2004 ARRL November Sweepstakes CW Results

Five Easy (?) Pieces (of information)…

Randy Thompson, K5ZD

Dick, K4XU, finished in 10th place in the Low Power category.

Amateur Radio operators pride themselves on their ability to communicate under all conditions. The hurricanes in Florida and the tsunami in Asia have demonstrated the value of having trained communicators at the ready in time of need. The ARRL November Sweepstakes, with its message-like exchange and roots in traffic handling, is a practice and proving ground for developing those communication skills. Whether you see the SS as a serious competition or just for fun, there is valuable skill building going on.

For each completed contact, there are five distinct pieces of information that must be exchanged. If anyone of them is copied incorrectly, the QSO is lost and score reduced. Why such an emphasis on accuracy? In the real world of emergency communication, even the smallest error can have dire consequences. Copying the precedence as A or B may cost you a point in the contest, but if it represents the blood type of an injured person, that single character could mean life or death.

The SS offers much more than the pursuit of logging perfection. It also provides the adrenalin rush of competition, the thrill of a multiband scavenger hunt, and the opportunity to compete against records at the section, division and national levels. Victory is not a destination, but a journey. If you happen to develop your operating skills along the way, then the contest was not only fun, it was good for you, too!

For radio amateurs across the United States and Canada, the weekend of November 6-7, 2004 was the 71st opportunity to renew this annual tradition of operating excellence in the ARRL November Sweepstakes, CW. Log submissions were down about 10% to 1113. But, with a total of 484,304 QSOs reported, there was plenty of fun and experience to be had!

What do you Like about SS CW?

When we asked the top scorers in each category this question, the responses were amazingly varied. For Ken, N6RO, "it is because CW is my natural mode, music." Rich, KE3Q, agreed, "I enjoy the 'musicality' of it, listening to a 'note' rather than a voice. We listen to voices all day every day in our normal life; listening to CW is special; 'ordinary people' don't do it; just us."

Some mentioned the competitive aspects. To K6LA, "it is the National Championship." For K7BG, "SS is two contests in one, that is run like blazes the first 10 or 12 hours and then dig out the Qs on Sunday." Bob, K5WA, noted, "I like being able to hear the QSO count of fellow competitors and see how the 'race' is going...or if I'm even in the race." Steve, N2IC, likes "the challenge of executing a strategy that squeezes out as many QSOs as possible." Tom, K1KI, also valued strategy saying, "You can't win just by CQing a lot. You have to go find new people to work." According to K7GK, "this contest forces everyone to bring their best game."

It's not all about having the largest station either. Dave, K6LL, likes it that, "a small station like mine can score quite well in this contest." Dick, K4XU, sees the SS as, "the contest where a modest station is adequate for serious competition…it is a far better test of operator skill than any other contest."

