# ARRL November Sweepstakes, Phone 2018 Results

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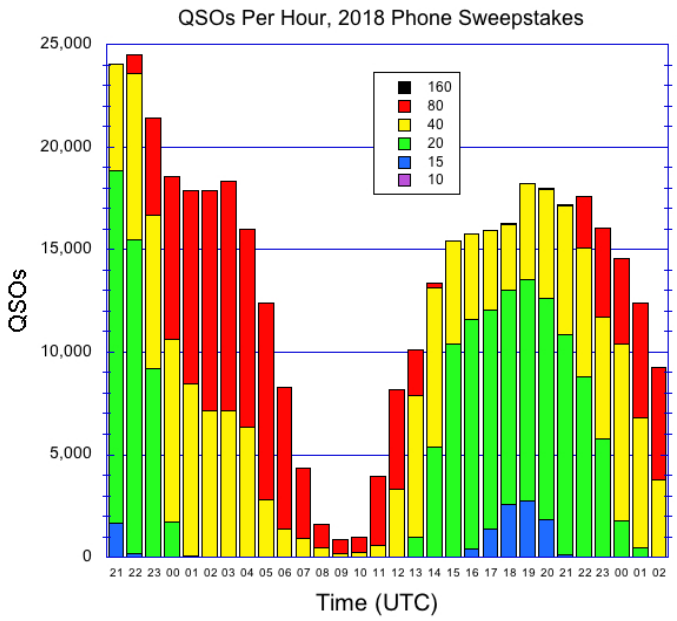
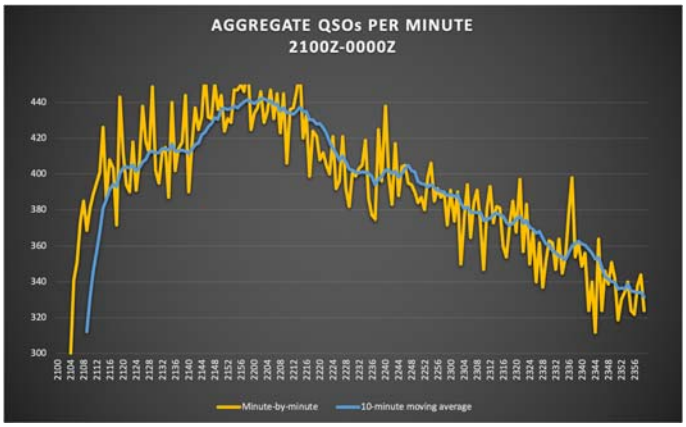
**WHAT** were you doing on Saturday and Sunday, November 17 and 18, 2018? If you are reading this page, more than likely you were participating in our oldest domestic radio contest — the November Sweepstakes. This was the 85th anniversary of the event, and it continues to be extremely popular with hams of all persuasions. From the biggest of big guns to the peanut-whistle crowd, there's something for everyone here. This year, the ARRL received 1,713 logs, up from 1,674 the previous year and 1,626 in 2016. There were 409,405 "raw" QSOs reported, which, after log checking, netted 392,370 valid contacts, which is slightly fewer than the previous year's count.

The chart below shows the aggregate number of QSOs per hour, per band, for the entire contest period. As usual, the best action was at the start, but interestingly, Hour #2 beat Hour #1 by 465 contacts, which is unusual. Notably, QSO rates on 40 meters stayed high throughout the entire Sunday period, never dropping below 3,200 contacts per hour, even at high noon. (...in the time zone of your choice!)




The 24-of-30 hour time limit dictates that participants take at least 6 hours off, and it's easy to see the favorite times for inactivity – roughly 0600-1200 UTC, with an *extreme* lull from 0800 through 1100 UTC. As shown elsewhere in this report, very few entrants took advantage of the full allowed on-time.

We all know that the best rates are to be had at the beginning of the contest, but just when, exactly, is the absolute peak? The QSOs/hour/band chart above indicates that the second hour produced more QSOs than the first, but those data are grouped by exact clock-hours. What if we looked at the minute-by-minute stats?

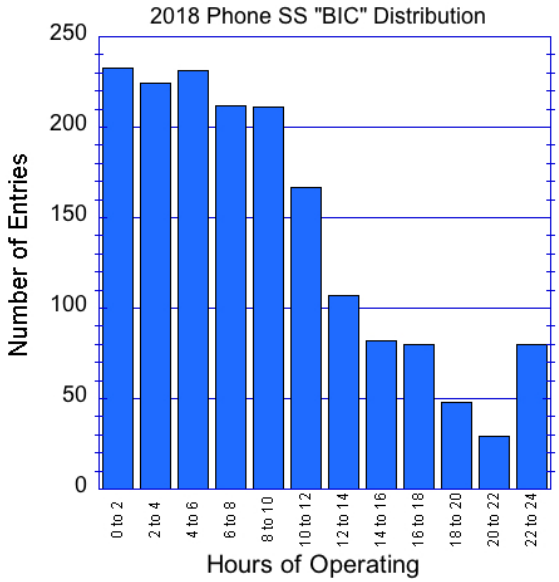



In the graph above, we are looking at aggregate QSOs per *minute*, all bands, from 2100Z through 0000Z. The peak 1-minute rates occur in a small band of time centered approximately on 2200Z. Additional analysis shows the best hour was actually 2126 to 2225 UTC, with 25,605 QSOs.

Who needs this kind of information? Ask George, K5TR, who has been pursuing a 200-hour for years, and *almost* got there this time. Ask any nerd who loves contesting!

QSO rates are one thing, operating time is another. The bar graph below shows the distribution of Butt-In-Chair (BIC) time. It's pretty flat from 0 to 10 hours, then falls off steadily until a little uptick at the end for the stalwarts who sprint all the way to the finish line. It's also interesting to look at the fraction of stations in each category that operated at least 23.5 hours ("the full contest"). It's no surprise that the Multioperator categories (MH, S, and ML) would be leading in this metric:

| *Category* | *> 23.5 hrs BIC* |
|---|---|
| MH | 24.0 % |
| S | 22.2 |
| ML | 8.2 |
| SOUHP | 4.7 |
| SOHP | 3.9 |
| SOLP | 0.6 |
| SOQRP | 0.0 |
| SOULP | 0.0 |




## Conditions

The past three years have seen very little variation in solar activity on the weekend of phone Sweepstakes. According to data published by NOAA at

ftp://ftp.swpc.noaa.gov/pub/warehouse/2018/WeeklyPDF

and

ftp://ftp.swpc.noaa.gov/pub/warehouse/2014/

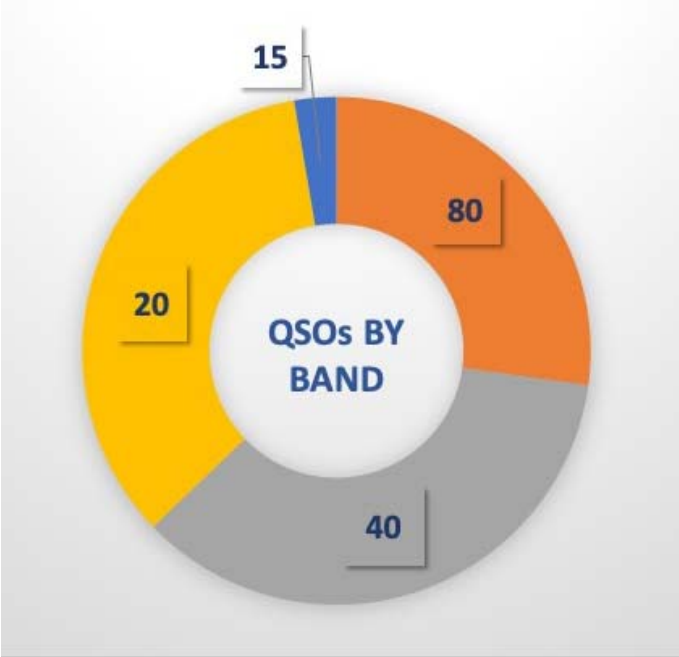
the 10.7cm solar flux and sunspot numbers for the third weekend of November, 2014 through 2018, look like this:

| *Date* | *Solar Flux* | *Sunspot Number* |
|---|---|---|
| 17-18 November 2018 | 72-73 | 13-14 |
| 18-19 November 2017 | 74-76 | 0-14 |
| 19-20 November 2016 | 76-77 | 11-22 |
| 21-22 November 2015 | 122-123 | 59-76 |
| 15-16 November 2014 | 161-172 | 91-100 |

The A and K indices were very stable and low this year, indicating quiet geomagnetic conditions. While propagation was generally poor by historical standards, at least there were no surprise CMEs or other disturbances to deal with. A screenshot of WWV postings at **VE7CC.net** during the contest confirms this:

| << Date | UTC | Flux | A | K | Forecast >> |
|---|---|---|---|---|---|
| 17-Nov-2018 | 21 | 73 | 2 | 0 | No Storms -> No Storms |
| 18-Nov-2018 | 0 | 73 | 1 | 0 | No Storms -> No Storms |
| 18-Nov-2018 | 3 | 73 | 1 | 0 | No Storms -> No Storms |
| 18-Nov-2018 | 6 | 73 | 1 | 1 | No Storms -> No Storms |
| 18-Nov-2018 | 9 | 73 | 1 | 0 | No Storms -> No Storms |
| 18-Nov-2018 | 12 | 73 | 1 | 1 | No Storms -> No Storms |
| 18-Nov-2018 | 15 | 73 | 1 | 1 | No Storms -> No Storms |
| 18-Nov-2018 | 18 | 73 | 1 | 1 | No Storms -> No Storms |
| 18-Nov-2018 | 21 | 72 | 4 | 0 | No Storms -> No Storms |
| 19-Nov-2018 | 0 | 72 | 3 | 1 | No Storms -> No Storms |
| 19-Nov-2018 | 3 | 72 | 3 | 1 | No Storms -> No Storms |

As would be expected, band usage was consistent with the solar activity and closely mimicked last year's pattern, with 40 meters leading the way, followed closely by 20. Fifteen meters accounted for only 2.7% of the reported contacts, while just a few dozen QSOs were logged on 160 and 10 combined.



