA
K7RU	ML	WWA
K8BZ	SOULP	MI
VA2CZ	ML	QC

## Clean Sweeps

118 stations managed to contact all 83 ARRL/RAC sections, (down from 135 last year) while 57 stations missed just one multiplier. The table below clearly shows

that entrants in the high-power categories had a significant advantage in the multiplier department:

#### **Clean Sweeps by Category**

Category	Sweeps
Single-op high power	22
Single-op low power	11
Single-op QRP	0
Single-op unlimited, high power	46
Single-op unlimited, low power	4
Multi-op, high power	27
Multi-op, low power	4
School	4

Note that in most categories, a spot in the top ten was easily achievable without working them all.

The rarest section (by number of reported QSOs) was NL, with just 2 logs and 166 contacts, followed by BC(!?) with 387 Qs, then PR, QC, and NT. Look for NT to move back up the most-wanted list next year, due to the planned dismantling of the VY1JA/VY1AAA station that has been active for many years. Also next year, watch for the new PE section (Prince Edward Island) to join the multiplier table, and hope that the big stations currently there stay on the air!

### **Accuracy Matters**

We like to publish an Accuracy Honor Roll each year. This time, we recognize 14 stations (about 1% of all the logs received) with 300 or more QSOs and an error rate of 1% or less. It's interesting to note that there was only one multi-op station on the Honor Roll this time, no QRP stations, and no Golden Logs.

#### 2019 Phone SS Accuracy Honor Roll

Call Sign	Category	<b>QSOs</b>	Error %
W7YAQ	SOLP	563	0.5
NWØM	SOULP	339	0.6
KØEJ	SOHP	639	0.6
N4BP	SOHP	596	0.7
N9SJ	MH	728	0.7
K4WI	SOUHP	330	0.9
N4DJ	SOHP	332	0.9
K3TW	SOUHP	340	0.9
K8NVR	SOLP	540	0.9
ND8DX	SOUHP	1279	0.9

N4ZZ	SOULP	399	1.0
K6OK	SOUHP	623	1.0
NT5V	SOULP	760	1.0
W3MMM	SOUHP	895	1.0

## **Affiliated Club Competition**

Many ARRL-sponsored events, including the DX and VHF 'tests, the 160m and 10m contests, and of course the November Sweepstakes, are designated as *Affiliated Club Competitions*, effectively adding an additional category to the scoring. Gavels (instead of plaques) are awarded each year to the winning (combined CW and phone) ARRL-affiliated clubs in three different size divisions. Competition among the clubs encourages team spirit and results in more stations on the air, raising the scores of all participants, and allowing "little pistols" or ops with limited on-air time to contribute to a larger group effort.



The Unlimited and Medium size categories share the same territorial definition -- either entirely within one ARRL Section, or within a 175-mile radius circle. The difference between them is in the number of logs submitted. A club with 51 or more entries is Unlimited, while those with 50 or fewer submissions qualify as Medium. There is also a Local category, with a 10-log limit and a 35-mile radius circle.

#### Unlimited (>50 entries, ≤175-mile radius)

Club	Score	Entries
Potomac Valley Radio Club	14,079,340	280
Frankford Radio Club	6,041,690	108
Society of Midwest Contesters	4,643,038	3 107
Yankee Clipper Contest Club	4,464,474	1 75
Minnesota Wireless Assn	3,676,284	92

The dominant Unlimited club for as long as anyone can remember is the Potomac Valley Radio Club, universally known as PVRC. They routinely score more than double their nearest competitor, and collectively make a huge impact on the contest as a whole. In his 3830 posting this year, Jeff, N8II commented "... I had to move to 40 which had very long skip similar to 75 the night before, wiping out possibility for Q's with well populated areas and PVRC." We know that people put up special antennas to favor specific regions – it looks like "PVRC" qualifies as a target all by itself. The log data certainly supports that – PVRC members as a group made roughly 13% of all QSOs reported!

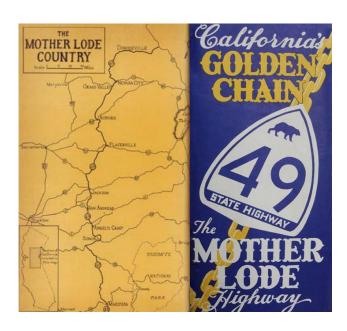


PVRC's Territory. Red=ARRL HF. Green=ARRL VHF. Blue=CQ HF.

#### **Medium (≤50 entries, ≤175-mile radius)**

Club	Score	Entries
Mother Lode DX/Contest Club	3,874,762	2 46
Southern California Contest Club	2,955,914	4 44
Florida Contest Group	2,675,750	0 42
Contest Club Ontario	2,130,752	2 48
Western Washington DX Club	2,095,486	6 29
Mad River Radio Club	2,069,890	0 37
Arizona Outlaws Contest Club	1,861,352	2 32
Tennessee Contest Group	1,801,124	4 38
DFW Contest Group	1,731,49	6 26
Northern California Contest Club	1,530,270	0 42
Central Texas DX and Contest Club	1,337,28	8 21
Alabama Contest Group	1,111,06	0 13
Grand Mesa Contesters	1,079,53	8 17
Willamette Valley DX Club	1,053,350	6 13
South East Contest Club	989,40	4 17
Big Sky Contesters	938,172	2 14
Kentucky Contest Group	935,952	2 20
Kansas City Contest Club	732,90	6 9
North Texas Contest Club	729,892	2 10

Great Places Contest Club	722,820	9
CTRI Contest Group	629,230	15
Hudson Valley Contesters and DXers	593,712	16
Sussex County ARC	553,294	4
North Coast Contesters	472,742	10
Georgia Contest Group	455,762	6
Niagara Frontier Radiosport	407,988	14
Northeast Maryland ARC	342,230	15
Mississippi Valley DX/Contest Club	230,222	7
Order of Boiled Owls of New York	221,836	6
Swamp Fox Contest Group	216,348	5
West Park Radiops	182,146	3
Bay Area DXers	179,982	4
Maritime Contest Club	177,738	4
Rochester (NY) DX Assn	143,428	5 3
Alberta Clippers	122,606	3
New Providence ARC	116,294	7
Driftless Zone Contesters	114,168	6
Texas DX Society	106,044	3
Portage County Amateur Radio Service	104,930	5
South Jersey Radio Assn	104,884	7
Badger Contesters	100,370	3
Providence Radio Assn	92,252	
Silver Comet Amateur R	88,694	9
Skyview Radio Society	85,010	4
Orca DX and Contest Club	75,758	5
Sierra Foothills ARC	72,286	5
Granite State ARA	60,920	8
Motor City Radio Club	52,552	4
Pacific Northwest VHF Society	47,220	4
Sierra Nevada ARS	45,360	4
Southern Berkshire ARC	8,182	3



Anchored by Top-Tenners W7RN and WC6H, the Mother Lode DX/Contest Club has remained at the top of this most-popular category for the past 5 years. Their 175-mile club circle is centered southeast of Sacramento, near California State Highway 49 (as in '49ers?), the

heart of gold-rush "Mother Lode" country. (It's fun to scan the list of clubs in these tables and visualize the geography for which most of them are named.)



