

ARRL Phone Sweepstakes 2015 Results

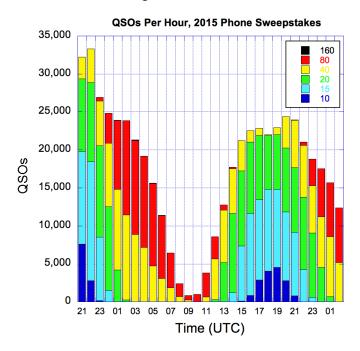
By Bruce Draper, AA5B (BruceAA5B@gmail.com) & Scott Davis, K5TA (ScottK5TA@gmail.com)



You don't need to break records to have fun!

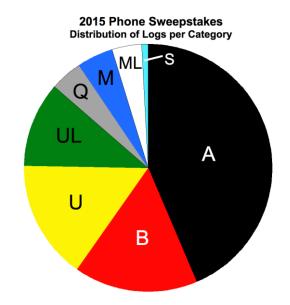
That's right – there were no all-time category records set this year and only a handful of division records fell, yet everyone seemed to have tons of fun! Participation continued to be high, and competition for the top spots was fierce. With a dip in the MUF, there was a shift of activity away from the 10 meter band compared to 2014, but the other bands took up the slack just fine. Figure 1 is a plot of the number of QSOs on each band for every hour of the contest. As always in phone Sweepstakes, the first few hours had the hottest activity, 0800-1100Z were the doldrums, and Sunday had a very steady level of activity. Here are some statistics:

- ✓ During the last 3 hours of the contest, the 15 and 10 meter bands had a combined total of a paltry 9 QSOs.
- ✓ The 15 meter band had the highest hourly number of QSOs 7 times, 20 meters 7 times, 40 meters only 5 times, and 80 meters a surprising 11 times. The 10 meter band never was the hottest.
- ✓ QSOs were made on the 40 meter band during every hour of Sweepstakes (although only 20 contacts during the 1000 UTC hour).



There were 1,826 logs submitted, representing 508,866 QSOs after log checking (more than a half million QSOs, wow!). These totals are down slightly from last year, when a record 1,911 logs were received.

The most popular category by far was the unassisted Single-Operator, Low Power (A), with 795 entries – almost as many as all other categories combined! Single-Operator, High Power (B) was next, at 295, followed closely by Single-Operator Unlimited, High Power (U) at 287. Rounding out the Single-Op categories were Unlimited, Low-Power (UL) with 198 and QRP (Q) at 78. In the Multioperator categories, there were 156 total entries; 85 High Power (M) and 71 Low Power (ML). School clubs (S) submitted 17 logs.

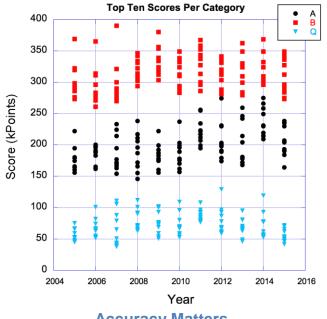


The following graph of unassisted Single-Op Top Ten scores over the last 11 years shows a few interesting things:

- ✓ There has been a clear separation of scores among High Power, Low Power, and QRP categories. In the distant past, the top LP score occasionally overlapped the bottom of the HP Top Ten, but not during this past solar cycle. (2012 got pretty close!)
- ✓ Despite a bump in the total number of multipliers (it went from 80 to 83 in 2012 with the split of VE3-ON into GTA/ONE/ONN/ONS) and a

general increase in activity, scores have been mostly flat.

✓ All three categories have had occasional "high fliers" – scores that are way above the pack.



Accuracy Matters

Everyone (okay, nearly everyone) makes mistakes. Many people are tempted to say we all make about the same number of errors, and QSO rate is king, so we should just try to make QSOs as fast as possible and it'll all come out in the wash, right? WRONG! The ARRL's logchecking process is thorough, and a comparison of claimed scores to final scores shows that there were some significant changes in order of finish.



Congratulations to NWØM, the only station in the contest with 400 or more QSOs and a Golden Log. (Photo credit — Mitch Odneal, NWØM)

In some categories, the #1 slot changed hands after the dust settled. In other categories, stations moved into or out of the Top Ten because of big differences in error rates. The Sweepstakes exchange is the longest and most complex of any of the major contests, so it is the most prone to errors. But because each QSO is precious, it pays to take the time to get it right. If you're not already doing it, get a copy of your LCR or Log Checking Report (www.arrl.org/contest-log-checking-reports), study it, and see what you can do to improve your logging accuracy.

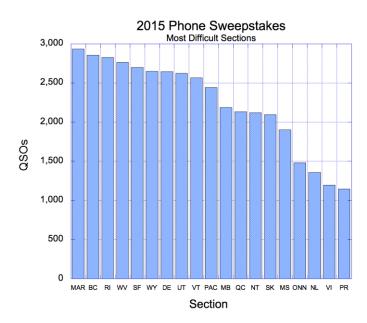
Best Error Rates for More than 400 QSOs

Call NWØM WA8ZBT K8BKM NDØC K6OK N2NC NA4K W3WC W7ZRC AA4NC KØZL N3KN KR4YO VE3RZ WE9V NØHJZ WBØN N3QE K1KNQ N4BP	Category UL A UL Q UH B A UH UL Q Q UH A UH UH UH A A A	Raw QSOs 401 445 490 427 430 615 619 525 832 401 405 430 442 818 1021 487 487 511 756 801	Error Rate (%) 0 0.2 0.5 0.5 0.5 0.6 0.6 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7
KH6LC (NH6V, op) N9JF	A UL	1465 467	0.8 0.9
KG4W	UH	574	0.9
K1JB W2ID	UH A	650 774	0.9 0.9
W2RQ	A	917	0.9
WØCN	В	1387	0.9
VA7RR	А	1439	0.9
K5TA	В	1733	0.9
AA5B WV1M	B UH	1821 404	0.9 1.0
NU1O	UH	404	1.0
AE7AP	A	505	1.0
N3YUG	UH	592	1.0
VE6SV (VE4GV, op)	ŪН	1953	1.0

The Sweep

It has always been a goal of Sweepstakes participants to "run the table" working at least one station in every possible section. The so-called "Clean Sweep" not only maximizes an entrant's total point score for a given number of QSOs, but also carries with it a certain satisfaction that comes with having fought and won the good fight. In fact, some consider that quest to be more important than winning or placing in their section, division, or category. There were 296 Clean Sweeps in the 2015 phone Sweepstakes, down a little from 320 the year before. Scores for those entries ranged from a high of 362,710 (#1 in the multi-high category) all the way down to 13,778, which, by the way, is mathematically the lowest "sweep" score possible (83 QSOs \times 2 Points \times 83 sections). N6MU in the SOLP (A) category, and K1DG in SOHP (B) scored exactly as such. NDØC, AA4NC, W4IM, N3UR, and K9ARF deserve a special shout-out for being the only QRP entrants in the sweep club. As fun as it might be to work them all, it is in no way a prerequisite to winning. Just down the page is the evidence – NP4G placed first in the most-popular and extremely competitive (A) category with 82 sections. At the 1500-QSO level, the difference between 82 and 83 mults is 3,000 points, which can be "made up" by 19 extra QSOs. It's up to each individual operator to figure out which strategy to follow -- your preference may vary!

The most difficult sections in 2015 are shown in the chart below. KP4 (PR) and KP2 (VI) top the list, with some Canadian sections filling six of the next seven slots! The most common sections in this running of phone SS were MDC (29k QSOs), VA (26k), IL (nearly 24k), and OH then MI (both with a little over 19k).

