

ARRL CW Sweepstakes 2015 Results

By Kelly Taylor, VE4XT (ve4xt@mymts.net)



To put the 2015 running of CW Sweepstakes into perspective, we first have to go back in time to 1996. The O.J. Simpson trial is on, Bill Clinton has won his second term as president and K1ZX is winning SS CW. It's an operation notable not only for where it happened or who was involved. It's the last time a Multioperator station beat the usual king of the hill, the Single-Operator, High-Power winner.

The 2015 win by K5GO on Nov 7th-9th was a surprise 19 years in the making, as Stan, K5GO, and his son, Kevin, N5DX, beat not only all other Multioperator stations, but also Steve, N2IC, who as winner of the Single-Operator, High Power category would normally be considered the winner overall.

That earlier Multiop victory took place in 1996 at the White house — home of Florida's first family of contesting, Bob White, W1CW (SK), his wife Ellen, W1YL, and son Jim, who then held the call K1ZX but went on to hold K4OJ (SK). There was Dan, K1TO, Jeff, WC4E, and Jim, and their score was just 1,400 points more than Tree, N6TR, who ran W5WMU to the top of B. (The Whites were recently invested as the inaugural members of the Florida Contest Group Hall of Fame.)

Sweepstakes Categories

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Exchange Precedence / Abbreviation
Single-Operator
Low Power - A/SOHP, High Power – B/SOHP, QRP – Q/SOQRP
Single-Operator Unlimited
High Power - U/SOUHP, Low Power – UL/SOULP
Multioperator
High Power – M/MH, Low Power – M/ML
School Club – S

For Kevin, the 2015 win with his father was special. "The experience reminded me a lot of when I was a young boy and would get to play in father-son golf tournaments with my dad. At the time, my dad was the best golfer at our course and getting the chance to be on his team was something that really made me excited as a kid.

"Fast-forward 30 years and we got to do a father-son effort, but instead of our course being tree-lined fairways, it would be the crowded frequencies of the ARRL CW Sweepstakes." And so we begin with...

Multioperator

Kevin and Stan's Multioperator, High Power (MH) effort from Arkansas beat Number 2 station W6YI (K6AM, N6MJ, N6AN, N5ZO, N6KI, W6YI, operators) by 90 QSOs and nearly 15,000 points. It appears 40 meters was the money band at K5GO, with 237 more 40 meter QSOs than W6YI. The Californians nearly made up the difference with 15 and 10 meters and 309 more QSOs on those bands, but K5GO had an edge in 20 meter and 80 meter QSOs for the win. What effect the waning sunspot cycle had on W6YI's chances is debatable, but this year's results certainly suggest that hotter high bands would favor the San Diego operators.

Top Ten – Multi-Op, High Power					
K5GO	244,850				
W6YI	229,910				
WØSD	222,938				
W2FU	218,954				
KY7M	203,018				
KØWA	196,710				
W5RU	194,340				
N4GI	190,896				
W4RM	190,236				
N6RO	175,462				



Kevin, N5DX (left) and his dad Stan, K5GO, at Stan's shack in northwestern Arkansas. (Photo by N5DX)

Kevin attributes their win to "being extremely patient with your teammate. This isn't always easy for me to do, especially when operating with my dad, but we both did a really good job throughout the contest. The Sweepstakes is a real grind, but we pounced on all available contacts and sprinkled in a few other little tricks to help keep the rate up."

The big question, however, is why do multioperator stations not beat the single operator competitors more often? Especially given the opportunity to substitute fresh legs in the chair and monitor spots which are valuable not just because of the limited number of multipliers (83), but also for the fresh stations to work during the Sunday doldrums?

Dan, K1TO, who was part of that K1ZX multiop overall win, can't help but wonder if this isn't the first trickle of water through the dam. "I would think in this day and age, with Skimmer ruling the CW bands, an M would crush a B," Dan said. "I suspect that will happen more often going forward."

Multioperator, Low Power (ML) winner Chuck, WØDLE, who partnered with Barry, W2UP, and Dave, WBØGAZ, also wonders if 2015 is the start of a new trend. "I think the M classes can beat the A or B classes because really good operators are now liking a more relaxed time," he said. "Keeping BIC (butt in chair) is not a problem because we have three or four operators."

Nothing gains attention in SS more than being rare, and having that rarity evident in your call sign certainly helps, too. So it's no surprise to see WØS*outhDakota* in the midst of the MH winners, holding down third place with 1,343 QSOs and a sweep for 222,938 points. Ed, WØSD, Todd, WDØT, Joe, WØDB and Edith, WØOE, lost ground to the winners on 40 and to W6YI on 15.

Multioperator, Low Power

Off the grid and off the charts. That describes this year's winner, the previously mentioned WØDLE. Chuck's Colorado station is tucked in a pocket of ruggedness not terribly far from Denver but miles from commercial power. Chuck, Barry, W2UP, and Dave, WBØGAZ, used solar and wind power to charge their battery system, which practically mandates a low-power entry.

Top Ten – Multi-Op, Low Power					
WØDLE	175,960				
W8TK	160,024				
VY2TTT	153,550				
NX6T	152,388				
NØUR	121,120				
N7IV	119,394				
NM5M	105,120				
K7SS	58,240				
KA9VVQ	53,280				
WDØGTY	52,326				

"Running high power would require running my generator and amps for the contest, at considerable fuel expense," he said. "Being away from power lines also has the added benefit as the noise is very low. Many operators have stated it's the quietest station they've ever operated at."

You can't work 'em if you can't hear 'em, and that quietude helped them to a nearly 100-QSO win over Number 2, Arizona's W8TK (+K2EV). In addition to quiet, Chuck has also built his station to exploit his midcontinent location.



No photo editing was used to enhance the visibility of the WØDLE's antenna farm. Mother Nature's wintry, November conditions took care of that! (Photo by WØDLE)

"Being in Colorado, I have designed a number of my antennas to be bi-directional for domestic contests. I have a 40 meter rotating phased beam that is bi-directional and an 80 meter rotary dipole at 120 feet. I have six towers loaded with stacked TH7s or monobanders, so rotating antennas is not needed in the contest," he said.

As well, "A run and a mult station can blast away on any antenna or band." (Such is within the rules if only one radio is transmitting at any one time.)

The Number 3 spot heads east to the potato fields of Prince Edward Island, with VY2TTT (Fred, KE7X, Vic, VE3YT, Eric, VA7DZ, Bill, VE3BXI and Chester, VE3CFK, running to 925 QSOs and a sweep. If they return in 2016, it appears 80 meters would be the key band to improve since they were fairly even on 40 meters and higher, but managed only 51 QSOs on 80. WØDLE had 208 on 80, but was significantly behind VY2TTT on 15; 165 QSOs to 30.

