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Results, 2003

November CW Sweepstakes

How did you fare with the flares?

Welcome to the results of the 70th ARRL November CW Sweepstakes. The first weekend of November 2003 brought us many close battles, two major solar flares accompanied by severe HF radio blackouts, and nine new division records. It was indeed a weekend that participants will remember for some time to come.

2003 saw a total of 1239 log entries, down from 1319 in 2002. This constitutes a 6% decline, and the first time in many years that we have not seen an increase in the number of logs submitted. This is the fewest number of entries since the year 2000, when there were 1236 official entries. As illustrated in Figure 2, only the Unlimited category has continued to grow steadily since its inception in 1999, as more and more entrants continue to opt for packet use in the CW Sweepstakes.

Clean Sweeps

There were only 39 clean sweeps realized in 2003. This was in stark contrast to the 159 sweeps seen in 2002. There were just 2 sweeps in the low power category versus 58 in 2002. 12 sweeps in the high power category versus 51 in 2002. 9 sweeps in the multi-operator category versus 14 the previous year, and 16 in the unlimited category, just less than half of the 33 from the year before. No QRP sweeps were achieved in 2003 versus 2 sweeps attained in the same category the previous year.

Low Power Category

Vaulting up from a 6th place category finish in 2002 at the Illinois station of K9RS, Mark, AG9A convincingly won the

low power category this time around from N0NI in Iowa. Mark had 1225 QSOs and 79 sections for 193,550 points en route to shattering the Midwest division record set just last year by K0DI. Mark now owns 3 CW SS Division records, all set during the last three years; Low Power Midwest Di-

vision set from N0NI in 2003, Low Power Central Division from K9RS in 2002, and High Power Midwest Division from N0NI in 2001. You've been a busy fellow, OM—keep up the good work!

With only 7000 points separating 2nd through 7th places, the battle to gain one

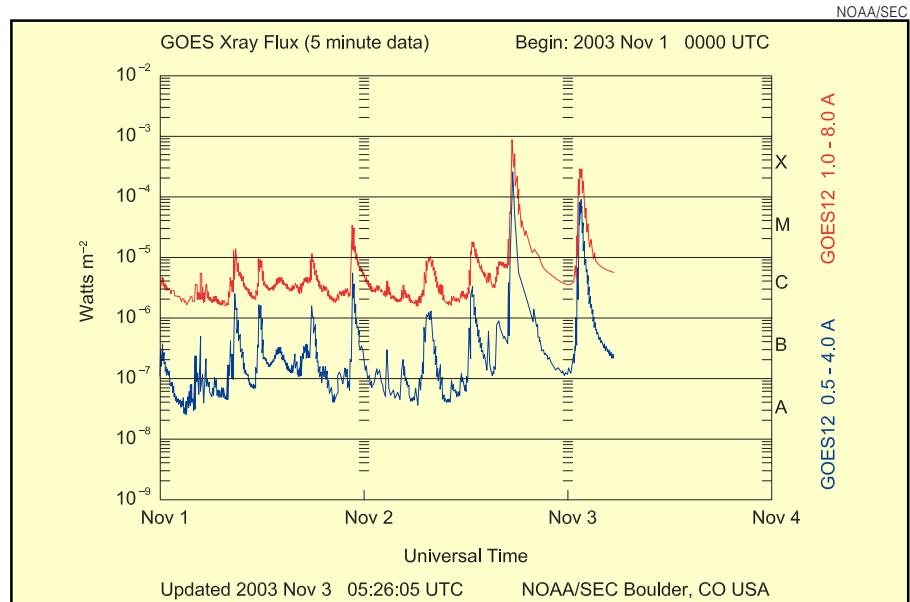


Figure 1—Two major solar flares impacted the 2003 CW Sweepstakes.

2003 Sponsored Plaque Winners—CW

Overall Single Operator High Power	WP3R (KE3Q, op)	Trey Garlough, N5KO
Overall Single Operator Low Power	N0NI (AG9A, op)	Kirk Pengelly, N0KK
Overall Single Operator QRP	N5DX	Ron Dohmen, N0AT
Overall School Club College Division	W2CXM	Mark Smith KD4JLC Memorial
Atlantic Single Operator High Power	K3MM	North Coast Contesters
Atlantic Single Operator Low Power	K3WU	Potomac Valley Radio Club
Atlantic Multioperator	N3OC	North Coast Contesters
Central Multioperator	WE9V	Don Haney, W9WW
Great Lakes Single Operator High Power	K9NW	North Coast Contesters
Great Lakes Single Operator Low Power	W8MJ	Mad River Radio Club
Hudson Multioperator	NJ2OM	Stuart Silverstein, K3UEI, Memorial
Midwest Multioperator	K0WA	Lincoln Amateur Radio Club
New England Single Operator QRP	W1QK	QRP Club of New England
Pacific Single Operator Low Power	K6OY	Robert A. Wilson, N6TV
Roanoke Single Operator High Power	N4AF	Potomac Valley Radio Club
Roanoke Single Operator Low Power	W4OC	Raleigh Amateur Radio Society - W4DW
Roanoke Single Operator QRP	K4ORD	Bill Harding, K4AHK
Southwestern Single Operator Low Power	AA6PW	Larry Serra, N6NC
Southwestern Single Operator QRP	N7IR	Ray and Donna Day, N6HE and N6HTH
West Gulf Single Operator High Power	WX0B (K5GA, op)	Ken Adams, K5KA
Canada Single Operator Low Power	VE3DZ	Don Haney, W9WW

Overall and Division Winners may purchase plaques that are not sponsored. The cost is \$61.95 plus shipping and handling. Contact Kathy Allison, KA1RWY, at 860-594-0295 for more information.

Log Entries By Year

Category	2003	2002	2001	2000	1999
A	650	701	652	656	638
B	219	227	240	213	205
Q	137	200	195	215	192
U	177	140	110	89	61
M	53	47	64	54	70
S	3	4	7	9	6
Total logs	1239	1319	1268	1236	1172

of these positions was fierce. Making a giant leap from 11th place in 2002 into 2nd place we have Steve "the animal" K0SR (@ W0ZT) from the northern reaches of the Midwest Division, the Minnesota section. Steve had 1177 QSOs × 79 sections for 185,966 points. During his rampage, the animal ravenously devoured the Dakota Division category record. As we all know how tough it is to score big from this area of the country, this obviously represents a superlative effort. It would appear that we need to turn him loose more often.