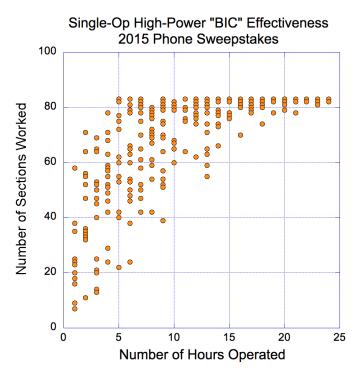


So what's it take to make the coveted Clean Sweep? You might guess that some spotting assistance might help, so operating in the Unlimited or Multiop categories would be an advantage. You might also guess that Butt-In-Chair time would be a big factor – the longer you operate, the more sections you'll log. Let's see if the data supports those theories:

Category	Clean Sweeps
A	3%
В	19%
MH	48%
ML	27%
UH	37%
UL	19%

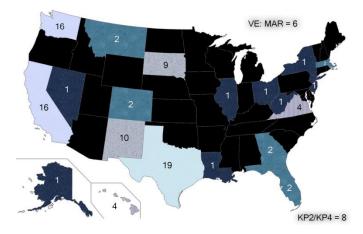
Clearly, the four categories that allow spotting assistance are at an advantage, as expected. But it also helps to have extra operators – the MH and ML (Multiop) categories fared significantly better than the UH and UL (Single-op) categories in getting the Clean Sweep. Furthermore, with or without spotting assistance, transmitter power matters a lot. (A noteworthy data point not in the table: Operators in the Q category attained a Clean Sweep twice as often as operators in the A category; is it because the QRPers usually operate in search and pounce mode and are more likely to find rare mults?)

But what about Butt-In-Chair time? The graph below shows what you probably already knew: In general, the longer you operate, the more likely it is that you'll put more multipliers in your log. But there are plenty of folks who operated only 5 to 10 hours and made a Clean Sweep, just as there are some who operated 20 or more hours and still missed some sections. It's all part of the game.

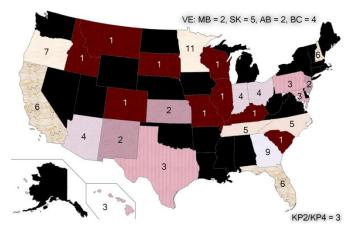


Black Holes and Sweet Spots

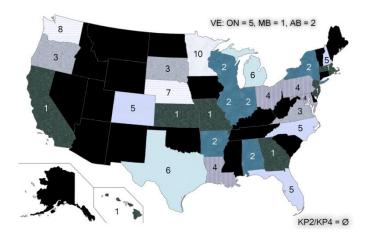
Much discussion has taken place over the years regarding the competitive advantage or disadvantage of certain geographical regions in Sweepstakes. Below are maps showing 11 years (~one sunspot cycle) of Top Ten placements by state, for the Single-op categories B, A, and Q. Originally, the plan was to present just one data set combining all the power levels, but during the analysis we noticed that the distribution of scores was vastly dissimilar among the categories. Generally speaking, High Power stations do better in the west, while the east is good territory for Low Power entries. Perhaps most surprising is Minnesota, which leads the nation in Top Ten placements in both the Low Power and QRP categories, while being totally shut out in SOHP (B).



Top Ten Phone SS Placements in Category B (SOHP), 2005-2015



Top Ten Phone SS Placements in Category A (SOLP), 2005-2015



Top Ten Phone SS Placements in Category Q (SOQRP), 2005-2015

Single-Operator, High Power (SOHP) (B)

For the second year in a row, the top spot in this category went to Dan, W7WA. Remarkable for his consistency, Dan has placed no lower than 6th in the SOHP (B) category for an entire sunspot cycle. His station has changed very little over the past 15 years, and as he remarked in his 3830 soapbox (<u>3830scores.com</u>), "SSB Sweepstakes is one of my favorite contests. It's one of the few contests left where a SO1R station can be competitive."

Single-Op, High Powe	r (SOHP) (B)
W7WA	349,098
N2IC	342,126
NR5M	335,652
VY2ZM	326,854
W6NL (K5TR, op)	311,748
AA5B	296,476
NC1I (K9PW, op)	288,840
K5TA	283,860
N4OX	275,228
KU2M	273,236

An informal survey finds that at least four of the Top Ten finishers did not use a second radio. The other high scores were also from familiar, well-known call signs. Perennial CW winner Steve, N2IC, operated high-power phone for the first time since 2010 and took 2nd, about 40 QSOs behind Dan. George, NR5M, who has been in the Top Ten six out of the past seven years was 3rd, and K1ZM, operating from his VY2ZM superstation, came in 4th. Jeff blamed sub-optimum conditions for his "poor" showing – he may have a point, since he is quite accustomed to being in first position, winning the category in 2010, 2012, and 2013.

Fifth place went to the recently-peripatetic K5TR, who, after 30+ years of contesting from Texas has decided to try out some new locations – last year Montana and this year the windy hilltop QTH of W6NL. AA5B and K5TA

finished 6th and 8th from their mostly-wires SO1R stations a couple of miles apart in New Mexico, while NC1I (K9PW, op) and N4OX (another one-radio station) finished 7th and 9th from WMA and NFL.

An interesting thing happened at the bottom of the Top Ten, where Peter, KU2M, in his first attempt at SOHP, stood at 11th place in the claimed scores, but due to an excellent accuracy rate, moved up to number 10 after log checking. Congratulations to all.



KU2M, a frequent Top Ten finisher in the A category (Single-Op, Low Power), moved to the B category this year (Single-Op, High Power) and was very successful in cracking the Top Ten. Peter's comparison of the two: "High power keeps your shack warmer during cold weather!" (Photo credit — Peter Bizlewicz, KU2M)



30% of the SOHP (B) category Top Ten (George K5TR, Scott K5TA, and Bruce AA5B), along with a couple members of the New Mexico Big River Contesters club (Gary K5TQ and Duffey KK6MC). The photo was taken during a recent NM visit by George and his son Matthew. The little green guy is AL1EN, and Matthew says they picked him up while driving through Roswell. (Photo credit — George Fremin III, K5TR)

Single-Operator, Low Power (SOLP) (A)

Despite missing a multiplier, NP4G hung on to win the Single-Operator, Low Power category by the equivalent of just 10 QSOs – a good argument for keeping your butt in the chair! Otis again operated from the well-equipped KP3Z Los Chachos club station (he finished 3^{rd} from there last year – his first serious effort in this contest), but operated as SO2R (single-op, two radios) for the first time in SS this year and found it to his liking.

Single-Op, Low Pov	ver (SOLP) (A)
NP4G (@KP3Z)	238,292
KH6LC (NH6V, op)	236,716
VA7RR	234,890
K2PO	230,242
KW8N	206,836
K9WZB	204,180
WDØT	192,560
K3UA	189,748
VE5SF	184,008
NØKK (@NØAT)	164,008



NP4G used the fine antennas at the KP3Z club station to help him win the Single-Op, Low Power category. (Photo credit — Jose Vicens, NP4G)

"The 40 meter band proved to be the money band. Propagation was fantastic, especially to the West Coast once all East Coasters went to 80 and QRM was less noticeable. It was nice to work a few West Coast QRP stations on 40 the first night. The new 40 meter 2-element full size Yagi is working great! I worked both K2PO and KH6LC early in the contest and they both gave me a higher serial number that I gave them." Where was his last section? Right next door: "My last worked section was NP2X. Worked him Sunday morning on 15 meters."

At the western end of Sweepstakes territory, NH6V piloted KH6LC's station to 2^{nd} place, with just an 11-QSO margin over 3^{rd} place VA7RR, another familiar call in the Top Ten.

K2PO, winner of this category in 2013, was 4th this year and the only station in the tight top-4 group located in the continental U.S. (Portland, OR) Bill got his start in Phone Sweepstakes in the early 1970s as a teenager, but then was away from ham radio for nearly 30 years before jumping back in a big way. He embraces SO2R operating, saying, "I ran SO2R, which naturally helps. When responses to my CQs slowed, I could tune the second radio on a second band and pick up the occasional station." Despite that, "89% of my QSOs were made in response to my own CQing. It's sometimes discouraging to call CO with low power – being crowded by big guns, and not certain where your signal is reaching. But with a recorded CQ message that loops 5-6 times a minute, even a low percentage of success to any one CQ adds up to a lot of contacts over the course of 24 hours."