Mother Lode DX/CC's Territory

#### **Local (≤10 entries, ≤35-mile radius)**

Club	Score	Entries
Pizza Lovers 259	1,367,8	48 10
Redwood Empire DX Association	562,0	76 9
Iowa DX and Contest Club	561,5	70 6
New Mexico Big River Contesters	356,0	10 3
Metro DX Club	167,5	30 9
Bristol (TN) ARC	94,4	70 5
Sunday Creek AR Federation	47,9	40 3
North Fulton ARL	29,0	28 3
Alexandria Radio Club	22,7	76 3

In the Local category, the past few years have seen a back-and-forth at the top between Pizza Lovers 259, based in Silicon Valley, and New Mexico Big River Contesters, in and around Albuquerque. This year, the NM club was severely under-staffed due to the absence of recently-retired AA5B, who traveled to Delaware and joined the W3NX multiop effort both weekends. Winning the Local club category is tricky -- you need all 10 logs, none of which can afford to be too small. The PL-259 club has been very consistent in that regard, averaging ~137k points per entry this year.



PL-259's Territory

### **Around the Categories**

## **Single-Op Unlimited, Low Power**

On the surface, this category seems like it would be attractive to a large fraction of contesters – run low power, either for the challenge of it or because you don't have an amplifier, but make up for it by using spotting networks to find new multipliers and/or QSOs. Despite that argument (which must be wrong!), only 10% of the entries were SOULP this time. Go figure.

W4LT, Lu, piloted the Tampa ARC's station to a big win – and he was the only one in the Top Ten to operate the full 24 hours. The impressive antennas at the club include a 2-element 40-meter yagi at 118 feet, along with big multi-banders at 108, 70, and 55 feet. More than 99% of Lu's QSOs were on 40 and 20 meters, but not by choice: "I checked my 80m antenna at 2 PM [before SS started]. Nice low SWR in the phone band. Later...I made my planned move from 40m to 80m. The antenna REFUSES TO LOAD! Turned on the tuner, THE TUNER REFUSES TO TUNE IT!" Plan B worked pretty darn well, though.

Last year's winner, WB2P, operated only 16 hours and settled for 2<sup>nd</sup> place this time around. Just behind him was NT5V, Jim's first-ever Top Ten appearance in Sweepstakes! Veteran contester KØUK pushed his Colorado antenna farm to a 4<sup>th</sup>-place finish in only 15 hours of operating time!

#### Top Ten – Single-Op Unlimited, Low Power (SOULP)

Call	Score	QSOs	Mults	Sec	Hours
W4LT (@W4DUG)	176,300	1075	82	WCF	24.0
WB2P (@W2YC)	138,278	833	83	SNJ	16.4



KØUK finished 4<sup>th</sup> in SOULP using this nice setup. (Photo from Bill Brown, KØUK.)

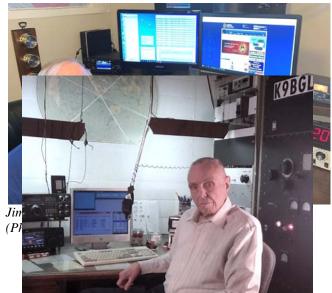


Some of KØUK's antenna farm: 2-el 40-mtr yagi at 107 ft, a few tribanders, and a single-element 40-mtr antenna, with StackMatch boxes on both towers. (Photo courtesy of Bill Brown, KØUK.)

NT5V	126,160	760	83	NTX	19.0
KØUK	120,376	734	82	CO	15.4
KK7AC	109,388	667	82	ΑZ	21.0
WZ8T	89,586	567	79	WWA	17.0
K8BZ	88,232	538	82	MI	8.0
NØIRM	78,080	488	80	MO	12.6
K2SDS	77,080	470	82	SNJ	23.1
KØAD	75,604	461	82	MN	12.8

## Single-Op, High Power

George K5TR and Dan W7WA repeated their 1<sup>st</sup> and 2<sup>nd</sup> place finishes from 2018, but the scores were a bit closer this time. They not only outscored the rest of the competition in the SOHP category, they also had the two highest scores in *any* category – by far – including the top "unlimited" and multi-op entrants.



Karl, K9BGL, made the Top Ten SOHP from the black hole! (Photo courtesy of Karl Bretz, K9BGL.)

The Top Ten SOHP box includes stations from coast to coast, including the Black Hole of the midwest. It's also a bit unusual these days to see both KH6 and KL7 in the Top Ten. Neither WH7Z nor KL7SB operated anywhere near the full 24 hours allowed – storms in Hawaii and punk propagation in Alaska got in the way.

The scores for the #8, #9, and #10 finishers were separated by the equivalent of just 8 QSOs. Makes you think twice about taking that short bathroom or kitchen break.

#### Top Ten – Single-Op, High Power (SOHP)

Call	Score	QSOs	Mults	Sec	Hours
K5TR	333,660	2010	83	STX	24.0
W7WA	323,202	1947	83	WWA	23.9
K5TA	255,640	1540	83	NM	24.0
W2RQ	250,162	1507	83	NNJ	23.6
WC6H	246,328	1502	82	SJV	23.5



WC6H at the controls of his station. Rich finished in 5<sup>th</sup> place in the SOHP category this time. (Photo courtesy of Rich Cutler, WC6H.)



The WC6H antenna farm in SJV. (Photo is from Rich Cutler, WC6H.)



Dan, WØCN, used this beautiful antenna farm at KH6YY and finished 6<sup>th</sup> in SOHP. (Photo courtesy of Dan Hausauer, WØCN).

