## 2007 ARRL November Sweepstakes (Phone)

## Phone band expansion brings new breathing room

Steve London, N2IC PO Box 402 Hanover, NM 88041

The 2007 ARRL November Phone Sweepstakes will be remembered by many participants as perhaps the most challenging Sweepstakes in modern memory. The dearth of sunspots pushed competitors to the lower frequency bands earlier, and kept them on those bands for long periods of time. Even this was not enough to avoid long skip conditions on 75 meters during most of the nighttime hours. Many eastern participants commented on having their CQ's answered by Europeans, while being unable to work stations within 500 miles of their QTH. The United States phone band expansion came just in time to accommodate the hoards retreating to 75 meters. Participants were certainly thankful for the "extra" 150 kHz of breathing room. Unfortunately for SS aficionados, the phone band expansion did not include 20 meters. With the lack of sunspots keeping the daytime MUF suppressed, 20 meters was the only game in town during daylight hours for most stations in the eastern and central USA. The result was a very crowded band...and that's putting it mildly!

Despite the challenging conditions, **1571** entries were submitted, an increase of 30 entries over 2006. Even more impressive is that **32** new section records were set, along with **6** new division records. Sweepstakes isn't just about setting new records. For many participants, it's a contest-within-a-contest, with the yearly quest for the "clean sweep" (working at least one station in each of the 80 ARRL sections) being the ultimate goal. There were two major challenges this year for earning a clean sweep. There are always some sections which have a limited amount of activity, making QSOs with those sections very coveted. This year, the long skip conditions added the challenge of working "common" close-in sections. Many stations, especially in the northeast USA, were surprised to discover they still need neighboring sections late in the contest. Despite these challenges, **215** stations made the grade for a clean sweep. For W4RK, W5CPT, N9SJ, WC4V, K3UD, K5LAD, N4FR, NR6S and others, it was their first sweep ever! K0HW was thrilled to make a clean sweep this year on both CW and Phone SS, for the first time!

Many new and many long-time hams joined in the Phone SS fun for the first time. For N4JF, it was his first Phone SS in over 50 years, after doing CW SS nearly every year.

## The Elusive Clean Sweep

While 215 participants earned clean sweeps (See "Clean Sweep Winners" sidebar for the complete list), another 97 participants came so close, missing only 1 section. What section did they miss? 22 missed the Northern Territories, despite activity from VY1JA, VY1MB, VY1EI, VE8EV, VE8DAV, VE8DW and VE8NSD. 18 missed Newfoundland/Labrador, which was represented by VO1TA, VO1HE, VO1BQ, VO1JNS, VO1MX and VO1MP. Many thanks to these ops for making their rare sections available. Surprisingly, a few participants missed the sweep by not working more common sections, such as Kentucky, Orange, and even South Florida! See the sidebar "Clean Sweep Minus One" for a complete breakdown of what sections were missed by those who worked 79 sections.

### **High Power Category**

The high power, top-10 winners came from all parts of the USA and Canada.

Rich Boyd, KE3Q, completed his streak of 10 consecutive victories from the WP3R superstation in Puerto Rico with 2432 QSOs. In all likelihood, this will be Rich's last operation from WP3R, leaving the field open to a new winner in 2008.

Within the continental USA/Canada, George Fremin, K5TR, operating from central Texas, easily swept the field with 2008 QSOs. Congratulations to George on his 3rd consecutive continental USA/Canada victory! In 3rd place, from the Seattle area, with 1897 QSOs was Dan Honda, W7WA. Very impressive, considering the propagation challenges from the Pacific Northwest.

There was a heated battle for 4th and 5th places, between two South Dakota competitors. When the dust settled, Todd Dravland, WD0T, operating from KD0S, edged out Joe Brown, W0DB, operating from W0SD, by 23 QSOs.

Using only a low beam on 15 meters, and dipoles on 20, 40 and 75 meters, Scott Davis, K5TA, took advantage of his New Mexico QTH for 6th place.

In a rare domestic contest appearance, Jeff Briggs, K1ZM, piloted his Prince Edward Island contest station to a 7th place finish and a new Canadian division record.

8th and 9th places were battled between two California stations. Dean Straw, N6BV out maneuvered Craig Gullickson, N6ED, operating at K6NA. Craig actually had 15 more QSOs, but missed Northern Territories for the clean sweep.

Stan Barczak, K8MJZ, traveled to warm St. Croix, piloting WP2Z to a 10th place finish.

#### **Low Power Category**

The "A" precedence is clearly the most popular category for SS participants. This year there were 724 submitted logs in the low power category, more than twice as many as any other category.

Congratulations to Bruce Draper, AA5B (operating from NN5K), for being the winner in the hotly-contested, low power category with 1473 QSOs. This was Bruce's first SS victory since 1988. Not only did he win, but he did it with style by having the lowest busted exchange percentage in the low power top-10. Paul Newberry, N4PN, in his 54th year as a ham, proved he still has what it takes, with a 2nd place, 1398 QSO finish from his Georgia QTH.

John Bayne, KK9A, using the W4AAA callsign, finished 3rd with 1338 QSOs. John is still in the station-building mode from his North Carolina QTH. He is better known by his Aruba, DX contest call, P40A. Showing that you CAN do well from the Midwest black hole, Mike Kasrich, AJ9C, placed 4th with 1217 QSOs. Struggling with New England propagation, Art Hambleton, K1BX, placed 5th.

Two Pacific Northwest stations battled for 6th and 7th places. With a clean sweep, Brad Wallingford, K7ZSD bettered Gene Shea, KB7Q. Gene missed Newfoundland, and bordering sections Saskatchewan and Wyoming. Ouch!

Long-time SS competitor Tom Behman, N6NF, used his ridge-top, Bay Area QTH for 1045 QSOs and 8th place.

Rich Zwirko, K1HTV, fought the long-skip conditions by making 97 topband QSOs on his way to a 9th place finish from Maryland.

Rounding out the top-10 was Bill Lippert, ACOW, from Minnesota. Bill is mooing with satisfaction over his 972 QSOs.

#### **ORP Category**

In the best of years, doing QRP in Phone SS is a challenge that tries your patience. With this year's conditions, only the most determined operators stuck it out in this category.

Al Sinopoli, KC5R took advantage of good north-south propagation on 15 and 20 meters for 695 QSOs and a clean sweep on his way to a repeat victory. This is an increase of 65 QSOs over his win last year. Imagine how Al will do with some sunspots?