Bill, K2PO, finished 4th in a very tight race in the Single-Op, Low Power category. (Photo credit — Bill Conwell, K2PO)

Bill's antennas are perhaps a cut above the typical lowpower station: "Monobanders on 10/15/20 at 35', 45' and 55'. Those are the bands that really matter from this remote corner of the country – contributing 190, 413 and 494 QSOs, respectively, to my tally. On 40 and 80 meters, I worked 216/123 QSOs, respectively. I have a 2element 40 meter Yagi at 135 feet, and a rotatable, short 80m dipole at 145 feet. But my workhorse antenna for the low bands in Sweepstakes is a duo-band sloper with the center at 35 feet. Most of my low-band contacts were West Coast, where the low sloper is the antenna of choice." Bill's last section was Virgin Islands, but "Eastern Washington had me worried. It's next door, but was my third-to-last mult."

Single-Operator, QRP (SOQRP) (Q)

Operating QRP on phone can be brutal, often much more difficult than on CW. Despite that, 78 brave souls battled it out in the QRP category in 2015's Phone SS. Scores were down a bit this year, but the competition was fierce – the top four stations finished within 10k points of each other!

RP (SOQRP) (Q)
72,000
70,384
65,902
61,908
54,400
52,152
48,762
46,646
45,982
42,276

Dan, VE6EX, missed 3 sections but still finished at the top of the heap thanks to his 450 QSOs. His posting on the 3830 reflector said, "Great opening on 10 meters [65 QSOs], but the low bands were hopeless. Huge improvement over last year's QRP effort. Did 24 hours tho' lots of 1 Q per hour stints. Bigger "Q" scores out there yet to come. Operated mostly on 15m where there was some room." Dan's city lot in Calgary includes a Mosley TA-33 three-element tribander and inverted vees for 40 and 80 meters.

VE6EX was followed closely by NDØC, AA4NC, and KØZL. Randy, NDØC, missed the 2014 Sweepstakes, but came back this year ready for action. Randy says "As usual with QRP, this was pretty much just slogging away, S&Ping, and looking for the elusive mults since I wasn't able to get much going for runs. It really seemed like the activity was down overall. 15 and 20 were equally good depending on the time of day and area of the country. At times, I seemed to be heard pretty well on the low bands, but at other times the other station just CQed in my face. Such is life with QRP!"

Randy has this advice for QRP operators: "If there is a huge pile-up and the guy I'm calling isn't very strong, I just note the frequency and check back later. On the other hand, sometimes I can still get him with QRP if there are few callers. Listening carefully and using good timing is essential since I know I'm definitely not going to be the strongest caller. I can't depend on brute force! Doing a lot of tuning to find the mults before the cluster pile-ups descend on them is key, as well as knowing and using the propagation. And running QRP requires the persistence and tenacity to hang in there."

Randy probably knows what he's talking about, because he's been using QRP for all of his DXing and contesting since 1980 – he just enjoys the challenge and reward associated with it. For multipliers this year, "I was very fortunate that I found VY1 in the second hour. I finally picked up Nebraska for the sweep with just over an hour left. I was really starting to sweat it!" His station is a Yaesu FTdx3000 feeding a TX-38 tribander at 40 feet, along with an inverted vee for 40 and 80 meters.



NDØC took 2nd place in the Single-Op, QRP (Q) category. (Photo credit — Randy Shurbroun, NDØC)

Single-Operator Unlimited, High Power (SOUHP) (U)

This category, like many of the others, was filled with repeat performers, many of whom have been consistent Top Ten finishers for years. The exception was the winner - Randy, KØEU, who put in his "first serious SS phone effort in quite a while," according to his 3830 post. "The money bands for me were 20 and 40 meters. I didn't even try 10 or 15 the first day." And how did he navigate on Sunday? The same as many other successful top operators: "Spent a lot of time Sunday explaining the SS exchange to casual ops that wanted to give me a QSO. I encouraged them all to seek out others that were calling CQ and add to their scores as well. Not sure if they followed through, but I hope they gave it a shot." His score would have placed him 2nd in the SOHP (B) category, which is uncommon - the top (B) scores have been typically 10% or so higher than their (U) counterparts. Also, his error rate of 1.4% was the best of all stations in the 2000+ QSO range, regardless of category.

Single-Op Unlimited, Hig	h Power (SOUHP) (U)
KØEU	342,624
VE6SV (VE4GV, op)	319,550
N800	300,294
N5ZC	294,816
W1SJ	279,710
W7RN (WX5S, op)	269,916
NØXR (@NØNI)	249,664
VE3CX	235,720
W4MYA	220,946
К9СТ	220,614

Moving up from third last year to second place this year, with an even-better error rate of 1.0%, but with 139 fewer net QSOs, was Rob, VE4GV, operating from VE6SV near Edmonton, AB. N8OO, N5ZC, and W1SJ, all Top Ten finalists from last year, rounded out the top five.



Randy, KØEU, winner of the SOUHP category on both modes. (Photo credit — Randy Martin, KØEU)



VE4GV, operating VE6SV's very fine station outside of Edmonton. Rob used the hardware and quiet location to great advantage, finishing 2^{nd} in the SOUHP category. (Photo credit – Rob Kaufmann, VE4GV)

Single-Operator Unlimited, Low Power (SOULP) (UL)

Lu, W4LT, entered the Unlimited ranks for the first time ever on phone and took home the First Place plaque, thanks to nearly 700 contacts on 20 meters and a final 10-QSO margin over second-place N4PN. The next four stations (K8BL, KE7X, NA5NN, and WB2P) all finished within 24 QSOs of each other. Close races like this emphasize the importance of logging accuracy and buttin-chair time. Of the 11 stations in the Top Ten (there was a tie for 5th place), 9 had Clean Sweeps.

Single-Op	Unlimited, Low Powe	er (SOULP) (UL)
-----------	---------------------	-----------------

182,932
181,272
151,226
149,896
147,740 tie
147,740 tie
143,922
136,452
132,136
125,164
121,196

"Sweepstakes is my favorite contest, and it was the second contest I ever operated in back in 1976," says Lu. "Since then, I have made it a point to be available for both the CW and the SSB SS even though my wife's birthday often falls on SSB weekend."

"My station is marginally competitive in international contests," he states. But the relatively low antennas might work to his advantage in stateside events. "My small city lot, 4-and-a-half miles northwest from the north end of the main runway at Tampa International Airport, is a challenging location. I'm limited to 40 feet of tower and a tribander, and my lot - including the front yard - barely fits an 80 meter dipole diagonally. I'm plagued by the usual man-made RF racket generated by a zillion wall warts, Internet routers and plasma TVs in the neighborhood. While I have operated SS SSB from other area stations that have better antenna facilities with good success, there is nothing like staying at home, with ergonomics you instinctively know and systems you thoroughly trust. I play the technical cards I'm dealt and do the best I can with what I have."



W4LT, winner of the Single-Op Unlimited, Low Power category on his very first try! (Photo credit — Lu Romero, W4LT)

"In 2015, I decided to try using the spotting network (Unlimited category) for the first time. It was great on CW, since the skimmers (*CW Skimmer* by VE3NEA) really offer a lot of fish in the barrel to shoot at. However, it was not much of an advantage in SSB, due to the fact that few SSB ops seem to take the time to spot stations to the cluster during SS. I found that 75% of the time, I was using the big center knob just as much as I was used to in the 'A' category."