WH7Z	240,408	1484	81	PAC	20.9			
(op WØCN @ KH6YY)								
N4OX	219,120	1320	83	NFL	23.8			
KL7SB	203,520	1272	80	AK	18.5			
WDØT	202,520	1220	83	SD	23.2			
K9BGL	202,354	1219	83	IL	19.7			

## Single-Op, Low Power

This most-popular category, with 714 entries, was quite competitive near the top:

- All of the top 5 stations operated the full contest period.
- There were 7 clean sweeps among the Top Ten.
- The number 10 point score was only 36% behind the winner.
- The category's top 3 scores were all higher than the winning SOULP entry.
- The top 2 ops ended up only 7 QSOs apart, after an exciting back-and-forth battle.

Six of 2018's Top Ten finishers returned to the box this year, but Bill, K2PO, a guy who has been absent for a



Outside K2PO, #1 SOLP. (Photo by Bill Conwell, K2PO.)



The antennas at WØEWD, #2 SOLP (from his QRZ page).



The W4AAA QTH (#3 SOLP), from their QRZ.com page.

while, (sticking to CW for the past few years) returned big-time to the SSB 'test and came out on top, squeaking past WØEWD (#2 last year as well) by just 7 QSOs. Third place went to 2018's category winner W4AAA.

The idea of "a boy and his radio" or "100 watts and a wire," often associated with SOLP, certainly doesn't describe this year's top 3 stations. Check out the photos.

Continuing a trend that has been apparent for the past several years, the location of the majority of the Top Ten in the low-power categories has been shifting away from the western U.S. toward the East and Midwest. In 2016, SOLP was an even 5-5 split. This year only 3 stations west of 105 degrees west longitude made the grade.

**Top Ten – Single-Op, Low Power (SOLP)** 

Call	Score	<b>QSOs</b>	Mults	Sec Ho	urs
K2PO	186,584	1124	83	OR 23	3.8
WØEWD	185,422	1117	83	IA 24	1.0
W4AAA (KK9A, op)	180,774	1089	83	NC 24	1.0
N4OO	174,466	1051	83	GA 23	3.9
K6JO	159,246	983	81	SDG 23	3.9
VE5SF	150,562	907	83	SK 18	3.6

N8II	127,008	784	81	WV	13.4
WR3R	124,476	759	82	MDC	23.4
K9WZB	122,450	775	79	AZ	21.6
KU2M (tie)	120,184	724	83	NNJ	13.2
ACØW (tie)	120,184	724	83	MN	18.4



NAIME, finished 4th in the QRP category from his station in Maine. Wes, a veteran CW QRP op, crossed the Phone Sweepstakes off of his ham radio bucket list. "I don't know if I'll do it again, but it definitely was fun and a learning experience." He calls his antenna a "wet noodle"— a 130-ft end fed wire up about 40 feet. (Photo from Wes Baden, NAIME.)

## Single-Op, QRP

They say that VHF is hard, but it's difficult to imagine anything more challenging than QRP phone at the bottom of the sunspot cycle in a contest with 98% of the



NK8Q, 2<sup>nd</sup> place SOQRP (Mark Schreiner, NK8Q, photo).

other stations running 13 to 25 dB more power (and



Joel, N9LQ, 6<sup>th</sup> place in the QRP category, says "I worked quite a few sections that I thought would be hard, and missed quite a few that I thought would be easy. QRP can be quite an exercise in patience and humility. I tip my hat to those who dug my puny signal out of the noise. I hope I didn't try their patience too much." (Photo from Joel Gray, N9LQ).

often with better antennas). Only 35 stations braved the QRP waters this time, down considerably from recent years.

WZ8P was at the top of the heap this time, outscoring the rest of the Top Ten by a wide margin with the help of a very nice set of antennas — "Having 4 antennas on 40 meters, 3 antennas on 80 meters, and a 5-element stack on 20 meters was wonderful." No kidding!

Mark, NK8Q, piloted the W3YA club station to 2<sup>nd</sup> place and noted the brutal conditions for QRP. His 3830 post had this message for the other stations in his log: "Most of you thanked me for my patience, but I felt honored that you took the time and effort to pull me through."

The QRP Top Ten is geographically balanced, with stations from coast to coast. Not one of them operated the full 24 hours, and a couple were on the air only about a third of the time – maybe a sign of just how taxing QRP might be!

Top Ten - Single-Op, QRP (SOQRP)

Call	Score	QSOs	Mults	Sec	Hours
WZ8P	61,304	388	79	ОН	20.0

NK8Q	34,350	229	75	WPA	19.4
VE6EX	29,040	220	66	AB	12.8
NA1ME	25,254	183	69	ME	12.2
WK4P	22,440	170	66	NC	20.0
N9LQ	20,636	154	67	IL	8.7
K7MM	17,810	137	65	EWA	13.1
K2GMY	17,472	156	56	EB	14.3
KØTEA	16,800	140	60	MI	12.9
N7JI	15,080	145	52	OR	8.9

## **Multi-operator**, Low Power

With few exceptions, Top-Ten scores in this category were down roughly 10% from 2018 totals. The K9KE squad improved their performance by 1000 points, lifting them to 3rd place compared to 6th last year. WX4W eked out exactly 3 more Qs than in 2018, repeating their clean sweep and moving up to the #4 spot. All the clean-sweep chasers were happy to hear 5th-place VA2CZ throughout the weekend – without their 497 QSOs QC would have been the second-rarest section, just 94 contacts ahead of NL. *Merci!* 

Last year's winning team moved to a new location this time, setting up a "Field Day style" operation under the call sign K7RU from a cabin near saltwater in the WWA section, grid CN88se. They decided to use that call because, as reported in their 3830 posting, "In past years



ML winner K5KU and K5HML, the father-daughter team from LA. Photo credit: Gary Van Winkle, K5KU.

we have activated K7IR in EWA. We didn't use that call,

since we didn't want to be asked over and over for a section repeat:-)" Love that pre-fill. Ironically, they missed EWA, along with NL, and dropped to second place, trading spots with the father/daughter team of Gary, K5KU and Kathy, K5HML, who snagged the top spot with 971 QSOs and 1 of only 4 clean sweeps achieved in this category. Recognizing the advantage of having a YL on his team, Gary described their mode of operation in his 3830 comments: "My daughter, K5HML, did 95% of the running while I tuned around picking up the scraps and mults." Good job!