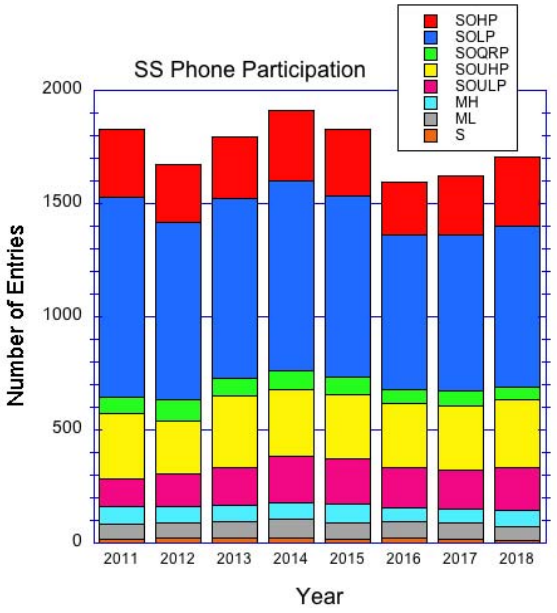
## Sweepstakes Categories

There are eight operating categories in the November Sweepstakes:

| *Category* | *Abbreviation* | *Precedence* |
|---|---|---|
| Single-op, High Power | SOHP | B |
| Single-op, Low Power | SOLP | A |
| Single-op, QRP | SOQRP | Q |
| Single-op Unlimited, High Power | SOUHP | U |
| Single-op Unlimited, Low Power | SOULP | U |
| Multiop, High Power | MH | M |
| Multiop, Low Power | ML | M |
| School Club | S | S |

The chart below shows the number of logs submitted in each of the categories from 2011 (the first year that the ML category existed) through 2018. The total has varied from about 1600 to 1900 entries each year, while the relative popularities of the categories have changed very little.

As it is every year, the most popular category in 2018 was Single-op, Low Power (SOLP), with more logs than the two Single-op, High Power categories combined! Some hams refer to this category as "a boy and his radio" – no internet connections, no amplifiers, often no antennas any more complicated than wires. And it continues to appeal to a great many hams.




## New Records

Many operators overcame less-than-great conditions to move the bar higher. There were 2 new Division records and 20 new Section records set this time! Congratulations to the folks listed below for etching their call signs into the history books. The complete set of records for this and all other ARRL contests is at www.arrl.org/contest-records.

**New Records**

| *Call Sign* | *Category* | *Division* |
|---|---|---|
| WØNO | MH | Midwest |
| K5KU | ML | Delta |

| *Call Sign* | *Category* | *Section* |
|---|---|---|
| KØVBU | SOULP | KS |
| WØNO | MH | KS |
| K1KP | ML | EMA |
| WA1BXY | ML | RI |
| KD2RD | SOUHP | NLI |
| K3UA | SOUHP | WPA |
| NO3U | ML | WPA |
| N1KSC | ML | SFL |
| K5KU | ML | LA |
| K5TR | SOHP | STX |
| W6EK | ML | SV |
| W7EB | MH | NV |
| AD7OV | ML | UT |
| WT8WV | SOULP | WV |
| K9DA | ML | IN |
| W9XT | SOULP | WI |
| VE3PJ | SOULP | ONE |
| VE3RX | SOHP | ONN |
| VA2CZ | ML | QC |
| VY2TT | SOUHP | MAR |

## Clean Sweeps

135 stations contacted all 83 ARRL/RAC sections. That's better than in 2017 (only 78 sweeps, due to a devastating hurricane season in the Caribbean), but down from 2015 and 2016 (296 and 162 sweeps, respectively).

| *Category* | *Sweeps* |
|---|---|
| Single-op, High Power | 26 |
| Single-op, Low Power | 10 |
| Single-op, QRP | 0 |
| Single-op Unlimited, High Power | 60 |
| Single-op Unlimited, Low Power | 5 |
| Multiop, High Power | 25 |
| Multiop, Low Power | 7 |
| School Club | 2 |

## Accuracy Matters

Each year, we publish an Accuracy Honor Roll recognizing stations with 400 or more QSOs and an error rate of 1% or less. There are reasons, both practical and historical, why so much attention is given to accuracy in this particular contest as opposed to others. Practically, the exchange has five separate elements, all of which must be copied correctly to receive credit for the QSO. Historically, that exchange is derived directly from the standard message preamble sent by traffic handlers, who were expected to send, receive, and relay message traffic, sometimes during emergency situations, through all conditions, with high accuracy.

In 2015, there were 36 on the Accuracy Honor Roll, but only 17 in 2016 and 11 in 2017, not a good trend. We're happy to report that the numbers have rebounded somewhat – the list is 22 strong in 2018.

**2018 Accuracy Honor Roll**

| *Call Sign* | *Category* | *QSOs* | *Error %* |
|---|---|---|---|
| N2CU | SOHP | 406 | 0.2 |
| WB8WKQ | SOLP | 632 | 0.6 |
| WD9CIR | MH | 803 | 0.6 |
| ND8DX | MH | 1386 | 0.6 |
| K5WA | SOHP | 933 | 0.7 |
| K5RT | SOLP | 493 | 0.8 |
| K5ZD | SOHP | 699 | 0.8 |
| N2BJ | SOUHP | 781 | 0.8 |
| KH6CJJ | SOLP | 430 | 0.9 |
| K2LNS | SOHP | 550 | 0.9 |
| AA5B | SOHP | 632 | 0.9 |
| K9KE | ML | 640 | 0.9 |
| WD5K | SOLP | 648 | 0.9 |
| KØEJ | SOHP | 807 | 0.9 |
| K3MM | SOUHP | 1494 | 0.9 |
| KD4D | SOHP | 1508 | 0.9 |
| KH7XS | SOUHP | 1987 | 0.9 |
| VE3RX | SOHP | 620 | 1.0 |
| N4QS | SOUHP | 707 | 1.0 |
| K1KD | SOUHP | 808 | 1.0 |
| K8AO | SOHP | 890 | 1.0 |
| NA5NN | MH | 1208 | 1.0 |

Because the SS exchange is so complicated, many operators rely on the "Pre-Fill" features of most logging programs to guide them through the information. Given a valid call sign as a starting point and using data from previous contests, pre-fill can make suggestions for precedence, check, and section. But that's all they are — suggestions. There's no substitute for carefully copying what you hear over the air. Stations often move to a new QTH, or enter a different category, or even use a different check. For example, dozens of stations in this year's CW SS changed their check to 49 in honor of Paul, WØAIH, and that led to a very high number of people getting it wrong because they blindly used the pre-fill data instead of copying what was sent. Pre-fill is a guide, not a substitute for copying. Pay attention, get it right. Relying on pre-fill can be useful, but it can easily lead you astray.

## Affiliated Club Competition

Gavels are awarded each year to the top-scoring (combined CW and phone) ARRL-affiliated clubs in three different size categories. The competition among the clubs results in more stations on the air, making it more fun for everyone and raising the scores of all participants. The Medium category almost always has the highest number of clubs, and this year was no exception.

With an amazing 281 entries and nearly 17 million points, The Potomac Valley Radio Club crushed their closest competition in the Unlimited category by more than a factor of two! This makes 11 wins in a row for PVRC. The Unlimited category had only 6 combatant clubs this year, but the category was a behemoth in terms of participation – over 700 logs and more than 35 million points.

Out on the other coast, the Mother Lode DX/Contest Club bested the competition in the Medium category for the 4th year in a row. Their "club circle" is centered near Sacramento, CA.

With nearly 100% of their members participating this time, the New Mexico Big River Contesters won the gavel in the Local category for the 2nd year in a row. The club's territory is in central NM's Rio Grande valley ("big river").