Interestingly, VY2TTT was staffed by the same group of operators who won the ML category in 2014 from Manitoba. That effort, VE4DR, from the Manitoba Amateur Radio Museum in Austin earned them 22 more QSOs and one fewer section (82). A simple repeat of last year wouldn't have won it this year.

Since that is a group that loves to travel, it will be interesting to see where they end up this year. Might be time for a run from VE5, which some contesters think is slightly better for SS than VE4. "We call ourselves the Contest Wanderers," said Eric, VA7DZ. "Not quite sure yet where (we'll go) in 2016."

Single-Operator, High Power

Just when you think the dynasty is about to crack, Steve, N2IC — who has won five of the last eight SS CWs, including three in a row from 2007 to 2009 — has returned to his place atop the granddaddy of SS categories, Single-Op, High Power (SOHP). Pat, N9RV, and Bob, N6TV (@W7RN), may have won the past two years respectively, but Steve was not to be denied this year.

His 1,449 QSOs and 83 sections was good for a 51-QSO victory over Bill, K5GA (@NR5M). From Steve's New Mexico location, 15 and 20 were the money bands, as Bill beat him down low, but even 80 more 10 meter QSOs weren't enough. Steve out-QSOed Bill on 20, 382 to 267, and on 15, 400 to 302, while Bill beat Steve on 40 and 80. This appears to prove the adage about running as high as the bands will allow.

Top Ten – Single-Op, High Power						
N2IC	240,534					
NR5M (K5GA, op)	232,068					
N9RV	225,262					
K5TR (K5OT, op)	221,610					
N5RZ	219,286					
W7RN (N6TV, op)	218,954					
K6LA	212,872					
N2NT (N2NC, op)	210,488					
NX4N	207,788					
AA5B	203,360					

Pat, N9RV, couldn't find his groove this year, dropping 41 QSOs back of Bill. "I don't think it was a very successful SS for me," Pat said. "It might be a long time before I can win again if we have those kinds of conditions. Just no pep to the runs at the start, which is vital."

From his Montana QTH, it's clear Pat needs the high bands. In 2014, when he won, he made the bulk of his Qs on 15 and 10, with 624 Qs between the two bands. In 2015, he recorded only 370. And while he made up some ground on 80 and 40, it still left him 46 Qs behind 2014. With Steve still mustering 46 more Qs this year than Pat made in 2014, it's clear the sunspots are fading over Big Sky country.

Single-Operator, Low Power

The U.S. possessions in the Caribbean once ruled SS, with a Puerto Rico station dominating the SOHP category for years. That seemed to fade from prominence, particularly as Steve, N2IC, and Pat, N9RV, rose to command the top spots. For 2015, the Caribbean is back, with John, W2GD, taking the Single-Op, Low Power (SOLP) crown in dominating fashion as KP2M from the U.S. Virgin Islands.

John's total score 213,144 (1,284 QSOs and 83 sections), was due to 79 QSOs more than Mark, AG9A (@NØNI) and 143 more QSOs than Number 3, NA5NN (Tor, N4OGW, operator).

John's operation earned kudos from an unlikely source: the winner of the SOUHP category. Randy, KØEU, noticed K5GO beating N2IC's score, but said (referring to raw scores), "What I thought was more of an achievement was W2GD beating my score with low power, unassisted, from KP2M. That was really some amazing operating." Ultimately, Randy would edge just ever so slightly ahead of John when the log-checking was complete.

Top Ten – Single-Op, Low Power							
KP2M (W2GD, op)	213,144						
NØNI (AG9A, op)	200,030						
NA5NN (N4OGW, op)	187,124						
NP3A	186,304						
K7BG	174,964						
N9CK	174,824						
W4AAA (KK9A, op)	173,138						
K7GK	170,150						
NAØN (@WØZT)	169,904						
WJ9B	166,788						

John is no stranger to beating the odds: he's one of very few operators from east of the Mississippi to win the SOHP category from the continental U.S. — back in 1978 from his home in Northern New Jersey. "It was a magical weekend," he said, looking back. (KM9P won at N4RJ from GA in 1992 and K1TO from SFL in 1998.)

For 2015, his motivation was simple. "For the last several years, I'd been eyeing the very significant lowpower record Chip, K7JA, set operating from NP4A's station way back in 1993. For one reason or another, I never found it convenient. Finding a well-equipped station in the Caribbean to use also remained a major hurdle to overcome." Then, last fall, serendipity. He was having dinner with Phil, KT3Y, after some antenna work in Virginia. Phil also happens to own KP2M. "One thing led to another and Phil offered KP2M to me, with the hope I'd take a run at the SS single-operator record, either high power or low power."

John credits several important developments since 1993 for breaking Chip's record: spotting, *CW Skimmer*, and the Reverse Beacon Network, as well as the growth in the number of multipliers from 77 to 83. "In hindsight, these changes were contributing factors that ultimately enabled me to break the record." Indeed, had the section count remained at 77, John's QSO count would not have been enough.

To be clear, John wasn't using spotting assistance, but a station such as KP2M benefits from spotting when it helps stations who do find him on the bands.

"In some ways, success from KP2M was a replay of my personal all-time best HP SS entry in 1978. In both cases, I started on 10 meters, and managed a high-rate first hour, which included contacts with many of the rarest western U.S. sections."

John finished with 1,284 Qs and a sweep. His 213,144 points beats Chip's record from 1993 of 210,518. It would be the only overall record to fall in 2015.

Single-Operator Unlimited, High Power

If bookies ever handicapped Sweepstakes, the shortest odds would have to go to Randy, KØEU, who is again atop the Single-Op Unlimited, High Power (SOUHP) category. His 1,291 QSOs and a sweep were good for 214,306 points and a 30-QSO victory over Number 2, Bob, N4BP.

Top Ten – Single-Op Unlimited, High Power						
KØEU	214,306					
N4BP	209,326					
N800	207,500					
VY2ZM	192,864					
WA6O (@N6XG)	186,086					
К9СТ	184,426					
WR3Z	183,098					
W6SX	180,940					
K5KG	177,786					
AD4EB	177,612					

Randy's choice of U is a tip of the hat to Steve, N2IC. "The reason I chose the U category is simple. SS is one of the few contests I have a chance to win a plaque. Since N2IC is also in the Rocky Mountain region, the only way to get a plaque is to enter any category except B." As for why a U, with access to CW Skimmer and spots, has yet to beat a B — or would lose to an A — Randy suggests two reasons: location and operator. "It will happen if and when an operator of N2IC's caliber decides to give it a shot, for whatever reason. Maybe a change of pace or to set a new record for the U category. I think the SO2R skill level of these operators is so high, that there is minimal advantage for them to have spotting assistance."