You can even choose your own form of competition. Jim, WI9WI, looks forward

2004 ARRL November CW Sweepstakes Sponsored Plaque Winners

Category	*Winner*	*Sponsor*
Overall Single Operator High Power	WP3R (KE3Q, op)	Trey Garlough, N5KO
Overall Single Operator Low Power	N4ZZ	Kirk Pengelly, NØKK
Atlantic Division Single Operator High Power	K3CR (LZ4AX, op)	North Coast Contesters
Atlantic Division Single Operator Low Power	K3WU	Potomac Valley Radio Club
Atlantic Division Multioperator	K2NNY	North Coast Contesters
Central Division Multioperator	K9NS	Don Haney, W9WW
Dakota Division Single Operator High Power	WØSD (WØDB, op)	Minnesota Wireless Association
Dakota Division Single Operator Low Power	WDØT	Minnesota Wireless Association
Dakota Division Single Operator QRP	NØUR	Tod Olson, KØTO
Dakota Division Single Unlimited	KTØR	Minnesota Wireless Association
Dakota Division Multioperator	KRØB	Minnesota Wireless Association
Great Lakes Division Single Operator High Power	N4GN	North Coast Contesters
Great Lakes Division Single Operator Low Power	W8CAR	Mad River Radio Club
Great Lakes Division Single Operator QRP	W8TM	Mad River Radio Club
Hudson Division Multioperator	W2GD	Stuart Silverstein, K3UEI, Memorial
Midwest Division Multioperator	KBØVVT	Lincoln Amateur Radio Club
New England Division Single Operator QRP	W1QK	QRP Club of New England
Pacific Division Single Operator Low Power	N6ZFO	Robert A. Wilson, N6TV
Roanoke Division Single Operator High Power	N4AF	Potomac Valley Radio Club
Roanoke Division Single Operator Low Power	K8AC	Raleigh Amateur Radio Society - W4DW
Roanoke Division Single Operator QRP	WA4PGM	Bill Harding, K4AHK
Southwestern Division Single Operator Low Power	K6AM	Larry Serra, N6NC
Southwestern Division Single Operator QRP	N7IR	Ray and Donna Day, N6HE & N6HTH
West Gulf Division Single Operator High Power	K5TR (N5RZ, op)	Ken Adams, K5KA
Canada Single Operator Low Power	VE4VV	Don Haney, W9WW

Winners of Overall and Division Level plaques that have not been sponsored may purchase the plaque from the ARRL for $67. Contact Kathy Allison, KA1RWY, at **kallison@arrl.org** or by phone at 860-594-0295.

to "the challenge of trying to win the section in whatever category I enter." Todd, N9NE, enjoys "watching the multiplier total rise toward 80 and having a contest with myself to see if I can make a clean sweep." K7RE likes that there are "lot's of good ears for QRP signals." Bill, N7OU, likes " the work them only once rule."

High Power Category

Rich, KE3Q, continued his string of victories from WP3R in Puerto Rico. He has now won an amazing six consecutive times. That's one for the thumb plus one more! Rich took advantage of his southern location to avoid the aurora and post giant QSO totals on 40 and 10 meters. His 1497 QSOs was 40 more than last year.

In second place was Steve, N2IC, operating from his new QTH in New Mexico. This is Steve's third Top Ten finish from three different stations in three years as he moved from Colorado to his new retirement home and dream radio location! His 1405 QSOs dominated everyone who wasn't on a Caribbean island.

Third place went to Ralph, N5RZ, who drove over to the central Texas station of K5TR for the weekend and 1351 contacts. Two hundred miles to his north, Bill, K5GA, operated WXØB to fourth place, just 4 QSOs behind Ralph.

The battle for fifth place looked like a tie between Mark, AG9A, operating NØNI in Iowa and Randy, K5ZD, operating AK1W in Massachusetts. Each submitted 1346 claimed contacts, but after the log checking, NØNI had one fewer error to take the position! Both achieved their precontest goals of making the Top Ten. AK1W went away happy with a new record score for the New England Division. And it's also worth noting that even after 72 years of operating (ck 32), Vic, N4XR, made 628 QSOs from Connecticut. Congrats, Vic!

Low Power Category

The largest category in number of entrants, low power, is always a dogfight. The two top scorers this year are perennial favorites who always generate a close race. Don, N4ZZ, takes the prize this time from his effective station in Tennessee. Don's 1166 contacts and a clean sweep produced a score just slightly above his third place result from a year ago. To think that Don almost gave up the contest in favor of going hunting using a muzzle loader! Randy, KØEU, in Colorado finished a close second with 1148 QSOs. Randy had his fastest clean sweep ever just 10 hours into the contest.

Third place went to everyone's Virgin Island multiplier, NP2B, operated by Bob, N4BP. With 1145 contacts, only 3 behind KØEU, Bob moved up from fifth last year. Bob is the only entrant in the top 30 low power scores who didn't make a QSO on 80 meters!

Fourth place went to Matt, K7BG, operating from Montana. Matt entered the contest with the goal of beating KØEU and N4ZZ. He didn't make it, but repeated his fourth place finish from last year.