## Affiliated Club Competition

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

| *Club* | *Score* | *Entries* |
|---|---|---|
| Potomac Valley Radio Club | 16,694,489 | 281 |
| Society of Midwest Contesters | 7,414,944 | 136 |
| Yankee Clipper Contest Club | 4,637,618 | 78 |
| Minnesota Wireless Assn | 4,251,602 | 110 |
| Frankford Radio Club | 4,238,734 | 67 |
| Northern California Contest Club | 2,404,492 | 56 |

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

| | | |
|---|---|---|
| Mother Lode DX/Contest Club | 4,139,454 | 48 |
| Mad River Radio Club | 2,650,330 | 43 |
| Southern California Contest Club | 2,550,090 | 37 |
| Arizona Outlaws Contest Club | 2,442,818 | 35 |
| DFW Contest Group | 2,240,248 | 35 |
| Contest Club Ontario | 2,226,064 | 43 |
| Florida Contest Group | 2,209,914 | 33 |
| Western Washington DX Club | 1,738,218 | 26 |
| Tennessee Contest Group | 1,548,996 | 28 |
| Alabama Contest Group | 1,478,500 | 19 |
| Central Texas DX and Contest Club | 1,321,838 | 18 |
| South East Contest Club | 1,029,556 | 17 |
| Big Sky Contesters | 931,920 | 12 |
| Kentucky Contest Group | 885,230 | 19 |
| North Coast Contesters | 859,972 | 13 |
| Grand Mesa Contesters of Colorado | 849,788 | 16 |
| CTRI Contest Group | 827,322 | 13 |
| Hudson Valley Contesters and DXers | 801,438 | 15 |
| North Texas Contest Club | 772,914 | 9 |
| Georgia Contest Group | 688,392 | 10 |
| Willamette Valley DX Club | 661,820 | 17 |
| Niagara Frontier Radiosport | 651,620 | 16 |
| Sussex County ARC | 577,216 | 5 |
| Kansas City Contest Club | 553,540 | 6 |
| Orca DX and Contest Club | 466,948 | 8 |
| Radiosport Manitoba | 342,864 | 5 |
| Order of Boiled Owls of New York | 276,566 | 9 |
| Northeast Wisconsin DX Assn | 237,400 | 3 |
| Delara Contest Team | 197,722 | 3 |
| Alberta Clippers | 192,008 | 4 |
| South Jersey Radio Assn | 188,576 | 9 |
| Maritime Contest Club | 188,186 | 7 |
| Rochester (NY) DX Assn | 181,052 | 7 |
| Sierra Foothills ARC | 166,754 | 6 |
| Swamp Fox Contest Group | 161,618 | 7 |
| Allegheny Valley Radio Association | 159,990 | 4 |
| Badger Contesters | 133,388 | 3 |
| Driftless Zone Contesters | 126,558 | 4 |
| Northeast Maryland Amateur Radio Contest Society | 115,682 | 6 |
| Texas DX Society | 87,822 | 3 |
| Mississippi Valley DX/Contest Club | 65,884 | 5 |
| Granite State ARA | 62,568 | 4 |
| Spokane DX Association | 59,130 | 3 |
| Carolina DX Association | 47,064 | 3 |
| Great South Bay ARC | 24,396 | 3 |
| Southern Berkshire ARC | 9,448 | 3 |

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

| | | |
|---|---|---|
| New Mexico Big River Contesters | 1,159,734 | 10 |
| Iowa DX and Contest Club | 550,986 | 3 |
| Radio Amateurs of Northern Vermont | 492,454 | 4 |
| Bristol (TN) ARC | 299,382 | 9 |
| Redwood Empire DX Assn | 193,372 | 3 |
| Hilltop Transmitting Assn | 170,290 | 4 |
| Metro DX Club | 106,806 | 6 |
| Silver Comet Amateur Radio Society | 98,640 | 6 |
| Medina 2 Meter Group | 95,822 | 3 |
| Alexandria Radio Club | 48,926 | 4 |
| Seneca Radio Club | 46,902 | 6 |
| Stoned Monkey VHF ARC | 35,212 | 3 |
| The Villages Amateur Radio Club | 34,752 | 4 |

## Around the Categories

### Single-Op Unlimited, Low Power

There was more turnover in this category than in any other. Only three call signs from last year's Top Ten appear in the box again this year — WB2P, KK7AC, and KØNEB. It also happens that they're the only ones that also made the grade in 2016 and 2015!

Congratulations to WB2P, who topped the category this time after finishing in the top five in 2015, 2016, and 2017. Ken's 70k margin over the 2nd place finisher, VE3PJ, was the largest in any category. His 3830 post gives some insight into his strategy: "This was my first Sweepstakes that I did not worry about the sweep and just tried to run as much as possible. Being low power, it was a lot easier to hold a run freq on 80m than 40m on Saturday. And after most of the big guns on Sunday moved from 20 to 40, I was able to have a solid run on 20m." His >900 QSOs on 80 and 20 meters would've won the category by themselves.

*WB2P at his home station. Kenny operated from W2YC this year and won the SOULP category. (Photo courtesy of Kenny Denson, WB2P)*

In contrast, KS4AA operated *only* on 40 meters ("I thought there was a single-band category...oh well!"), snagged all but one multiplier (never found a VO station), and still made the top five!

Not unexpectedly in times of poor propagation, the scores in the low power categories take a bigger hit. Last year's Top Ten SOULP scores ranged from 207k to 85k, this year they spanned 186k to 70k.

*KK7AC, SOULP 3rd place. Andy says "The set-up is quite humble at the summer cabin; transceiver, voice keyer, and automatic tuner. The contest cabin has the most important elements of a good station: Location (hilltop with 360° take-off), antennas (high), noise (none). Over time, I have dialed in my makeshift contest "desk" that sits on my lap that I formed out of a dry erase board so I can quickly make notes or calls then erase later. I have also found, for me, a recliner provides hours of comfort for those long in chair runs. I transform the living room into the contest station with a fireplace in front of me and a view of the beautiful outdoors." (Photo courtesy of Andy Smith, KK7AC.)*

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

| *Call* | *Score* | *QSOs* | *Mults* | *Sec* | *Error %* |
|---|---|---|---|---|---|
| WB2P (@W2YC) | 186,252 | 1122 | 83 | SNJ | 1.8 |
| VE3PJ | 117,588 | 717 | 82 | ONE | 3.6 |
| KK7AC | 104,814 | 647 | 81 | AZ | 2.0 |
| KS4AA | 93,440 | 584 | 80 | VA | 3.5 |
| W9XT | 90,138 | 543 | 83 | WI | 1.4 |
| K5KJ | 82,336 | 496 | 83 | NTX | 2.4 |
| KØACP | 72,090 | 445 | 81 | MI | 3.5 |
| W9QL | 70,356 | 429 | 82 | IL | 4.9 |
| KØNEB | 69,822 | 431 | 81 | NE | 1.1 |
| K2DFC | 67,732 | 413 | 82 | NNJ | 2.1 |

*The skyhook at VE3PJ's gorgeous station. Greg finished 2nd in the SOULP category. (Photo courtesy of Greg Foster, VE3PJ.)*

## Single-Op, High Power

*"There's no place like first place; there's no place like home!"*

If George, K5TR, were a country-music singer, that would be a good line for one of his songs. After guest-operating at various stations around the country recently and consistently placing in the Top Ten (but *not* number 1), George opted to stay home this year. And given his excellent station and location, why not? This time, as was the case in 2016, his effort yielded a convincing win. This was George's 40th phone Sweepstakes. In all that time, one of his unfulfilled personal goals has been to log a 200-QSO hour. So far, that lofty aim has eluded him, but not by much. He hit 197 this year. He'll be back.

Dan, W7WA, also operated from his home QTH, only under a different call sign. Many of you will remember Rush Drake, W7RM, the first contester in the Pacific Northwest to put up *really big* antennas. Rush, who died in 2005, was Dan's contesting mentor. The Willamette Valley DX Club holds that call now and lent it to Dan to use for this contest. W7RM/W7WA finished second, about 200 QSOs behind George. Dan is used to winning – in fact the only times he has placed 2nd in the past 6 years have been when K5TR was at home!

Rich, WC6H, another regular (5 Top-Tens out of the past 6 years) moved up to the #3 spot, his best result to date.

The number 4 through 7 placements all come from the eastern US, which is unusual in this category, and almost certainly related to the lack of propagation on 15 and 10 meters. *Get it while you can, guys!* Those four scores are tightly clustered, with just a 120-QSO difference between #4 and #7.

K9PW, operating at NC1I in WMA, was disappointed that he missed the Top Ten last year, and according to his 3830 post, got off to a super-slow start this time. But he made up for it on Sunday and finished a strong 4th. A comment he made, which many will find surprising, was:

> *Sunday on SS has always been my favorite. It is when you need to work hard to get the weak ones in the log, really try to use that second radio and make smart decisions. Not sure why anyone would want to change the rules to mess up Sunday.*

*The HF antennas at NC1I, from his QRZ.com page. (Photo courtesy Frank Potts, NC1I)*

W2RQ, a long-time SS op with several multi-op Top Tens in his resume, went solo and took 5th this year from Northern New Jersey.

At number 6, Mark, KD4D, operating at the N3HBX superstation, made good use of the big antennas, remarking "I was very glad to have John's stacks on 20 meters Sunday. There was an endless stream of callers but many were very weak. Fortunately, there wasn't much noise." It all came together, and Mark is the only op in the SOHP Top Ten to make the Accuracy Honor Roll.

Jay, N4OX, has been quietly infiltrating the SOHP leaderboard for the past few years, and continued the string this round, with a solid 7th-place finish from the NFL section.