One theory about why U can't beat B holds that spots are a distraction that take away from rate. Randy isn't convinced. "I barely used the spotting network information for the first 12 hours except when a rare mult appeared. My focus is always on rate. All that having the spotting network does is allows me to not worry as much about missing a sweep." As proof, he said he used his second radio, and not the spotting network, to find perhaps the rarest, VY1AAA in the Northern Territories, who worked only 320 stations. (VY1AAA, a hybrid remote multiop effort of Hal, W1NN, and station owner J Allen, VY1JA was one of only two Northern Territories stations to submit logs.)

For Randy, 20 meters was the money band, followed by 40. Bob, N4BP, significantly outpaced Randy on 40 and 15, but couldn't match Randy's 20 meter total of 544 QSOs. Bob, meanwhile, was beaten on the lower bands overall by Number 3 Vic, N8OO, but won out on the strength of 519 15 meter QSOs to Vic's 272.

Single-Op Unlimited, Low Power

Making the switch from SOUHP to SOULP has paid off for Dave, K6LL. His 1,067 QSOs and a sweep were good for a 10-Q win over Will, AA4NC, in a category where, once again, low-band dominance was not enough to overcome high-band supremacy.

Top Ten – Single-Op Unlimited, Low Power									
K6LL 177,122									
AA4NC	175,462								
KB7Q	173,968								
N4PN	163,012								
N5DO	156,206								
W9SN	152,442								
KY4F	151,208								
K8BL	150,894								
WE9V	147,242								
N9CO	145,250								

If this were merely a 40 and 80 meter contest, Will would win, hands down. He racked up 760 QSOs on 40 and 80 alone, but Dave edged ahead 381 to 264 on 20 and dominated 15 meters 247 Qs to 33. And while they would otherwise be insignificant, Dave's 3 QSOs on 10 were a nice cushion with the gap so close. Given Dave's and Steve's (N2IC) high-band dominance, the southwest is the place to be as the sunspots wane.

The Top 3 in this category was an extremely tight race: Gene, KB7Q, who like Dave was in Arizona, was only nine QSOs away from Will and 19 from Dave. In Gene's case, it's the inverse of why Will didn't beat Dave: Gene outdid Will on the high bands but couldn't match Will's score on 80 and 40.

School Club

Time was, if you wanted to guarantee a Top 10 finish, School Club was the place to go. In many previous years, there haven't been enough entries to complete the Top 10, so any amount of operation sufficed. That all changes for 2015, with 11 entries.

Bob, WØBH (@KØHC), who lost in 2014 by a razorthin three QSOs, appeared not to be taking any chances in 2015, with a 47-QSO victory over W6RFU (Steve, AC6T and Mike, K6QD operators). As with the other categories, the Californians were ahead on 20 and 15, but Bob's Kansas location (at Hesston College in Hesston) provided enough 80 and 40 meter QSOs for the win.

Top Ten – School Club						
KØHC (WØBH, op)	181,604					
W6RFU	157,202					
W8EDU	132,136					
W4UAL	87,814					
NØT	33,670					
N5XU (AA5BT, op)	24,236					
W1AF (W1PL, op)	10,608					
W9UIH	10,080					
W8SH (K2BET & W8EO)	2,080					
W9GRS (W9KVR, op)	968					

W6RFU is the club station at the University of California Santa Barbara, and it was Steve, AC6T, who beat Bob by three QSOs in 2014. A rivalry in the making?

Number 3 goes to W8EDU at Case Western Reserve University in Cleveland. Dave, AD8Y, and Jim, W8WTS, ran the club station to 796 QSOs and a sweep, creating an increasingly competitive category for SS.

The rules for School Club are simple: the operation must be by staff, students or alumni and must be at the school's station. Operating at a nearby private station it must be owned by an eligible team member — is permitted only if the school does not have a station. The objective is to encourage operation in SS by students who might otherwise not have an exposure to contesting. With this category appearing to grow, the real winner is the Amateur Radio contesting community as a whole.

Single-Operator, QRP

You need a fair degree of humility to operate Sweepstakes with less power than most rigs use to receive. You work your heart out and come up with little more than half the QSOs of the higher-power stations. So it wasn't a surprise to get a tiny bit of self-deprecation back from this year's winner, Ward, NØAX. (Full disclosure: he's the managing editor for the write-ups.)

"I have been trying for this on and off for many years since the 1990s — and had got as close as second a couple of times," Ward said. "It was pretty gratifying this year to be in the right location, with decent equipment and finally be a good enough operator to put the pieces together. I knew I was being chased by KØAV and W6YX and it would be close."

Top Ten – Single-Op, QRP						
NØAX	131,528					
KØAV	121,120					
W6YX (N7MH, op)	120,848					
VE6EX	111,040					
N7IR	102,008					
N7CW	101,924					
K3TW	92,016					
W6JTI	91,040					
WF7T	87,576					
N5EE	87,360					

Close, but not razor-thin: Alan, KØAV, recorded 757 QSOs and 80 sections to Ward's 802 and 82. Mike, N7MH, operating the Stanford University club station W6YX, was in just behind Alan with 728 QSOs and a sweep. The sweep closed the gap between Alan and Mike to a photo-finish 272 points. To put that into perspective, with a sweep, a difference of 272 points works out to 1.6 QSOs. Now that's a tight race! The 2014 QRP winner, Dan, VE6EX, came in fourth with 694 QSOs and 80 sections.

Golden Logs

If there's one way SS distinguishes itself from other contests, it's the complexity of the exchange. There are as many as 15 characters (up to four for the serial number, one for the category (or precedence), as many as six for the call sign, and two each for the check and section).

Top Ten Golden Logs (zero errors)

Call	Category	QSOs
VE4YU	SOLP	340
W1MJ	SOLP	120
AD2KA	SOLP	114
К6СТА	SOLP	85
KØJPL	SOHP	83
ĸiøj	SOLP	79
W5KI	SOUHP	37
VE3VSM	SOLP	30
KØVG	SOHP	27
N6KW	SOLP	26
WØCZ	SOQRP	26

Sweepstakes is a contest that absolutely rewards accuracy, and it's not uncommon to see accuracy be the difference between winning and being Number 2 or Number 3. So when an operator turns in a Golden Log, one with no deductions for copying errors, it is truly something to celebrate.

The top Golden Log in 2015 was turned in by an operator who will be missed. Ed, VE4YU, was still operating Sweepstakes in 2015, even as he knew his days were growing short from a recurrence of cancer. His 340 QSOs and 71 sections were flawlessly recorded. Ed died early in the new year.