**Top Ten – Multioperator, Low Power (ML)** 

Call	Score	QSOs	Mults	Sec	Hours
K5KU	161,186	971	83	LA	24.0
K7RU	116,154	717	81	WWA	23.4
K9KE	107,402	647	83	IL	23.8
WX4W	87,980	530	83	KY	20.3
VA2CZ	79,520	497	80	QC	16.8
K9DA	69,554	419	83	IN	20.2
WR5O	63,504	392	81	WTX	16.9
W9ET	62,694	387	81	WI	22.1
W1FM	55,902	363	77	<b>EMA</b>	7.4
N8YXR	55,404	342	81	MI	21.1

#### **School Club Stations**

Well, all streaks have to end somewhere. After dominating this category for more than a decade, the Hesston College club, KØHC, got beaten soundly even as their score improved by almost 11,000 points over last year. If you read the 2018 Phone SS writeup, in the SOQRP section you'll find reference to N7MH's failed attempt to recruit some students for an "S-class" operation at the Stanford ARC. Well, this year he succeeded, and the result is dramatic. The club station. W6YX, is noted, among other things, for its EME setup, and as it happened the Phone SS weekend coincided with the 3rd weekend of the ARRL EME 'test, so there were plenty of members around. The "main" ops, N7MH and WD6T, introduced Stephen, AJ6IV, an Applied Physics grad student, to HF contesting, and he quickly caught on. From their 3830 posting:

Stephen started his contest weekend on Friday evening, helping out in the EME contest, then joined us Saturday and Sunday for SS Phone. Up to this past weekend his ham radio operating experience had been with Handy-Talkies, repeaters, and a brief taste of SSB during a satellite demo... [He] did a great job operating. He was surprised to hear us using Q-signals on phone. By the end he was regularly using QRZ and even occasionally QSL instead of his initial "got it".

The Stanford effort produced a solid category win with over 252k points. That score would have placed in the top 4 in MH, SOHP, and SOUHP. Impressive.





Dresden Elementary Amateur Radio Station (D.E.A.R.S.). How many University clubs have that many members? Their level of activity is amazing – check out their Twitter feed @KD8NOM. (Photo from Twitter.)

It's nice to display a full Top Ten table this time – there were just 9 entries in 2018, but 15 total entries in this category this time. The remaining TT spots (with one exception) are familiar call signs. W4AQL, K9IU, W9JWC, W8EDU, W4UAL, W1YK, and WØEEE, all University or College clubs, are well-known SS regulars.

New to this contest, and at the other end of the academic timeline, the "exception" is KD8NOM, a club of 5th- and 6th-graders in Dresden, OH, whose 212 QSOs earned them the #6 position in the TT box.

**Top Ten -- School Club Station (S)** 

Score	QSOs	Mults	Sec	Hours
252,154	1519	83	SCV	24.0
207,832	1252	83	KS	23.7
148,570	895	83	GA	20.8
76,360	460	83	IN	16.6
42,042	273	77	IL	21.3
30,528	212	72	OH	16.7
27,202	203	67	OH	16.0
21,060	135	78	AL	13.6
18,810	165	57	WMA	9.6
15,480	129	60	MO	2.0
	252,154 207,832 148,570 76,360 42,042 30,528 27,202 21,060 18,810	252,154 1519 207,832 1252 148,570 895 76,360 460 42,042 273 30,528 212 27,202 203 21,060 135 18,810 165	252,154 1519 83 207,832 1252 83 148,570 895 83 76,360 460 83 42,042 273 77 30,528 212 72 27,202 203 67 21,060 135 78 18,810 165 57	252,154 1519 83 SCV 207,832 1252 83 KS 148,570 895 83 GA 76,360 460 83 IN 42,042 273 77 IL 30,528 212 72 OH 27,202 203 67 OH 21,060 135 78 AL 18,810 165 57 WMA

## **Single-Op Unlimited, High Power**

How did the Big Guns feel about Sweepstakes this year? Here are a few comments pulled from 3830 postings of just the SOUHP Top Ten. I think I see a pattern here:

- I thought last year's condx sucked. Absolutely the pits this year
- I had forgotten how mentally fatiguing the unrelenting hurricane of QRM becomes...
- Don't even get me started on QSB.
- 20m was absolutely insane.
- This was 24 hours of hard work.
- I can't say that this was a lot of fun...
- *Sweeps SSB is a tough slog.*
- Good fun, but glad it's over.

Not exactly inviting to potential recruits. But, even with all those objections, 281 brave souls entered this category, endured the aforementioned hardships, and persevered. A contest is a *contest*, and the winners prevail by getting it done, slog or no slog: BIC, even when it hurts.

That being said, it really was a low point as far as conditions were concerned. The graph in the introduction section of this report shows the sunspot cycle progression. Can't get much worse. Although many commented about occasional good signals being seen/heard on 15 meters, few people took advantage of those openings. The action remained on 20m and below, with the attendant crowding and QRM. Here are screen shots of K7RL's Flex panadapter on 20 meters and 75 meters:



20 meters: No wonder the QRP entries were so low.



75 meters was-to-wall from 3.6 to 3.8 MHz, and that's on the West coast.

The Top Ten table looks much like last year's, but with lower scores. The top two positions remained the same, with KH7XS finding a way to attract 300k worth of attention even without much action on 15 meters, and, at the other geographical extremity, VY2TT repeating in second place, down just 3.7% from 2018. WX5S, operating from the Comstock Memorial Station, W7RN, moved up a notch from 4th to 3rd. Mitch, K7RL returned to the fray after an absence of 5 years to capture #4. K3MM and W1SJ also moved up a notch each, while W3IDT jumped up 3 spots. ND8DX and W9KKN, absent from last year's TT box, came in at #s 8 and 9,

while another newcomer WBØTEV, whose 3830 rank was 11, was apparently accurate enough to leapfrog into 10th.

May the sun gods treat us better next year.