Dave Spoelstra, N9KT, came in 2nd place from the Indiana black hole. 661 QSOs and a clean sweep is none too shabby with ORP.

After a 50 year hiatus from Phone SS, Jerry Fiore, N4JF returned to "do it right" with a 3rd place finish, a clean sweep, and a new section record from Alabama! Over half his QSOs were made on the difficult 75 meter band. How's that for making a silk purse from a sow's ear?

Jeff Keller, NX9T was happy when the contest was over. Despite missing 4 hours of operating time, he still came in 4th with 519 QSOs.

5th place went to Dan Shepherd, N8IE. Another QRP clean sweep! Dan is becoming a regular in the QRP top-10.

Jim Lageson, NOUR, made 6th place from Minnesota.

A part time effort brought Ralph Bellas, K9ZO a 7th place finish.

Chris, KA1LMR, Joe, N3JW and Doug, VA3DF rounded out the top-10.

### **Unlimited Category**

The unlimited category has become as popular as the high power category, with stiff competition for the top slots.

For the past few years, there has been a three-way battle for top dog between Mitch Mason, K7RL, Tom McAlee, NI1N, and Dave Hachedorian, K6LL. This year, Mitch and his Seattle-area station emerged victorious with a 33 QSO margin over Dave. Tom's 3rd place finish takes top east-coast honors with 1674 QSOs. Tom's great 75 meter signal from Virginia really paid off on Saturday night, but wasn't enough to overcome the west coast daytime high-band domination.

Matt Thomas, WX5S, piloted W7RN to a 4th place finish.

Mitch Stern, WB1GQR made Vermont an easy catch, with a 5th place, 1511 QSO finish.

Close behind were fine 6th and 7th place efforts from the opposite coasts by Bob Wolbert, K6XX and Ty Stewart, K3MM.

The 8th and 9th places went to mid-westerners Craig Thompson, K9CT and Ken Meier, W8MJ. Rounding out the top 10 was Curt Kolovson, W6RQ.

#### **Multioperator Category**

Doing a multi-op with a bunch of friends is a great way to build up your contest skills, learn a few new tricks, and enjoy some pizza!

Thanks to a good 15 meter opening, and the team's impressively low error rate, team San Diego, W6YI, operated by Jim, W6YI, Dan, N6MJ, John, K6AM, John, N2NC and Dennis, N6KI took home the 1st place honors.

The Central Texas team at K5NA came in 2nd place. Station owner Richard, K5NA was happy to have Colin, KU5B for doing 99% of the running!

In 3rd place, only 6 QSOs behind was the K9NS team from north of Chicago, operated by KO9A, K9HMB, K9PW and K9XW. A great job from the midwest!

The West Texas team at N5DO, operated by N5DO, KE5OG and K5FD, placed 4th, narrowly missing a new record.

Despite computer troubles, Team SteppIR, K7IR, came in 5th, operated by K7XH, K7IR, K7PU, and K7XS.

Only 6 QSOs down in 6th place was the W0NO team from Kansas, operated by W0NO, AB0S and K0WA. Ed, K1EP, and Doug, K1DG, operated at Doug's Maine vacation home, taking 7th place. The high bands were so bad from there that they made more QSOs on 160 meters than 15 meters!

The Iowa N0NI team of N0NI, N0AC, KE0WO and K0WHV placed 8th over the Ohio team of N8HR by a mere 2 QSOs.

The last-minute antenna work of the NC team at KA1ARB paid-off, with the team finishing out the multiop top-10

#### School Club Category

The Hesston College Amateur Radio Club, K0HC, operated by Bob, W0BH, Eric, N0LQU and Nelson, N0LRA won the school club category with 1390 QSOs. This is exactly the same score they had last year, in their winning effort. Great job!

The University of Chicago ARC, N9UC operated by Jon, WO9S, place 2nd, as they did in 2006. The 3rd and 5th places were battled between Big Ten giants, the University of Michigan, W8UM, operated by KA8WFC, K8QKY, K8KS, and KB5AW, and Michigan State University, W8SH, operated by K8MAS and W2NRL. In the end, U-of-M was victorious. Go Blue!

In their first-ever Phone SS, the University of Mississippi ARC, operated by W5MPC, placed 4th. The Virginia Tech ARC, K4KDJ, operated by N4CV, KI4OSL and KF4YLM came in 6th.

The University of Nebraska-Lincoln place 7th, operated by WD0BGZ and N0KIS, while Florida Atlantic University, K4FAU, operated by KI4WFJ and W4RIS placed 8th.

Rounding out the top-10 were the University of Pennsylvania ARC, W3ABT, and the Nacogdoches School District ARC, KD5VVI.

Which school is going to oust perennial winners K0HC and N9UC in 2008?

#### **Club Competition**

Many thanks to all of the clubs who bang-the-drums to get their members on for Sweepstakes. Considering all the major contests taking place in the 5-week period beginning at the end of October, this is no easy task! I personally have a great appreciation for the positive impact that the club competition has on Sweepstakes participation.

This year, the titans of the west and east coasts, the Northern California Contest Club and the Potomac Valley Radio Club again battled it out for dominance in the Unlimited Club category. When the dust settled, the W6's came out victorious, aided by their 32 entry margin over the capitol-area gang. The Medium Club category featured a very tight race between the 41 entries of midwestern Mad River Radio Club and the 40 entries Southern California Contest Club. The Mad River group came out the winners, by the slimmest of margins. One more semi-serious entry by the Southern California crew would have reversed the standings! The was also an even tighter race between the 3rd place South East Contest Club and the 4th place Central Texas DX and Contest Club.

In the Local Club category, the seven entries of the New Mexico Big River Contesters narrowly beat the Montana-based Northern Rockies DX Association.

#### Close Races

For many participants, SS is about bringing home the coveted "section winner" certificate. Often, there is a cross-town, or cross-section rivalry involved with a close friend. There may even be a culinary award for the winner, courtesy of the runner-up - a slice of hot, sizzling, pizza downed with a cold beverage!

This year, there were a number of particularly close section races, detailed in the sidebar "Close Races". The most exciting close race was QRP in Colorado, where two Pikes Peak area contesters battled it out. In the end, Larry, K0RI edged-out Robb, N0RU by 2 QSOs. It's interesting that Larry and Robb operated almost the same number of hours (10 hours), and had the same number of sections (70).