Ed began his amateur radio career in the 1950s, about the same time he started as an electronics expert working on the famed Avro Arrow supersonic fighter jet. Its controversial cancellation in 1959, even as it was proving itself superior to its competitors, remains an important story in Canada's aerospace sector. In the last few years, he was a founding member of Radiosport Manitoba and a driving force in getting more Manitoba stations into contesting.



This chart shows the number of submitted logs with a certain error rate or better. If you want to be in the Top Ten, make sure your log is in one of the categories at the left of the chart!

Call	Score	QSOs	Error Rate (%
Low Power			
KP2M (W2GD, op)	213,144	1284	3.3
NØNI (AG9A, op)	200,030	1205	1.1
NA5NN (N4OGW, op)	187,124	1141	0.6
NP3A	186,304	1136	3.3
K7BG	174,964	1054	0.6
High Power			
N2IC	240,534	1449	1.5
NR5M (K5GA, op)	232,068	1398	0.8
N9RV	225,262	1357	1.3
K5TR (K5OT, op)	221,610	1335	1.1
N5RZ	219,286	1321	2.4
QRP	,		
NØAX	131,528	802	1.3
KØAV	121,120	757	1.6
, W6YX (N7MH, op)	120,848	728	0.3
VE6EX	111,040	694	2.1
N7IR	102,008	622	1.1
Unlimited Low Power	101,000	022	
K6LL	177,122	1067	0.7
AA4NC	175,462	1057	1.1
KB7Q	173,968	1048	1.1
N4PN	163,012	982	5.1
N5DO	-	982	2.9
	156,206	941	2.9
Unlimited High Power	214 206	1201	2.2
KØEU	214,306	1291	2.2
N4BP	209,326	1261	0.9
N800	207,500	1250	1
VY2ZM	192,864	1176	1.8
WA6O	186,086	1121	2.9
Top Five Single-Op Accura	cy Indexes		
Call	, QSOs	Error rate (%)	Accuracy Inde
Low Power			,
NA5NN (N4OGW, op)	1141	0.6	12.997
N9CK	1066	0.4	12.988
NØNI (AG9A, op)	1205	1.1	12.971
K7BG		0.6	12.963
	1054	0.0	
	1054 1036	0.6 0.7	
NAØN	1054 1036	0.7	12.945
NAØN High Power	1036	0.7	12.945
NAØN High Power NR5M (K5GA, op)	1036 1398	0.7 0.8	12.945 13.066
NAØN High Power NR5M (K5GA, op) W7RN (N6TV, op)	1036 1398 1319	0.7 0.8 1	12.945 13.066 13.020
NAØN High Power NR5M (K5GA, op) W7RN (N6TV, op) K5TR (K5OT, op)	1036 1398 1319 1335	0.7 0.8 1 1.1	12.945 13.066 13.020 13.015
NAØN High Power NR5M (K5GA, op) W7RN (N6TV, op) K5TR (K5OT, op) AA5B	1036 1398 1319 1335 1240	0.7 0.8 1 1.1 0.8	12.945 13.066 13.020 13.015 13.013
NAØN High Power NR5M (K5GA, op) W7RN (N6TV, op) K5TR (K5OT, op) AA5B N2IC	1036 1398 1319 1335	0.7 0.8 1 1.1	12.945 13.066 13.020 13.015
NAØN High Power NR5M (K5GA, op) W7RN (N6TV, op) K5TR (K5OT, op) AA5B N2IC QRP	1036 1398 1319 1335 1240 1449	0.7 0.8 1 1.1 0.8 1.5	12.945 13.066 13.020 13.015 13.013 13.011
NAØN High Power NR5M (K5GA, op) W7RN (N6TV, op) K5TR (K5OT, op) AA5B N2IC QRP W6YX (N7MH, op)	1036 1398 1319 1335 1240 1449 728	0.7 0.8 1 1.1 0.8 1.5 0.3	12.945 13.066 13.020 13.015 13.013 13.011 12.832
NAØN High Power NR5M (K5GA, op) W7RN (N6TV, op) K5TR (K5OT, op) AA5B N2IC QRP W6YX (N7MH, op) NØAX	1036 1398 1319 1335 1240 1449 728 802	0.7 0.8 1 1.1 0.8 1.5 0.3 1.3	12.945 13.066 13.020 13.015 13.013 13.011 12.832 12.774
NAØN High Power NR5M (K5GA, op) W7RN (N6TV, op) K5TR (K5OT, op) AA5B N2IC QRP W6YX (N7MH, op) NØAX KØAV	1036 1398 1319 1335 1240 1449 728 802 757	0.7 0.8 1 1.1 0.8 1.5 0.3 1.3 1.6	12.945 13.066 13.020 13.015 13.013 13.011 12.832 12.774 12.719
NAØN High Power NR5M (K5GA, op) W7RN (N6TV, op) K5TR (K5OT, op) AA5B N2IC QRP W6YX (N7MH, op) NØAX KØAV N7IR	1036 1398 1319 1335 1240 1449 728 802 757 622	0.7 0.8 1 1.1 0.8 1.5 0.3 1.3 1.6 1.1	12.945 13.066 13.020 13.015 13.013 13.011 12.832 12.774 12.719 12.684
NAØN High Power NR5M (KSGA, op) W7RN (N6TV, op) K5TR (KSOT, op) AA5B N2IC QRP W6YX (N7MH, op) NØAX KØAV N7IR W6JTI	1036 1398 1319 1335 1240 1449 728 802 757	0.7 0.8 1 1.1 0.8 1.5 0.3 1.3 1.6	12.945 13.066 13.020 13.015 13.013 13.011 12.832 12.774 12.719
NAØN High Power NR5M (KSGA, op) W7RN (N6TV, op) K5TR (KSOT, op) AA5B N2IC QRP W6YX (N7MH, op) NØAX KØAV N7IR W6JTI Unlimited Low Power	1036 1398 1319 1335 1240 1449 728 802 757 622 569	0.7 0.8 1 1.1 0.8 1.5 0.3 1.3 1.6 1.1 0.9	12.945 13.066 13.020 13.015 13.013 13.011 12.832 12.774 12.719 12.684 12.665