In 3rd place, just 2 QSOs behind K0SR, we find K4WX with 1175 Qs and 79 sections for 185,650 points from TN. Don fell 13,550 points shy of breaking his own Delta Division record set in 2002, when he won the low power category. 4th place went to Matt, K7BG, from MT, with 1180 Qs × 78 sections for 184,080 points, just 1570 points behind K4WX. Matt, like Don, fell just shy of breaking his own Division record. Rounding out the top 5 we have Bob, N4BP, operating from NP2B in the Virgin Islands section. Since Bob was the only entrant from the VI, 1177 of us are likely in his debt for our only VI contact. Combining this Q total with 78 mults resulted in a score of 183,612, only 468 points back of K7BG.

Sixth place finds K0EU from Colorado with 1140 Qs × 79 sections for a score of 180,120 points. Randy may have dropped back a few notches in the standings from last year, but he continues to own the Rocky Mountain Division record that he set in 1998. In 7th, K5WA combined 1133 QSOs with 79 sections for a score of 179,014 points from STX, and one place higher in the standings than his 8th place finish in 2002.

Our 2003 8th place finisher was N4OGW from the Mississippi section, with 1102 QSOs and 79 mults for a score of 174,116 points. In 9th place, K0DI logged 1060 QSOs × 77 sections for a score of 163,240 points from the Nebraska section. Our last member of the top 10 is VE3DZ, who crossed 1029 Qs with 79 mults for a score of 162,582. Since none of the top 10 were able to accomplish the feat in 2003, honorable mention is certainly in order for W4OC in 16th place, and K4XU in 21st place. These two standouts were the only stations out of 650 low power entrants that pulled off the clean sweep.

High Power Category

Once again, 2003 saw WP3R (KE3Q op.) at the top of the High Power heap. Rich took full advantage of a great set of antennas, and a desirable location in cruising to another high power victory. Even with only 78 sections worked, his

Top Ten

Single Operator, QRP	Single Operator, High Power	Multioperator	
N5DX 129,668	WP3R (KE3Q, op) 227,292	K0RF 227,204	
K4XS 119,922	N2IC 221,760	N6VR 216,160	
KG5U 117,868	WX0B (K5GA, op) 221,440	K6AM 214,400	
K4RO 116,270	KH7X (KH6ND, op) 215,360	K51A 210,140	
N7IR 106,334	N9RV 214,722	W6UE 196,640	
N0UR 103,816	W0SD (WD0T, op) 214,722	WE9V 195,680	
N2CU 103,332	K7RAT (N6TR, op) 213,600	K4OJ 179,172	
K7MM4 99,256	K5STR (N5RZ, op) 212,510	W6YX 171,040	
WD7Z 98,750	K5GN 210,930	W7RN 170,720	
W6JTI 96,854	AK1W (K5ZD, op) 203,188	W7CT 162,424	
Single Operator, Low Power	Single Operator, Unlimited	School Club	
N0NI (AG9A, op) 193,550	K6LL 208,000	W2CXM 94,692	
K0SR 185,966	N6RO 194,400	W2SZ (K2TJ, op) 41,890	
K4WX 185,650	K3PA 185,492	K7UAZ 25,312	
K7BG 184,080	W7UT 180,320		
NP2B (N4BP, op) 183,612	K6YT (W0YK, op) 171,680		
K0EU 180,120	N5NA 162,898		
K5WA 179,014	N9FH 160,844		
N4OGW 174,116	K1IG 159,588		
K0DI 163,240	K6RIM 154,560		
VE3DZ 162,582	K7OX 150,416		



Steve, K0SR, operated from W0ZT for an impressive 2nd place Single Op Low Power category finish.



W4ES, KB7XL and KK7GP at the K7UAZ school club station. KD7CNJ must be behind the camera.

1457 QSOs were enough to outdistance the next score in the field by 5532 points.

In 2nd place, we have Steve, N2IC, putting everyone on notice that his move from Colorado to New Mexico has certainly not hampered his results. Steve had 1386 QSOs and a sweep for a total of 221,760 points, and a notch up from his 3rd place finish in 2002. One can only imagine what will happen to his scores as he continues to build his new station.

Just 2 QSOs behind for a 3rd place finish is Bill, K5GA, operating the well equipped station of WX0B. With 1384 QSOs and a sweep for 221,440 points, Bill made a big move up in the standings from his 8th place finish in 2002. With 2nd and 3rd place coming out of the Rocky Mountain and West Gulf Divisions, it looks as if we may see more big finishes from this part of the country in the near future.

In 4th place, down 2 notches from a 2nd place finish in 2002 is Mike, KH6ND, operating as KH7X at the station of KH7R. When asked about the drop, Mike muttered something about not having any off times left when the flares amputated 55 minutes of his operating time.

Leaping into 5th place after a 10th place finish in 2002, and the only member of the high power top 10 to set a new Division record we have Pat, N9RV, with 1359 Qs and 79 sections for 214,722 points. The Division record that Pat broke was set in 2002 by, you guessed it, N9RV. The important thing to keep in mind here is that this guy continues to find ways to improve each year (he was 12th in 2001). From the black hole of the Central Division, this is truly no small feat. Excellent work, OM!

Also in 5th place we have Todd, WD0T, operating W0SD to a tie with N9RV and the same 1359 Qs × 79 mults for 214,722 points. Todd has been a member of the top ten for more years than I can remember, and sole owner of 5th place in 2002. Well, this year he has to share that honor. His obvious long term commitment to SS CW is to be commended and should be an example to all of us what we can accomplish when we put our minds to it, and keep at it. Do we see some mid-USA rivalries heating up here as the sunspots decline?

Seventh place found Tree, N6TR, operating K7RAT to 1335 QSOs and a sweep



Drew, K3PA, set a new Midwest Division record with a 3rd place Single Op Unlimited category finish.



Tree, N6TR, operated as K7RAT for a 7th place Single Op High Power category finish.



K4OJ—enjoying the battle... 73 OM.

for a score of 213,600 points. After his remarkable record-setting performance in the QRP category in 2002 from W5WMU, Tree decided to stay home for a change and move back into the high power category. Tree fell just 5232 points short of breaking the Northwestern Division record that he set from W7RM way back in 1993. Of the 16 high power Division records, this is the second oldest on the books. Unless I miss my guess, there may be some in the Delta Division who would certainly wish him the best of luck if he were to stay home and try to break it again next year. I know all of us wish him the best of luck in any case, and are grateful for his tireless efforts in checking our logs, thereby dramatically improving the accuracy of the results. N6TR, an example for us all, both on and off the playing field.

Eighth place went to Gator, N5RZ, operating the growing station of K5TR. Gator left his West Texas QTH behind to give South Texas a try for a 1345 QSO × 79 mult, 212,510 point total. Ninth place was taken by Dave, K5GN, using his own call sign from the station of W5KU. Dave had 1335 QSOs × 79 sections for 210,930 points. Rounding out the top 10, and its only representative from the Northeast region is Randy, K5ZD, operating as AK1W. Randy had 1286 QSOs and 79 sections for 203,188 points. Randy set the current New England Division record in 2002.