Only 3 QSOs separated Greg, AB7R and Tom, N7WI in the low power race in Western Washington! In the Alabama, low-power category, K4HAL edged out KC4HW by only 5 QSOs, and N4KH by 10 QSOs. That's competition!

Another very close race was in the Sacramento Valley, Unlimited category. Dave, WJ6O, edged out Ira, K2RD, operating at K6IDX, by 11 QSOs, out of a total of over 1200 QSOs. This was a full-time effort by these fine operators.

#### Accuracy

Thanks to the hard work of Tree, N6TR, over many years, Sweepstakes is arguably, the most accurately adjudicated of all contests. When the submitted scores of potential section, division and category winners are only a few QSOs apart, it's obvious that the operator who is best at accurately copying the SS information should be rewarded. This year there was a very small group of exceptional operators whose accuracy stands out from the rest with their nearly "golden logs". The "Accuracy Honor Roll" lists those operators who made at least 500 QSOs, with an error rate of less than 1.0 %. When you consider the complexity of the SS exchange, this is truly awesome!

The error rates in each category are shown in the table below. It's interesting to observe that the overall error rate statistics are remarkably consistent across all four of the single-operator categories. It's also not surprising that the top-10 in each category exhibited significantly better error rates than the average for the entire category. Download your Log Checking Report (LCR) and see how you compared and how you can improve next year!

Accuracy Honor Roll			
Call	# QSO's	Category	Error Rate (%)
K4CZ	846	U	0.4
W6EU	826	U	0.6
K1PY	568	A	0.7
K3AN	566	A	0.9
N9KT	671	Q	0.9
NN5K	1496	A	0.9

Error Rates by Category	– Stations Mak	king Over	100 QSO's

Category	Average	Best	Worst
High-Power	5.0	0.0	18.6
(top-10 only)	2.6	1.5	3.9
Low-Power	5.0	0.0	97.0
(top-10 only)	2.3	0.9	3.4
QRP	3.9	0.0	11.1
(top-10 only)	3.2	0.5	9.4
Unlimited	3.7	0.0	17.5
(top-10 only)	2.1	1.1	3.7
Multi-Operator	5.9	0.0	37.1
(top-10 only)	4.3	2.0	8.0
School	6.4	1.1	15.9

## Top Ten

Single Operator, QRP		Single Operator, Unlimited	I
KC5R	111,040	K7RL K6LL NI1N W7RN (WX5S, op) WB1GQR (W1SJ, K6XX K3MM K9CT W8MJ W6RQ (N7MH, op) (	289,920
N9KT	105,760		284,640
N4JF	87,520		267,840
NX9T	78,888		243,520
N8IE	65,280		241,760
N0UR	50,920		240,000
K9ZO	43,928		237,280
KA1LMR	43,168		237,120
N3JW (W5JBV, op)	39,600		225,120
VA3DF	38,332		222,560
Single Operator, Low Pow	er	Multi-Operator	
NN5K (AA5B, op) N4PN W4AAA (KK9A, op) AJ9C K1BX K7ZSD KB7Q N6NF K1HTV ACOW	232,734	W6YI	310,560
	223,680	K5NA	303,200
	214,080	K9NS (@K9HMB)	302,240
	194,720	N5DO	258,080
	177,280	K7IR	240,792
	172,480	W0NO	240,000
	170,170	N1LI	236,640
	167,200	N0NI	226,880
	163,360	N8HR	226,560
	153,576	KA1ARB	219,840
Single Operator, High Pow	<i>у</i> ег	School Club	
WP3R	389,120	KOHC N9UC (WO9S, W8UM W5UMS W8SH K4KDJ N0UNL K4FAU W3ABT KD5VVI	222,400
K5TR	321,280		124,480
W7WA	299,726		93,378
KD0S (WD0T, op)	290,560		83,266
W0SD (W0DB, op)	286,880		60,040
K5TA	280,960		48,640
VY2ZM (K1ZM, op)	280,640		46,900
N6BV	277,440		41,720
K6NA (N6ED, op)	276,342		41,464
WP2Z (K8MJZ, op)	269,548		37,224

#### 2007 SS Phone Plaque Winners

November SSB Sweepstakes Results Plaque Winners
Thanks to the generous sponsorship of numerous clubs, individuals and Icom — the principal awards sponsor for the 20/07 ARRL
November Sweepstakes — we are pleased to announce that the Overall and Division leaders in each category receives a sponsored
Sweepstakes plaque. The ARRL wishes to thank the plaque sponsors for their continued commitment to the ARRL Plaque Program.
Without their support and dedication, the Plaque Program would not be possible.