**Top Ten – Single Operator Unlimited, High Power** (SOUHP)

Call	Score	<b>QSOs</b>	Mults	Sec	Hours
KH7XS (K4XS, op)	300,128	1808	83	PAC	23.3
VY2TT	274,564	1654	83	MAR	24.0
W7RN (WX5S, op)	256,968	1548	83	NV	24.0
K7RL	246,178	1483	83	WWA	24.0
K3MM	231,238	1393	83	MDC	23.4
W1SJ	220,946	1331	83	VT	24.0
W3IDT	218,124	1314	83	MDC	24.0
ND8DX	212,314	1279	83	OH	24.0
W9KKN	203,848	1228	83	SCV	24.0
WBØTEV	203,184	1224	83	NTX	19.3

## Multi-op, High Power

In the previous running of Phone SS (2018), the #2 and #3 teams finished just 3 QSOs apart. Those same two teams, WØNO and K4OV, had a close battle again in 2019, finishing only 22 QSOs apart – this time in the #1 and #2 slots. The 4-man winning team at WØNO in Kansas did "multi-op the old-fashioned way... one radio, one VFO." Interestingly, the K4OV team in NC relied more heavily on the low bands, with about 1300 QSOs on 80 and 40 meters (WØNO had fewer than 1000). Neither team made any contacts on 10 or 15 meters. The 3<sup>rd</sup> place team was from a little state that doesn't make too many appearances in Sweepstakes Top Ten boxes – Delaware! Check out the antennas in the photo.





A drone's view of the NX6T multi-op high-power station. The antennas were held aloft by a couple trailer-mounted towers, and included a 2-el 40 meter yagi, 3-el SteppIR, F12 tribander, and an 80 meter dipole. (Photo from Dennis Vernacchia, N6KI).

The W3NX crew (Bruce/AA5B and Ray/K9RS) holding <u>all</u> of the antennas they used for phone SS, and they're standing in front of the trees that held those wires! It doesn't take a lot of hardware to have fun and do well in this contest – W3NX finished 3<sup>rd</sup> in both phone and CW. (photo courtesy of Ray Sokola, K9RS)

N6WM and N6MU used N6RO's fine station, sometimes on site and sometimes via remote connection, to finish in 4<sup>th</sup> place. More than half of their QSOs were on 20 meters, and even this well-equipped station in California managed just 1 contact on 15 meters. BRING BACK THE SUNSPOTS, PLEASE!

W5WZ, W1XX, KRØP, and N3OC reprised their Top Ten showings from 2018.

All stations in this year's Multi-High Top Ten operated the full 24 hours, or very close, and all had a clean sweep – as it should be!

**Top Ten – Multi-operator, High Power (MH)** 

Call	Score	QSOs	Mults	Sec	Hours
WØNO	262,612	1582	83	KS	23.9
K4OV	258,960	1560	83	NC	24.0
W3NX	240,700	1450	83	DE	24.0
N6WM	234,890	1415	83	EB	24.0
W5WZ (tie)	234,226	1411	83	LA	22.3
NX6T (tie)	234,226	1411	83	SDG	23.9
W5RRR	225,262	1357	83	STX	24.0
W1XX	224,100	1350	83	RI	23.9
KRØP	217,294	1309	83	NE	23.9
N3OC	206,670	1245	83	MDC	23.7

## It's a Wrap!

There are more tables in the following pages (Division winners, regional leaders, plaque winners, etc.). You can also find more data at contests.arrl.org (including line scores, a searchable database and log check reports).

We hope you'll join the Sweepstakes fun again when it rolls around in 2020: the first full weekend in November for CW, the 3<sup>rd</sup> full weekend in for phone. There will be a new section (VY2), but will there be new sunspots? We can hope!

73, Scott K5TA amd Bruce AA5B

Regional Leaders			W6YX	252,154	S
West Coast Region			W7UNR	286	S
(Pacific, Northwestern and Southwestern Divisions;		ions;	Midwest Region		
Alberta, British Columbia an	d NT Sections)		(Dakota, Midwest, Ro	ocky Mountain and West G	ulf
W7WA	323,202	SOHP	Divisions; Manitoba	and Saskatchewan Sections	s)
WC6H	246,328	SOHP	K5TR	333,660	SOHP
WH7Z (WØCN, op		22115	K5TA	255,640	SOHP
@KH6YY)	240,408	SOHP	WDØT	202,520	SOHP
KL7SB	203,520	SOHP	AD5XD	167,116	SOHP
NR6Q	198,932	SOHP	KØVXU	157,440	SOHP
К2РО	186,584	SOLP	WØEWD	185,422	SOLP
K6JO	159,246	SOLP	VE5SF	150,562	SOLP
K9WZB	122,450	SOLP	ACØW	120,184	SOLP
W7YAQ	88,954	SOLP	KØEA	78,468	SOLP
N7XU (K4XU, op)	83,640	SOLP	WD5K	61,600	SOLP
VE6EX	29,040	SOQRP		,	
K7MM	17,810	SOQRP	K7DLX	7,998	SOQRP
K2GMY	17,472	SOQRP	N1XIH	7,896	SOQRP
N7JI	15,080	SOQRP	W8MZ	6,160	SOQRP
WB6CZG	11,368	SOQRP	KØDMT	240	SOQRP
	,		WØHGW	8	SOQRP
KH7XS (K4XS, op)	300,128	SOUHP		222.424	
W7RN (WX5S, op)	256,968	SOUHP	WBØTEV	203,184	SOUHP
K7RL	246,178	SOUHP	K1KD	200,694	SOUHP
W9KKN	203,848	SOUHP	WD4IXD	163,800	SOUHP
W1SRD	154,878	SOUHP	K7UT	159,080	SOUHP
			WTØDX	149,404	SOUHP
KK7AC	109,388	SOULP	NITEN	126.160	COLUD
WZ8T	89,586	SOULP	NT5V	126,160	SOULP
WA6KHK	55,848	SOULP	KØUK	120,376	SOULP
K6GHA	53,628	SOULP	NØIRM	78,080	SOULP
AI6JB	27,852	SOULP	KØAD	75,604	SOULP
			N7MZW	69,696	SOULP
N6WM	234,890	MSHP	MANO	262.642	MACLID
NX6T	234,226	MSHP	WØNO	262,612	MSHP
K7RI	154,880	MSHP	W5RRR	225,262	MSHP
VE6AO	139,968	MSHP	KRØP	217,294	MSHP
W6DR	134,460	MSHP	K2KR	134,958	MSHP
			NØMA	129,314	MSHP
K7RU	116,154	MSLP	WIREO	C2 F04	NACLE
KC7KFF	24,426	MSLP	WR50	63,504	MSLP
WN7Y	16,352	MSLP	K5LRW	41,952	MSLP
KDØLHI	13,566	MSLP	KØAJW	28,842	MSLP
N6TCE	6,384	MSLP	KS5Z	24,564	MSLP