"The key to competitiveness in SS for me here in WCF is to stay in the chair and use my 24 hours efficiently. From Florida in general and WCF in particular, with a modest station such as mine, one needs to maximize QSOs on 20 and 40." He did that quite well, with nearly a thousand contacts logged on those two bands. "The 15 meter band is saved for Sunday morning for California, VY1, Alaska and Hawaii. When 10 meters is hot, you work it as best you can, but when it's hot, 20 will be hotter, and that's really where you should be Saturday afternoon and evening up to 9 PM local on 20, then do the best you can on 40 and 80 overnight until the sun rises in California and pick up the CA sections plus AK, PAC and VY1 on 15, take a break during football, then head back to 20 and 40 while tuning 10 for mults."

Multioperator, High Power (MH)

Theoretically, a high-power multioperator station should be able to work just about everybody in this contest. The number of participants is not infinite, and the one-QSOregardless-of-band restriction further limits the possible total. So it is fitting that the winner in this category made more contacts than any other station in the competition. The ops at W6YI (K6AM, N6AN, N6KI, N6MJ, and W6YI) defended their 2014 title with a total of 2185 QSOs, beating the best single-op score by 82 contacts.

Multioperator,	High Powe	r (MH) (M)	
manuoperator,	Ingil I Owc	• (•••••) (•••)	

	0 1 /1
W6YI	362,710
W5RU	325,858
K4OV	317,890
WØNO	285,354
N6WM	246,842
NV9L	243,522
N3OC	241,198
NOMA	240,700
NJ1F	229,910
N6BV	229,412

It's always amazing to work these multis midway through the contest, and receive a serial number way higher than your own. Boy, if only that rate could last... Another repeat performance was posted by the Louisiana group W5RU (@KN5O) in second place with 1963 Qs. K4OV, WØNO, and N6WM were third, fourth, and fifth, respectively.

Multioperator, Low Power (ML)

This relatively new category (2011 was its inaugural year) seemed to hit its peak with 84 entries in 2014 (after 74 in 2013). There were 71 entries this year – still a healthy number. The crew at WZ8P in OH repeated at the #1 spot, with a 10k point advantage over N5DO in WTX, followed very closely (4 QSOs!) by K7IR in WWA. The top nine stations all had Clean Sweeps.

Multioperator, Low Power (ML) (M)		
WZ8P	202,022	
N5DO	192,228	
K7IR	191,564	
K8TE (@WØLSD)	157,534	
KØUK	153,716	
W6YX	149,068	
N7IV	142,096	
W2TZ	140,768	
KØFVF	137,614	
WN1G	132,840	

The WZ8P story is interesting. Everett says, "For over 15 years my wife and I drove all around Muskingum County looking for that perfect spot to construct a station. Then

one day we found it, a nice spot on top of a hill 300' above the average elevation. Thus started the construction of my dream station."

"We started working November SS Phone in 1995. That first year we had several operators from the local radio club. We managed to work a Clean Sweep and about 600 QSOs with a 1000MP radio and several dipoles. Each year we worked to improve the antennas and look for ways to make more QSOs faster. Then we found out about using DVK and that helped a lot, too."

"Several of our club members are actively working with students and formed an elementary school club to teach Amateur Radio as an after-school activity. We invited some of the new Novices and Technician students to come operate. No one is turned away. We will let anyone sit in the chair and make QSOs. Of course by now we know how to teach them to make QSOs very fast and accurately. Our operators range from 10 to 86 years of age. The students do a great job and can cause quite a pile up with their unique voices."



The WZ8P antennas have come a long way since 1995! (Photo credit — Everett H Jackson, Jr, WZ8P)

School Club Category (S)

School Club (S)						
кøнс	221,444					
W4AQL	181,272					
W1AF	138,776					
W1YK	83,040					
W4UAL	82,004					
W9UIH	52,456					
WØEEE	34,932 tie					
W5YM	34,932 tie					
W9JWC	31,200					
K2CC	26,320					
κøννγ	25,568					

For the third year in a row, the top School Club score belongs to the crew at Hesston College in Kansas, operating under the call sign KØHC. Their 1334-QSO total was 22% better than the nearest competitor, and they were the only entry in this category to appear on the accuracy honor roll, with an error rate of 0.8%, truly amazing for a multioperator effort. The team was led by the club trustee Bob, WØBH, and included four unlicensed students. Second place went to Georgia Tech, (W4AOL), with Harvard (W1AF), Worcester Polytechnic (W1YK) and the Crimson Tide (W4UAL) rounding out the top five.

The Youth Element

Attend any gathering of hams – on or off the air – and you're bound to notice that the average age seems to be creeping up, so it's always great to hear about efforts to recruit kids into our ranks. We've already had a few other mentions of young folks operating in this year's phone Sweepstakes, and here's another.

Marty, KC1CWF, says, "After creating the Eastern Mass Contest Club early in 2015, we were eager to get the club callsign on the air (KC1ENE). We also hoped to get some youth who didn't have HF experience up and contesting. The goal of the club is to get youth on the air, in an environment led by other youth. We thought SS would be a great way to get kids on the air. I volunteered to host the contest at my very modest station. I am a teenager, and my station is in my 'office' in the back of my bedroom. I have verticals for 10-20 meters and dipoles for 40/80, but we wanted more flexibility for the contest, so KC1AHI brought a portable vertical which we deployed in the front yard of the house with great success. I forgot to mention one key detail: we had multiple stations! SS only allows for Multi-Single, but we wanted to entertain as many kids as possible, so we had two stations using two different call signs on the air - KC1CWF amd KC1ENE. We had the chance to have multiple youth come to my OTH, and give contesting a try, everyone had fun, and multiple new contesters were born. Everyone struggled through a first contact, and then got excited to make more. Everyone had fun! The kids even got pizza, what could be better?"



Putting QSOs in the log as KC1ENE, Ken, KC1AHI operated along with Nathan, KB1RD and Marty KC1CWF. Check out the QRZ.com profiles for Ken and Marty – active operators! (Photo credit – Marty Sullaway, KC1CWF)

"As for me, going into the contest, the goal was to train/educate as many kids as possible about contesting. I think we were successful, as the club was able to get multiple kids who had never been on HF before making his own contacts. For me however, I only ended up operating for a little bit in a not-so-serious way. I made a few QSOs but was mainly playing GOTA-coach-person. It seems as though kids enjoy learning from other kids, and what we are doing really works. For me, it is now a matter of balancing stuff like this with serious efforts."

Records

There were no all-time records set in any category this year, and only 11 Division records fell! On the other hand, there were 55 Section records set, with well over half of them being in the Multiop and Single-Op Unlimited, Low Power categories. You can find all of the records, new and old, at www.arrl.org/contest-records.

See You in November!

What surprises will the bands bring in 2016's running of the phone Sweepstakes? Tune in on November 18-20 and find out!