Unlimited Category

For the second year in a row, the Single Operator Unlimited category was won by Dave, K6LL, in Arizona. Dave garnered 1300 Qs and a sweep for 208,000 points, and a comfortable victory in this steadily growing arena. Good job, Dave.

Second place belongs to Ken, N6RO, operating from his fine station in the East Bay section. Ken had 1215 Qs and a sweep for a score of 194,400 points in only his second foray into the assisted category, and

his 51st CW Sweepstakes overall! In 3rd place, Drew, K3PA, from the Kansas section tallied 1179 QSOs and 79 mults for a score of 185,492 points, and in the process demolished the Midwest Division record. Not too shabby for a guy just back from 15 years of inactivity!

In 4th place is Bob, W7UT, in Utah. Bob racked up 1127 QSOs and a clean sweep for 180,320 points, and a new Rocky Mountain Division record. Another record bites the dust. Good job, Bob. Fifth place goes to K6YT operated by Ed, WØYK. Ed had 1073 QSOs and a sweep for 171,680 points from the Santa Clara Valley section.

Sixth place belongs to N5NA out of WTX. Alan had 1031 Qs × 79 sections for 162,898 points. In 7th place Fred, N9FH in Wisconsin combined 1018 QSOs with 79 sections for 160,844 points. In 8th place we find KI1G with 1023 QSOs and 78 sections for 159,588 points, and yet another new Division record, this time for the New England Division. 9th place—K6RIM—966 QSOs and a sweep for 154,560 points, and in 10th, K7OX, with 952 QSOs × 79 sections for 150,416 points.

QRP Category

Kevin, N5DX, set himself apart from the rest of the 5 W pack with an 842 QSO × 77 section 129,668 point effort. The 292 40-meter QSOs that he amassed were a big factor in his sizable margin of victory. It's pretty tough to beat 3 over 3 stacked on 40, especially at such low power levels! Kevin, the son of longtime contesteer K5GO, seems to be a chip off the old block. We look forward to many more strong performances in the future, Kevin.

In 2nd place, with 759 QSOs and 79 sections for a 119,922 point total is K4XS. Bill decided to give QRP a try, apparently with a considerable amount of success. With all of that aluminum working for him from the great station that he has put together, perhaps he'll decide

to return to this tough category again someday.

Third place goes to longtime QRP stalwart Dale, KG5U, who had 746 QSOs × 79 sections for 117,868 points. Dale moved up 2 notches from his 5th place finish in 2002, and yet another appearance in the QRP top 10.

Fourth place gets pulled down by Kirk, K4RO. Kirk had 755 QSOs × 77 multipliers for 116,270 points, and climbed well up the ladder from his 8th place finish in the same category the previous year. In 5th place, Gary, N7IR logged 673 QSOs and 79 sections for a total of 106,334 points, and a couple of notches higher in the standings than his seventh place finish in 2002. Sixth place finds Jim, NØUR, also moving up two clicks from the previous year with a 683 QSO × 76 multiplier 103,816 point effort. Jim still owns the Dakota Division record he set with that eighth place finish in 2002.

In 7th place, and the only top 10 entrant from the Northeast Region, Tom, N2CU, collected 654 QSOs and 79 sections for 103,332 points, and a nice move up from 10th place QRP in the previous year. In 8th place, Dan, K7MM, had 653 QSOs × 76 mults for 99,256 points. Dan still holds the Northwestern Division record he set in 2001. Ninth place saw Dave, WD7Z, put together 625 QSOs × 79 multipliers for 98,750 points. Dave's effort is a great example of what can be accomplished in the CW Sweepstakes with a little ingenuity, and without a lot of steel and aluminum up in the air. His operation was portable, using only tree-supported wire antennas. In 10th place, W6JTI had 613 QSOs and 79 sections for a total of 98,750 points. No QRP Division records were set in 2003, and total entries in this category were down a whopping 31% from 2002. Is it possible that this decline had something to do with the intense solar disturbances that put

Top Five

Tables list call sign, score and class (Q = QRP, A = Low Power, B = High Power, U= Single Unlimited, M = Multioperator)

Northeast Region (New England, Hudson and Atlantic Divisions; Maritime and Quebec Sections)			Southeast Region (Delta, Roanoke and Southeastern Divisions)			Central Region (Central and Great Lakes Divisions; Ontario Section)			Midwest Region (Dakota, Midwest, Rocky Mountain and West Gulf Divisions; Manitoba and Saskatchewan Sections)			West Coast Region (Pacific, Northwestern and Southwestern Divisions; Alberta, British Columbia and NWT Sections)		
AK1W (K5ZD, op, @K5ZD)	203,188	B	WP3R (KE3Q, op)	227,292	B	N9RV	214,722	B	N2IC	221,760	B	KH7X (KH6ND, op)	215,360	B
K1RX	188,968	B	N4AF	191,970	B	K9DX	182,016	B	WX0B	221,440	B	K7RAT (N6TR, op)	213,600	B
N2NT	188,336	B	W5WMU	171,132	B	KE9I	180,436	B	(K5GA, op)			N6TV	197,760	B
K3MM	181,116	B	N4ZR	170,478	B	K9NW	176,328	B	W0SD (W0DT, op)	214,722	B	K6TA (N6BV, op)	190,232	B
AA3B	177,750	B	K4BAI	157,052	B	N0IJ	160,212	B	K5TR (N5RZ, op)	212,510	B	VA7RR	190,074	B
W1RM	147,108	A	K4WX	185,650	A	VE3DZ	162,582	A	K0NI (AG9A, op)	193,550	A	K7BG	184,080	A
K3WU	144,096	A	NP2B (N4BP, op)	183,612	A	W8MJ	161,634	A	K0SR	185,966	A	AA6PW	149,380	A
N2MM	139,356	A	N4OGW	174,116	A	N9CK	158,340	A	K0EU	180,120	A	K4XU	147,200	A
NY3A	136,344	A	W4OC	155,040	A	K8BL	136,986	A	K5WA	179,014	A	N7CW	144,254	A
K1HTV	129,876	A	K9OM	148,678	A	N9JF	129,244	A	K0DI	163,240	A	K6OY	137,934	A
N2CU	103,332	Q	N5DX	129,668	Q	WI9WI	90,744	Q	KG5U	117,868	Q	N7IR	106,334	Q
VE9DX	81,158	Q	K4XS	119,922	Q	K9ZO	90,090	Q	N0UR	103,816	Q	K7MM	99,256	Q
W1QK	63,364	Q	K4RO	116,270	Q	N9C1Q	83,448	Q	WD7Z	98,750	Q	W6JTI	96,854	Q
W2EB	39,220	Q	W9WI	87,472	Q	N9NE	76,760	Q	N0SXX	85,200	Q	N7OU	91,884	Q
K2EK	35,088	Q	KC5R	57,152	Q	W8TM	68,700	Q	W5ROK (WA8ZBT, op)	74,936	Q	W7RAB	85,008	Q
KI1G	159,588	U	N6ZO	106,334	U	N9FH	160,844	U	K3PA	185,492	U	K6LL	208,000	U
W2MU (WA2GO,op)	124,346	U	W4NF	102,024	U	W4FMS	129,948	U	W7UT	180,320	U	N6RO	194,400	U
K3KO	83,616	U	W9IU	121,992	U	W9IU	121,992	U	N5NA	162,898	U	K6YT	171,680	U
K3WW	118,500	U	N4GG	78,624	U	K19A	121,836	U	N0YY	133,068	U	(W0YK, op)		
W1ZT	98,750	U	W4ZW	63,674	U	KG9X	120,274	U	KT0R	129,244	U	K6RIM	154,560	U
W3HVQ	91,416	U										K7OX	150,416	U
K3NA	158,496	M	K4OJ	179,172	M	WE9V	195,680	M	K0RF	227,204	M	N6VR	216,160	M
N3OC	157,368	M	N4DD	156,468	M	K8CC	151,522	M	K5TA	210,140	M	K6AM	214,400	M
K2NNY	115,192	M	W4RM	152,312	M	K8JM	140,712	M	W7CT	162,424	M	W6UE	196,640	M
NZ1U	80,028	M	W4ZYT	61,620	M	KB9AX	119,448	M	K0WA	159,588	M	W6YX	171,040	M
K2CDJ	29,944	M				W8EDU	114,076	M	KB0VVT	150,696	M	W7RN	170,720	M