QRP Category

It doesn't take a lot of power to find success in the Sweepstakes as long as you have a commitment to your goal and the willingness to stay in the chair. Kirk, K4RO, came into the contest focused on finishing in first place. In spite of only operating 23 hours, his 758 QSOs and a clean sweep did just that. After a slow start, Kirk noted, "Eighty meters the first night was just amazing. It may have been the best I've ever heard the band in a domestic contest. KL7WV answered my 5 W CQ!"

Dan, K7MM, also entered the contest with a mission. "My goal was to finish in the QRP Top Ten, to have a great time doing so, and to beat my score last year." His 679 QSOs and a sweep were good enough for second place. Dan was one who benefited from some sporadic E that was mixed in with the disturbed conditions. He worked his last two close in sections, W7IS in EWA and VE6EX in AB, during the last hour of the contest on 20 meters!

The next four positions had close QSO totals, but it was their ability to find multipliers that set the order of finish. Bud, W2RU (ex-K2KIR as he may be better known), celebrated his new call by making more contacts than K7MM but missed the sweep to finish third. Bud selected his goal for the contest this way, "I decided before the contest to select an entry category that would maximize my chances of

Three-time winner of the Unlimited category, Dave, K6LL.

Top Ten

Single Operator, QRP		Single Operator, High Power		Multi-Operator	
K4RO	121,280	WP3R (KE3Q, op)	239,520	N6VR	216,480
K7MM	108,640	N2IC	224,160	K9NS	199,840
W2RU	108,230	K5TR (N5RZ, op)	216,000	W2GD	187,040
KG5U	107,282	WXØB (K5GA, op)	214,880	K8CC	181,920
N7OU	105,768	NØNI (AG9A, op)	212,480	KBØVVT	178,560
VE6EX	103,512	AK1W (K5ZD, op)	212,320	W4RM	175,680
NØUR	102,542	N9RV	209,120	ABØS	165,742
N9NE	100,962	K5GN	204,320	W6OAT	163,040
WI9WI	100,320	K6LA	201,760	W7CT	160,160
K7RE	99,684	K1KI	201,440	W1AW	152,944
Single Operator, Low Power		**Single Operator, Unlimited**		**School Club**	
N4ZZ	186,560	K6LL	202,080	K7UAZ	63,516
KØEU	183,680	N6RO	193,920	K8ITT	36,156
NP2B (N4BP, op)	183,200	KO7X	174,400	KC4WQ	10,340
K7BG	180,320	W7RN (WØYK, op)	174,240	N7BYU (AD7BN, op)	570
KØDI	180,000	N4GG	168,160		
WDØT	178,240	N5NA	167,638		
K7GK (@K7ZSD)	170,400	KX7M	166,560		
W7UT	165,760	N6XI	160,320		
K5WA	165,120	W4NZ	159,200		
K4XU	163,040	W4MYA	157,248		