Division/Plaque Category Overall	Winner	Plaque Sponsor
Single Operator High Power	WP3R	Mike Fatchett, WØMU
Single Operator Low Power	NN5K (AA5B, op)	Ken Adams, K5KA
Single Operator QRP	KC5R	QRP Amateur Radio Club International
Single Operator Unlimited	K7RL	Icom America. Inc.
Multioperator	W6YI	Icom America, Inc.
School Club	KØHC	Icom America, Inc.
SCHOOL CIUD	KOTIC	Icom America, Inc.
Atlantic		
Single Operator High Power	KD4D	North Coast Contesters
Single Operator Low Power	K1HTV	Potomac Valley Radio Club
Single Operator QRP	K3TW	Icom America, Inc.
Single Operator Unlimited	K3MM	Icom America, Inc.
Multioperator	K2NNY	Mark Sickmeyer, KB3GJ Memorial
School Club	W3ABT	Icom America, Inc.
School Club	WJADI	Icom America, inc.
Central		
Single Operator High Power	WB9Z	Society Of Midwest Contesters
Single Operator Low Power	AJ9C	Society Of Midwest Contesters
Single Operator QRP	N9KT	Sean Kutzko, KX9X
Single Operator Unlimited	K9CT	Icom America, Inc.
Multioperator	K9NS (@K9MHB)	Icom America, Inc.
School Club	N9UC (WO9S, op)	Icom America, Inc.
Carlos Glab	11000 (11000, 00)	room vironou, mo.
Dakota		
Single Operator High Power	KDØS (WDØT, op)	Minnesota Wireless Association
Single Operator Low Power	ACØW	Minnesota Wireless Association
Single Operator QRP	NØUR	Tod Olson, KØTO
Single Operator Unlimited	KØHW	Minnesota Wireless Association
Multioperator	KTØR	In Memory of Jim Dokmo, KØFVF
		Minnesota Wireless Association
School Club	KØVVY	Icom America, Inc.
		,
Delta		
Single Operator High Power	W5WMU	Icom America, Inc.
Single Operator Low Power	NA4K	Icom America, Inc.
Single Operator QRP	KC5R	Icom America, Inc.
Single Operator Unlimited	KN5O	Icom America, Inc.
Multioperator	AE5T (N5OZB, op)	Icom America, Inc.
School Club	W5UMS	Icom America, Inc.
Great Lakes		NA AND AND AND AND AND AND AND AND AND A
Single Operator High Power	N8VW	North Coast Contesters
Single Operator Low Power	KB4AMA	Mad River Radio Club
Single Operator QRP	N8IE	Mad River Radio Club
Single Operator Unlimited	W8MJ	Icom America, Inc.
Multioperator	N8HR	Icom America, Inc.
School Club	W8UM	Icom America, Inc.
Undon		
Hudson	NOCOM	Inner American Inner
Single Operator High Power	N2SQW	Icom America, Inc.
Single Operator Low Power	K2UF	Icom America, Inc.
Single Operator QRP	KR2Q	Icom America, Inc.
Single Operator Unlimited	W2GDJ	Icom America, Inc.
Multioperator	N2PL	Icom America, Inc.
Midwest		
Single Operator High Power	KØDEQ	Icom America, Inc.
Single Operator Low Power	KØRH	Society Of Midwest Contesters
Single Operator QRP	NØSS	Icom America, Inc.
Single Operator Unlimited	KØOU	Icom America, Inc.
origio operator orinnineu	1000	room America, inc.

Multioperator	WØNO	Icom America, Inc.
School Club	KØHC	Icom America, Inc.
New England		The state of the s
Single Operator High Power	W1XX	Icom America, Inc.
Single Operator Low Power	K1BX	CTRI Contest Group
Single Operator QRP	KA1LMR	QRP Club of New England
Single Operator Unlimited	WB1GQR (W1SJ, op)	Icom America, Inc.
Multioperator	N1LI	Icom America, Inc.
Northwestern		
Single Operator High Power	W7WA	Icom America, Inc.
Single Operator Low Power	K7ZSD	Icom America, Inc.
Single Operator QRP	WA7PVE	Icom America, Inc.
Single Operator Unlimited	K7RL	Icom America, Inc.
Multioperator	K7IR	Icom America, Inc.
Pacific		
Single Operator High Power	N6BV	Icom America, Inc.
Single Operator Low Power	N6NF	Icom America, Inc.
Single Operator QRP	N6WG	Icom America, Inc.
Single Operator Unlimited	W7RN (WX5S, op)	Icom America, Inc.
Multioperator	W6YX	Icom America, Inc.
Roanoke		
Single Operator High Power	NN3W (@N4RV)	Potomac Valley Radio Club
Single Operator Low Power	W4AAA (KK9A, op)	Raleigh Amateur Radio Society - W4DW
Single Operator QRP	NX9T	NoVa QRP Group
Single Operator Unlimited	NI1N	Icom America, Inc.
Multioperator	KA1ARB	Icom America, Inc.
School Club	K4KDJ	Icom America, Inc.
Rocky Mountain		
Single Operator High Power	K5TA	Icom America, Inc.
Single Operator Low Power	NN5K (AA5B, op)	Icom America, Inc.
Single Operator QRP	KØRI	Colorado QRP Club
Single Operator Unlimited	WØMU	Icom America, Inc.
Multioperator	KO7X	Icom America, Inc.
Southeastern		
Single Operator High Power	WP3R	Icom America, Inc.
Single Operator Low Power	N4PN	Icom America, Inc.
Single Operator QRP	N4JF	Icom America, Inc.
Single Operator Unlimited	NF4A	Icom America, Inc.
Multioperator	W8JI	Icom America, Inc.
School Club	K4FAU	Icom America, Inc.
	1041710	icom America, inc.
Southwestern	VCNIA (NICED on)	Jaam America Inc
Single Operator High Power	K6NA (N6ED, op)	Icom America, Inc. Icom America, Inc.
Single Operator Low Power	WAØKDS N7JXS	N6HE and W6DLD
Single Operator Unlimited	K6LL	
Single Operator Unlimited Multioperator	W6YI	Icom America, Inc. Inland Empire ARC
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
West Gulf		14 11 12514
Single Operator High Power	K5TR	Ken Adams, K5KA
Single Operator Low Power	K5KA	Ralph "Gator" Bowen, N5RZ
Single Operator QRP	WA8ZBT	Icom America, Inc.
Single Operator Unlimited	K5LAD	Icom America, Inc.
Multioperator School Club	K5NA KD5VVI	Icom America, Inc. Icom America, Inc.
	1 EU SPORT	254.0404032550450077A05537
Canada Single Operator High Power	VY2ZM (K1ZM, op)	Icom America, Inc.
Single Operator Low Power	VE5ZX	Icom America, Inc.
Single Operator QRP	VA3DF	Frank Merceret, NA4CW
Single Operator Unlimited	VE7FO	Icom America, Inc.
Multioperator	VE6EX	Icom America, Inc.

If you wish to order a duplicate plaque, contact ARRL Contest Branch Manager Sean Kutzko, KX9X, at 86Ø-594-Ø232 or by e-mail at kx9x@arrl.org. The cost for duplicate plaques is \$67 (includes shipping).