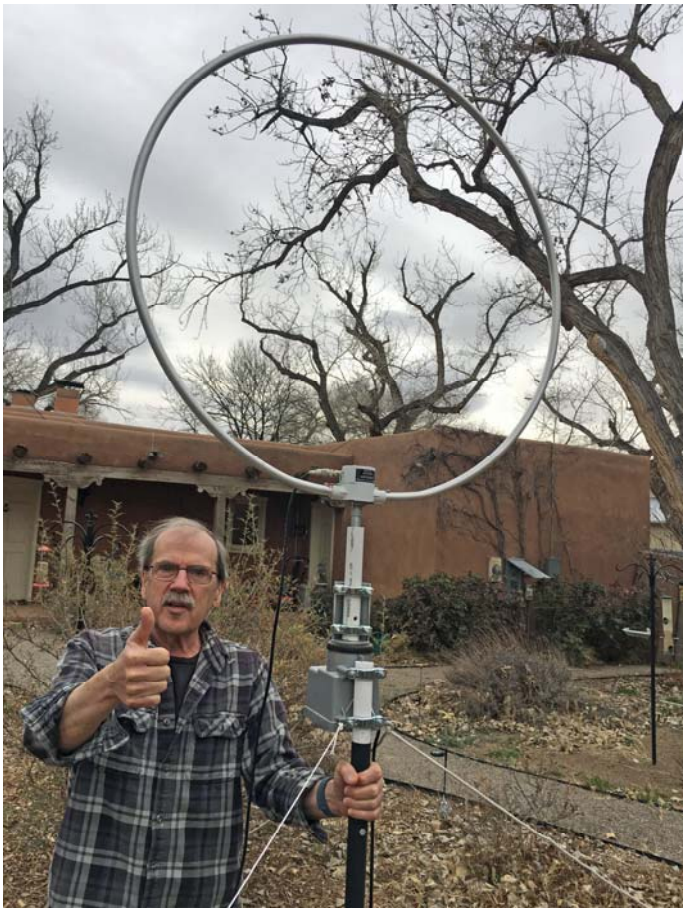
K5TA has a season ticket for seat #8, and he cashed it in again in 2018. Scott, who has lived in the same house for 42 years, has seen his neighborhood noise level slowly rise from absolute zero to horrible, and just a year ago almost gave up totally on 80 meters. But this year he took a chance, set up a Wellbrook receive loop in his back yard, and grinned ear-to-ear the first time he hit the "RX ANT" button. Back in business: 177 Qs on 80.

K2PM, another freshman in the SOHP Top Ten class, missed a section but scored enough QSOs to slide into the ninth spot, not an easy proposition from Michigan.

N9RV came in 10th. *What?* That's like saying the New England Patriots lost a close game to the Southern Utah Thunderbirds. In which alternate universe? Oh wait, an examination of Pat's log reveals a pattern of operation more like a casual contester, with a 10-hour break, and several hours with totals like 2, 24, or 33 contacts. We've all been there, done that, and enjoyed it, but never ended up in the Top Ten!

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

| *Call* | *Score* | *QSOs* | *Mults* | *Sec* | *Error %* |
|---|---|---|---|---|---|
| K5TR | 355,738 | 2143 | 83 | STX | 1.5 |
| W7RM (W7WA, op) | 320,380 | 1930 | 83 | WWA | 1.3 |
| WC6H | 280,374 | 1689 | 83 | SJV | 3.0 |
| NC1I (K9PW, op) | 263,276 | 1586 | 83 | WMA | 1.3 |
| W2RQ | 253,814 | 1529 | 83 | NNJ | 1.3 |
| KD4D | 250,328 | 1508 | 83 | MDC | 0.9 |
| N4OX | 243,356 | 1466 | 83 | NFL | 1.1 |
| K5TA | 241,032 | 1452 | 83 | NM | 1.3 |
| K2PM | 217,136 | 1324 | 82 | MI | 3.1 |
| N9RV | 215,496 | 1314 | 82 | MT | 1.3 |



*Scott, K5TA, with the latest addition to his bonsai antenna farm (Photo courtesy of Mary Kerrigan, NM5DX)*

## Single-Op, Low Power

Like many of the other categories, this one saw lots of repeat entrants jockeying for position in this year's derby. In all, five stations made the Top Ten list in both 2017 and 2018 — in that group, one moved up (ACØW), three moved down (N4PN, K8WZB, and K9ZO), and VE5SF stayed even at the number 10 spot. Notably absent was VA7RR, who has spent many of the past several years at number 1, 2, or 3 in this category.

The winner was W4AAA, operated by KK9A, who switched from his usual SOULP to compete unassisted this year. He ended up working a Clean Sweep and 115 more QSOs in this category than he did with assistance last time, while cutting his error rate in half. So much for spots.

WØEWD was second, and interestingly posted the exact same score – points, QSOs and mults, as last year's #1 entry.

Third went to Paul, N4PN, down just 4 QSOs from his 2017 second-place showing. He made most of his QSOs on 80 meters, and remarked in his 3830 post that "[the]

lower end of 80 was good to me…never went above 3.740."

Next was N4OO, who had a goal of 1,000 QSOs and a sweep, which he accomplished with some room to spare. Like fellow Georgian N4PN, but even more so, he concentrated heavily on 80 meters, making almost 62% of his total contacts on that band, remarking that "80 was just spectacular from here Saturday night with no storms nearby and quiet conditions."

NP4G, operating from the KP3Z station, returned to the category after a two-year absence, placed fifth, and made roughly a thousand folks very happy with the PR multiplier that was, sadly, very rare last year due to the heavy destruction caused by Hurricane Maria.

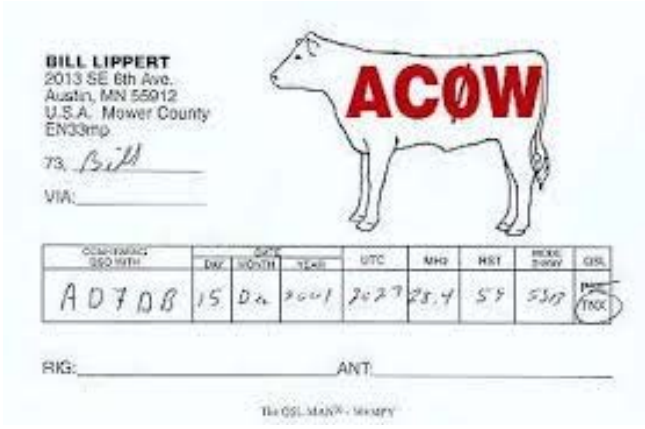
Sixth was Bill, ACØW, moving up 3 spots from last year with about 50 more contacts and one more mult, scoring one of the six Clean Sweeps among the Top Ten in this category.

The only station in the Southwest US that made it into the list this year is K9WZB in AZ. While the eastern stations were singing the praises of 80 meters, Garry was busy on other bands – his QSO total on 80 was five (5). Fifteen was not much better, and he ended up splitting almost exactly 50-50 between 20 and 40. His 7th-place result is down from #5 last year.

K9ZO was 8th this time, and it was great to hear him doing battle on the air. Two Canadians, VE4VT and VE5SF, round out the geographically-diverse Top Ten in this most-popular category.

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

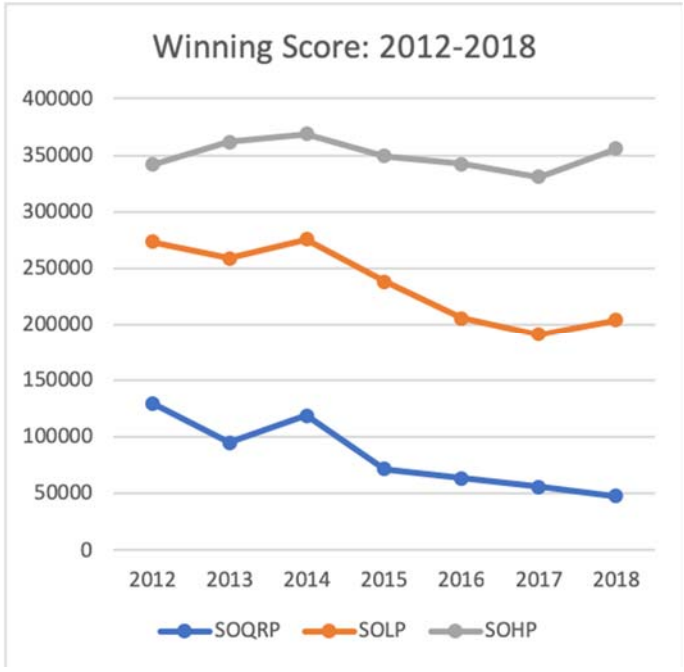
| *Call* | *Score* | *QSOs* | *Mults* | *Sec* | *Error %* |
|---|---|---|---|---|---|
| W4AAA (KK9A, op) | 204,180 | 1230 | 83 | NC | 1.4 |
| WØEWD | 191,224 | 1166 | 82 | IA | 2.3 |
| N4PN | 178,284 | 1074 | 83 | GA | 3.9 |
| N4OO | 174,300 | 1050 | 83 | GA | 1.4 |
| NP4G | 163,016 | 994 | 82 | PR | 2.3 |
| ACØW | 134,460 | 810 | 83 | MN | 2.5 |
| K9WZB | 127,428 | 777 | 82 | AZ | 2.0 |
| K9ZO | 123,172 | 742 | 83 | IL | 1.2 |
| VE4VT | 122,958 | 759 | 81 | MB | 5.3 |
| VE5SF | 120,682 | 727 | 83 | SK | 2.3 |




*It's always a hoot ("moo?") to work Bill, ACØW, during any contest. This year he harvested a Clean Sweep on his way to a sixth-place finish in SOLP.*

## Single-Op, QRP

For some reason, scores in SOQRP are continuing to decline recently, while those in the other Single-op categories (SOLP, SOHP) have leveled off or are actually increasing during the same period. The following chart shows the historical progression of winning scores in each of those categories from 2012 through 2018. (The choice of 2012 as a start date is not arbitrary – that was when Ontario split into 3 sections, so direct comparison of total scores is invalid prior to that year.)