Regional Scores

Tables 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)			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)	212,320	B	WP3R (KE3Q, op)	239,520	B	N9RV	209,120	B	N2IC	224,160	B	K6LA	201,760	B
K1KI	201,440	B	W4PA	191,040	B	N4GN	196,640	B	K5TR (N5RZ, op)	216,000	B	VA7RR	192,602	B
N2NT (N2NC, op)	196,320	B	N4OGW	189,920	B	W9RE	176,160	B	WXØB (K5GA, op)	214,880	B	N6TV	185,600	B
K3CR (LZ4AX, op)	182,400	B	N4AF	187,360	B	K9DX	173,440	B	NØNI (AG9A, op)	212,480	B	K6TA (N6BV, op)	181,120	B
KD4D	182,240	B	W5WMU	176,480	B	K9NW	171,040	B	K5GN	204,320	B	N7TR (N7ON, op)	174,720	B
K3WU	149,152	A	N4ZZ	186,560	A	N9CK	155,360	A	KØEU	183,680	A	K7BG	180,320	A
W1RM	148,678	A	NP2B (N4BP, op)	183,200	A	W8CAR	138,566	A	KØDI	180,000	A	K7GK (@K7ZSD)	170,400	A
W3EF	145,834	A	KM5G	158,632	A	K9UIY	135,248	A	WDØT	178,240	A	K4XU	163,040	A
WY3A	122,928	A	WJ9B	143,680	A	AJ9C	134,080	A	W7UT	165,760	A	K6AM	155,520	A
N2PP	119,922	A	WO4O	143,360	A	KJ9C	130,400	A	K5WA	165,120	A	AA6PW	151,048	A
W2RU	108,230	Q	K4RO	121,280	Q	N9NE	100,962	Q	KG5U	107,282	Q	K7MM	108,640	Q
K3TEJ	92,092	Q	WA4PGM	91,040	Q	WI9WI	100,320	Q	NØUR	102,542	Q	N7OU	105,768	Q
W1QK	69,496	Q	K3AN	62,550	Q	W8TM	81,158	Q	K7RE	99,684	Q	VE6EX	103,512	Q
W1CSM	63,384	Q	K4UK	51,450	Q	WT9Q	76,752	Q	W7FB	93,912	Q	N7IR	98,280	Q
AA1CA	55,480	Q	W8DL	48,202	Q	N8IE	72,072	Q	WØZQ	90,744	Q	W6JTI	91,200	Q
N2MM	150,080	U	N4GG	168,160	U	KI9A	143,622	U	KO7X	174,400	U	K6LL	202,080	U
AB2E	137,124	U	W4NZ	159,200	U	N8BJQ	131,200	U	N5NA	167,638	U	N6RO	193,920	U
K2FU	107,172	U	W4MYA	157,248	U	W9IU	129,244	U	WØZP	150,720	U	W7RN (WØYK, op @K5RC)	174,240	U
K3DI	102,858	U	N4PN	144,160	U	KT8X	126,560	U	K5UN	140,304	U	KX7M	166,560	U
K3SV	98,118	U	N6ZO	109,652	U	K9MOT	124,960	U	WØBH	135,680	U	N6XI	160,320	U
W2GD	187,040	M	W4RM	175,680	M	K9NS	199,840	M	KBØVVT	178,560	M	N6VR	216,480	M
W1AW	152,944	M	W4UG	80,160	M	K8CC	181,920	M	ABØS	165,742	M	W6OAT	163,040	M
K2NNY	145,920	M	W4ZYT	52,930	M	KB9AX	152,800	M	W7CT	160,160	M	W6YX	137,618	M
N2EK	119,132	M				W8TK	141,094	M	KRØB	128,480	M	N6RC	132,160	M
W2CDO	101,280	M				K8JM	123,360	M	WØMU	90,324	M	N6EE	131,360	M

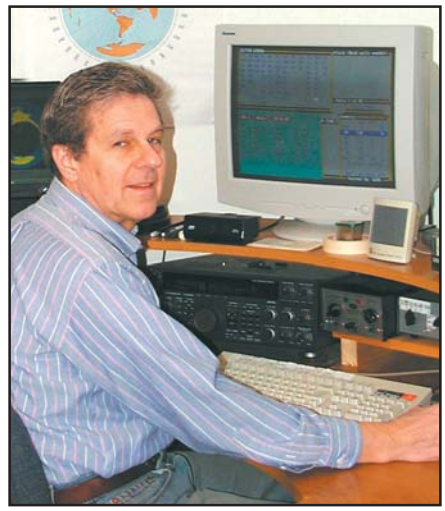
seeing my call in print.... After analyzing recent years' entries, I decided I had the best chance of landing in a Top 10 box by entering the QRP category." It worked!