NAØN High Power NR5M (KSGA, op) W7RN (N6TV, op) K5TR (KSOT, op) AA5B N2IC QRP W6YX (N7MH, op) NØAX KØAV N7IR W6JTI Unlimited Low Power K6LL	1036 1398 1319 1335 1240 1449 728 802 757 622 569 1067	0.7 0.8 1 1.1 0.8 1.5 0.3 1.3 1.6 1.1 0.9 0.7	12.945 13.066 13.020 13.015 13.013 13.011 12.832 12.774 12.719 12.684 12.665 12.958
NAØN High Power NR5M (KSGA, op) W7RN (N6TV, op) K5TR (KSOT, op) AA5B N2IC QRP W6YX (N7MH, op) NØAX KØAV N7IR W6JTI Unlimited Low Power K6LL AA4NC	1036 1398 1319 1335 1240 1449 728 802 757 622 569 1067 1057	0.7 0.8 1 1.1 0.8 1.5 0.3 1.3 1.6 1.1 0.9 0.7 1.1	12.945 13.066 13.020 13.015 13.013 13.011 12.832 12.774 12.719 12.684 12.665 12.958 12.914
NAØN High Power NR5M (K5GA, op) W7RN (N6TV, op) K5TR (K5OT, op) AA5B N2IC QRP W6YX (N7MH, op) NØAX KØAV N7IR W6JTI Unlimited Low Power K6LL AA4NC KB7Q	1036 1398 1319 1335 1240 1449 728 802 757 622 569 1067 1057 1048	0.7 0.8 1 1.1 0.8 1.5 0.3 1.3 1.6 1.1 0.9 0.7 1.1 1.8	12.945 13.066 13.020 13.015 13.013 13.011 12.832 12.774 12.719 12.684 12.665 12.958 12.914 12.840
NAØN High Power NR5M (KSGA, op) W7RN (N6TV, op) K5TR (KSOT, op) AA5B N2IC QRP W6YX (N7MH, op) NØAX KØAV N7IR W6JTI Unlimited Low Power K6LL AA4NC KB7Q	1036 1398 1319 1335 1240 1449 728 802 757 622 569 1067 1057	0.7 0.8 1 1.1 0.8 1.5 0.3 1.3 1.6 1.1 0.9 0.7 1.1	12.945 13.066 13.020 13.015 13.013 13.011 12.832 12.774 12.719 12.684 12.665 12.958 12.914
NAØN High Power NR5M (KSGA, op) W7RN (N6TV, op) K5TR (KSOT, op) AA5B N2IC QRP W6YX (N7MH, op) NØAX KØAV N7IR W6JTI	1036 1398 1319 1335 1240 1449 728 802 757 622 569 1067 1057 1048	0.7 0.8 1 1.1 0.8 1.5 0.3 1.3 1.6 1.1 0.9 0.7 1.1 1.8	12.945 13.066 13.020 13.015 13.013 13.011 12.832 12.774 12.719 12.684 12.665 12.958 12.914 12.840
NAØN High Power NR5M (KSGA, op) W7RN (N6TV, op) K5TR (KSOT, op) AA5B N2IC QRP W6YX (N7MH, op) NØAX KØAV N7IR W6JTI Unlimited Low Power K6LL AA4NC KB7Q K8BL	1036 1398 1319 1335 1240 1449 728 802 757 622 569 1067 1057 1048 909	0.7 0.8 1 1.1 0.8 1.5 0.3 1.3 1.6 1.1 0.9 0.7 1.1 1.8 1.2	12.945 13.066 13.020 13.015 13.013 13.011 12.832 12.774 12.719 12.684 12.665 12.958 12.914 12.840 12.839
NAØN High Power NR5M (K5GA, op) W7RN (N6TV, op) K5TR (K5OT, op) AA5B N2IC QRP W6YX (N7MH, op) NØAX KØAV N7IR W6JTI Unlimited Low Power K6LL AA4NC KBL KBTQ K8BL WE9V Unlimited High Power	1036 1398 1319 1335 1240 1449 728 802 757 622 569 1067 1057 1048 909	0.7 0.8 1 1.1 0.8 1.5 0.3 1.3 1.6 1.1 0.9 0.7 1.1 1.8 1.2	12.945 13.066 13.020 13.015 13.013 13.011 12.832 12.774 12.719 12.684 12.665 12.958 12.914 12.840 12.839
NAØN High Power NR5M (K5GA, op) W7RN (N6TV, op) K5TR (K5OT, op) AA5B N2IC QRP W6YX (N7MH, op) NØAX KØAV N7IR W6JTI Unlimited Low Power K6LL AA4NC KB7Q K8BL WE9V	1036 1398 1319 1335 1240 1449 728 802 757 622 569 1067 1057 1048 909 887	0.7 0.8 1 1.1 0.8 1.5 0.3 1.3 1.6 1.1 0.9 0.7 1.1 1.8 1.2 1.3	12.945 13.066 13.020 13.015 13.013 13.011 12.832 12.774 12.719 12.684 12.665 12.958 12.914 12.840 12.839 12.818
NAØN High Power NR5M (K5GA, op) W7RN (N6TV, op) K5TR (K5OT, op) AA5B N2IC QRP W6YX (N7MH, op) NØAX KØAV N7IR W6JTI Unlimited Low Power K6LL AA4NC KBL KB4N KB7Q K8BL WE9V Unlimited High Power N4BP	1036 1398 1319 1335 1240 1449 728 802 757 622 569 1067 1057 1048 909 887 1261	0.7 0.8 1 1.1 0.8 1.5 0.3 1.3 1.6 1.1 0.9 0.7 1.1 1.8 1.2 1.3 0.9	12.945 13.066 13.020 13.015 13.013 13.011 12.832 12.774 12.719 12.684 12.665 12.958 12.914 12.840 12.839 12.818 13.011
NAØN High Power NR5M (K5GA, op) W7RN (N6TV, op) K5TR (K5OT, op) AA5B N2IC QRP W6YX (N7MH, op) NØAX KØAV N7IR W6JTI Unlimited Low Power K6LL AA4NC KB7Q K8BL WE9V Unlimited High Power N4BP N80O	1036 1398 1319 1335 1240 1449 728 802 757 622 569 1067 1057 1048 909 887 1261 1250	0.7 0.8 1 1.1 0.8 1.5 0.3 1.3 1.6 1.1 0.9 0.7 1.1 1.8 1.2 1.3 0.9 1	12.945 13.066 13.020 13.015 13.013 13.011 12.832 12.774 12.719 12.684 12.665 12.958 12.914 12.840 12.839 12.818 13.011 12.997