Comparing just the endpoints of those graphs shows SOQRP top scores down a hefty 63%, while SOLP declined only 25%. SOHP was actually 4% *higher* this

year than 6 years ago, and less than 4% below its highest point in 2014. Conventional wisdom attributes this phenomenon to propagation conditions due to low solar activity affecting low-power stations disproportionately, but a quick look back at scores during the last sunspot minimum shows that from 2008 through 2010, the winning QRP scores were never less than 102k, and those were made with the help of just 80 possible multipliers. Go figure.

Whatever the explanation, the operators of today must play the hand they're dealt, and many of the call signs in the list below have long histories of competing in this challenging environment.

Topping the table this year, in a repeat performance from 2017 is Randy, NDØC, in MN. His day-to-day hamming prepares him well for this type of event – according to his **QRZ.com** profile, he has worked 319 DXCC entities with 5 watts or less, including 137 on 40 meters and 77 on 80 meters. Quite impressive from the Black Hole.

Next on the list is a newcomer who came to the party by accident. Mike, N7MH, a regular operator at the Stanford University club station, W6YX, was planning to recruit some students for an "S-class" School Club entry, but missed the club meeting and found himself alone at the station, so decided to try something new — QRP. After dealing with a few equipment problems, he cruised to 2nd place. How did he like it? Check out the final sentence of his 3830 post: "I have new respect for anyone that enters an SSB contest QRP."

Ken, N5EE, the third-place finisher just behind 'YX, has been a regular in this category forever and has a darker message: "I've operated QRP in SS Phone many times before but this one might be my last." His complaint is not with band conditions, LIDs, or activity, just the constant hard slog of calling, calling, calling – and hearing "Please again again…" etc. that goes along with this mode of operation.

Fourth place goes to Dan, VE6EX, who won the category in 2015 and 2016, and was 2nd last year. He apparently had some time conflicts during the contest, since he suddenly left the air after 4 hours, returning only at 1700Z Sunday. He had decent rates while he was on — too bad he couldn't have spent more time.

Scores taper off down the list, with KA8SMA, AA7V, KJ2G, N1XIH, N7JI and N7FLT filling out the Top Ten.

**Top Ten – Single-Op, QRP (SOQRP)**

| *Call* | *Score* | *QSOs* | *Mults* | *Sec* | *Error %* |
|---|---|---|---|---|---|
| NDØC | 48,048 | 308 | 78 | MN | 0.6 |
| W6YX (N7MH, op) | 46,136 | 292 | 79 | SCV | 0.3 |
| N5EE | 43,450 | 275 | 79 | AR | 3.5 |
| VE6EX | 31,144 | 229 | 68 | AB | 4.5 |
| KA8SMA | 28,016 | 206 | 68 | MI | 1.0 |
| AA7V | 25,650 | 171 | 75 | AZ | 0.6 |
| KJ2G | 18,144 | 162 | 56 | EMA | 0.6 |
| N1XIH/7 (GWØNVN, op) | 16,714 | 137 | 61 | UT | 4.8 |
| N7JI | 16,200 | 135 | 60 | OR | 2.9 |
| N7FLT | 14,706 | 129 | 57 | MT | 2.2 |

*NDØC used this neat-and-tidy single-tower antenna system to successfully defend his SOQRP category title. (Photo courtesy Randy Shirbroun, NDØC)*

## Multioperator, Low Power

"Musical chairs" might be a good description of this category's top players. Seven of this year's top ten scorers have been in the Top Ten in the last few years, but the finishing order is scrambled.

At the top of the heap this time is the K7IR team in the Eastern Washington section, which also won in 2016 but finished 3rd in 2015. They missed a section this time (they think it might have been because of local noise problems on 40 and 80), but had a big enough QSO margin to make up for it.

The father-daughter team at K5KU, 3rd in 2017, moved up to 2nd this time.

The WW4LL multiop was 1st in 2017 and 2nd in 2016, but had "a couple of issues" that limited their operating time to only 21 of the 24 hours this year. They fell to 3rd place.

WZ8P: 1st, 2nd, and 3rd in previous years, 4th this year. Interestingly, they made almost all of their QSOs on 40 and 80 meters.

The 6-operator K9KE team noted that "this contest has become a Fall tradition for our local group and a way to share contesting with younger hams." The team was 4th in 2017, 6th this time around.

And so the story goes… musical chairs!

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

| *Call* | *Score* | *QSOs* | *Mults* | *Sec* | *Error %* |
|---|---|---|---|---|---|
| K7IR | 179,908 | 1097 | 82 | EWA | 2.0 |
| K5KU | 164,164 | 1001 | 82 | LA | 3.4 |
| WW4LL | 152,222 | 917 | 83 | GA | 1.7 |
| WZ8P | 148,570 | 895 | 83 | OH | 1.8 |
| NØAT | 145,632 | 888 | 82 | MN | 4.2 |
| K9KE | 106,240 | 640 | 83 | IL | 0.9 |
| KØUK | 90,200 | 550 | 82 | CO | 1.6 |
| WX4W | 87,482 | 527 | 83 | KY | 2.4 |
| WR5O | 86,994 | 537 | 81 | WTX | 2.3 |
| K9DA | 80,032 | 488 | 82 | IN | 2.0 |

*K9KE and KC9JKE, John and Jackie, operating at the 6th place ML station. (Photo courtesy of John McCormick, K9KE and Milwaukee County ARES, W9WK.)*

## School Club

Another year, another win for KØHC, the "Larks" of Hesston College, located about a half-hour north of Wichita, KS. The club's trustee Bob, WØBH, who is an avid contester specializing in State QSO parties, always seems to have a good-sized and enthusiastic group of students ready for action. Their first entry in Phone Sweepstakes appears to be in 2004, when they made only 66 QSOs and finished near the bottom of the category, but just one year later in 2005, they jumped to first place with a score exceeding 239k. Since then, with the exception of 2015 (a year in which they evidently did not participate), they have never finished below 2nd. All in all, they have 10 wins in the past 14 years. Perhaps the college should consider adding "Radiosport" to the list of available majors! Scholarships, anyone? (Seriously, they do offer an air-traffic control program – there's quite an overlap in skills between that and phone contesting…just sayin'.)

Close behind, (and the only other station in the category to manage a Clean Sweep), was W4AQL, the Georgia Tech ARC, another club with a recent history of success in this contest. They were in first place in 2015, and have finished 2nd to Hesston for the past 2 years.

Other entries were familiar regulars as well: WØEEE (Missouri S&T), KF5CRF (Tiger RC, a public school club in Magnum, OK), W8EDU (Case Western), W9JWC (Bradley University in Peoria), and K5LSU (LSU, *doh*). A newcomer to the category is VE9UNB, at the University of New Brunswick. Welcome, and please come back – that MAR multiplier can be a little tricky. Rounding it out is W1YK at Worcester Polytechnic.

Other school clubs were active, but are not represented in the results for this category. W9YB, the Purdue University ARC, made at least 124 QSOs that showed up in other people's logs, but apparently did not submit their own. K9IU, at Indiana University, sent "S" as their precedence, posted to 3830 as a School Club, but their official entry shows up in the ML category. W6UE, the Caltech ARC, entered as "M." Future entrants should be aware that the online log submission form is not particularly clear or obvious when it comes to declaring your category. Be sure to check the verification email that comes back from the robot.

**Scores -- School Club Station (S)**

| *Call* | *Score* | *QSOs* | *Mults* | *Sec* | *Error %* |
|---|---|---|---|---|---|
| KØHC | 196,876 | 1186 | 83 | KS | 2.1 |
| W4AQL | 169,818 | 1023 | 83 | GA | 2.7 |
| WØEEE | 69,700 | 425 | 82 | MO | 7.4 |
| KF5CRF | 33,824 | 302 | 56 | OK | 5.3 |
| W8EDU | 32,562 | 243 | 67 | OH | 5.0 |
| W9JWC | 30,932 | 209 | 74 | IL | 6.6 |
| K5LSU | 7,426 | 79 | 47 | LA | 3.7 |
| VE9UNB | 6,952 | 79 | 44 | MAR | 2.5 |
| W1YK | 6,396 | 82 | 39 | WMA | 5.6 |


*The crew at KØHC – most will be returning next year according to their 3830 post. (Photo courtesy of Bob Harder, WØBH)*

## Single-Op Unlimited, High Power

In some respects, you'd expect SOUHP to represent the "big artillery" of the Single-op categories — good hardware inside and out, seasoned operators, and the power of the internet providing a constant stream of spots to help find both new multipliers and QSOs (seven stations in the Top Ten had a Clean Sweep, maybe fewer than you'd expect).

There were 300 entries in this category, about equal to those in SOHP (and with very similar scores). Finishing at the top of the pile for the 2nd year in a row was Bill, K4XS, operating at his station in Hawaii, KH7XS. Because of his distance from the mainland, Bill had almost no QSOs on 80 meters, but he made up for it with good numbers on 40 meters (790), excellent totals on 20 meters (865), and the best in the contest on 15 meters (320 QSOs). His good logging accuracy didn't hurt, either.

K6LA piloted VY2TT, his station in PEI, to 2nd place. Ken had no propagation on 10 or 15 meters, but logged nearly 1800 QSOs on the other bands. Gotta go with the flow.

*The fine SO2R station layout at VY2TT, 2nd place in SOUHP. (Photo courtesy of Ken Widelitz, K6LA.)*

Close on Ken's heels were western-US stations N5ZC (WTX) and W7RN (in NV, and operated by WX5S). Rich and Matt had nearly identical QSO totals and distribution across the bands, and it was logging accuracy that determined the final order of finish.