New Division Records in 2015

New Division Records	s in 2015		
Call Sign	Score	Category	Division
K4OV	317,890	M	Roanoke
W2LV	90,692	ML	Hudson
W6YX	149,068	ML	Pacific
K8TE	157,534	ML	Rocky Mountain
W4AQL	181,272	S	Southeastern
VE6SV (VE4GV, op)	319,550	U	Canadian
N8OO	300,294	U	Delta
KØEU N5ZC	342,624 294,816	U U	Rocky Mountain West Gulf
NA5NN (K2FF, op)	147,740	UL	Delta
W4LT	182,932	UL	Southeastern
New Section Records	in 2015		
Call	Score	Category	Section
KW8N	206,836	A	OH
VE3YT	123,670	В	ONS
W5JJ	212,812	Μ	AR
VE3MIS	158,916	M	GTA
K4OV	317,890	M	NC
VE8EV	208,496	M	NT
VE3FU VA3ZV	45,522 122,010	M	ONE ONS
K8TE	157,534	ML	CO
W1FM	49,966	ML	EMA
W3ZGD	83,000	ML	EPA
K7IR	191,564	ML	EWA
WA1F	56,938	ML	GA
KDØLHI	14,000	ML	ID
NU4X	125,952	ML	KY
N7IV	142,096	ML	ND
K3WTT	19,840	ML	NFL
VO2AC W2LV	13,568 90,692	ML ML	NL NNJ
N5UM	102,754	ML	OK
WW4SF	40,172	ML	SC
W6YX	149,068	ML	SCV
K2AA	46,904	ML	SNJ
W3KWH	40,508	ML	WPA
K7SS	69,044	ML	WWA
K2GMY	28,700	Q	EB
VE3KI	54,400	Q	ONE
KL7DG W1AF	1,904 138,776	S S	AK EMA
W4AQL	181,272	S	GA
VE6SV (VE4GV, op)	319,550	Ŭ	AB
KØEU	342,624	Ŭ	CO
KV7N	129,560	U	ID
N8ZFM	118,524	U	KY
N8OO	300,294	U	LA
NM2O	131,306	U	NNY
N5ZC VA7VF	294,816	U UL	WTX BC
N4PN	45,708 181,272	UL	GA
W7ZRC	136,452	UL	ID
KØVBU	12,324	UL	KS
W6AWW	52,728	ÜL	LAX
K8BKM	81,174	UL	MI
NA5NN (K2FF, op)	147,740	UL	MS
NY6DX	90,802	UL	NLI
NT5V	143,922	UL	NTX
AF5Q	24,750	UL	OK
KU7K (KA7ARC, op) KCØMCK	41,610 47,002	UL UL	OR SC
WBØULX	24,138	UL	SD
KK6NON	49,928	UL	SDG
VE5MX	19,470	UL	SK
WB2P	147,740	UL	SNJ
W4LT	182,932	UL	WCF
KC2LRC	63,744	UL	WNY

Affiliated Club Competion

By the ARRL Contest Branch

The competition between clubs remains intense as always, with every member encouraged (putting it mildly) to get on the air and submit both CW and Phone scores. Winning totals usually come from the club that can generated the most medium-sized entries: the biggest total from the Potomac Valley Radio Club (PVRC) was built from an average score of just over 60k points.

Gavels are awarded to the top-scoring club in each category: Potomac Valley Radio Club (Unlimited – more than 50 logs), Mother Lode DX/Contest Club (Medium category – more than 10 logs), and the Pizza Lovers 259 or "PL259" (Local – up to 10 logs).

PVRC really beat the bushes this year, getting every eligible member on the air and pushing their total entries over 300. Society of Midwest Contesters (SMC) also increased participation over 2014 hitting the 200 mark on the nose but PVRC has really dominated this category recently.

The winning performance by PVRC reinforces that the Affiliated Club Competition is at its best when all members get on the air, increasing activity and raising scores for every Sweepstakes station. This year, be sure to encourage every member on the club roster to operate and credit the club.

Affiliated Club Competition

Unlimited Cotonomy	Casas	Entries
Unlimited Category	Score	311
Potomac Valley Radio Club	18,789,084	
Society of Midwest Contesters	8,931,090	200
Yankee Clipper Contest Club	7,500,650	119
Minnesota Wireless Assn	5,444,516	100
Frankford Radio Club	4,356,958	55
Northern California Contest Club	4,146,242	74
Florida Contest Group	3,880,422	52
Mad River Radio Club	3,668,356	54
Medium Category		
Mother Lode DX/Contest Club	3,968,346	47
Southern California Contest Club	3,491,852	41
Arizona Outlaws Contest Club	3,417,206	47
Contest Club Ontario	3,151,264	50
DFW Contest Group	2,680,896	33
Grand Mesa Contesters of Colorado	2,004,198	19
Tennessee Contest Group	1,946,614	27
Western Washington DX Club	1,908,690	23
Central Texas DX and Contest Club	1,742,254	22
Big Sky Contesters	1,475,528	22
Kentucky Contest Group	1,327,376	22
Alabama Contest Group	1,322,990	19
Hudson Valley Contesters and DXers	1,285,982	22
South East Contest Club	1,249,774	16
Georgia Contest Group	1,158,824	13
Radiosport Manitoba	1,075,310	15
North Coast Contesters	971,038	13
Willamette Valley DX Club	937,598	16
	,-50	

Iowa DX and Contest Club	927,212	7
Mississippi Valley DX/Contest Club	842,208	11
Orca DX and Contest Club	835,732	12
North Texas Contest Club	705,044	10
Niagara Frontier Radiosport	596,868	16
Northeast Maryland Amateur Radio Contest		10
Society	496,550	12
Utah DX Association	496,046	5
Contest Group du Quebec	456,694	9
•	-	
Saskatchewan Contest Club	451,318	5
Rochester (NY) DX Assn	419,496	8
Oklahoma DX Assn	381,020	4
Carolina DX Association	305,858	7
Hampden County Radio Assn	285,194	13
South Jersey Radio Assn	284,992	9
Order of Boiled Owls of New York	260,382	7
Swamp Fox Contest Group	222,960	8
Radio Club of Redmond	131,242	3
Motor City Radio Club	117,822	5
Magnolia DX Assn	40,672	3
Local Category		
Pizza Lovers 259	1,539,126	10
New Mexico Big River Contesters	1,451,186	9
Kansas City Contest Club	957,334	10
Sussex County ARC	813,248	8
Redwood Empire DX Assn	775,804	9
Louisiana Contest Club	679,022	5
CTRI Contest Group	603,834	10
Midland ARC	585,110	6
599 DX Association	534,934	4
Bishop ARC	534,862	4
Panhandle DX and Contest Club	467,226	5
Bristol (TN) ARC	-	
	306,336	6 5
Lincoln ARC	291,978	
Spokane DX Association	273,342	4
Maritime Contest Club	257,206	7
Dupage ARC	230,166	6
Central Oregon DX Club	228,748	3
Hilltop Transmitting Assn	221,040	7
Mt Vernon (OH) ARC Contesters	209,074	5
Maui ARC	167,016	3
Bergen ARA	137,496	6
Oakland County Amateur Radio Society	136,900	9
Meriden ARC	126,606	5
L'anse Creuse ARC	115,968	3
Portage County Amateur Radio Service	112,798	5
Delara Contest Team	109,010	4
Peterborough Amateur Radio Club	102,328	4
West Allis RAC	95,252	4
NorDX Club	90,158	6
Winona ARC	88,704	3
Southern Berkshire ARC	83,788	6
Metro DX Club	78,630	5
Clark County Amateur Radio Club	69,448	4
West Park Radiops	69,236	5
Tallahassee ARS	61,346	5
Great South Bay ARC	48,696	4
Milford (OH) ARC	44,396	4
Alexandria Radio Club	26,762	3
Granite State ARA	26,448	3 4
	-	
Nanaimo Amateur Radio Association	12,912	3
Sterling Park ARC	1,768	3