## 2007 SS Phone Region Box

Top Five - PH

Boxes list call sign, score and class (Q = QRP, A = Low Power, B = High Power, M = Multioperator)

## Northeast Region

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

VY2ZM (K1ZM, op) KD4D W1XX W3IDT K3MIM	280,640 206,080 201,134 199,520 193,392	B B B B
K1BX K1HTV W3LL K2UF K1PY ( @W2TZ)	177,280 163,360 125,920 97,644 85,880	
KA1LMR K3TW W1ZRO KR2Q N1URA	43,168 29,680 25,074 23,640 17,472	
WB1GQR (W1SJ, op) K3MM N3KS Wx3B NJ1F	241,760 237,280 219,200 212,474 204,160	U
N1LI K2NNY N3OC N2PL W1AW	236,640 212,480 208,160 182,174 179,200	

## Southeast Region

## (Delta, Roanoke and Southeastern Divisions)

WP3R	389,120 B
WP2Z (K8MJZ, op)	269,548 B
K4SSU (NA4BW, op)	258,400 B
W5WMU	256,800 B
KP2TM (K9TM, op)	234,880 B
N4PN	223,680 A
W4AAA (KK9A, op)	214,080 A
K4LY	134,560 A
NA4K	127,680 A
KZ2I	117,760 A
KC5R	111,040 Q
N4JF	87,520 Q
NX9T	78,888 Q
N3JW (W5JBV, op)	39,600 Q
KI3O	29,376 Q
NI1N	267,840 U
KN5O	210,400 U
K2WK	187,520 U
W4NF	183,520 U
W4MYA	179,520 U
KA1ARB	219,840 M
AE5T (N5OZB, op)	182,560 M
W5JJ	174,880 M
W8JI	166,058 M
KG5VK	165,440 M

## Central Region

## (Central and Great Lakes Divisions; Ontario Section)

WB9Z	254,400 B
K9GX	236,480 B
K9BGL	220,160 B
N0IJ	219,680 B
N8VW	176,000 B
AJ9C	194,720 A
WX9U	142,896 A
N9AX	118,880 A
KB4AMA	106,080 A
K0PJ	91,416 A
N9KT	105,760 Q
N8IE	65,280 Q
K9ZO	43,928 Q
VA3DF	38,332 Q
KT8K	33,460 Q
K9CT	237,120 U
W8MJ	225,120 U
W9IU	181,600 U
N2BJ	177,120 U
N8TR	156,320 U
K9NS (@K9HMB)	302,240 M
N8HR	226,560 M
NT8V	142,720 M
N9SJ	136,320 M
W9YV	112,970 M

## Midwest Region

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

K5TR	321,280 B
KD0S (WD0T, op)	290,560 B
W0SD (W0DB, op)	286,880 B
K5TA	280,960 B
W5KFT (WM5R, op)	265,512 B
NN5K (AA5B, op)	232,734 A
AC0W	153,576 A
K0RH	150,384 A
VE5ZX	144,320 A
VE5SF	116,640 A
NOUR	50,920 G
NDOC	32,900 G
KORI	31,080 G
NORU	30,800 G
WA8ZBT	30,756 G
KOOU	183,680 U
WOMU	180,800 U
KOHW	128,160 U
W7UT	84,160 U
WOTT	75,360 U
K5NA	303,200 M
N5DO	258,080 M
W0NO	240,000 M
N0NI	226,880 M
K0GND	217,440 M

## West Coast Region

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

W7WA N6BV K6NA (N6ED, op) KH7X (KH6ND, op) WC6H	299,726 277,440 276,342 261,440 260,960	B B B B
K7ZSD KB7Q N6NF WA0KDS VE6CNU	172,480 170,170 167,200 117,936 100,646	A A A A
N6WG WA7PVE KD4HXT W7PT K6XM	28,408 26,600 22,494 13,920 8,730	99999
K7RL K6LL W7RN (WX5S, op) K6XX W6RQ (N7MH, op) ( @W6YX	289,920 284,640 243,520 240,000 222,560	U U U U
W6YI K7IR NN7SS VE6EX W6YX	310,560 240,792 203,360 196,640 178,698	M M M M

## 2007 SS Phone Affiliated Club Competition

## **Affiliated Club Competition**

	Score	Entries
Unlimited Category		
Northern California Contest Club Potomac Valley Radio Club Society of Midwest Contesters Minnesota Wireless Assn Yankee Clipper Contest Club	19,130,144 18,012,122 10,448,258 5,967,490 5,898,360	273 241 173 95 92
Medium Category		
Mad River Radio Club Southern California Contest Club South East Contest Club Central Texas DX and Contest Club Florida Contest Group Western Washington DX Club Tennessee Contest Group Frankford Radio Club Grand Mesa Contesters of Colorado Alabama Contest Group	3,573,384 3,403,560 2,823,020 2,815,172 2,546,902 2,182,682 2,169,706 1,825,040 1,702,102 1,487,262	41 40 33 24 45 26 36 36 22 21
Contest Club Ontario North Texas Contest Club Northern Rockies DX Association Hudson Valley Contesters and DXers Kentucky Contest Group Central Arizona DX Assn Saskatchewan Contest Club Utah DX Assn Willamette Valley DX Club BC DX Club Motor City Radio Club Alberta Clippers Oklahoma DX Assn	1,437,768 1,314,092 909,928 893,134 770,438 764,098 744,632 721,998 649,980 616,948 592,866 580,772 545,266	37 15 10 20 17 11 7 8 14 9 19
Ordaniona D.X. Assin Rochester (NY) D.X. Assin Carolina D.X. Assin Order of Boiled Owls of New York South Jersey Radio Assin North Coast Contesters Western New York D.X. Assin East Coast Canada Contest Club West Park Radiops Contest Club Du Quebec Magnolia D.X. Assin Texas D.X. Society Woodbridge Wireless	529,984 521,938 364,904 352,672 269,846 242,756 229,074 206,746 102,896 83,924 60,920 49,714	7 9 6 5 4 5 4 14 3 3 4 3
Local Category		
New Mexico Big River Contesters Spokane DX Association Ozark Contest Club Kansas City DX Club	1,006,474 537,230 419,064 361,622	7 7 3 3
Affiliated Club Competition		
CTRI Contest Group Maritime Contest Club Lincoln ARC Dominion DX Group Sussex County ARC Northern Arizona DX Assn Salt City DX Assn North Hills Amateur Radio Contest Medina 2 Meter Group Southwest Ohio DX Assn	Score 360,372 339,822 284,288 229,596 182,496 177,690 153,712 150,708 139,004 127,952	Entries 8 6 4 8 6 4 3 4 4 4 4

Radio Club of Tacoma	123,780	4
Redmond Top Key Contest Club	113,520	4
Sterling Park ARC	110,748	6
Low Country Contest Club	100,866	6
Fauguier AŔA	87,210	3
West Allis RAC	82.900	4
Bergen ARA	81.998	9
Florida Contest Club	79.220	3
Michigan State University ARC	70,860	4
Central Michigan ARC	54.500	4
Hazel Park ARC	50.392	3
Orange County Radio Amateurs	30.438	3
Portage County Amateur Radio	25.896	4
Tri-Town Radio Amatur Club	17.836	3
Northern Lights Radio Society	16.136	4