even the higher power participants out of business at times during the second half of the contest?

Multioperator Category

For the third year in a row, K0RF (+W0UA) took down 1st place in the multioperator category from Colorado with 227,204 points. After 25 years of operating as a team, Chuck and George seem to have figured out what it takes to win in this category.

Second place belongs to N6VR (+AC6T and KR6X) with 216,160 points from Santa Barbara. Congratulations to Ray, Steve and Lee on a new Southwestern Division multioperator category record.

In 3rd place, K6AM (+N6MJ and N6KI) teamed up for 214,400 points from the Orange section, and in the process also exceeded the Southwestern Division multioperator record set by K6AM in 2002. More congratulations, for John, Dan, and Dennis. In 4th place we have K5TA (+AA5B) collaborating on a 210,140 point effort from New Mexico. Fifth place goes to W6UE (+KA6SAR, N6AN, and W4EF) from the LAX section, with a 196,640 point total. Just 6 QSOs behind in 6th place, WE9V (+KO9A) teamed up for 195,680 points from the Wisconsin section.

Expanded Results, Line Score Printouts Available

For complete contest results online, please visit [www.arrl.org/contest.results/](http://www.arrl.org/). ARRL members without Internet access may obtain a printout of the complete line scores by sending a self-addressed, stamped envelope to ARRL Contest Results, 225 Main St, Newington, CT 06111. Please be sure to include the contest name and year.

Seventh place goes to K4OJ (+N4KM and W1YL) from the WCF section. Jim, Kevin, and Ellen teamed up for 179,172 points. Sadly, as this article was being written, Jim, K4OJ, became a Silent Key. Our condolences go out to his family and friends. I will miss his consistent presence on the air, and on the contest reflectors. We shall all certainly miss having him in the log. We have lost another long-time dedicated competitor, one who loved this sport as much as or more than any of us. God bless, OJ, many thanks for all the QSOs.

In 8th place, the W6YX Stanford University club station manned by N7MH, N6UK and AA6XV amassed 171,040 points. Only 2 QSOs behind, 9th place went to W7RN (@K5RC) operators K7AO and N6PN with a total of 170,720

points. The final member of the top 10 in this category is W7CT (+W7FB) with a 162,424 point effort.

School Club Category

2003 saw only three entrants in this category. In 1st place for the second year in a row is W2CXM, the Cornell University Amateur Radio Club. Eight operators (KB9YER, N2YYZ, KB2ZWZ, KC2IAW, WO9S, N2TQ, KC2KCF and N2VR) parlayed 607 QSOs and 78 sections for 94,692 points.

In 2nd place, with a brand new Hudson Division record is the Rensselaer Polytechnic Institute Amateur Radio Club, W2SZ, with K2TJ at the key. This is the first Hudson Division record in this category at 41,890 points.

Third place goes to K7UAZ, the University of Arizona Amateur Radio Club, manned by W4ES, KB7XL, KK7GP and KD7CNJ. With 25,312 points, Chris, KD7CNJ, comments: "Be sure to look for us full throttle in future contests; this was a warm-up! Look forward to competing against other college and school stations in future contests!" We all look forward to working K7UAZ again in 2004, Chris—especially on the weekend of November 6-8, the 71st running of the annual ARRL November CW Sweepstakes. Aloha!

Scores

Within each Section, scores are listed in descending order by entry category, with single ops followed by multioperator. Line scores list call sign, score QSOs, multipliers, hours, class (Q = QRP, A = Low Power, B = High Power, U - Single Unlimited, M = Multioperator, S = School Club).