Dale, KG5U, a regular visitor to the QRP Top Ten finished fifth. Dale also commented on the excellent propagation on 80 meters. He heard VY1JA before the contest started, but never when it counted. Bill, N7OU, accomplished his goal for the contest by finishing in fifth place. Unfortunately he missed AB and VY1 for the sweep. Bill credited his modest antenna farm for his success, "Thought my fixed wire Yagis—constructed of bamboo, garden stakes and duct tape—performed great. They hang from fir trees on my suburban lot."

Unlimited Category

The unlimited category continues to be popular as participants look for extra help to garner the elusive clean sweep of all 80 sections. In a duplicate finish to last year, Dave, K6LL, bested Ken, N6RO, for the victory. This is Dave's third consecutive win in the Unlimited category. Ken's goal of beating K6LL will have to wait until next year. Alan, KO7X, handed out Wyoming to finish third, despite operating only 21 hours. WØYK visited W7RN in Nevada to claim fourth, just one QSO behind KO7X!

Hal, N4GG, fought with computer problems all weekend but still pounded out 1051 QSOs and a sweep to take fifth place. Even packet doesn't guarantee a clean sweep as Alan, N5NA, unfortunately discovered. It cost him a place in the standings, but he still managed a respectable sixth.



Bud, W2RU (ex-K2KIR), entered QRP and made the Top Ten so he could get his picture in the write-up.

Multioperator Category

The multioperator category continues to attract a combination of serious competitors and those out for fun or as a training exercise. At the top of the list for the second year in a row is N6VR. Ray invited KR6X and AC6T to make a top-notch team that broke the Santa Barbara section record. K9NS, operated by K9HMB, K9PW, K9XW and KO9A from the Illinois QTH of K9HMB finished a strong second. W2GD, operating from the station of NO2R in New Jersey, battled the aurora to take third.

Expanded Results, Line Score Printouts Available

For complete contest results online, please visit **www.arrl.org/contests/results**. 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.

Final Thoughts

Once again, a lot of credit for the quality of log checking must go to N6TR. Tree works hard to make sure the log checking process is both fair and consistent. You can make his job easier by submitting your logs electronically using the Cabrillo format and by making sure all of the information in your entry is correct. We all benefit from knowing that the winners of the Sweepstakes are truly deserving of the honor.

The next running of the Sweepstakes CW will be the weekend of November 5-6, 2005. Where else can you practice your communication skills and copying accuracy with some of the best operators in the country? See you on the radio!

Scores

Within each Section, scores are listed in descending order by entry category with single operator entries then 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).

CW

1

Connecticut

K1KI	201,440	1259	80	B
K1WB	133,760	836	80	B
N4XR	97,968	628	78	B
W1WEF	76,320	477	80	B
NN1N	45,360	324	70	B
W1RM	148,678	941	79	A
K1ZE	46,488	298	78	A
W2JU	45,406	311	73	A
K1KAV	34,894	239	73	A
NX1Q	28,696	211	68	A
W1JQ	12,312	114	54	A
KW1K	10,812	106	51	A
W1QK	69,496	476	73	Q
K1ZZ	58,144	368	79	U
W1AW (N6MZ, N0AX, K6KR, N1ND, ops)	152,944	968	79	M
W1NRG (W1KKF, W1FD, K1VDF, N1ZN, DB1FYL, WA1TRY, ops)	36,300	242	75	M

Eastern Massachusetts

W1ZT	133,826	847	79	B
K5MA	104,596	662	79	B
K1IR	94,010	595	79	B
W1EBI	39,060	279	70	B
W1EZ	30,192	222	68	B
K1YA	9,900	99	50	B
N1DC	68,796	441	78	A
WA1OLV	65,512	431	76	A
K1HT	56,092	379	74	A
K1NTR	55,334	379	73	A
WG1Z	48,960	340	72	A
K1MC	38,880	270	72	A
W1XS	35,076	237	74	A
K1XM	31,144	229	68	A
K1PNQ	25,192	188	67	A
W1VIV	14,592	128	57	A
WO1N	14,274	117	61	A
W1AWB	6,048	72	42	A
NF1D	5,544	77	36	A
W1OH	1,716	33	26	A
KY1B	1,150	23	25	A
N1NN	840	21	20	A
W1CCE	280	14	10	A
W1CVE	33,410	257	65	Q
W0ZEN	22,704	172	66	Q
NB1B	22,304	164	68	Q
W1MJ	44,104	298	74	U
K1NU	31,312	206	76	U
K1TH	16,402	139	59	U
AG1C (+K1RDD)	6,396	82	39	M