## **Clean Sweep Winners**

Clean Swe	ep Winner	5
AA0BA	KC5R	NN7ZZ
AB4GG	KD0S	NT4Q
AC4PY	KD4D	NT8V
AC8E	KD5LNO	NW5U
AD2P	KE2DX	NY4A
AE5T	KE5K	VA3IC
AJ3G	KF6T	VE3CR
AJ9C	KG4W	VE5CPU
K0DEQ	KG5VK	VE5SF
K0FVF	KH7X	VE5ZX
K0GND	KH7Y	VE6EX
КОНС	KI0Y	VE7FO
K0HW	KI9A	VY2ZM
K0OU	KJ6RA	W0BR
КОТО	KM9M	W0ISU
K1BX	KN4KL	W0MU
K1HTV	KN5O	W0NO
K1OU	KO7X	W0SD
K2AX	KP2TM	WOTT
K2NNY	KT0R	W1AW
K2PLF	KU8E	W1NG

K2WK	KW3W	W1QK
K3DI	KZ2I	W1WEF
K3DNE	N0AT	W2GDJ
КЗММ	NOIJ	W2VQ
K3WW	NOMA	W3IDT
K3ZQ	NONI	W3KB
K4CZ	N0PKX	W3LL
K4EU	N1LI	W3TMZ
K4FPF	N1LN	W4AAA
K4IU	N1WR	W4MYA
K4IX	N2BJ	W4MY
K4LY	N2MF	W4NF
K4PV	N2NHN	W4SPA
K4SSU	N3II	W5CPT
K4TS	N3KS	W5IF
K4WX	N3OC	W5JJ
K5ER	N3RM	W5MX
K5NA	N4FR	W5WMU
K5QQ	N4FX	W5WW
K5TA	N4JF	W6AFA
K5TQ	N4PN	W6DRX
K5TR	N5DO	W6EU

K5XR	N5JB	W6KC
K6HNZ	N6BV	W6OAT
K6IDX	N6DE	W6RQ
K6LA	N6HC	W6SR
K6LL	N6KI	W6TK
K6LRN	N6NF	W6XU
K6MM	N6NZ	W6YI
K6NR	N6RK	W7RN
K6RB	N6TU	W7UT
K6RIM	N6XI	W7ZR
K6ST	N7WI	W8MJ
K6SV	N8HR	W9IU
K6VVA	N8IE	W9QL
K6XX	N8KAM	W9YK
K6YT	N8TR	WA2JQK
K7BG	N8VV	WA6O
K7MM	N8VW	WB1GQR
K7NV	N9AX	WB6JJJ
K7RL	N9FC	WB9Z
K7XC	N9IO	WC6H
K7ZSD	N9KT	WJ6O
K9BGL	N9SJ	WK4P
1	11	1

К9СТ	N9UC	WK6I
K9DA	NA4K	WN0G
K9GX	NI1N	WP3R
K9NS	NI6T	WR4F
KA1ARB	NJ1F	WT9U
КВОНН	NN7SS	WW9R
		WX7P
		WZ8T

## Clean Sweep Minus One

Section	Number Missed
NT	22
NL	18
Qc	12
Mb	10
Ak	6
ND	4
Sk	4
Me	3
SC	2
WCF	2
WTx	2

BC	1
EW	1
Id	1
Ky	1
Mar	1
Org	1
PR	1
RI	1
SFl	1
VI	1
Wy	1

**Most Worked Sections** 

## **Least Worked Sections**

## **Close Races**

Winner	Runner- Ups	Section	Category	Margin of Victory (#QSO's)	Notes
KD0S	W0SD	SD	В	23	#4, #5 placings, much more spread in high claimed. KD0S error rate brought it closer together
WX3B	KD4D	Md	В	40	Would have been more spread, but WX3B only had 78 mults. Several others within 100 QSO's.
N6XI	KI6CG	Sv	В	29	

K4HAL	KC4HW, N4KH	Al	A	5, 10
WA0WWW	WS7V	Ewa	A	25
N5YE	N5II	La	A	10
KX1E	KA1C	Me	A	6
WZ8T	K8NWD	Mi	A	19
WD5JNC	KJ5RC	Ms	A	14
AB7R	N7WI	Wwa	A	3
K0RI	N0RU	Co	Q	2
W2GDJ	KE2DX	Eny	U	15
WJ6O	K6IDX	Sv	U	11

## **New Section and Division Records**

Call	Category	Section	Score	Division Record
N4PN	A	Ga	223680	
W4AAA	A	NC	214080	
VY2ZM	В	Mar	280640	
W1XX	В	RI	201134	
N4JF	Q	Al	87520	
N6WG	Q	ЕВ	28408	
N9KT	Q	In	105760	
KC5R	Q	La	111040	*
VE9QRP	Q	Mar	2842	

NX9T	Q	NC	78888	
W3TZ	U	Ar	92352	
VE7FO	U	BC	48640	
К9СТ	U	  I1	237120	*
KN5O	U	La	210400	*
K7BG	U	Mt	130400	
N8TR	U	Oh	156320	
N6WK	U	Org	39974	
W6TK	U	SB	158560	
NS4SC	U	SC	63516	
N6NZ	U	SJV	212320	
NI1N	U	Va	267840	*
K7RL	U	Wwa	289920	*
NJ1F	U	Wma	204160	
NONI	M	Ia	226880	
N1LI	M	Me	236640	
W6YI	M	Sdg	310560	
K5NA	M	Stx	303200	
W8UM	S	Mi	93378	*
W5UMS	S	Ms	83266	
N0UNL	S	Ne	46900	
K0VVY	S	SD	18908	
			п	

K4FAU	S	Sfl	41720	

QSOs per Hour

HOUR	160	80	40	20	15	10	TOTAL
2100	4	10	4368	19829	8008	0	32219
2200	0	1723	5436	19941	3095	0	30195
2300	0	5726	4910	14431	35	0	25102
0	9	8060	8733	4495	11	0	21308
100	129	9533	9905	333	0	0	19900
200	608	10768	9243	55	0	0	20674
300	578	13003	6137	0	0	0	19718
400	635	13535	4843	1	0	0	19014
500	501	13983	4672	2	0	0	19158
600	73	11680	4518	9	0	0	16280
700	8	10174	2540	19	0	0	12741
800	0	6518	1267	0	0	0	7785
900	0	3448	294	1	0	0	3743
1000	0	2209	263	11	0	0	2483
1100	0	3661	656	4	0	0	4321
1200	0	6293	3065	113	1	0	9472
1300	0	4707	6482	2433	4	0	13626
1400	1	978	7631	9118	61	0	17789
1500	0	79	7787	11579	1118	0	20563