Accuracy Index = log (Good QSOs) + 10 (1-error rate)

Among those operators whose accuracy was among the top five in their categories, Mike, N7MH, operating QRP from W6YX, had the best error rate, an astonishing 0.3 percent over 728 QSOs, finishing third in SOQRP. The lowest error rate by a category winner was set by Dave, K6LL, who won Single-Op Unlimited, Low Power.

The preceding table shows the five most accurate entries in each category as well as the top operators by error index. It shows that while accuracy is celebrated by many top operators, it is balanced by speed. Either way, the entry with the most clean QSOs wins!

Needles and Haystacks

Conventional wisdom holds the key to winning Sweepstakes is to find productive frequencies and run like crazy for every minute of the available 24 hours, hoping against hope you find all 83 ARRL sections. Paul, KØJPL, took a different approach.

He didn't win. He didn't place. He didn't even show. Indeed, his score is so far down the listings, you have to be looking for a specific convergence of events to find it. Paul earned his sweep of 83 sections, but took only 83 QSOs to do it. Quite the contrast from the 1,475 contacts and a sweep in the winning K5GO log!



Paul, KØJPL, and his wife, Linda Lou, in his nicely appointed shack in Chesterfield, Missouri. (Photo by KØJPL)

For Paul's effort, the word surgical comes to mind. Eighty-three needles in a thousand haystacks. "I enjoy most contests, but try to stay away from running a frequency," Paul said. "I got started on this years back by my elmer, Bill Pike, KØECK (SK). One contact in each of the (sections) requires a lot of tuning around." No kidding. Many of the top operators can rack up 83 QSOs in less than one good hour, but for Paul this was no timesaving effort. "It usually takes till about 1700 Sunday to finish up," he said.

It's been done before, in some years by multiple operators. Paul said he's done it 10 times since 2008 (including in SS Phone), but this year, it appears he's the only one to try. The feat requires pinpoint accuracy, since one busted QSO costs you not only the Q, but also the section. (Paul also turned in the fifth largest Golden Log -Ed.)

While it's not a requirement, it's easier if you're in a section that's not that rare, such as Paul's home state of Missouri. Your name would be forever reviled if you purposely gave out Northern Territories or Newfoundland — or even VE4, for that matter — to only 83 stations. By the way, Paul did it the old-fashioned way, without spotting, as a single operator using high power.

Tight Races

There aren't too many races that were tighter than Gary, N7IR, vs. Warren, N7CW. How tight? Half a QSO!

The Arizona QRP crown goes to Gary by the thinnest of margins. His 622 QSOs and 82 sections barely nudged out Warren's 614 and 83. Missing the sweep for Gary means one fewer QSO for him or one more QSO by Warren would have flipped the table and launched Warren into Top Five for SOQRP overall.

Another close finish was in Single-Operator, Low Power in Virginia, where George, N4UA, just edged Larry, K7SV, by 5,750 points. Because of Larry's sweep to George's 82 sections, the gap narrowed to just 35 QSOs.

In Northern Florida, the Single-Operator, Low Power race came down to fewer than 50 QSOs. Ric, WO4O, logged 922 QSOs to the 991 by Kevin, N4KM. But because of Ric's sweep to Kevin's 81 sections, another 46 QSOs by Ric would have sealed the win.

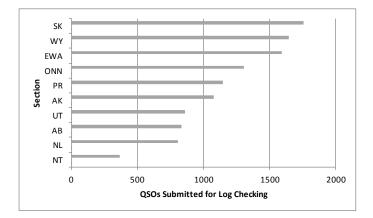
Number 3 overall in Single-Operator, Low Power was also razor-thin. Tor, N4OGW (@NA5NN) was just five QSOs ahead of Eric, NP3A. Both scored 82 sections, just missing sweeps. Similarly, the spread between Numbers 6 and 7 in the same category was less than one QSO. Matt, K7BG, recorded 1,054 QSOs and a sweep to Steve, N9CK, who had 12 more QSOs but one fewer section. A difference of one QSO either way hands sixth place to Steve.

Standard Setters

Even with conditions not at the peak of performance for the higher bands, the unique one-QSO-and-done nature of Sweepstakes creates a window of opportunity throughout the solar cycle for exceptional efforts to set records. This year, 15 new Division records and 60(!) new Section records were set. The new all-time record for Single-Op, Low Power was set by W2GD from KP2M as described earlier. All of the Sweepstakes records are detailed by Sweepstakes Manager, Larry Hammel, K5OT at **arrl.org/contest-records**.

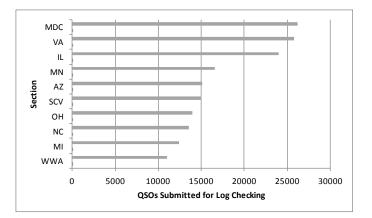
How Rare Was It?

It's never easy to make a Clean Sweep of all the sections and when you fall a little bit short, knowing that maybe the one you missed was extra-hard eases the sting a little bit. The chart below shows the rarest of the rare in 2015.



No surprise that NT (Northern Territories – VE8, VY1, and VYØ) was the hardest to log with less than 500 QSOs made during the entire contest! Northern sections seemed especially tough this year with NL (VO1 and VO2) the next most difficult, then AB (VE6) in 3^{rd} and AK (KL7) in 5th. Utah must have taken the weekend off and if you didn't find the high bands open, PR (KP4) was probably difficult as well.

The sections in the following charts weren't rare at all! MDC (Maryland-D.C.), VA, and IL generated the most QSOs but that also means competition was the stiffest in those sections. Feast or famine, there's always something challenging in Sweepstakes.



See you in November!

Dust off that keyboard, polish up that paddle and download the latest files for your logging program: the 2016 CW Sweepstakes runs on November 5th through the 7th. Whether you're in for the long haul or just to pass some time, we'd love to hear you.