W	Rhode Island										N2JNZ	8,464	92	46	Q	N2EY	54,316	367	74	A				
1	N1SW 123,120 810 76 B										AA0CY	40,736	268	76	A	N3KR	38,360	274	70	A				
Connecticut																								
K1RM	161,148	1033	78	B	KM1X	126,984	814	78	A	K2NNY (K2DB, W2LB, W2FE, ops)														
K1ZZ	145,044	918	79	B	K1AM	97,188	623	78	A	115,192	748	77	M	W3BYX	37,584	261	72	A						
K1WB	125,452	794	79	B	W1HY	8,904	84	53	A	NYC-Long Island														
W1WEF	105,000	700	75	B	KB1JCT	4,392	61	36	A	N2GC	34,440	246	70	B	N3NZ	31,232	244	64	A					
N4XR	74,024	487	76	B	K1DS										NU3Z	26,520	221	60	A					
NN1N	24,448	191	64	B	AB3AI										K1NR	19,220	155	62	A					
K1KI	6,800	85	40	B	KI1G	159,588	1023	78	U	N2GA	32,922	279	59	A	AG3G	11,700	117	50	A					
W1RM 147,108 943 78 A										WZ2S	27,048	196	69	A	W3SD	10,672	116	46	A					
W1EQ	123,576	813	76	A	K1KD	130,416	836	78	B	WA2MAV	9,184	112	41	A	W3RT	3,168	48	33	A					
W2JU	63,448	412	77	A	K2LE										7,636	83	46	A						
K1BV	59,904	416	72	A	W1ECH	97,500	625	78	A	K1EP	1,840	40	23	A	W3IW	2,604	42	31	A					
K1KAV	43,452	306	71	A	W1FP	25,600	200	64	A	K2UY	26,568	246	54	Q	WA2GBF	23,364	177	66	Q					
NX1Q	19,276	158	61	A	KE1FO	23,436	186	63	A	KA2L	6,624	69	48	Q	W3MWR	3,124	71	22	Q					
K1LEE	7,800	100	39	A	NY6DX										6,576	66	43	Q						
W1QK	63,364	434	73	Q	KM1Z	12,768	133	48	Q	KE2SX	3,410	55	31	Q	K3WW	118,500	750	79	U					
K1ZE	27,336	204	67	Q	Western Massachusetts										K3SV	82,836	531	78	U					
WS1F	15,194	107	71	U	AK1W (K5ZD, op (@K5ZD))	203,188	1286	79	B	KD2HE	45,260	310	73	U	W3FV	46,176	312	74	U					
NZ1U (N1XS, KB1H, ops)										KD2AD	31,672	214	74	U	Maryland-DC									
W1AW (N1KB, + ops)	80,028	513	78	M	WB1UV	62,088	398	78	A	WO2N	16,240	116	70	U	K3MM	181,116	1161	78	B					
1,512	36	21	M	K1TTT (K7BV, op)										KD4D	166,532	1054	79	B						
Eastern Massachusetts										K2ZO	165,426	1047	79	B	K3ZO									
W1VE	150,732	954	79	B	AK1W (K5ZD, op (@K5ZD))										K3PLF	139,776	896	78	B					
K5MA	66,896	452	74	B	W1TO	62,088	398	78	A	W2ESX	74,850	499	75	A	N3UM	109,186	709	77	B					
K1YA	6,708	78	43	B	WB1UV	49,050	327	75	A	WA2VQV	29,212	218	67	A	N3II	101,244	649	78	B					
K1HT	126,516	811	78	A	N4HY										N3AM	93,936	618	76	B					
N1DC	76,000	500	76	A	N2SQW	44,588	314	71	B	K2MK	15,912	153	52	A	K3TW	75,300	502	75	B					
K1XM	56,696	373	76	A	N1EU	34,200	228	75	B	W5KI	3,264	48	34	A	W3NH7C	338	13	13	B					
K1NTR	51,800	350	74	A	K2UG (WA2JQK, op)										K3TM	88,616	583	76	A					
K1PNQ	46,498	347	67	A	W2WC	27,924	179	78	A	KA2BXH	112	12	11	A	W2CDO	84,952	574	74	A					
WG1Z	37,536	272	69	A	AB2E										W3CB	80,560	530	76	A					
K1MC	37,128	273	68	A	W2RD	88,764	569	78	U	W3AY (WB4FDT, op)	61,060	61,060	430	71	A	W3UT	57,888	402	72	A				
W1MJ	35,772	271	66	A	K2XA	24,816	188	66	A	W2RDS	220	11	10	U	WA1LWS	41,800	275	76	A					
W1JCJ	25,200	200	63	A	K2EK	35,088	258	68	Q	Western New York										AA3YV	33,792	256	66	A
W1CCE	21,248	166	64	A	W2LC										NS3T	30,774	223	69	A					
W1EBI	19,764	162	61	A	W2MU (WA2GO, op @W2RE)										K3STX	25,764	226	57	A					
W1OH	15,480	129	60	A	W2GDJ	124,346	787	79	U	N2PP	102,564	666	77	A	K3KU	24,056	194	62	A					
AD1C	11,000	100	55	A	K2SX	75,998	481	79	U	WB2ABD	87,096	573	76	A	W4EE	20,400	170	60	A					
KY1B	4,232	46	46	A	N2RD										K3JX	13,938	101	69	A					
W1AWB	3,762	57	33	A	W2RDS	88,764	569	78	U	KU2N	45,584	308	74	A	W3DAD	11,270	115	49	A					
NF1D	2,600	50	26	A	NM2A										NM2A	39,606	287	69	A					
WA1ZCB	3,774	51	37	Q	W2EY										N2RD	29,184	228	64	A					
W1ZT	98,750	625	79	U	WA2WPM										N2RC	24,948	198	63	A					
K1NU	61,462	389	79	U	N2CU	103,332	654	79	Q	W3XG	8,100	8,100	90	45	A	W3NC	8,000	80	50	A				
WS1L	18,300	122	75	U	W2EB	39,220	265	74	Q	N3HCN	180	10	9	A	K4JSI	15,400	140	55	Q					
K3NA (+W1KM)										K2CDJ (+K2YEH)	29,944	197	76	M	W3HVQ	91,416	586	78	U					
W1AO	158,496	1016	78	M	N2NC	110,292	707	78	A	W2CXM (KB9YER, N2YYZ, KB2ZWZ, KC2IAW, WO9S, N2TQ, KC2KCF, N2VR, ops)										K3DI	72,842	473	77	U
NY1S	102,144	672	76	B	WB2AA	65,808	457	72	A	WA3AAN	47,002	331	71	B	WX3B	23,160	193	60	U					
KX1E	48,720	348	70	A	WA2VYA	38,736	269	72	A	N3OC (+K3FT, WR3Z)										N2TQ	157,368	996	79	M
NX1T	32,860	265	62	A	W2VQ	30,384	211	72	A	K3CR (LZ4AX, op)										K2JE	111,650	600	79	B
KA1RFD	1,840	40	23	A	W2LRO	27,848	236	59	A	NY3C	9,630	107	45	A	K3MD	94,800	600	79	B					
K1RX	188,968	1196	79	B	KG2MV	24,428	197	62	A	K3AS	988	26	19	Q	K3WT	22,230	195	57	A					
WC1M	149,468	946	79	B	K2TM	21,830	185	59	A	WA3SES	106,260	690	77	A	AA3B	177,750	1125	79	B					
K1DG	132,720	840	79	B	N2LK	20,736	162	64	A	N3FR	102,904	677	76	A	W3FI	69,464	457	76	A					
W1LEE	23,058	183	63	Q	W2KA	19,712	154	64	A	W3BBO	86,032	566	76	A	K3JH	16,744	161	52	A					
New Hampshire										W3BPP (N3HUV, op)	65,208	429	76	U	WA3FR	102,904	677	76	A					
K1RDX	188,968	1196	79	B	W2JEK	2,520	42	30	Q	W3BBO	86,032	566	76	A	AD8J	78,624	504	78	A					
WC1M	149,468	946	79	B	W2BVH	2,464	44	28	Q	K3WU	144,096	912	79	A	WA3AA	47,002	331	71	B					
K1DG	132,720	840	79	B	N2TQ										W3BBO	86,032	566	76	A					
KB1T	71,148	462	77	A	NJ2OM (+NJ2YL)	20,336	164	62	M	W3BBO	86,032	566	76	A	WA3AA	47,002	331	71	B					
KC1F	52,998	363	73	A	AB2DE (+KC2AVE)	19,608	129	76	M	K3WU	144,096	912	79	A	W3BBO	86,032	566	76	A					
WA1Z	43,332	314	69	A	W2TQ	16,820	145	58	A	NY3A	136,344	874	78	A	W3BBO	86,032	566	76	A					
K1TR	32,116	259	62	A	N2NO	15,950	145	55	Q	WY3A	111,650													