KØTSA	22,244	MSLP	WX4W	87,980	MSLP
NOTSA	22,244	IVISLI	K9DA	69,554	MSLP
кøнс	207,832	S	W9ET	62,694	MSLP
WØEEE	15,480	S	N8YXR	55,404	MSLP
KF5CRF	13,064	S	NOTAN	33, 10 1	WISE
W Solu	23,00	J	K9IU	76,360	S
Central Region			W9JWC	42,042	S
(Central and Great Lakes I	Divisions: Ontario Fas	t Ontario	KD8NOM	30,528	S
North, Ontario South, and			W8EDU	27,202	S
K9BGL	202,354	SOHP	W9YB	8,648	S
K9ZO	190,402	SOHP		·	
ND4Y	177,122	SOHP			
KØPJ	152,222	SOHP	Southeast Region		
K8AO	134,480	SOHP	(Delta, Roanoke and Sou	theastern Divisions)	
			N4OX	219,120	SOHP
WB8WKQ	117,126	SOLP	WS7X	168,640	SOHP
K8NVR	88,560	SOLP	KP2M (KT3Y, op)	149,202	SOHP
VE3WRL	84,952	SOLP	W6SFG	126,608	SOHP
AJ9C	82,164	SOLP	KM4HI	118,900	SOHP
K9GX	77,420	SOLP			
			W4AAA (KK9A,	100 774	COLD
WZ8P	61,304	SOQRP	op)	180,774	SOLP
N9LQ	20,636	SOQRP	N400	174,466	SOLP
KØTEA	16,800	SOQRP	N8II K4PV	127,008	SOLP SOLP
KA8SMA	10,260	SOQRP	KG5HVO	100,488 75,088	SOLP
K9ARF	6,348	SOQRP		·	
			WK4P	22,440	SOQRP
ND8DX	212,314	SOUHP	N4CLY	5,320	SOQRP
VE3CX	171,976	SOUHP	NU4E	2,744	SOQRP
WT9U	160,356	SOUHP	KN4PTU	0	SOQRP
K10U	133,660	SOUHP	KODNE	464.020	COLULD
N2BJ	110,888	SOUHP	K3DNE	164,838	SOUHP
			KC4NX	157,760	SOUHP
K8BZ	88,232	SOULP	N1LN KDE IRV	98,892	SOUHP
VE3PJ	75,492	SOULP	KD5JRY	98,106	SOUHP
W9QL	63,990	SOULP	N3MK	93,150	SOUHP
KF9UP	39,270	SOULP	W4LT	176,300	SOULP
N8FYL	36,024	SOULP	KD3GC	69,920	SOULP
			N4ZZ	63,840	SOULP
W8BI	139,728	MSHP	WBØRUR	61,420	SOULP
N9SJ	120,848	MSHP	N1WR	51,376	SOULP
NT8V	91,040	MSHP	IATAAII	31,370	JOULF
W8ZHO	17,316	MSHP	K4OV	258,960	MSHP
VOVE	407 :00		W5WZ	234,226	MSHP
К9КЕ	107,402	MSLP	K2ADA	201,192	MSHP
			NZI IDI I	201,132	TAISIIL

W8AT	189,738	MSHP	N2SQW	48,348	SOULP
W5YO	137,104	MSHP			
			W3NX	240,700	MSHP
K5KU	161,186	MSLP	W1XX	224,100	MSHP
W4YK	33,280	MSLP	N3OC	206,670	MSHP
WA1F	16,506	MSLP	K1KP	206,172	MSHP
KA4J	15,576	MSLP	N2NC	195,382	MSHP
K2KW	2,350	MSLP			
			VA2CZ	79,520	MSLP
W4AQL	148,570	S	W1FM	55,902	MSLP
W4UAL	21,060	S	K2APD	54,264	MSLP
W5YM	3,016	S	K3KU	52,884	MSLP
K5LSU	2,542	S	AD2P	38,016	MSLP
			W1YK	18,810	S

#### **Northeast Region**

(New England, Hudson and Atlantic Divisions; Maritime and Quebec Sections)

and Quebec sections,		
W2RQ	250,162	SOHP
K3ZO	187,780	SOHP
KK1L	159,732	SOHP
K1RX	159,360	SOHP
AF1T	127,156	SOHP
WR3R	124,476	SOLP
KU2M	120,184	SOLP
KZ2I	117,528	SOLP
K1EP	111,618	SOLP
W1QK	93,126	SOLP
NK8Q	34,350	SOQRP
NA1ME	25,254	SOQRP
K2YG	13,750	SOQRP
KJ2G	4,148	SOQRP
W3EK	18	SOQRP
VY2TT	274,564	SOUHP
K3MM	231,238	SOUHP
W1SJ	220,946	SOUHP
W3IDT	218,124	SOUHP
KO2WW	202,852	SOUHP
WB2P	138,278	SOULP
K2SDS	77,080	SOULP
NO3U	66,400	SOULP
NY6DX	63,200	SOULP