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

| *Call* | *Score* | *QSOs* | *Mults* | *Sec* | *Error %* |
|---|---|---|---|---|---|
| KH7XS (K4XS, op) | 329,842 | 1987 | 83 | PAC | 0.9 |
| VY2TT | 285,196 | 1739 | 82 | MAR | 2.1 |
| N5ZC | 281,702 | 1697 | 83 | WTX | 1.9 |
| W7RN (WX5S, op) | 279,378 | 1683 | 83 | NV | 3.8 |
| K9CT | 264,604 | 1594 | 83 | IL | 1.4 |
| K3MM | 248,004 | 1494 | 83 | MDC | 0.9 |
| W1SJ | 246,178 | 1483 | 83 | VT | 2.2 |
| NØXR (@NØNI) | 240,534 | 1449 | 83 | IA | 2.2 |
| W6PZ (K6SRZ, op) | 224,024 | 1366 | 82 | SF | 2.8 |
| W3IDT | 212,872 | 1298 | 82 | MDC | 4.3 |

*N5ZC at the controls of his WTX station. Rich finished 3rd in the SOUHP category this year. (Photo courtesy of Rich Thorne, N5ZC.)*

## Multiop, High Power

At first glance, it almost looks like we have a new winner in the category this year — K6AM came out of nowhere to win MH on their first try. But that's not quite true. The call sign wasn't anywhere in the MH Top Ten in the previous few years, but the crew certainly was:

*"The K6AM call has not been heard in SS Phone for many years. We have been operating from W6YI for a while. But after winning most years, that station was not available this time. So we brought core operators N6MJ, N6WIN, N6KI, and K6AM over to the NX6T contest station a few hilltops to the west. We were joined by our two young champions-in-training, Axel KI6RRN and Levi KK6NON."*

The 3-man team at WØNO moved up from 3rd in 2017 to take 2nd place this time, edging out the K4OV by just 3

QSOs. The guys at 'OV say "We were lucky to even get on the air after Hurricane Michael blew down nearly all the wire antennas, and its lightning blew up switches and networking. But we got some antennas up and things were more or less working."

*The 2 operators at the #3 multiop station: Rob, K4OV on the left; Lee, N1BA, on the right. (Photo courtesy of Rob Katz, K4OV)*

The race for 4th place was also very close. WØSD had fewer QSOs than W5WZ, but W5WZ had one fewer multiplier, giving the SD crew the edge in score. WØSD almost missed a mult, too, but finally made a QSO with neighboring ND on Sunday afternoon to complete the sweep.

W5WZ's story is interesting. They finished 2nd in 2017 and had high hopes of doing better this time. With 367 Qs in the first 2 hours, they were off to a great start. But the rate collapsed ("it seemed that 20 meters had great propagation to all the places with no hams, and 40 meters had deep QSB").

*A great view of the WØSD antenna farm. (Photo courtesy Ed Gray, WØSD)*

W1XX, congratulations on the strong Top Ten finish (#6 last year and again this time) and thank you. It's always great to see a big score from the tiny state of RI, making the mult easier for a lot of folks.

NV9L was 7th this time around, once again operating from WB9Z. Val and Jerry had well over 1100 contacts on 80 and 40 meters. ND8DX made over 1200 Qs on 80 and 40, finishing in 8th.

Rounding out the Top Ten were N3OC in Maryland (big bands were 80 and 20) and KRØP in Nebraska (a very balanced attack on 80/40/20).

**Top Ten – Multioperator, High Power (MH)**

| *Call* | *Score* | *QSOs* | *Mults* | *Sec* | *Error %* |
|---|---|---|---|---|---|
| K6AM | 323,036 | 1946 | 83 | SDG | 2.8 |
| WØNO | 302,784 | 1824 | 83 | KS | 3.3 |
| K4OV | 302,286 | 1821 | 83 | NC | 2.8 |
| WØSD | 280,706 | 1691 | 83 | SD | 2.4 |
| W5WZ | 279,292 | 1703 | 82 | LA | 2.7 |
| W1XX | 270,248 | 1628 | 83 | RI | 2.9 |
| NV9L | 242,858 | 1463 | 83 | IL | 1.2 |
| ND8DX | 230,076 | 1386 | 83 | OH | 0.6 |
| N3OC | 222,772 | 1342 | 83 | MDC | 1.8 |
| KRØP | 216,132 | 1302 | 83 | NE | 2.2 |

## 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 circus again when it comes to town in 2019: November 2-4 for CW, November 16-18 for phone. You can keep your fingers crossed for better propagation on 15 meters, but that's likely only to get you some cramped fingers.

73,
Scott and Bruce
K5TA and AA5B

## Division Winners

**Single Operator, High Power**

| | | |
|---|---|---|
| Atlantic | KD4D | 250,328 |
| Central | KØPJ | 208,662 |
| Dakota | KØIDX | 146,610 |
| Delta | KØEJ | 129,120 |
| Great Lakes | K2PM | 217,136 |
| Hudson | W2RQ | 253,814 |
| Midwest | N7WY | 131,638 |
| New England | NC1I (K9PW, op) | 263,276 |
| Northwestern | W7RM (W7WA, op) | 320,380 |
| Pacific | WC6H | 280,374 |
| Roanoke | K4ZW | 187,248 |
| Rocky Mountain | K5TA | 241,032 |
| Southeastern | N4OX | 243,356 |
| Southwestern | W6AFA | 110,484 |
| West Gulf | K5TR | 355,738 |
| Canada | VE3YT | 137,280 |

**Single Operator, Low Power**

| | | |
|---|---|---|
| Atlantic | NM2O | 106,108 |
| Central | K9ZO | 123,172 |
| Dakota | ACØW | 134,460 |
| Delta | WD5DJW | 53,682 |
| Great Lakes | WB8WKQ | 104,912 |
| Hudson | KS2G | 36,354 |
| Midwest | WØEWD | 191,224 |
| New England | KC1SQ | 61,650 |
| Northwestern | N7LOX | 81,300 |
| Pacific | WB6POT | 72,226 |
| Roanoke | W4AAA (KK9A, op) | 204,180 |
| Rocky Mountain | KBØVHA | 33,136 |
| Southeastern | N4PN | 178,284 |
| Southwestern | K9WZB | 127,428 |
| West Gulf | WD5K | 107,568 |
| Canada | VE4VT | 122,958 |

**Single Operator, QRP**

| | | |
|---|---|---|
| Atlantic | WK3A | 7,050 |
| Central | AF9J | 912 |
| Dakota | NDØC | 48,048 |
| Delta | N5EE | 43,450 |
| Great Lakes | KA8SMA | 28,016 |
| Midwest | N5SEZ | 4,224 |
| New England | KJ2G | 18,144 |
| Northwestern | N7JI | 16,200 |
| Pacific | W6YX (N7MH, op) | 46,136 |
| Roanoke | N4ZAK | 11,526 |
| Rocky Mountain | N1XIH (GWØNVN, op) | 16,714 |
| Southeastern | KJ4M | 8,976 |
| Southwestern | AA7V | 25,650 |
| West Gulf | AC5D | 10,670 |
| Canada | VE6EX | 31,144 |

**Single Operator Unlimited, High Power**

| | | |
|---|---|---|
| Atlantic | K3MM | 248,004 |
| Central | K9CT | 264,604 |
| Dakota | KØCN | 143,664 |
| Delta | KC4NX | 182,574 |
| Great Lakes | W8MJ | 135,270 |
| Hudson | KD2RD | 207,168 |
| Midwest | NØXR | 240,534 |
| New England | W1SJ | 246,178 |
| Northwestern | K7RL | 163,836 |
| Pacific | KH7XS (K4XS, op) | 329,842 |
| Roanoke | N1LN | 161,186 |
| Rocky Mountain | K7UT | 187,616 |
| Southeastern | KT4Q | 161,186 |
| Southwestern | W6TK | 155,210 |
| West Gulf | N5ZC | 281,702 |
| Canada | VY2TT | 285,196 |

**Single Operator Unlimited, Low Power**

| | | |
|---|---|---|
| Atlantic | WB2P | 186,252 |
| Central | W9XT | 90,138 |
| Dakota | K4IU | 31,350 |
| Delta | WBØRUR | 63,246 |
| Great Lakes | KØACP | 72,090 |
| Hudson | K2DFC | 67,732 |
| Midwest | KØNEB | 69,822 |
| New England | W1HS | 45,892 |
| Northwestern | W7ZRC | 43,608 |
| Pacific | K6GHA | 57,760 |
| Roanoke | KS4AA | 93,440 |
| Rocky Mountain | N7MZW | 67,340 |
| Southeastern | K4QY | 31,652 |
| Southwestern | KK7AC | 104,814 |
| West Gulf | K5KJ | 82,336 |
| Canada | VE3PJ | 117,588 |

**Multioperator, Single Transmitter, High Power**

| | | |
|---|---|---|
| Atlantic | N3OC | 222,772 |
| Central | NV9L | 242,858 |
| Dakota | WØSD | 280,706 |
| Delta | W5WZ | 279,292 |
| Great Lakes | ND8DX | 230,076 |
| Hudson | N2NC | 213,974 |
| Midwest | WØNO | 302,784 |
| New England | W1XX | 270,248 |
| Northwestern | KZ1W | 207,846 |
| Pacific | NW6P | 209,756 |
| Roanoke | K4OV | 302,286 |
| Rocky Mountain | NN5K | 132,184 |
| Southeastern | N4SVC | 134,644 |
| Southwestern | K6AM | 323,036 |
| West Gulf | KG5VK | 166,460 |
| Canada | VE4EA | 135,456 |