Maine

W1AO	159,580	1010	79	B
N4CW	125,580	805	78	B
K1PQS	94,800	632	75	B
K1JB	62,064	431	72	B
NY1S	88,160	580	76	A
KX1E	58,312	394	74	A
K1FQ	35,604	258	69	A

New Hampshire

KF1V	152,640	954	80	B
WC1M	114,400	715	80	B
NM1W	6,862	73	47	B
K1TR	56,832	384	74	A
KZ1O	43,168	284	76	A
KB1T	26,624	208	64	A
WA1Z	8,118	99	41	A
AA1CA	55,480	365	76	Q
KA1LMR	12,064	104	58	Q
W1DAD	70	7	5	Q
KC1F	52,500	350	75	U

Rhode Island

N1SW	129,200	850	76	B
KM1X	109,200	700	78	A
K1VSJ	45,084	289	78	A
K1MBO	39,566	271	73	A
K3IU	48,356	314	77	Q
NB1U	1,242	27	23	U

Vermont

K1KD	145,044	918	79	B
WT1L	133,056	864	77	B
W1ECH	95,432	604	79	A
KE1FO	38,360	274	70	A
NV1X	72	6	6	Q

Western Massachusetts

AK1W (K5ZD, op)	212,320	1327	80	B
N2OW	171,200	1070	80	B
NG1I	640	10	32	B
W1TO	55,024	362	76	A
W1BYH	43,120	280	77	A
W1AUV	22,244	166	67	A
W1CSM	63,384	417	76	Q

2

Eastern New York

K1AK (WA2GO @W2RE, op)	168,744	1068	79	B
N1EU	64,000	400	80	B
N2SQW	46,056	303	76	B
N2NI	39,480	282	70	B
WE2F	31,248	248	63	B
W2LK	96,712	628	77	A
K2UF	84,214	533	79	A
K2DW	48,860	349	70	A
W2XM	41,464	292	71	A
N4BG	33,596	227	74	A
W2GDJ	32,612	263	62	A
K2YR	26,792	197	68	A
W2ENY	20,286	147	69	A
K2SX	19,840	160	62	A
W2MU (WA2JQK, op)	18,904	139	68	A
W2WC	9,680	110	44	A
WT4Q	8,692	82	53	A
WA2ASQ	6,192	72	43	A
W2NRD	5,016	57	44	A
KW2D	12,320	112	55	Q
K2ONP	80,960	506	80	U
N2EK (+W2XL)	119,132	754	79	M

Northern New Jersey

N2NT (N2NC, op)	196,320	1227	80	B
W2RQ	180,000	1125	80	B
W2LE	60,060	385	78	B
NA2U	56,960	356	80	B
K2ESE	10,980	90	61	B
W2UDT	5,200	65	40	B
WB2AA	57,000	380	75	A
W2LHL	46,350	309	75	A
KG2MV	28,840	206	70	A
K2TWK	24,800	200	62	A
W2LRO	20,160	168	60	A
WA2LXE	11,000	110	50	A
WA2VQF	10,800	108	50	A
K2WA	7,956	78	51	A
N2QOR	3,626	49	37	A
W2TI	1,152	32	18	A
NR2I	240	12	10	A
N2NO	25,326	189	67	Q
W2JEK	12,064	116	52	Q
W2BVH	11,172	98	57	Q
N2ED	69,454	451	77	U
W2YR	25,200	180	70	U
N2KPB	10,904	116	47	U
W2GD (+K2TW, NO2R)	187,040	1169	80	M
AB2DE (+KC2AVE)	16,632	108	77	M