Division Winn	ers		New England	NA1ME	25,254
Single Operator, High Power			Northwestern	K7MM	17,810
Atlantic	K3ZO	187,780	Pacific	K2GMY	17,472
Central	K9BGL	202,354	Roanoke	WK4P	22,440
Dakota	WDØT	202,534	Rocky Mountain	K7DLX	7,998
Delta	KØEJ	100,962	Southwestern	WB6NJA	6,844
Great Lakes	ND4Y	177,122	Canada	VE6EX	29,040
Hudson	W2RQ	250,162			-,-
Midwest	KØVXU	157,440	Single Operator U	Inlimited, High Power	
New England	KK1L	159,732	Atlantic	K3MM	231,238
Northwestern	W7WA	323,202	Central	WT9U	160,356
Pacific	WC6H	246,328	Dakota	K1KD	200,694
Roanoke	W6SFG	126,608	Delta	KC4NX	157,760
Rocky Mountain	K5TA	255,640	Great Lakes	ND8DX	212,314
Southeastern	N4OX	219,120	Hudson	W2GDJ	179,280
Southwestern	W6AFA	105,944	Midwest	wøtt	63,246
West Gulf	K5TR	333,660	New England	W1SJ	220,946
Canada	VE4VT	140,320	Northwestern	K7RL	246,178
		,	Pacific	KH7XS (K4XS, op)	300,128
Single Operator, I	ow Power		Roanoke	K3DNE	164,838
Atlantic	WR3R	124,476	Rocky Mountain	WD4IXD	163,800
Central	AJ9C	82,164	Southeastern	K3TW	56,440
Dakota	ACØW	120,184	Southwestern	W6TK	148,570
Delta	N5RN	35,926	West Gulf	WBØTEV	203,184
Great Lakes	WB8WKQ	117,126	Canada	VY2TT	274,564
Hudson	KU2M	120,184	Single Operator U	Inlimited, Low Power	
Midwest	WØEWD	185,422	Atlantic	WB2P	138,278
New England	K1EP	111,618	Central	W9QL	63,990
Northwestern	K2PO	186,584	Dakota	KØAD	75,604
Pacific	KH6CJJ	52,852	Delta	N4ZZ	63,840
Roanoke	W4AAA (KK9A, op)	180,774	Great Lakes	K8BZ	88,232
Rocky Mountain	KØKR	34,560	Hudson	NY6DX	63,200
Southeastern	N400	174,466	Midwest	NØIRM	78,080
Southwestern	K6JO	159,246	New England	K1ECU	26,268
West Gulf	WD5K	61,600	Northwestern	WZ8T	89,586
Canada	VE5SF	150,562	Pacific	K6GHA	53,628
Single Operator, (	QRP		Roanoke	N1WR	51,376
Atlantic	NK8Q	34,350	Rocky Mountain	κ <b>ø</b> υκ	120,376
Central	N9LQ	20,636	Southeastern	W4LT	176,300
Great Lakes	WZ8P	61,304	Southwestern	KK7AC	109,388
Hudson	K2YG	13,750	West Gulf	NT5V	126,160
Midwest	W8MZ	6,160	Canada	VE3PJ	75,492

Multioperator, Single Transmitter, High Power			Great Lakes	WX4W	87,980
Atlantic	W3NX	240,700	Hudson	AD2P	38,016
Central	N9SJ	120,848	Midwest	KØTSA	22,244
Dakota	NRØT	50,244	New England	W1FM	55,902
Delta	W5WZ	234,226	Northwestern	K7RU	116,154
Great Lakes	W8BI	139,728	Pacific	N6TCE	6,384
Hudson	N2NC	195,382	Roanoke	W4YK	33,280
Midwest	WØNO	262,612	Rocky Mountain	K5LRW	41,952
New England	W1XX	224,100	Southeastern	WA1F	16,506
Northwestern	K7RI	154,880	Southwestern	KC7KFF	24,426
Pacific	N6WM	234,890	West Gulf	WR5O	63,504
Roanoke	K4OV	258,960	Canada	VA2CZ	79,520
Rocky Mountain	K2KR	134,958			
Southeastern	K2ADA	201,192	School Club		
Southwestern	NX6T	234,226	Central	K9IU	76,360
West Gulf	W5RRR	225,262	Delta	W5YM	3,016
Canada	VE6AO	139,968	Great Lakes	KD8NOM	30,528
			Midwest	кøнс	207,832
Multioperator, Single Transmitter, Low Power			New England	W1YK	18,810
Atlantic	K2APD	54,264	Pacific	W6YX	252,154
Central	K9KE	107,402	Southeastern	W4AQL	148,570
Dakota	KØAJW	28,842	West Gulf	KF5CRF	13,064
Delta	K5KU	161,186			

ARRL Sweepstakes SSB- Sponsored Plaque Winners				
Winner	Division	Category	Sponsor	
K5TR	Overall	Single Operator High Power	Icom America	
K2PO	Overall	Single Operator Low Power	Icom America	
WZ8P	Overall	Single Operator QRP	Icom America	
KH7XS (K4XS, op)	Overall	Single Operator Unlimited High Power	Icom America	
W4LT	Overall	Single Operator Unlimited Low Power	Icom America	
WØNO	Overall	Multioperator High Power	Icom America	
K5KU	Overall	Multioperator Low Power	Icom America	
W6YX	Overall	School Club	Robert Tuttle, N8YXR & Jennie Tuttle, KCORBV	
K3ZO	Atlantic Division	Single Operator High Power	Icom America	
WR3R	Atlantic Division	Single Operator Low Power	Potomac Valley Radio Club	
NK8Q	Atlantic Division	Single Operator QRP	Icom America	
K3MM	Atlantic Division	Single Operator Unlimited High Power	Icom America	
WB2P	Atlantic Division	Single Operator Unlimited Low Power	Icom America	
W3NX	Atlantic Division	Multioperator High Power	Icom America	
K2APD	Atlantic Division	Multioperator Low Power	Icom America	