Regional Leaders														
SOQRP/LP/HP = Single-Op All-Band; SOULP/HP = Single-Op Unlimited; MSL/MSH = Multioperator, Single Transmitter														
Northeast	Regior	n	Southeas	t Regio	n	Centra	Region		Midwest	Region		West Coa	ast Regio	n
New England, Hudson and Atlantic Divisions; Maritime and Quebec Sections		Delta, Roanoke and Southeastern Divisions			Central and Great Lakes Divisions; Ontario Section			Dakota, Midwest, Rocky Mountain and West Gulf Divisions; Manitoba and Saskatchewan Sections			Pacific, Northwestern and Southwestern Divisions; Alberta, British Columbia and NWT Sections			
Call	Score	Cat	Call	Score	Cat	Call	Score	Cat	Call	Score	Cat	Call	Score	Cat
VY2ZM NC1I (K9PW, op) KU2M KD4D KK6L K3UA W2RQ W2ID K3KU NK8Q N3UR W2JRO A2VK K4TJ W1SJ N2RR W2JRO A2VK KV1J W1SJ N2RR W3LL N3RR K3DNE W3LL N3RR K3DNE W3LL N3RR K3DNE W3LL N3RR K3DNE W3LL N3RR K3DNE W3LL N3RR K3DNE W3LL N3RR K3DNE W3LL N3RR K3DNE W3LL N3RR K3DNE W3LL N3RR K3DNE W3LL N3RR K3DNE W32R N3GC N3CR N3GC N3CR N3CR N3CR N3CR N3CR N3CR N3CR N3C	326,854 326,854 288,840 273,236 233,894 187,414 189,748 162,360 150,230 126,658 94,956 52,152 45,982 42,276 279,710 218,776 206,172 199,366 193,390 147,740 90,802 82,834 70,848 66,912 241,198 229,910 179,114 178,782 278,450 140,768 97,276 90,692 83,000 54,594 138,776 83,040 26,320 15,038 12,768	B B B B A A A A A Q Q Q Q J J J J J J J J J J J	N40X N40X N4ZZ K4JPD (N400, op) W4RM (N3AHA, op) vØCN NP4G N4BP K1KNQ N5EE K7SV AA4NC W4IM N4TOL AC2N K04PM N80O W4MYA N1LN KG4W N4FX W4LT N4SNN (K2FF, op) WB40MM N4CF W5RU K40V W5JJ N8VCF W4MLB WN1G KF3N N2VA W4TG WA1F W4AQL W4UAL W5YM	275,228 270,272 268,920 241,530 224,024 238,292 128,466 120,852 119,556 114,374 65,902 46,646 9,700 4,880 3,850 300,294 220,946 196,212 94,454 93,292 182,932 181,272 147,740 125,164 67,728 325,858 317,890 212,812 143,258 139,072 143,258 139,072 143,258 139,072 143,258 139,072 143,258 139,072 143,258 139,072 143,258 139,072 143,258 139,072 132,840 106,904 97,908 90,528 56,938 181,272 82,004 34,932	B B B B A A A A A Q Q Q Q H H H H H U U U U U U U M M M M M M M M	K9BGL ND4Y K1OU K9ZO WA8Y KW8N WZ8T N8CWU W8PEN VE3SD VE3KI N9SE K9ARF K78K W9VQ VE3CX K9CT W29V VE3CX K9CT W29V N2EJ VE3RZ K8BL VA3DF VE3MGY VE3RZ K8BL VA3DF VE3MGY VE3VSM K8BKM NV9L K9SF (@K9XD) K8CC N9SJ K09ST W28P NU4X AA9BL N9VI N8YXR W9UH N8YXR W9UH W9JWC W8SH W8EDU W9GRS (W9KVR,	215,966 202,022 177,288 147,906 139,236 206,836 136,784 120,184 120,184 120,184 120,184 130,75,768 54,400 39,780 35,690 34,580 16,758 235,720 220,614 168,158 235,720 220,614 168,158 158,696 134,626 132,136 134,626 132,136 134,626 132,136 134,626 132,136 134,626 132,136 134,626 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 132,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136 133,136	BBBBBBAAAAAQQQQJHHHHHHHHHHHHHHHMLSSSSS S	VCIII N2IC NR5M AA5B KSTA VE4VT (VE4EAR, op) WDØT VESSF NØKK (@NØAT) NTNKD (N7MZW, op) WD5K NØC KØZL NTCC KJSRM WAØBJR KØEU N5ZC NØXR (@NØNI) WBØTEV KSLLA NTSV KØOB NWØM AD1C NØYQ WØNO NØMA NNSV KØGND W77SS N5DO K8TE KØHC (WØBH, op) WØEEE KØVVY	342,126 335,652 296,476 283,860 247,968 192,560 184,008 164,008 135,432 133,630 70,384 61,908 48,762 32,412 24,840 342,624 294,816 249,664 190,402 185,754 143,922 83,332 66,566 55,566 48,000 223,602 194,668 162,016 192,228 157,534 153,716 142,2086 137,614 221,444 34,932 25,568	B B B B A A A A A A A A A A A A A A A A	WTWA W6NL (K5TR, op) WC6H K6LA N6RK KH6LC (NH6V, op) VA7RR K2PO K9WZB N7LOX VE6EX K2GMY KK7EL W7PT NE4RD VE6SV (VE4GV, op) W7RN (WX5S, op) W1SRD VE6SV (VE4GV, op) W7RN (WX5S, op) W1SRD N6NZ W1RH K67X W1RH K67X W7ZRC NC6B WA6KHK W6AWW W6Y1 N66W W66Y1 N66W K7RI W6PZ K7IR W6PZ K7IR W6PZ K7IR W67X NX6T K7SS KD7RCJ KL7DG (KL7DG, op)	349,098 311,748 271,078 230,076 217,128 236,716 234,890 230,242 204,180 133,824 72,000 28,700 27,406 26,270 17,640 319,550 269,916 194,054 180,608 161,352 149,896 136,452 67,064 55,610 52,728 362,710 246,842 229,412 227,420 225,428 191,564 149,068 120,350 69,044 32,832 1,904	B B B A A A A A Q Q Q Q H H H H U U U U U U U U U M M M M M M M

2015 ARRL Phone Sweepstakes – Sponsored Plaque Winners

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



Division / Plaque Category Winner **Plaque Sponsor** Overall Single Operator High Power Phone W7WA Dan Henderson, N1ND Single Operator Low Power Phone NP4G ARRL Contest Branch - Ken Adams, K5KA Memorial Single Operator QRP Phone **QRP** Amateur Radio Club International VE6EX Single Operator Unlimited High Power Phone KØEU Icom America Single Operator Unlimited Low Power Phone W4LT Icom America **Multioperator High Power Phone** W6YI Icom America Multioperator Low Power Phone WZ8P Icom America KØHC (WØBH, op) School Club Phone Bart Jahnke, W9JJ Atlantic Single Operator High Power Phone KD4D Icom America Single Operator Low Power Phone K3UA Potomac Valley Radio Club Single Operator QRP Phone NK8Q Icom America Single Operator Unlimited High Power Phone N2MM Icom America Single Operator Unlimited Low Power Phone WB2P Icom America **Multioperator High Power Phone** N3OC Icom America Multioperator Low Power Phone W2TZ Icom America Central Single Operator High Power Phone K9BGL Society Of Midwest Contesters Single Operator Low Power Phone KD9MS Society Of Midwest Contesters Single Operator QRP Phone N9SE Sean Kutzko, KX9X Single Operator Unlimited High Power Phone к9СТ Icom America Single Operator Unlimited Low Power Phone W9QL Icom America Multioperator High Power Phone NV9L Icom America Multioperator Low Power Phone AA9BL Icom America School Club Phone W9UIH Icom America Dakota Single Operator High Power Phone кøтт Minnesota Wireless Association Single Operator Low Power Phone WDØT Minnesota Wireless Association Single Operator QRP Phone NDØC Tod Olson, KØTO Single Operator Unlimited High Power Phone KØCN Minnesota Wireless Association Single Operator Unlimited Low Power Phone кøов Tod Olson, KØTO **Multioperator High Power Phone** KØJA In Memory of Jim Dokmo, KØFVF Minnesota Wireless Association Multioperator Low Power Phone N7IV Icom America School Club Phone κάννγ Tod Olson, KØTO Delta Single Operator High Power Phone N4ZZ Icom America Single Operator Low Power Phone N5EE Icom America Single Operator QRP Phone KI4CVU Icom America Single Operator Unlimited High Power Phone N800 Icom America Single Operator Unlimited Low Power Phone NA5NN (K2FF, op) Icom America **Multioperator High Power Phone** W5RU Icom America Multioperator Low Power Phone WD5CCA Icom America School Club Phone W5YM Icom America