Total	3829	163472	145708	170200	43175	9	526393
200	553	7888	1432	14	0	0	9887
100	629	9629	2782	60	1	2	13103
0	52	7388	6560	680	0	0	14680
2300	14	7041	5303	5325	0	0	17683
2200	0	4444	5104	10842	15	1	20406
2100	0	917	6347	12852	951	1	21068
2000	1	23	5691	12126	4520	3	22364
1900	0	15	4534	10925	5841	2	21317
1800	4	5	4165	12020	6603	0	22797
1700	15	5	4969	11143	7841	0	23973
1600	15	29	6071	11839	5070	0	23024

## **Entries per Category**

Category	# Clean Sweeps	Total Entries
Q	4	71
A	28	724
В	53	301
M	43	160
U	85	300
S	2	15
	215	1571

## **2007 ARRL November Sweepstakes (Phone) Confessions of a New Ham and Contester**

K4XD



It's my second year of hamming and second SS, and this contest is growing on me! It's the right length to feel like you've really done something but not so long that you start thinking about cleaning the garage. You can get a decent run going without a ton of aluminum in the backyard. It stretches you enough to feel that you're a slightly better operator than when you started and you can spend most of Saturday tinkering with your rig so it will break unexpectedly during the test and keep you from getting bored.

And SS is not above throwing a sucker punch now and then to keep you on your toes - like the band conditions Saturday night. I confess, prior to Saturday night I wouldn't have thought of 80M as the best band for a schedule with my friends in CA, but it sure was on Saturday. Or did half the hams in CA get together and build 4 element 80M yagis for October's club construction project? I worked one S9+ SV / SCV / SF station after another, but the guys "up the street" in VA and MD sounded like they were calling from a rock in the South China Sea.

My goal was to break 100K points. In retrospect, that may have been too modest of a goal, but it seemed like the logical "next target" after last year's performance. My other goal was to work the full 24 hours, which I almost did. I got confused toward the end and took off 30 minutes more than I should have. Had a nice dinner though!

In my extensive experience of four Sweepstakes, MB and NT have been the nail-biter sections to get, so I was quite pleased to work both in the first hour. The two holdouts were ND and, of all things, SB. A ND guy called me during my run on 20M (thanks!) and relieved that pressure, and then I saw a spot for SB, called him, and thanked him for the sweep. Note to the endless parade of SV/SCV/SF guys - if you want a bigger pileup next year, take one of those 4 element yagis to SB.

If you use any kind of digital voice keyer, I recommend plugging your transceiver into a dummy load and listening on a second receiver. Nothing works as well to let you know how you'll sound on the air as you fiddle with audio levels, compression, and filter settings.

But the DVK felt a bit sterile, and during the contest, I ended up using "live audio" for most of the exchanges. It just kept me more involved. Despite living in the South for almost 30 years, my native New Yorker background lets me talk fast on demand. Somehow, the momentum of the run seems broken when you hit a key and wait in silence for 10 seconds while the computer does the work. I did use the DVK to give my voice a rest when it started getting a little hoarse. I was glad it was there at those moments. On to the event itself. By 2030Z the bands were starting to fill with SS warm-up traffic and the excitement was palpable. Kind of like the buzz in the stadium before the team takes the field. Then at 2100 UTC, pandemonium. Even though CQ WW SSB was only a few weeks earlier, I wasn't quite prepared for the signal density on 20M at 2100:01. I tried running but could barely hear the people who answered me through the splatter. I hereby (hearby?) christen those who run at 125/hour or better in the first four hours

of Sweeps as having "Ears of Steel". My hat is off to you gents. Can I borrow your ears next time? Or at least your receiving antennas?

My pre-game mental image of finding a nice quiet 3 kHz wide spot, setting up shop and confidently answering a 150/hr run quickly degenerated into a mad rush to try to get through any pileups in a frenzy of increasingly erratic S&P. Minutes ticked by and the Q's did not mount up according to my well-conceived plan. As Mike Tyson once said, "everyone has a strategy until they get hit". It was positively depressing to give my exchange "W6XYZ, please copy number 33U K4XD 06 NC" after hearing "K4XD, please copy 225A W6XYZ 58 SV." After a couple hours of increasingly desperate S&P I went to 40M, remembering my semi-decent runs from SS CW only two weeks back. OK, this has to get better. Not. I managed to follow up two 26 hours on 20M with a 22 Q run on 40M that took 90 minutes. I literally kept checking my antenna switch to make sure I wasn't still plugged into the dummy load. "Hello, hello, is this thing turned on?"

At this point I remembered all the talk on the reflector about 80M being the "SS money band" OK, I needed some cash, fast. I went down to 80M and the Left Coast was booming in there too. Only problem was the East Coast was not. So I S&P'd on 80M for a couple of hours, with my rate still hovering in the mid-30's. At this point I compared my rate to that of SS CW from a couple weeks ago and it was actually lower. I almost bagged it in disgust, but just like in the movies, I said to myself, "Don't stop now, you're not a quitter!" and soldiered on with images of glory in my mind. And things started to improve - I found a spot in the Extra band that had almost 2 kHz of splatter-free spectrum and parked there, enjoying, at last, a couple hours of slowly improving rates. Still nothing to get excited about, but the needle was starting to move in the right direction, with some bursts up to 100/hour.

At 3:30AM local time, things started to slow down, including my brain, so I figured it was a good time for Break Number One. Although I read that I should sleep in multiples of 90 minutes, when the alarm went off at 6:30AM local I reasoned that 40 would be open to W1 and W2 land for at least a couple of hours past sunrise so I hit the snooze button and got 30 more minutes of blissful shut-eye.

I spent a little time on 80M and finally, the East Coast was LOUD. Yay! Life was normal again. Up to 40M at 1300 and things really started flowing. Nothing like seeing the QSO rate meter hitting 130/hr! I know, for many of you that's when you look to see if you accidentally switched in the dummy load, but for me it is Big Fun. No 130 Q hours, just a nice peak rate there and many minutes of rate above 60. My best hour was 80 Q's on 40M at 1500. Things started slowing down quite a bit after that and I spent the rest of the afternoon alternating 30 minute breaks with 30 min S&P's and piddly runs on 20M.