K5WA	179,014	1133	79	A	AA6PW	149,380	970	77	A	NM6E	39,974	253	79	U	NZ6K (K6RB, op)		
W5AC (NT5TU, op)	88,242	573	77	A	WA6OGO	50,550	337	75	A	N6ZFO	38,836	266	73	U	99,698		
W5TA	83,850	559	75	A	W6SJ	35,700	255	70	A	San Joaquin Valley		631	79	U	N6DE (@ K6ENT)		
NO5W	81,774	531	77	A	WA6BFW	23,562	187	63	A	WC6H	149,468	946	79	B	97,486		
KA5KLU	72,534	471	77	A	W6RTW	14,740	134	55	A	W6FRH	11,628	114	51	B	W6IOS (N6DE, op @ K6GT)		
N5AF	56,800	400	71	A	WA6GFR	14,190	129	55	A	KD6WW	12,312	114	54	A	85,956		
K5EJL	47,886	347	69	A	KQ6Q	14,040	130	54	A	AK7G	58,672	386	76	A	N6UK (W6LD, op @ N6XI)		
AD5Q	46,720	365	64	A	W6YR	7,200	75	48	A	K6CSL	26,712	212	63	A	82,232		
K5WF	43,680	280	78	A	K6HRT	18,300	150	61	Q	KN6YD	19,000	125	76	A	82,056		
AC5AA	35,560	254	70	A						KD6WW	12,312	114	54	A	526		
W4UTI	21,760	160	68	A						AD6E	79,156	514	77	U	514		
AJ4F	13,034	133	49	A						NI6T	72,072	462	78	U	462		
KG5U	117,868	746	79	Q						W6CS (WX5S, op)					459		
W5KDJ	40,044	282	71	Q						W6CS (KX7M, op)					78		
KI0G	8,556	93	46	Q						W6RQ (K6UFO, op)					459		
K5GQ	8,096	88	46	Q						64,600					78		
West Texas																	
W5ZO	77,526	531	73	B	K6AM (+N6MJ, N6KI)	214,400	1340	80	M	W6ML	132,800	830	80	U	K6ZM (K6GT, op)		
					Pacific					N6NZ	77,550	517	75	U	63,688		
					KH7X (KH6ND, op)	215,360	1346	80	B	NC6CC (N6ZFO, op)					419		
N5DO	158,632	1004	79	A	W4MDL	480	16	15	A	WA6OEC	27,816	183	76	U	59,280		
NZ5M	160	10	8	A					WK6I	19,320	138	70	U	378			
N5NA	162,898	1031	79	U	KH6/W6AQ	364	13	14	Q	K6OQ	13,054	107	61	U	78		
6 East Bay																	
W6CUS (K6SRZ, op)					Sacramento Valley					W6XK (+N6EE, W5NH)					300		
					K6TA (N6BV, op)					140,320	877	80	M	W6ISQ	80		
					WT6G	190,232	1204	79	B	WA6FGV	74,576	472	79	U	K6UFO	47,880	
KF6RIP	124,662	789	79	B	K6LRN	120,554	763	79	B		28,200	484	77	B	315		
KE6ZSN	105,490	685	77	B	WF6C (KU6J, op)	101,120	640	79	B		235	60	B	76	U		
NF6S	50,836	358	71	B		85,644	549	78	B	W6GL	31,968	216	74	Q	355		
K6AUC	41,942	313	67	B	W6NKR	69,916	454	77	B					74	76		
N6JS	21,948	177	62	B	KF6T	45,582	321	71	B	W6TK	78,720	492	80	U	253		
	3,800	50	38	B	W6XB	22,692	183	62	B					29	U		
K6XV	55,042	377	73	A	WX6V	51,264	356	72	A	W6OAT (+WA1QPK)					268		
W6OA	39,576	291	68	A	K6KYJ	43,654	299	73	A	141,920					71		
KE6QR	38,920	278	70	A	KJ6RA	13,090	119	55	A	N6RC (+WA6O)					223		
K6XC	4,810	65	37	A	KJ6CA	11,024	106	52	A	108,160					79		
K6SV	1,806	43	21	A					W6ISO (+WX5S)					676			
									90,376					80			
7 Alaska																	
N6RO	194,400	1215	80	U	KR6O (W6EU, op)	147,200	920	80	U	N6TV	197,760	1236	80	B	NW6P (+NI6T)		
WZ6Z	141,920	887	80	U	N6RK	110,442	699	79	U	NU6S	169,850	1075	79	B	56,248		
K6IW (N6KJ, op)					W6IXP	105,920	662	80	U	K6BL (K6AW, op)					356		
						90,324	579	78	U	N6NF	149,604	1061	80	B	79		
KX7M	108,546	687	79	U	K6KM (AD6TF, op)	105,612	677	78	U	W6NL	141,252	959	78	B	320		
K6RC (@W6JZH)	106,334	673	79	U	K6BSA (N6XI, op)	90,080	563	80	U	K6GX (AJ6V, op)					65		
	104,520	670	78	U	W6EU	89,902	569	79	U	AJ6V	92,872	611	76	B	41,600		
W6CQP (AD6E, op @ W6NV)	101,120	640	79	U	W6RKC	65,760	411	80	U	KA6W	82,840	545	76	B	320		
AI6V (K6RC, op)	88,296	566	78	U	KU6J	63,536	418	76	U	W6RN	75,306	489	77	B	66		
W6RGG	88,006	557	79	U	K6DGW	61,932	397	78	U	W6YL (W6CT, op)					A		
W6NV	83,776	544	77	U		52,136	343	76	U	40,044	282	282	71	B	261		
W6JZH (AI6V, op)	66,220	430	77	U	KI6T	47,894	311	77	U	W4NJK	30,360	230	66	B	62		
N6TQS	22,908	166	69	U	KI6TE (K6DGW, op @ W6JV)	24,888	204	61	U	WR6M	1,026	27	19	B	83		
AI6YL (+K2KW, AI6V)	105,386	667	79	M	K6ST	5,822	71	41	U					23			
					KI6IV (K6ST, op)	2,760	46	30	U	W7WW	3,818	873	79	Q	Q		
Arizona																	
					San Diego	W6MVW	65,700	438	75	B	K6OY	137,934	873	79	A	49,580	
N6GL	45,552	312	73	A						N6DQ	46,376	341	68	A	335		
WA6BOB	30,774	223	69	A	N7CW	144,254	913	79	A	KG6DFM	44,064	306	72	A	74		
WA6BIL	24,310	187	65	A						W9MAK	37,008	257	72	A	60		
WB6NFO	17,582	149	59	A	WN6K	116,700	778	75	A	N6YD	27,652	223	62	A	517		
K6ZCL	16,644	146	57	A	K6ZH	115,972	734	79	A	W6PRI	24,000	200	60	A	78		
N7KFL	15,120	135	56	A	WY7I	84,700	550	77	A	WD6DX	21,252	161	66	A	442		
W6SW	3,150	45	35	A	AA6EE	39,618	279	71	A	N6PT	19,536	148	66	A	76		
N6LL	2,852	46	31	A						K6MO	3,200	50	32	A	426		
										K3KO	2,968	53	28	A	100		
										W6ASH	532	19	14	A	45		
										N6ZB	272	17	8	A	29		
Los Angeles																	
					San Francisco	K6CTA	135,564	858	79	B	K6YT (W0YK, op)					45	
						W6XU	116,130	735	79	B	AB6WM	171,680	1073	80	U	Q	
						N6CT	53,340	381	70	B	N3ZZ	141,440	884	80	U	Q	
N5BF	20,460	165	62	U						N6TU	140,936	892	79	U	K7UAZ	25,312	
W6UE (KA6SAR, N6AN, W4EF, ops)	196,640	1229	80	M	AA6DX	44,968	308	73	A	W6LD (@W6YX)					226		
					W6IYS	40,128	264	76	A		117,078	741	79	U	Eastern Washington	22	
					WW6D	37,740	255	74	A		N7MH (@N6XI)				W7LT	150,732	
					K6UM	33,896	223	76	A		116,130	735	79	U		954	
										K6XX	113,918	721	79	U	W7WMO	673	
										N6CQP (K2RD, op)				WS7V	79		
										W6TF	112,788	723	78	U	KC7ITP	57,450	
											14,706	24,064	397	75	K7TJ (WS7I, op)	383	
											288	1,728	77	64		406	
											74	242	11	11		A	
Orange																	
W6PH	141,120	882	80	B	W6JTI	96,854	613	79	Q	K6RB	99,856	117,078	741	79	U	K7AWB	1,728
W6ZL	48,438	351	69	B						WA6O	111,864	112,788	708	79	U	K7MM	32
N6ER	35,778	267	67	B	K6RIM	154,560	966	80	U	N6IP (K6XX, op @ K6RB)		100,960	631	80	U	653	
W6HT	15,290	139	55	B	K6OWL	44,380	317	70	U		99,856	632	99,856	79	Q	76	