**Multioperator, Single Transmitter, Low Power**

| | | |
|---|---|---|
| Atlantic | NO3U | 61,320 |
| Central | K9KE | 106,240 |
| Dakota | NØAT | 145,632 |
| Delta | K5KU | 164,164 |
| Great Lakes | WZ8P | 148,570 |
| Hudson | NY6DX | 51,356 |
| Midwest | KØTSA | 14,364 |
| New England | WA1BXY | 73,470 |
| Northwestern | K7IR | 179,908 |
| Pacific | N6ACL | 35,416 |
| Roanoke | N2VA | 53,464 |
| Rocky Mountain | KØUK | 90,200 |
| Southeastern | WW4LL | 152,222 |
| Southwestern | AB7YQ | 31,376 |

| | | |
|---|---|---|
| West Gulf | WR5O | 86,994 |
| Canada | VA2CZ | 73,964 |
| | | |
| **School Club** | | |
| Central | W9JWC | 30,932 |
| Delta | K5LSU | 7,426 |
| Great Lakes | W8EDU | 32,562 |
| Midwest | KØHC | 196,876 |
| Southeastern | W4AQL | 169,818 |
| West Gulf | KF5CRF | 33,824 |
| Canada | VE9UNB | 6,952 |

## Regional Leaders

**West Coast Region**
(Pacific, Northwestern and Southwestern Divisions; Alberta, British Columbia and NT Sections)

| | | |
|---|---|---|
| W7RM (W7WA, op) | 320,380 | SOHP |
| WC6H | 280,374 | SOHP |
| N9RV | 215,496 | SOHP |
| NR6Q | 213,808 | SOHP |
| N6JS | 190,350 | SOHP |
| | | |
| K9WZB | 127,428 | SOLP |
| WN6K | 86,832 | SOLP |
| N7LOX | 81,300 | SOLP |
| WB6POT | 72,226 | SOLP |
| N7XU (K4XU, op) | 65,124 | SOLP |
| | | |
| W6YX (N7MH, op) | 46,136 | SOQRP |
| VE6EX | 31,144 | SOQRP |
| AA7V | 25,650 | SOQRP |
| N7JI | 16,200 | SOQRP |
| N7FLT | 14,706 | SOQRP |
| | | |
| KH7XS (K4XS, op) | 329,842 | SOUHP |
| W7RN (WX5S, op) | 279,378 | SOUHP |
| W6PZ | 224,024 | SOUHP |
| K7RL | 163,836 | SOUHP |
| W6TK | 155,210 | SOUHP |
| | | |
| KK7AC | 104,814 | SOULP |
| K6GHA | 57,760 | SOULP |
| W7ZRC | 43,608 | SOULP |
| KB7KYK | 26,864 | SOULP |
| NR7RR | 23,250 | SOULP |
| | | |
| K6AM | 323,036 | MSHP |
| NW6P | 209,756 | MSHP |
| KZ1W | 207,846 | MSHP |
| W7EB | 157,534 | MSHP |
| VE6AO | 118,408 | MSHP |
| | | |
| K7IR | 179,908 | MSLP |
| N6ACL | 35,416 | MSLP |
| W6EK | 33,744 | MSLP |
| AB7YQ | 31,376 | MSLP |
| KDØLHI | 11,024 | MSLP |

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

| | | |
|---|---|---|
| K5TR | 355,738 | SOHP |
| K5TA | 241,032 | SOHP |
| AD5XD | 190,402 | SOHP |
| NR5M | 153,348 | SOHP |
| K5WA | 151,146 | SOHP |
| | | |
| WØEWD | 191,224 | SOLP |
| ACØW | 134,460 | SOLP |
| VE4VT | 122,958 | SOLP |
| VE5SF | 120,682 | SOLP |
| WD5K | 107,568 | SOLP |
| | | |
| NDØC | 48,048 | SOQRP |
| N1XIH (GWØNVN, op) | 16,714 | SOQRP |
| AC5D | 10,670 | SOQRP |
| N7IV | 5,740 | SOQRP |
| N5XE | 5,208 | SOQRP |
| | | |
| N5ZC | 281,702 | SOUHP |
| NØXR | 240,534 | SOUHP |
| K7UT | 187,616 | SOUHP |
| N5RZ | 183,708 | SOUHP |
| KØCN | 143,664 | SOUHP |
| | | |
| K5KJ | 82,336 | SOULP |
| KØNEB | 69,822 | SOULP |
| N7MZW | 67,340 | SOULP |
| NWØM | 61,500 | SOULP |
| KØVBU | 48,114 | SOULP |
| | | |
| WØNO | 302,784 | MSHP |
| WØSD | 280,706 | MSHP |
| KRØP | 216,132 | MSHP |
| KG5VK | 166,460 | MSHP |
| VE4EA | 135,456 | MSHP |
| | | |
| NØAT | 145,632 | MSLP |
| KØUK | 90,200 | MSLP |
| WR5O | 86,994 | MSLP |
| KØFVF | 73,538 | MSLP |
| AD7OV | 25,404 | MSLP |
| | | |
| KØHC | 196,876 | S |
| WØEEE | 69,700 | S |
| KF5CRF | 33,824 | S |

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

| | | |
|---|---|---|
| K2PM | 217,136 | SOHP |
| KØPJ | 208,662 | SOHP |
| ND4Y | 176,300 | SOHP |
| K8AO | 145,960 | SOHP |
| VE3YT | 137,280 | SOHP |
| | | |
| K9ZO | 123,172 | SOLP |
| WB8WKQ | 104,912 | SOLP |
| W8MET | 91,466 | SOLP |
| VE3WRL | 76,160 | SOLP |
| N9KT | 61,462 | SOLP |
| | | |
| KA8SMA | 28,016 | SOQRP |

| | | |
|---|---|---|
| KØTEA | 13,416 | SOQRP |
| VA3MYC | 2,106 | SOQRP |
| VE3ZMC | 1,848 | SOQRP |
| N8XX | 1,040 | SOQRP |
| | | |
| K9CT | 264,604 | SOUHP |
| ND9G | 152,554 | SOUHP |
| WT9U | 147,436 | SOUHP |
| VE3CX | 144,180 | SOUHP |
| W8MJ | 135,270 | SOUHP |
| VE3PJ | 117,588 | SOULP |
| W9XT | 90,138 | SOULP |
| KØACP | 72,090 | SOULP |
| W9QL | 70,356 | SOULP |
| N8FYL | 59,904 | SOULP |
| | | |
| NV9L | 242,858 | MSHP |
| ND8DX | 230,076 | MSHP |
| WD9CIR | 133,298 | MSHP |
| WC8VOA | 71,448 | MSHP |
| KI9A | 67,396 | MSHP |
| | | |
| WZ8P | 148,570 | MSLP |
| K9KE | 106,240 | MSLP |
| WX4W | 87,482 | MSLP |
| K9DA | 80,032 | MSLP |
| K9IU | 75,152 | MSLP |
| | | |
| W8EDU | 32,562 | S |
| W9JWC | 30,932 | S |

**Southeast Region**
(Delta, Roanoke and Southeastern Divisions)

| | | |
|---|---|---|
| N4OX | 243,356 | SOHP |
| K4PV | 190,512 | SOHP |
| K4ZW | 187,248 | SOHP |
| WØCN | 158,112 | SOHP |
| NN4FL (N4EEB, op) | 148,836 | SOHP |
| | | |
| W4AAA (KK9A, op) | 204,180 | SOLP |
| N4PN | 178,284 | SOLP |
| N4OO | 174,300 | SOLP |
| NP4G | 163,016 | SOLP |
| N8II | 95,120 | SOLP |
| | | |
| N5EE | 43,450 | SOQRP |
| N4ZAK | 11,526 | SOQRP |
| KJ4M | 8,976 | SOQRP |
| K1DW | 3,060 | SOQRP |
| AC2N | 2,464 | SOQRP |
| | | |
| KC4NX | 182,574 | SOUHP |
| KT4Q | 161,186 | SOUHP |
| N1LN | 161,186 | SOUHP |
| W4GO | 132,966 | SOUHP |
| W4NF | 132,468 | SOUHP |
| | | |
| KS4AA | 93,440 | SOULP |
| WBØRUR | 63,246 | SOULP |
| WT8WV | 60,264 | SOULP |
| N1WR | 57,304 | SOULP |
| N4ZZ | 45,276 | SOULP |
| K4OV | 302,286 | MSHP |
| W5WZ | 279,292 | MSHP |
| NA5NN | 200,528 | MSHP |
| W5JJ | 177,786 | MSHP |
| N4SVC | 134,644 | MSHP |
| | | |
| K5KU | 164,164 | MSLP |
| WW4LL | 152,222 | MSLP |
| N2VA | 53,464 | MSLP |
| W5GAD | 52,000 | MSLP |
| N1KSC | 33,456 | MSLP |
| | | |
| W4AQL | 169,818 | S |
| K5LSU | 7,426 | S |