						Regiona									
			SOQRP/LP/HP	= Single-Op	All-Band	; SOULP/HP = Single	e-Op Unlimit	ed; MSL/N	/ISH = Multioperato	r, Single Tra	ansmitter	1			
Northeast Region Southeast Region					Centra	Central Region			Midwest Region			West Coast Region			
Atlantic Divis	and, Hudson ions; Maritin ec Sections	and ne and		oanoke and tern Divisio		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	
N2NT (N2NC,	210,488	В	NX4N	207,788	В	W9RE	201,556	В	N2IC	240,534	В	N9RV	225,262	В	
op) AA3B	202,852	в	N4AF	183,060	в	K1LT	174,798	в	NR5M (K5GA, op)	232,068	в	W7RN (N6TV, op)	218,954	В	
K5ZD	202,852 201,192	В	WP2B	185,060	В	VE3KI	161,920	В	K5TR (K5OT, op)	232,068 221,610	В	K6LA	218,954 212,872	В	
			K4JPD (N4OO,												
N1RR (@K1LZ)	190,734	В	op)	172,972	В	КЈЭС	144,088	В	N5RZ	219,286	В	WC6H	193,520	В	
KD4D	180,940	В	KU8E	170,100	В	K9BGL	128,576	В	AA5B	203,360	В	W6PH	192,560	В	
W2LK	156,492	А	KP2M (W2GD, op)	213,144	А	N9CK	174,824	A	NØNI (AG9A, op)	200,030	A	K7BG	174,964	А	
K1XM	154,324	А	NA5NN (N4OGW,	187,124	А	N8SS	144,180	А	NAØN (@WØZT)	169,904	А	K7GK	170,150	А	
K3UA	144,648	А	op) NP3A	186,304	А	W8CAR	129,068	А	NØAT (NØKK, op)	160,356	А	WJ9B	166,788	А	
W2ID	135,456	А	W4AAA (KK9A, op)	173,138	А	кэкм	126,400	А	N5FO	158,752	А	AA6PW	155,708	А	
VE2CWT (VE2FU, op)	130,086	А	N4KM	160,542	A	к9WX	119,232	А	W8FN	155,520	А	W9CF (@K8IA)	155,044	А	
K8CN	72,384	Q	K3TW	92,016	Q	к920	86,756	Q	NØAX	131,528	Q	W6YX (N7MH, op)	120,848	Q	
W1QK	71,448	Q	WF7T	87,576	Q	КТ8К	77,844	Q	KØAV	121,120	Q	VE6EX	111,040	Q	
WS2E	67,076	Q	N5EE	87,360	Q	K9UIY	68,376	Q	N1CC	75,492	Q	N7IR	102,008	Q	
K1VUT	67,032	Q	WØPV	64,960	Q	N9SE	68,256	Q	KEØG	49,296	Q	N7CW	101,924	Q	
NA1CC	51,984	Q	N4CF	60,368	Q	WI9WI	67,184	Q	WFØT	30,686	Q	W6JTI	91,040	Q	
VY2ZM	192,864	UH	N4BP	209,326	UH	К9СТ	184,426	UH	KØEU	214,306	UH	WA6O (@N6XG)	186,086	UH	
WR3Z	183,098	UH	N800	207,500	UH	N4QS	169,576	UH	WØZA	169,938	UH	W6SX	180,940	UH	
N3RR	170,262	UH	K5KG	177,786	UH	K8ND	164,984	UH	NØXR	160,218	UH	KO7SS	176,624	UH	
K3WW	168,822	UH	AD4EB	177,612	UH	VE3CX	163,178	UH	ктøа	157,534	UH	W1SRD	174,964	UH	
K3AJ	161,020	UH	N1LN	175,462	UH	K3WA	162,680	UH	KØOU	149,068	UH	K6SRZ	174,798	UH	
W1UJ	144,586	UL	AA4NC	175,462	UL	K8BL	150,894	UL	N5DO	156,206	UL	K6LL	177,122	UL	
K3AU (K2YWE, op)	137,700	UL	N4PN	163,012	UL	WE9V	147,242	UL	КØVBU	140,768	UL	KB7Q	173,968	UL	
N3HEE	132,184	UL	W9SN	152,442	UL	N9CO	145,250	UL	NØAC	137,268	UL	K7GA	112,640	UL	
KM1X	127,820	UL	KY4F	151,208	UL	K8BKM	129,232	UL	AD1C	133,464	UL	K9JM	95,450	UL	
N1QD (@K1KP)	124,500	UL	WQ2N/4	134,316	UL	KC9EE	119,394	UL	комрн	124,476	UL	W6AWW	90,396	UL	
W2FU	218,954	MH	K5GO	244,850	MH	W5MX	164,984	MH	WØSD	222,938	MH	W6YI	229,910	MH	
K3CCR	96,960	МН	W5RU	194,340	мн	AA8U	84,846	MH	KØWA	196,710	мн	KY7M	203,018	MH	
K2NA	80,190	МН	W4RM	190,236	MH	NT8V	65,072	MH	NJ8M	134,128	MH	N6RO	175,462	MH	
W3UR	4	мн	N4GI	190,896	MH	VE3MIS (VE3NE, op)	52,164	МН	КØНВ	121,014	MH	K6MMM	157,276	MH	
VY2TTT	153,550	ML	K9ES	145,476	MH	KEØL	31,980	МН	NØMA	85,988	MH	K7RI	135,432	MH	
W1FM	45,760	ML	W4TG	41,080	ML	KA9VVQ	53,280	ML	WØDLE	175,960	ML	W8TK	160,024	ML	
K2AA	45,592	ML	KW4JS (KI4WXI, op)	10,800	ML	N9MT	39,000	ML	NØUR	121,120	ML	NX6T	152,388	ML	
W3KWH	10,400	ML	W4UAL	87,814	S	W8EDU	132,136	S	N7IV	119,394	ML	K7SS	58,240	ML	
VO2AC	8,624	ML	K4KDJ (KK4BSM, op)	200	S	W9UIH	10,080	s	NM5M	105,120	ML	WW7LW	28,840	ML	
W1AF (W1PL, op)	10,608	s	r /			W9GRS (W9KVR, op)	968	s	WDØGTY	52,326	ML	KL2R	12,312	ML	
~~~									KØHC (WØBH, op)	181,604	s	W6RFU	157,202	S	
									N5XU (AA5BT, op)	24,236	s				

Overall category winners and Division Winners in each category are awarded a plaque thanks to clubs and individuals who sponsor them. A special thanks to Icom America for insuring that all Division Winners receive a plaque. For more information on plaque sponsorship or to order a duplicate plaque, contact ARRL Contest Branch Manager Bart Jahnke, W9JJ, at 860-594-0232 or w9jj@arrl.org. Plaques cost \$75, which include all shipping charges.

Winner

**Plaque Sponsor** 



Division y riaque category	<b>Winner</b>	
Overall		
Single Operator High Power CW	N2IC	Trey Garlough, N5KO
Single Operator Low Power CW	KP2M (W2GD, op)	Radiosport Manitoba - VE4VV Memorial
Single Operator QRP CW	NØAX	QRP Amateur Radio Club International
Single Operator Unlimited High Power CW	KØEU	Joe KH6GA & Victoria N4WV
Single Operator Unlimited Low Power CW	K6LL	Icom America
Multioperator High Power CW	K5GO	Icom America
Multioperator Low Power CW	WØDLE	Icom America
School Club CW	KØHC (WØBH, op)	Icom America
Atlantic		
Single Operator High Power CW	AA3B	Icom America
Single Operator Low Power CW	K3UA	Potomac Valley Radio Club
Single Operator QRP CW	WR3R	Icom America
Single Operator Unlimited High Power CW	WR3Z	Icom America
Single Operator Unlimited Low Power CW	K3AU (K2YWE, op)	Icom America
Multioperator High Power CW	W2FU	Icom America
Multioperator Low Power CW	K2AA	Icom America
	1400	leon Anerea
Central		
Single Operator High Power CW	W9RE	Society Of Midwest Contesters
Single Operator Low Power CW	N9CK	Society Of Midwest Contesters
Single Operator QRP CW	K9ZO	Sean Kutzko, KX9X
Single Operator Unlimited High Power CW	К9СТ	Icom America
Single Operator Unlimited Low Power CW	WE9V	Icom America
Multioperator High Power CW	KEØL	Icom America
Multioperator Low Power CW	KA9VVQ	Icom America
School Club CW	W9UIH	Icom America