At 2100Z I found a nice slot at 14.205 and spent the next two hours generating 105 Q's there. Still not a neck-snapping pace by any stretch, bu some good stretches with back-to-back Q's and two or three callers at a time.

A nice "beginner's pileup." Thanks!

At 2126 I saw a spot for SB and hopped up to 14.269 to work W6TK for the sweep. Thanks OM. I'm not sure what made me happier, getting the sweep or finding my run frequency still available when I came back. I know I'm not supposed to chase mults during SS, but hey, I'm compulsive and staring at the white dots in WriteLog's multiplier window just eats at me.

Where do you go after 20M slows down? 40M of course. Well, after 20 minutes and 4 Q's on 40M, I had second thoughts so back to 80 we go for the rest of the night. I ran for 90 minutes on 3.824 and 3.864, and then things started slowing down and the splatter from people with the same idea started getting in the way of Q's with the weaker stations. I recalled all that nice spectrum below 3.8 and decided to play there for the last 30 minutes. Fifteen minutes from the end stations started coming out of the woodwork and kept me busy until the final buzzer sounded. I didn't see myself spotted, and I really thought the rate would be higher in the General end of the band, but maybe a lot of others were avoiding the QRM too. Even more random thoughts:

- An amplifier is a good thing.
- I'm really glad I hooked up my AL-80B as a switchable alternate amp to my THP solid state amp. The AL-80B laughs at SWR that shuts the THP down. It runs like a tank for hours. The THP gets tired (OK, hot) and starts cranking back power after CQ'ing every 3 seconds for a while. But the THP rocks for S&P.
- My score would probably double if I could get points for all the cheap PC speakers in the neighborhood I "contacted."
- I wish I had the antennas of the Q precedence stations with the S9 signals

- Even though for much of the contest my rate was mediocre, thanks to BIC I'm happy with the
  result
- I'm too new at this to feel bad about a score under 250K
- I'm in awe of people with Ears of Steel
- I'm in awe of the people who racked up my score or better in 5 hours
- I tried my new K9AY loop a couple of times but it was easier to just shout "your number, AGAIN AGAIN!" until I was hearing it in my sleep
- Hams are by and large very patient people. When I shouted, "your number, AGAIN AGAIN," they all calmly repeated their numbers. Thanks!
- S&P is OK but Running IS

For next year: Figure out how to run more. Improve my receiving antennas. Record even shorter DVK messages.

I know it's popular to say "ham radio is dying" but SS proves to me there are a lot of operators and a lot of good stations out there, still waiting for the right stimulus to come along and activate them. Contesting, and SS in particular, is clearly a powerful stimulus. So are big DXpeditions. It wouldn't hurt for us to dream up some more.

# 2007 ARRL November Sweepstakes (Phone) A Sweepstakes That Dave Would Be Proud Of

A Tribute to Dave Ranney, KT0R

It was a difficult fall losing Dave, KT0R, to cancer in September at the age of 42. I couldn't have been any prouder to be part of the Minnesota Wireless Association (MWA) this fall with the show of support the group gave Dave and his family. After operating this weekend at the mighty KT0R station I once again am very happy to be part of such a fine group. I spent the weekend with a great group of guys and the many on the air comments of support from all over North America were incredible. We put together a little club to take Dave's call and protect it in hopes that one day one of his young sons would want it. In the meantime we want to make the call active when possible. It took a lot of work on the part of Jim, KE0L, to get the club set up. Dave's wife Adrienne really encouraged us to do SS from the house so we wanted to put in a good showing.

The work started a week before SS when Bob, Jim, and I went Dave's shack to set up the computers and get everything ready. Dave always took care of this for us so it took several hours to understand it all. Contest day arrived and Rich and I started the contest off with a bang. Rich, one of the MWA's premier phone ops, took the big run chair on 20 and got us off to a flying start. Things were right on pace with previous years until Murphy visited us at 23:45 when we ran into a computer problem. We took a 40 minute break and lost some prime run time on 40 meters while fixing it. Shortly after we had things going again 40 seemed to go very long so we were forced to run on 80. Jim arrived with pizza for the whole house and soon Neil joined us. After some M/S SS and TR training Jim and Neil took the late night shift. They even picked up 30 plus Q's on 160 with things so bad on 40.

The rest of our off time was taken in one chunk and I started things again Sunday morning at 13:50. This was the most difficult part of the contest for me. All these years I would show back up Sunday morning after staying until late Saturday night. Dave would be waiting for me and have things ready to go in the shack. It was so odd to walk in the shack alone and start running. Part of me just expected Dave to be waiting there for me again. Maybe he was. I would like to think so.

Al and Bob joined me at 16:00 and we suffered together through the pain of SS Sunday afternoon. It really wasn't painful because of the good company. One of the things I have always enjoyed about SS at Dave's was Dave, Al, and I chatting with each other on Sunday about a wide range of subjects. I enjoyed the same with Al and Bob. Jim showed back up for awhile which gave us time to take a break upstairs with Adrienne and the boys for leftover pizza. Later that afternoon Adrienne showed up in the shack with home made banana bread. How's that for a contest snack!

Rich and I took the last three hours to finish out the contest. Once again 40 went long early and we were forced to 80 meters. To my surprise there was activity on 160 and I managed to work 30 Q's there. In all the years of SS at Dave's we have rarely made a 160 Q. This year our 160 total is greater then our 15 total! The last couple hours of SS are painful as one pleads for more Q's while endlessly CQ'ing but, Dave would always be cheering us on to get the most Q's possible. I kept remembering him doing this and that made it a little easier to finish.

We did our best to come up with a respectable showing for KTOR. With half the crew new to SS at KTOR there was a learning curve and our computer glitch cost us a little but, I think Dave would have been proud of our effort. One of the most gratifying parts of the weekend was the many comments we got from contesters all over the country... words of encouragement for us and condolences for the family. It seems my email to the CQ-Contest list got the word out. The most amazing was when we worked N4OX on 40 meters. He had a great run frequency yet, he took a minute of silence to honor Dave and then came back on saying "73 Dave". Contesters truly are a great group and I am so glad to be part of it!

Greg -- K0OB