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

| | | |
|---|---|---|
| NC1I (K9PW, op) | 263,276 | SOHP |
| W2RQ | 253,814 | SOHP |
| KD4D | 250,328 | SOHP |
| AF1T | 213,674 | SOHP |
| K3ZO | 201,064 | SOHP |
| | | |
| NM2O | 106,108 | SOLP |
| KZ2I | 100,098 | SOLP |
| KC1SQ | 61,650 | SOLP |
| K3KU | 58,520 | SOLP |
| W3MMM | 57,038 | SOLP |
| | | |
| KJ2G | 18,144 | SOQRP |
| WK3A | 7,050 | SOQRP |
| K2QO | 7,008 | SOQRP |
| KC3TOM | 3,360 | SOQRP |
| W3EK | 2,464 | SOQRP |
| | | |
| VY2TT | 285,196 | SOUHP |
| K3MM | 248,004 | SOUHP |
| W1SJ | 246,178 | SOUHP |
| W3IDT | 212,872 | SOUHP |
| KD2RD | 207,168 | SOUHP |
| | | |
| WB2P | 186,252 | SOULP |
| K2DFC | 67,732 | SOULP |
| N2SQW | 48,924 | SOULP |
| W1HS | 45,892 | SOULP |
| W3KB | 35,192 | SOULP |
| | | |
| W1XX | 270,248 | MSHP |
| N3OC | 222,772 | MSHP |
| N2NC | 213,974 | MSHP |
| K3AJ | 182,434 | MSHP |
| K1RQ | 182,368 | MSHP |
| | | |
| VA2CZ | 73,964 | MSLP |
| WA1BXY | 73,470 | MSLP |
| NO3U | 61,320 | MSLP |
| K1KP | 57,728 | MSLP |
| W3ZGD | 55,278 | MSLP |
| | | |
| VE9UNB | 6,952 | S |

# 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 the ARRL Contest Branch at 860- 594-0232 or contests@arrl.org. Plaques cost $75, which includes all shipping charges

| Winner | Division | Category | Sponsor |
|---|---|---|---|
| K5TR | Overall | Single Operator High Power Phone | Icom America |
| W4AAA (KK9A, op) | Overall | Single Operator Low Power Phone | ARRL Contest Branch - Ken Adams, K5KA Memorial |
| NDØC | Overall | Single Operator QRP Phone | Icom America |
| KH7XS (K4XS, op) | Overall | Single Operator Unlimited High Power Phone | Icom America |
| WB2P | Overall | Single Operator Unlimited Low Power Phone | Icom America |
| K6AM | Overall | Multioperator High Power Phone | Icom America |
| K7IR | Overall | Multioperator Low Power Phone | Icom America |
| KØHC (WØBH, op) | Overall | School Club Phone | Robert Tuttle, N8YXR & Jennie Tuttle, KCØRBV |
| KD4D | Atlantic Division | Single Operator High Power Phone | Icom America |
| NM2O | Atlantic Division | Single Operator Low Power Phone | Potomac Valley Radio Club |
| WK3A | 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 |
| NO3U | Atlantic Division | Multioperator Low Power 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 |
| AF9J | Central Division | Single Operator QRP Phone | Icom America |
| K9CT | Central Division | Single Operator Unlimited High Power Phone | Society of Midwest Contesters |
| W9XT | 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 |
| W9JWC | Central Division | School Club Phone | Icom America |
| KØIDX | 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 |
| KØCN | Dakota Division | Single Operator Unlimited High Power Phone | Minnesota Wireless Association - In memory of Jim Dokmo, KØFVF |
| K4IU | Dakota Division | Single Operator Unlimited Low Power Phone | Minnesota Wireless Association |
| WØSD | Dakota Division | Multioperator High Power Phone | Icom America |
| NØAT | Dakota Division | Multioperator Low Power Phone | Icom America |
| KØEJ | Delta Division | Single Operator High Power Phone | Icom America |
| WD5DJW | Delta Division | Single Operator Low Power Phone | Icom America |
| N5EE | Delta Division | Single Operator QRP Phone | Icom America |
| KC4NX | Delta Division | Single Operator Unlimited High Power Phone | Icom America |
| WBØRUR | 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 |
| K5LSU | Delta Division | School Club Phone | Icom America |
| K2PM | 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 | Great Lakes Division | School Club Phone | Robert Tuttle, N8YXR & Jennie Tuttle, KCØRBV |
| W2RQ | Hudson Division | Single Operator High Power Phone | Icom America |
| KS2G | Hudson Division | Single Operator Low Power Phone | Icom America |
| KD2RD | Hudson Division | Single Operator Unlimited High Power Phone | Icom America |
| K2DFC | Hudson Division | Single Operator Unlimited Low Power Phone | Icom America |
| N2NC | Hudson Division | Multioperator High Power Phone | Icom America |
| NY6DX | Hudson Division | Multioperator Low Power Phone | Icom America |
| N7WY | Midwest Division | Single Operator High Power Phone | Icom America |
| WØEWD | Midwest Division | Single Operator Low Power Phone | Icom America |
| N5SEZ | Midwest Division | Single Operator QRP Phone | Icom America |
| NØXR | 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 |
| KØTSA | 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 |
| W1HS | New England Division | Single Operator Unlimited Low Power Phone | Icom America |
| W1XX | New England Division | Multioperator High Power Phone | Icom America |
| WA1BXY | New England Division | Multioperator Low Power Phone | Icom America |
| W1YK | New England Division | School Club Phone | Icom America |
| W7RM (W7WA, op) | Northwestern Division | Single Operator High Power Phone | Icom America |
| N7LOX | Northwestern Division | Single Operator Low Power Phone | Icom America |
| N7JI | Northwestern Division | Single Operator QRP Phone | Icom America |
| K7RL | Northwestern Division | Single Operator Unlimited High Power Phone | Icom America |
| W7ZRC | Northwestern Division | Single Operator Unlimited Low Power Phone | Icom America |
| KZ1W | Northwestern Division | Multioperator High Power Phone | Icom America |
| K7IR | Northwestern Division | Multioperator Low Power Phone | Icom America |
| WC6H | Pacific Division | Single Operator High Power Phone | Icom America |
| WB6POT | Pacific Division | Single Operator Low Power Phone | Icom America |
| W6YX (N7MH, op) | Pacific Division | Single Operator QRP Phone | Icom America |
| KH7XS (K4XS, op) | Pacific Division | Single Operator Unlimited High Power Phone | Icom America |
| K6GHA | Pacific Division | Single Operator Unlimited Low Power Phone | Icom America |
| NW6P | Pacific Division | Multioperator High Power Phone | Icom America |
| N6ACL | Pacific Division | Multioperator Low Power Phone | Icom America |
| K4ZW | Roanoke Division | Single Operator High Power Phone | Icom America |
| W4AAA (KK9A, op) | Roanoke Division | Single Operator Low Power Phone | Icom America |
| N4ZAK | Roanoke Division | Single Operator QRP Phone | Icom America |

| | | | |
|---|---|---|---|
| NN3W | Roanoke Division | Single Operator Unlimited High Power Phone | Icom America |
| KS4AA | Roanoke Division | Single Operator Unlimited Low Power Phone | Icom America |
| K4OV | Roanoke Division | Multioperator High Power Phone | Icom America |
| N2VA | Roanoke Division | Multioperator Low Power Phone | Icom America |
| K5TA | Rocky Mountain Division | Single Operator High Power Phone | Icom America |
| KBØVHA | Rocky Mountain Division | Single Operator Low Power Phone | Icom America |
| N1XIH | Rocky Mountain Division | Single Operator QRP Phone | Icom America |
| K7UT | Rocky Mountain Division | Single Operator Unlimited High Power Phone | Icom America |
| N7MZW | Rocky Mountain Division | Single Operator Unlimited Low Power Phone | Icom America |
| NN5K | Rocky Mountain Division | Multioperator High Power Phone | Icom America |
| KØUK | Rocky Mountain Division | Multioperator Low Power 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 |
| K4QY | Southeastern Division | Single Operator Unlimited Low Power Phone | Icom America |
| N4SVC | 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 |
| W1PR | Southwestern Division | Single Operator Low Power Phone | Icom America |
| AA7V | Southwestern Division | Single Operator QRP Phone | Icom America |
| W6TK | Southwestern Division | Single Operator Unlimited High Power Phone | Icom America |
| KK7AC | Southwestern Division | Single Operator Unlimited Low Power Phone | Icom America |
| K6AM | Southwestern Division | Multioperator High Power Phone | Icom America |
| AB7YQ | Southwestern Division | Multioperator Low Power Phone | Icom America |
| K5TR | West Gulf Division | Single Operator High Power Phone | Icom America |
| WD5K | West Gulf Division | Single Operator Low Power Phone | Icom America |
| AC5D | West Gulf Division | Single Operator QRP Phone | Icom America |
| N5ZC | West Gulf Division | Single Operator Unlimited High Power Phone | Icom America |
| K5KJ | West Gulf Division | Single Operator Unlimited Low Power Phone | Icom America |
| KG5VK | West Gulf Division | Multioperator High Power Phone | Icom America |
| WR5O | 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 |
| VE4VT | Canada Division | Single Operator Low Power Phone | Icom America |
| VE6EX | Canada Division | Single Operator QRP Phone | Icom America |
| VY2TT | Canada Division | Single Operator Unlimited High Power Phone | Icom America |
| VE3PJ | Canada Division | Single Operator Unlimited Low Power Phone | Icom America |
| VA2CZ | Canada Division | Multioperator Low Power Phone | Icom America |
| VE9UNB | Canada Division | School Club Phone | Icom America |