Great Lakes

Great Lakes		
Single Operator High Power Phone	ND4Y	Mad River Radio Club
Single Operator Low Power Phone	KW8N	Mad River Radio Club
Single Operator QRP Phone	KT8K	Mad River Radio Club
Single Operator Unlimited High Power Phone	N8ZFM	Icom America
Single Operator Unlimited Low Power Phone	K8BL	Icom America
Multioperator High Power Phone	K8CC	Icom America
Multioperator Low Power Phone	WZ8P	Icom America
School Club Phone	W8SH	Icom America
Hudson		
Single Operator High Power Phone	KU2M	Icom America
Single Operator Low Power Phone	W2RQ	Icom America
Single Operator QRP Phone	W2JRO	Icom America
Single Operator Unlimited High Power Phone	WS2E	Icom America
Single Operator Unlimited Low Power Phone	NY6DX	Icom America
Multioperator High Power Phone	W2XL	Icom America
Multioperator Low Power Phone	W2LV	Icom America
School Club Phone	N2TUX (KC2ASA, op)	Icom America
	N210X (RC2A3A, 00)	Rom America
Midwest		
Single Operator High Power Phone	KØDEQ	Icom America
Single Operator Low Power Phone	N7WY	Society Of Midwest Contesters
Single Operator QRP Phone	KØZL	Icom America
Single Operator Unlimited High Power Phone	NØXR	Icom America
Single Operator Unlimited Low Power Phone	NWØM	Icom America
Multioperator High Power Phone	WØNO	Icom America
Multioperator Low Power Phone	KB5ENP	Icom America
School Club Phone	KØHC (WØBH, op)	Icom America
New England		
New England		Icom America
Single Operator High Power Phone	NC1I (K9PW, op)	Icom America
Single Operator High Power Phone Single Operator Low Power Phone	N1DID	Icom America
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone	N1DID KV1J	Icom America QRP Club of New England
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone	N1DID KV1J W1SJ	Icom America QRP Club of New England Icom America
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone	N1DID KV1J W1SJ WT1A	Icom America QRP Club of New England Icom America Icom America
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Multioperator High Power Phone	N1DID KV1J W1SJ WT1A NJ1F	Icom America QRP Club of New England Icom America Icom America Icom America
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Multioperator High Power Phone Multioperator Low Power Phone	N1DID KV1J W1SJ WT1A NJ1F N2GZ	Icom America QRP Club of New England Icom America Icom America Icom America Icom America
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Multioperator High Power Phone	N1DID KV1J W1SJ WT1A NJ1F	Icom America QRP Club of New England Icom America Icom America Icom America
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Multioperator High Power Phone Multioperator Low Power Phone School Club Phone	N1DID KV1J W1SJ WT1A NJ1F N2GZ	Icom America QRP Club of New England Icom America Icom America Icom America Icom America
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Multioperator High Power Phone Multioperator Low Power Phone School Club Phone Northwestern	N1DID KV1J W1SJ WT1A NJ1F N2GZ W1AF	Icom America QRP Club of New England Icom America Icom America Icom America Icom America Michael McKaughan, K1DM
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Multioperator High Power Phone School Club Phone Northwestern Single Operator High Power Phone	N1DID KV1J W1SJ WT1A NJ1F N2GZ W1AF	Icom America QRP Club of New England Icom America Icom America Icom America Icom America Michael McKaughan, K1DM
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Multioperator High Power Phone School Club Phone Northwestern Single Operator High Power Phone Single Operator Low Power Phone	N1DID KV1J W1SJ WT1A NJ1F N2GZ W1AF W7WA K2PO	Icom America QRP Club of New England Icom America Icom America Icom America Michael McKaughan, K1DM Icom America Icom America
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Multioperator High Power Phone School Club Phone Northwestern Single Operator High Power Phone Single Operator Low Power Phone Single Operator Low Power Phone Single Operator QRP Phone	N1DID KV1J W1SJ WT1A NJ1F N2GZ W1AF W7WA K2PO W7PT	Icom America QRP Club of New England Icom America Icom America Icom America Michael McKaughan, K1DM Icom America Icom America Barbara Yasson, AC7UH
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Multioperator Low Power Phone School Club Phone Northwestern Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone	N1DID KV1J W1SJ WT1A NJ1F N2GZ W1AF W7WA K2PO	Icom America QRP Club of New England Icom America Icom America Icom America Michael McKaughan, K1DM Icom America Icom America Barbara Yasson, AC7UH Icom America
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Multioperator Unlimited Low Power Phone Multioperator Low Power Phone School Club Phone Northwestern Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited High Power Phone	N1DID KV1J W1SJ WT1A NJ1F N2GZ W1AF W7WA K2PO W7PT KV7N KE7X	Icom America QRP Club of New England Icom America Icom America Icom America Michael McKaughan, K1DM Icom America Icom America Barbara Yasson, AC7UH
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Multioperator Low Power Phone School Club Phone Northwestern Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited High Power Phone Multioperator High Power Phone	N1DID KV1J W1SJ WT1A NJ1F N2GZ W1AF W7WA K2PO W7PT KV7N KE7X K7RI	Icom America QRP Club of New England Icom America Icom America Icom America Michael McKaughan, K1DM Icom America Icom America Barbara Yasson, AC7UH Icom America
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Multioperator Unlimited Low Power Phone Multioperator Low Power Phone School Club Phone Northwestern Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited High Power Phone	N1DID KV1J W1SJ WT1A NJ1F N2GZ W1AF W7WA K2PO W7PT KV7N KE7X	Icom America QRP Club of New England Icom America Icom America Icom America Michael McKaughan, K1DM Icom America Icom America Barbara Yasson, AC7UH Icom America Icom America
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Multioperator Low Power Phone School Club Phone Northwestern Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited High Power Phone Multioperator High Power Phone	N1DID KV1J W1SJ WT1A NJ1F N2GZ W1AF W7WA K2PO W7PT KV7N KE7X K7RI	Icom America QRP Club of New England Icom America Icom America Icom America Michael McKaughan, K1DM Icom America Barbara Yasson, AC7UH Icom America Icom America Icom America Icom America Icom America
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Multioperator High Power Phone School Club Phone Northwestern Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited High Power Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Multioperator High Power Phone Multioperator Low Power Phone School Club Phone	N1DID KV1J W1SJ WT1A NJ1F N2GZ W1AF W7WA K2PO W7PT KV7N KE7X K7RI K7IR	Icom America QRP Club of New England Icom America Icom America Icom America Michael McKaughan, K1DM Icom America Barbara Yasson, AC7UH Icom America Icom America Icom America Icom America Icom America Icom America Icom America
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Multioperator High Power Phone School Club Phone Northwestern Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Single Operator High Power Phone Single Operator High Power Phone Single Operator Low Power Phone Multioperator Low Power Phone School Club Phone	N1DID KV1J W1SJ WT1A NJ1F N2GZ W1AF W7WA K2PO W7PT KV7N KE7X K7RI K7IR KL7DG (KL7DG, op)	Icom America QRP Club of New England Icom America Icom America Icom America Michael McKaughan, K1DM Icom America Barbara Yasson, AC7UH Icom America Icom America Icom America Icom America Icom America Icom America Icom America Icom America
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Multioperator High Power Phone School Club Phone Northwestern Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Single Operator Unlimited Low Power Phone Single Operator Unlimited Low Power Phone Single Operator High Power Phone Multioperator Low Power Phone School Club Phone	N1DID KV1J W1SJ WT1A NJ1F N2GZ W1AF W7WA K2PO W7PT KV7N KE7X K7RI K7IR KL7DG (KL7DG, op) W6NL (K5TR, op)	Icom America QRP Club of New England Icom America Icom America Icom America Michael McKaughan, K1DM Icom America Barbara Yasson, AC7UH Icom America Icom America Icom America Icom America Icom America Icom America
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Multioperator High Power Phone School Club Phone Northwestern Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Multioperator High Power Phone Multioperator High Power Phone School Club Phone Pacific Single Operator High Power Phone Single Operator High Power Phone	N1DID KV1J W1SJ WT1A NJ1F N2GZ W1AF W7WA K2PO W7PT KV7N KE7X K7RI K7IR KL7DG (KL7DG, op) W6NL (K5TR, op) KH6LC (NH6V, op)	Icom America QRP Club of New England Icom America Icom America Icom America Michael McKaughan, K1DM Icom America Icom America Icom America Icom America Icom America Icom America Icom America Icom America Icom America Icom America
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Multioperator High Power Phone School Club Phone Northwestern Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Multioperator High Power Phone School Club Phone Pacific Single Operator High Power Phone Single Operator Ow Power Phone	N1DID KV1J W1SJ WT1A NJ1F N2GZ W1AF W7WA K2PO W7PT KV7N KE7X K7RI K7R KL7DG (KL7DG, op) W6NL (K5TR, op) KH6LC (NH6V, op) K2GMY	Icom America QRP Club of New England Icom America Icom America Icom America Icom America Michael McKaughan, K1DM Icom America Icom America
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Multioperator Unlimited Low Power Phone Multioperator Low Power Phone School Club Phone Northwestern Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Single Operator Unlimited Low Power Phone Single Operator Unlimited High Power Phone Single Operator High Power Phone Multioperator Low Power Phone Single Operator Low Power Phone Stolo Club Phone Pacific Single Operator High Power Phone Single Operator Cow Power Phone Single Operator Unlimited High Power Phone Single Operator Unlimited High Power Phone	N1DID KV1J W1SJ WT1A NJ1F N2GZ W1AF W7WA K2PO W7PT KV7N KE7X K7RI K7IR KL7DG (KL7DG, op) W6NL (K5TR, op) KH6LC (NH6V, op) K2GMY W7RN (WX5S, op)	Icom America QRP Club of New England Icom America Icom America Icom America Michael McKaughan, K1DM Icom America Icom America Icom America Icom America Icom America Icom America Icom America Icom America Icom America Icom America
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Multioperator Unlimited Low Power Phone Multioperator Low Power Phone School Club Phone Northwestern Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Single Operator Unlimited Low Power Phone Single Operator Unlimited High Power Phone Multioperator Low Power Phone Single Operator High Power Phone Multioperator Low Power Phone School Club Phone Pacific Single Operator High Power Phone Single Operator Ow Power Phone Single Operator Unlimited High Power Phone Single Operator Unlimited High Power Phone Single Operator Unlimited High Power Phone	N1DID KV1J W1SJ WT1A NJ1F N2GZ W1AF W7WA K2PO W7PT KV7N KE7X K7RI K7R KTR KL7DG (KL7DG, op) W6NL (K5TR, op) KH6LC (NH6V, op) K2GMY W7RN (WX5S, op) WQ6X	Icom America QRP Club of New England Icom America Icom America Icom America Icom America Michael McKaughan, K1DM Icom America Icom America
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Multioperator Unlimited Low Power Phone Multioperator Low Power Phone School Club Phone Northwestern Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Single Operator Unlimited Low Power Phone Single Operator Unlimited High Power Phone Single Operator High Power Phone Multioperator Low Power Phone Single Operator Low Power Phone Stolo Club Phone Pacific Single Operator High Power Phone Single Operator Cow Power Phone Single Operator Unlimited High Power Phone Single Operator Unlimited High Power Phone	N1DID KV1J W1SJ WT1A NJ1F N2GZ W1AF W7WA K2PO W7PT KV7N KE7X K7RI K7IR KL7DG (KL7DG, op) W6NL (K5TR, op) KH6LC (NH6V, op) K2GMY W7RN (WX5S, op)	Icom America QRP Club of New England Icom America Icom America Icom America Icom America Michael McKaughan, K1DM Icom America Icom America
Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Multioperator Unlimited Low Power Phone Multioperator Low Power Phone School Club Phone Northwestern Single Operator High Power Phone Single Operator Low Power Phone Single Operator QRP Phone Single Operator Unlimited High Power Phone Single Operator Unlimited Low Power Phone Single Operator Unlimited Low Power Phone Single Operator Unlimited High Power Phone Multioperator Low Power Phone Single Operator High Power Phone Multioperator Low Power Phone School Club Phone Pacific Single Operator High Power Phone Single Operator Ow Power Phone Single Operator Unlimited High Power Phone Single Operator Unlimited High Power Phone Single Operator Unlimited High Power Phone	N1DID KV1J W1SJ WT1A NJ1F N2GZ W1AF W7WA K2PO W7PT KV7N KE7X K7RI K7R KTR KL7DG (KL7DG, op) W6NL (K5TR, op) KH6LC (NH6V, op) K2GMY W7RN (WX5S, op) WQ6X	Icom America QRP Club of New England Icom America Icom America Icom America Icom America Michael McKaughan, K1DM Icom America Icom America