K7OX	150,416	952	79	U	WA7VNI	54,900	366	75	A	AB8NZ (+AB8NY, KC8OBH, KC8PKY)	5,546	59	47	M	KG9N KB9DNA AI9L W9FGH N9WAT	22,880 8,272 6,880 6,080 392	208 88 80 76 14	55 47 43 40 14	B B B B B	
Idaho					K7WA (N0AX, op)	40,032	354	68	A	Ohio										
KOTO	102,300	682	75	A	K7RI (N0AX, op)	39,040	320	61	A	K9NW	176,328	1116	79	B						
N7ZN	54,020	365	74	A	K1LKR	35,224	259	68	A	K8MR	52,272	363	72	B						
KK7X	14,742	117	63	A	WA6AWD	27,588	209	66	A	AC8E (K8MR, op)										
W7QDM	55,480	380	73	Q	W7VXS	19,398	183	53	A	K8AZ (K8MR, op)	51,840	360	72	B	N9JF K9UIY (@WB9Z)	129,244	818	79	A	
WX7G	28,288	221	64	Q	KB7N	18,924	166	57	A	K8AZ (K8MR, op)	45,080	322	70	B	K9QVB	126,400	800	79	A	
K7TQ	25,920	216	60	Q	N7EIE	15,582	147	53	A	N8TR (K8MR, op)					K9CS	122,766	777	79	A	
AB7YB (+KB7LFO, KI7RO)	64,800	450	72	M	N7EPD	13,464	132	51	A	K3GP	44,872	316	71	B	K9KM	111,034	721	77	A	
					AG7T	12,276	93	66	A	N8UW	44,840	295	76	B	N9EP	110,550	737	75	A	
Montana					N7APP	7,728	92	42	A	W8AJ (K8MR, op)	25,200	175	72	B	K9YC	102,336	656	78	A	
KS7T	49,580	335	74	B	KD7LJ	5,994	81	37	A		11,526	113	51	B	K9MOT (K9PW, op)	100,408	652	77	A	
					WB7FJG	5,304	68	39	A						92,416	608	76	A		
					WR5J	312	12	13	A						91,956	582	79	A		
K7BG	184,080	1180	78	A	W7RAB (KH7YD, op)					K8BL	136,986	867	79	A	W9SE W9YK	83,776	544	77	A	
K7ABV	25,704	204	63	A	85,008	552	77	Q		W8CAR	128,544	824	78	A	K9WA	78,750	525	75	A	
					KX7L	4,970	71	35	Q	KV8Q	103,896	666	78	A	W9PZT	74,784	492	76	A	
W7XT	11,712	122	48	Q	Wyoming					AF8A	94,696	623	76	A	K9FO	67,298	437	77	A	
KL7FDQ	11,400	114	50	Q	K7VU	124,792	821	76	B	K8FH	78,584	517	76	A	W9IL	64,200	428	75	A	
Nevada					KO7X	116,064	744	78	A	K8CI	60,984	396	77	A	K9MMS	62,216	404	77	A	
WX7M (K7NV, op)					W7TSM	34,720	280	62	A	N8CPA	51,900	346	75	A	K9JE	59,888	394	76	A	
112,574	731	77	B		NC7O	18,120	151	60	A	W8IDM	50,468	341	74	A	N9BOR	53,534	377	71	A	
K7NV	107,768	709	76	B	W7CA	10,170	113	45	A	W8PN	49,700	350	71	A	W9SZ	47,400	316	75	A	
N7ON	66,992	424	79	A	AC7AF	20,886	177	59	Q	KA8HQL	37,050	285	65	A	N9MSG	46,720	320	73	A	
KC7NUP	10,028	109	46	A	WC7S	10,506	103	51	Q	W8DHG	34,408	253	68	A	K9CC	40,936	301	68	A	
K5RC	96,720	620	78	U	8 Michigan					N8DX	33,796	238	71	A	WD9CIR	39,024	271	72	A	
W7RN (K7AO, N6PN ops)	170,720	1067	80	M	W8MJ	161,634	1023	79	A	W8XE	24,288	176	69	A	N9NA	38,412	291	66	A	
					W8KW (W8UE, op)					KB8GAE	18,720	156	60	A	AK9F	37,884	287	66	A	
Oregon					K8BZ	116,920	740	79	A	WX8J	17,424	132	66	A	W9YS	35,840	256	70	A	
K7RAT (N6TR, op)	213,600	1335	80	B	NU8Z	90,324	592	78	A	K8AB	15,744	123	64	A	N9TF	33,840	235	72	A	
W7HWR	35,360	260	68	B	K8IR	87,856	578	76	A	K8NU	13,680	114	60	A	W9QFV	31,944	242	66	A	
					N8EA	79,952	526	76	A	W8DD	11,834	97	61	A	N9NT	27,520	215	64	A	
K4XU	147,200	920	80	A	K8MW	72,206	457	79	A	K8RJW	10,914	107	51	A	N9KO	24,948	189	66	A	
W7YAQ	123,396	791	78	A	W8ARC	63,384	417	76	A	WA3GSB	9,682	103	47	A	K9AHH	15,000	150	50	A	
K7KJ	109,494	711	77	A	WD8S	58,500	390	75	A	KV8US	9,120	95	48	A	K9IJ	14,950	115	65	A	