K9BGL	Central Division	Single Operator High Power	Society Of Midwest Contesters
AJ9C	Central Division	Single Operator Low Power	Society Of Midwest Contesters
N9LQ	Central Division	Single Operator QRP	Icom America
WT9U	Central Division	Single Operator Unlimited High Power	Society of Midwest Contesters
W9QL	Central Division	Single Operator Unlimited Low Power	Society of Midwest Contesters
N9SJ	Central Division	Multioperator High Power	Icom America
K9KE	Central Division	Multioperator Low Power	Icom America
K9IU	Central Division	School Club	Icom America
WDØT	Dakota Division	Single Operator High Power	Minnesota Wireless Association - In memory of Tod Olson, KØTO
ACØW	Dakota Division	Single Operator Low Power	Minnesota Wireless Association
K1KD	Dakota Division	Single Operator Unlimited High Power	Minnesota Wireless Association
KØAD	Dakota Division	Single Operator Unlimited Low Power	Minnesota Wireless Association
NRØT	Dakota Division	Multioperator High Power	Icom America
KØAJW	Dakota Division	Multioperator Low Power	Icom America
KØEJ	Delta Division	Single Operator High Power	Icom America
N5RN	Delta Division	Single Operator Low Power	Icom America
KC4NX	Delta Division	Single Operator Unlimited High Power	Icom America
N4ZZ	Delta Division	Single Operator Unlimited Low Power	Icom America
W5WZ	Delta Division	Multioperator High Power	Icom America
K5KU	Delta Division	Multioperator Low Power	Icom America
W5YM	Delta Division	School Club	Icom America
ND4Y	<b>Great Lakes Division</b>	Single Operator High Power	Icom America
WB8WKQ	<b>Great Lakes Division</b>	Single Operator Low Power	Icom America
WZ8P	<b>Great Lakes Division</b>	Single Operator QRP	Icom America
ND8DX	<b>Great Lakes Division</b>	Single Operator Unlimited High Power	Icom America
K8BZ	Great Lakes Division	Single Operator Unlimited Low Power	Icom America
W8BI	<b>Great Lakes Division</b>	Multioperator High Power	Icom America
WX4W	Great Lakes Division	Multioperator Low Power	Icom America
KD8NOM	Great Lakes Division	School Club	Robert Tuttle, N8YXR & Jennie Tuttle, KCORBV
W2RQ	Hudson Division	Single Operator High Power	Icom America
KU2M	Hudson Division	Single Operator Low Power	Icom America
K2YG	Hudson Division	Single Operator QRP	Icom America
W2GDJ	Hudson Division	Single Operator Unlimited High Power	Icom America
NY6DX	Hudson Division	Single Operator Unlimited Low Power	Icom America
N2NC	Hudson Division	Multioperator High Power	Icom America
AD2P	Hudson Division	Multioperator Low Power	Icom America
KØVXU	Midwest Division	Single Operator High Power	Icom America
WØEWD	Midwest Division	Single Operator Low Power	Icom America
W8MZ	Midwest Division	Single Operator QRP	Icom America
WØTT	Midwest Division	Single Operator Unlimited High Power	Icom America
NØIRM	Midwest Division	Single Operator Unlimited Low Power	Icom America
WØNO	Midwest Division	Multioperator High Power	Icom America
KØTSA	Midwest Division	Multioperator Low Power	Icom America
KØHC (WØBH, op)	Midwest Division	School Club	Icom America
KK1L	New England Division	Single Operator High Power	Icom America
K1EP	New England Division	Single Operator Low Power	Icom America

NA1ME	New England Division	Single Operator QRP	Icom America
W1SJ	New England Division	Single Operator Unlimited High Power	Icom America
K1ECU	New England Division	Single Operator Unlimited Low Power	Icom America
W1XX	New England Division	Multioperator High Power	Icom America
W1FM	New England Division	Multioperator Low Power	Icom America
W1YK	New England Division	School Club	Icom America
W7WA	Northwestern Division	Single Operator High Power	Icom America
K2PO	Northwestern Division	Single Operator Low Power	Icom America
K7MM	Northwestern Division	Single Operator QRP	Icom America
K7RL	Northwestern Division	Single Operator Unlimited High Power	Icom America
WZ8T	Northwestern Division	Single Operator Unlimited Low Power	Icom America
K7RI	Northwestern Division	Multioperator High Power	Icom America
K7RU	Northwestern Division	Multioperator Low Power	Icom America
WC6H	Pacific Division	Single Operator High Power	Icom America
KH6CJJ	Pacific Division	Single Operator Low Power	Icom America
K2GMY	Pacific Division	Single Operator QRP	Icom America
KH7XS (K4XS, op)	Pacific Division	Single Operator Unlimited High Power	Icom America
K6GHA	Pacific Division	Single Operator Unlimited Low Power	Icom America
N6WM	Pacific Division	Multioperator High Power	Icom America
N6TCE	Pacific Division	Multioperator Low Power	Icom America
W6YX	Pacific Division	School Club	Icom America
W6SFG	Roanoke Division	Single Operator High Power	Icom America
W4AAA (KK9A, op)	Roanoke Division	Single Operator Low Power	Icom America
WK4P	Roanoke Division	Single Operator QRP	Icom America
K3DNE	Roanoke Division	Single Operator Unlimited High Power	Icom America
N1WR	Roanoke Division	Single Operator Unlimited Low Power	Icom America
K4OV	Roanoke Division	Multioperator High Power	Icom America
W4YK	Roanoke Division	Multioperator Low Power	Icom America
K5TA	Rocky Mountain Division	Single Operator High Power	Icom America
KØKR	Rocky Mountain Division	Single Operator Low Power	Icom America
K7DLX	Rocky Mountain Division	Single Operator QRP	Icom America
WD4IXD	Rocky Mountain Division	Single Operator Unlimited High Power	Icom America
KØUK	Rocky Mountain Division	Single Operator Unlimited Low Power	Icom America
K2KR	Rocky Mountain Division	•	Icom America
	·	Multioperator Lew Power	
K5LRW	Rocky Mountain Division	Multioperator Low Power	Icom America
N4OX	Southeastern Division	Single Operator High Power	Icom America
N400	Southeastern Division	Single Operator Low Power	Icom America
K3TW	Southeastern Division	Single Operator Unlimited High Power	Icom America
W4LT	Southeastern Division	Single Operator Unlimited Low Power	Icom America
K2ADA	Southeastern Division	Multioperator High Power	Icom America
WA1F	Southeastern Division	Multioperator Low Power	Icom America
W4AQL	Southeastern Division	School Club	Icom America
W6AFA	Southwestern Division	Single Operator High Power	Icom America
K6JO	Southwestern Division	Single Operator Low Power	Icom America
WB6NJA	Southwestern Division	Single Operator QRP	Icom America
W6TK	Southwestern Division	Single Operator Unlimited High Power	Icom America
KK7AC	Southwestern Division	Single Operator Unlimited Low Power	Icom America

NX6T	Southwestern Division	Multioperator High Power	Icom America
KC7KFF	Southwestern Division	Multioperator Low Power	Icom America
K5TR	West Gulf Division	Single Operator High Power	Icom America
WD5K	West Gulf Division	Single Operator Low Power	Icom America
WBØTEV	West Gulf Division	Single Operator Unlimited High Power	Icom America
NT5V	West Gulf Division	Single Operator Unlimited Low Power	Icom America
W5RRR	West Gulf Division	Multioperator High Power	Icom America
WR50	West Gulf Division	Multioperator Low Power	Icom America
KF5CRF	West Gulf Division	School Club	Icom America
VE4VT	Canada	Single Operator High Power	Icom America
VE5SF	Canada	Single Operator Low Power	Icom America
VE6EX	Canada	Single Operator QRP	Icom America
VY2TT	Canada	Single Operator Unlimited High Power	Icom America
VE3PJ	Canada	Single Operator Unlimited Low Power	Icom America
VE6AO	Canada	Multioperator High Power	Icom America
VA2CZ	Canada	Multioperator Low Power	Icom America