Dakota		
Single Operator High Power CW	NEØU	Minnesota Wireless Association
Single Operator Low Power CW	NAØN (@WØZT)	Minnesota Wireless Association
Single Operator QRP CW	KEØG	Tod Olson, KØTO
Single Operator Unlimited High Power CW	KTØA	Minnesota Wireless Association
Single Operator Unlimited Low Power CW	комрн	Icom America
Multioperator High Power CW	WØSD	Minnesota Wireless Association
School Club CW	NØT	Tod Olson, KØTO
Delta		
Single Operator High Power CW	KØEJ	Icom America
Single Operator Low Power CW	NA5NN (N4OGW, op)	Icom America
Single Operator QRP CW	WF7T	Icom America
Single Operator Unlimited High Power CW	N800	Icom America
Single Operator Unlimited Low Power CW	W9SN	Icom America
Multioperator High Power CW	K5GO	Icom America
Multioperator Low Power CW	KW4JS (KI4WXI, op)	Icom America
Great Lakes		
Great Lakes	V11T	Mad Pivor Padio Club
Single Operator High Power CW	K1LT NRSS	Mad River Radio Club
Single Operator Low Power CW Single Operator QRP CW	N8SS	Mad River Radio Club
5 1 .	KT8K	Mad River Radio Club
Single Operator Unlimited High Power CW	N4QS	Icom America John S. Comella N8AA
Single Operator Unlimited Low Power CW	K8BL	
Multioperator High Power CW	W5MX	Icom America

W8EDU

School Club CW

**Division / Plaque Category** 

Icom America

Hudson		
Single Operator High Power CW	N2NT (N2NC, op)	Icom America
Single Operator Low Power CW	W2LK	Icom America
Single Operator QRP CW	WS2E	Icom America
Single Operator Unlimited High Power CW	W2VQ	Icom America
Single Operator Unlimited Low Power CW	K2DFC	Icom America
Midwest		
Single Operator High Power CW	KØDEQ	Icom America
Single Operator Low Power CW	NØNI (AG9A, op)	Society Of Midwest Contesters
Single Operator QRP CW	NØAX	Icom America
Single Operator Unlimited High Power CW	NØXR	Icom America
Single Operator Unlimited Low Power CW	КØVBU	Icom America
Multioperator High Power CW	KØWA	Icom America
Multioperator Low Power CW	KB5ENP	Icom America
School Club CW	KØHC (WØBH, op)	Icom America
New England Single Operator High Power CW	K5ZD	Icom America
Single Operator Low Power CW	K1XM	
0	K8CN	Michael McKaughan, K1DM Mark Olsen, KF1V
Single Operator QRP CW	W1SJ	
Single Operator Unlimited High Power CW	W1UJ	Mark Olsen, KF1V Icom America
Single Operator Unlimited Low Power CW Multioperator Low Power CW	W10J W1FM	Icom America
		icom America
Northwestern		
Single Operator High Power CW	N9RV	Icom America
Single Operator Low Power CW	K7BG	Icom America
Single Operator QRP CW	W7QDM	Phil Yasson, AB7RW
Single Operator Unlimited High Power CW	K7CF	Icom America
Single Operator Unlimited Low Power CW	K7GA	Icom America
Multioperator High Power CW	K7RI	Icom America
Multioperator Low Power CW	K7SS	Icom America
Pacific		
Single Operator High Power CW	W7RN (N6TV, op)	Icom America
Single Operator Low Power CW	K7GK	Robert A. Wilson, N6TV
Single Operator QRP CW	W6YX (N7MH, op)	Icom America
Single Operator Unlimited High Power CW	WA6O (@N6XG)	Icom America
Single Operator Unlimited Low Power CW	K9JM	Icom America
Multioperator High Power CW	N6RO	Icom America
	Hone	leoninaneneu
Roanoke		
Single Operator High Power CW	N4AF	Potomac Valley Radio Club
Single Operator Low Power CW	W4AAA (KK9A, op)	Icom America
Single Operator QRP CW	N4CF	Icom America
Single Operator Unlimited High Power CW	N1LN	Icom America
Single Operator Unlimited Low Power CW	AA4NC	Icom America
Multioperator High Power CW	W4RM	Icom America
Multioperator Low Power CW	W4TG	Icom America
School Club CW	K4KDJ (KK4BSM, op)	Icom America
Rocky Mountain		
Single Operator High Power CW	N2IC	Icom America
Single Operator Low Power CW	N5FO	Icom America
Single Operator QRP CW	KØAV	Icom America
Single Operator Unlimited High Power CW	KØEU	Icom America
Single Operator Unlimited Low Power CW	AD1C	Icom America
Multioperator Low Power CW	WØDLE	Icom America

#### Southeastern

Single Operator High Power CW Single Operator Low Power CW Single Operator QRP CW Single Operator Unlimited High Power CW Single Operator Unlimited Low Power CW Multioperator High Power CW School Club CW	NX4N KP2M (W2GD, op) K3TW N4BP N4PN N4GI W4UAL	Icom America Icom America Icom America Charlie Wooten, NF4A Icom America Icom America Icom America
Southwestern Single Operator High Power CW Single Operator Low Power CW Single Operator QRP CW Single Operator Unlimited High Power CW Single Operator Unlimited Low Power CW Multioperator High Power CW Multioperator Low Power CW School Club CW	K6LA AA6PW N7IR K07SS K6LL W6YI W8TK W6RFU	Icom America Icom America NGHE and WGDLD Icom America Icom America Icom America Icom America Icom America Icom America
West Gulf Single Operator High Power CW Single Operator Low Power CW Single Operator QRP CW Single Operator Unlimited High Power CW Single Operator Unlimited Low Power CW Multioperator Low Power CW School Club CW	NR5M (K5GA, op) W8FN N1CC N5ZC K5CM NM5M N5XU (AA5BT, op)	Icom America Icom America Icom America Icom America Icom America Icom America Icom America
<b>Canada</b> Single Operator High Power CW Single Operator Low Power CW Single Operator QRP CW Single Operator Unlimited High Power CW Single Operator Unlimited Low Power CW Multioperator High Power CW Multioperator Low Power CW	VE3KI VE2CWT (VE2FU, op) VE6EX VY2ZM VE5MX VE3MIS (VE3NE, op) VY2TTT	Icom America Icom America QRP Amateur Radio Club International Icom America Icom America Icom America Icom America