W7GG	99,900	666	75	A	K8RDJ	54,464	374	74	A	WD8AJF	6,600	75	44	A	KF4NBG	11,092	118	47	A	
W7WHO	98,592	632	78	A	N8MR	63,384	417	76	A	N8WS	6,512	74	44	Q	K9CJ	10,656	111	48	A	
KI7Y	87,828	563	78	A	W8UMP	47,450	325	73	A	W0CG	46,224	321	72	U	N9BT	9,984	104	48	A	
NB7F	17,172	159	54	A	NG8U	44,840	295	76	A	K8YM (ND8L, op)	35,076	237	74	U	N9KHR	9,118	97	47	A	
KU7K	9,282	91	51	A	WB8RFB	40,176	279	72	A	WKFUN (+KC8WTP)	34,222	241	71	M	WA9AQN	6,880	80	43	A	
					WA8YPY	35,784	252	71	A	W9VQ	12,792	123	52	Q	K9LYA	3,630	55	33	A	
N7OU	91,884	589	78	Q	KB8PGW	33,098	247	67	A	W8EDU (W8WTS, W8RZ, ops)	114,076	722	79	M	K9IB	2,772	42	33	A	
K7PJT	11,900	119	50	Q	K8SAK	29,670	215	69	A	NX8K (+K8CBS, KC8VCY)	43,800	300	73	M	K9BIG	1,872	39	24	A	
					KC8KAM	27,588	209	66	A	KF8UN (+KC8WTP)	34,222	241	71	M	KK9DX	1,156	34	17	A	
W7SIR (+N7HA)	33,796	238	71	M	W8EGI	26,000	200	65	A	WC8VOA (W8CDA, W8FEJ, ops)	11,660	110	53	M	KC9ARR	952	28	17	A	
N7TL (+WB7UFJ)	11,600	116	50	M	N8ZFH	25,344	192	66	A	W8ID (KF8GD, WB8REI, KB8SOU, WD8AVQ, K8ARL, op.)	5,618	53	53	M	AF9H	760	20	19	A	
W7PXL (N7ICR, WJ7R, ops)	8,084	94	43	M	K8AAK	25,194	221	57	A	K9VON	360	20	9	Q	N9IJ	336	24	7	A	
Utah					N5TU	24,766	203	61	A	W8RZ	12,322	101	61	U						
KH6SH	73,852	499	74	B	K8GVK	13,888	124	56	A	W8VEN	6,300	75	42	A	KI9A	121,836	781	78	U	
					K8RWG	12,240	102	60	A	K8VFR	6,216	84	37	A	KG9X	120,274	781	77	U	
W7HS	21,488	158	68	A	WA8OLD	9,996	102	49	A	N8NX	4,560	60	38	A	N2BJ	73,788	473	78	U	
WA7BME	50	5	5	Q	W8UE	1,302	31	21	A	K8GT	4,560	60	38	A	K9UQN	72,384	464	78	U	
					N8UZE	832	26	16	A	K2UOP	3,404	46	37	A	K9CW	65,832	422	78	U	
W7UT	180,320	1127	80	U	N8UE (WA8VNE, op)	67,192	454	74	Q	K3JT	2,580	442	409	69	K9X9	60,830	395	77	U	
					K8SB	65,860	445	74	Q	W8ZA	2,726	47	29	Q	W9OL	59,714	409	73	U	
W7CT (+W7FB)	162,424	1028	79	M	WA8REI	37,950	275	69	Q	K5IID	80,104	527	76	A	K9RS	46,176	296	78	U	
					N8KV	23,932	193	62	Q	W8UI	35,784	252	71	A	K9OR	44,700	298	75	U	
Western Washington					N8XMS	7,520	94	40	Q	N8II	11,856	114	52	A	N9QQK	44,092	302	73	U	
K7QQ	167,840	1049	80	B	KC0WE	2,726	47	29	Q	K8WV	6,336	99	32	A	AA9NF	39,664	268	74	U	
N4SL	157,368	996	79	B					KC8VCB	3,480	58	30	A	K9PG	38,624	272	71	U		
K7VI	89,320	580	77	B	W4FMS	129,948	833	78	U	N9TK	101,486	659	77	B	W9FX	38,236	242	79	U	
W7LKG	84,700	550	77	B	N8IA	24,500	175	70	U	W8LVN	99,012	669	74	B	W9FYI	35,074	247	71	U	
W7DPW	23,302	191	61	B					K9DX	182,016	1152	79	B	K9YI	214,722	1359	79	B		
N7DOE	14,520	132	55	B					K9BGL	152,312	964	79	B	KE9I	180,436	1142	79	B		
W9PL	9,348	114	41	B	K8CC (+N8NX, WA8RRR)	151,522	959	79	M	W9WU	140,146	887	79	B	K9ZB	153,036	981	78	B	
					K8JM (+K8MV, K8DD, AC8W, K8MM, N8LJ)	140,712	902	78	M	N9FGH	95,472	612	78	B	K9CS	140,778	891	79	B	
N7LOX	121,448	799	76	A	K8AE (+KC8GMG)	33,048	243	68	M	KX9DX	65,940	471	70	B	W9RE	126,516	811	78	B	
N7WA	114,304	752	76	A					K9XW	64,528	436	74	B	WT9U	45,500	350	65	B		
K7HBN	82,536	543	76	A					W3HDH	47,278	307	77	B	K9IG	45,500	350	65	B		
NU7J	70,532	458	77	A																
AB7RW	57,300	382	75	A																