Roanoke

Roanoke		
Single Operator High Power Phone	W4RM (N3AHA, op)	Icom America
Single Operator Low Power Phone	K7SV	Icom America
Single Operator QRP Phone	AA4NC	Ronnie Reams WA4MJF & Sherry Reams KB4EXL
Single Operator Unlimited High Power Phone	W4MYA	Ronnie Reams WA4MJF & Sherry Reams KB4EXL
Single Operator Unlimited Low Power Phone	N4CF	Icom America
Multioperator High Power Phone	K4OV	Ronnie Reams WA4MJF & Sherry Reams KB4EXL
Multioperator Low Power Phone	KF3N	Icom America
Rocky Mountain		
Single Operator High Power Phone	N2IC	Icom America
Single Operator Low Power Phone	N7NKD (N7MZW, op)	Icom America
Single Operator QRP Phone	N1XIH/7 (GWØNVN, op)	Icom America
Single Operator Unlimited High Power Phone	KØEU	Icom America
Single Operator Unlimited Low Power Phone	AD1C	Icom America
Multioperator High Power Phone	NN5V	Icom America
Multioperator Low Power Phone	K8TE	Icom America
	KOTL	Icom America
Southeastern		
Single Operator High Power Phone	N4OX	Icom America
Single Operator Low Power Phone	NP4G	Icom America
	N4TOL	Icom America
Single Operator QRP Phone		
Single Operator Unlimited High Power Phone	W4XO	Charlie Wooten, NF4A
Single Operator Unlimited Low Power Phone	W4LT	Icom America
Multioperator High Power Phone	W4MLB	Icom America
Multioperator Low Power Phone	WN1G	Icom America
School Club Phone	W4AQL	Icom America
Southwestern		
Single Operator High Power Phone	K6LA	Icom America
	K9WZB	Icom America
Single Operator Low Power Phone	KYV2B KK7EL	N6HE and W6DLD
Single Operator QRP Phone Single Operator Unlimited High Power Phone		
	W7WW	Icom America
Single Operator Unlimited Low Power Phone	NC6B	Icom America
Multioperator High Power Phone	W6YI	Icom America
Multioperator Low Power Phone	NX6T	Icom America
West Gulf		
Single Operator High Power Phone	NR5M	Icom America
Single Operator Low Power Phone	WD5K	Icom America
Single Operator QRP Phone	N1CC	Icom America
Single Operator Unlimited High Power Phone	N5ZC	Icom America
	N52C NT5V	
Single Operator Unlimited Low Power Phone		Icom America
Multioperator High Power Phone	N5AA (K5NA, op)	Icom America
Multioperator Low Power Phone	N5DO	Icom America
Canada		
Single Operator High Power Phone	VY2ZM	Icom America
Single Operator Low Power Phone		
o 1	VA7RR	Icom America
Single Operator QRP Phone		Frank Merceret, NA4CW
Single Operator Unlimited High Power Phone	VE6SV (VE4GV, op)	Icom America
Single Operator Unlimited Low Power Phone	VA3DF	Icom America
Multioperator High Power Phone	VE8EV	Icom America
Multioperator Low Power Phone	VE3UZ	Icom America
School Club Phone	VE9UNB	Icom America