Northern New York

NN2L	13,280	83	80	A
N2JNZ	18,368	164	56	Q
K2NNY (K2DB, WB2DVU, W2LB, NG2P, N2VJB, ops)	145,920	912	80	M

NYC-Long Island

KD2RD	70,420	503	70	B
KA2D	50,768	334	76	B
N2GC	27,336	201	68	B
N2GA	83,366	571	73	A
WA2VZQ	52,540	355	74	A
N2ZN	51,600	344	75	A
KD2HE	40,020	290	69	A
W2HLI	29,600	200	74	A
K2TV	22,272	174	64	A
K2LE	16,884	134	63	A
W3MMM	7,650	85	45	A
WA2MAV	7,590	115	33	A
K2IZ	6,600	75	44	A
K1EP	5,494	67	41	A
KC2LYQ	850	25	17	A
K2UY	38,068	307	62	Q
WA2SI	84	7	6	Q
WO2N	15,900	106	75	U

Southern New Jersey

N2RF	43,890	285	77	B
W5KI	43,216	296	73	B
K2QPN	8,528	82	52	B
W2RDS	24,156	183	66	A
WA2VQV	21,000	150	70	A
N2OO	18,600	155	60	A
K2MK	15,660	135	58	A
KC2NGC	15,232	136	56	A
KV2M	330	15	11	A
N2CQ	1,160	29	20	Q
N2MM	150,080	938	80	U
AB2E	137,124	879	78	U
W2YC	34,760	220	79	U

Western New York

K2UA	20,034	159	63	B
N2BEE	11,286	99	57	B
W2LC	11,220	102	55	B
N2PP	119,922	759	79	A
K2ZR	83,266	527	79	A
N2CU	73,800	492	75	A
N2RD	71,100	474	75	A
W2KA	63,832	404	79	A
NM2A	28,656	199	72	A
WB2WPM	19,140	145	66	A
W2EZ	16,680	139	60	A
KV2X	3,432	52	33	A
N2OPW	2,738	37	37	A
WB2SXY	84	7	6	A
W2RU	108,230	685	79	Q
WB2ABD	50,468	341	74	Q
K2QO	26,520	195	68	Q
W2EB	14,112	126	56	Q
WA2BQI	11,766	111	53	Q
KC2KME	2	1	1	Q
K2FU	107,172	687	78	U
K2CDJ (+K2YEH)	47,040	294	80	M

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Delaware

W3PP	156,800	980	80	B
AA1K	32,160	268	60	B
NY3C	7,280	104	35	A

EasternPennsylvania

AA3B	181,120	1132	80	B
NY3A	154,616	1004	77	B
K3MD	144,000	900	80	B
WA3AAN	53,568	372	72	B
K3ATO	39,680	310	64	B
W3FV	31,080	222	70	B
N3NR	1,242	27	23	B
K3WU	149,152	944	79	A
WY3A	122,928	788	78	A
K3NK	102,180	655	78	A
KC3M	100,160	626	80	A
K3EGE	71,592	471	76	A
W3TDF	68,100	454	75	A
N2EY	64,296	423	76	A
AA0CY	34,484	233	74	A
N3NZ	32,504	239	68	A
W3SD	19,920	166	60	A
N3RM	16,200	108	75	A
N3IW	5,776	76	38	A
K3TEJ	92,092	598	77	Q
WA2GBF	32,518	229	71	Q
N3AO	8,550	95	45	Q
K3SV	98,118	621	79	U
K3WW	84,000	525	80	U
NE3H	20,048	179	56	U
KB3MM	7,488	72	52	U

Maryland-DC

KD4D	182,240	1139	80	B
K3MM	181,700	1150	79	B
K3ZO	172,480	1078	80	B
K2PLF	129,876	822	79	B
K3TW	114,720	717	80	B
N3UM	108,420	695	78	B
WB4FDT	104,850	699	75	B
K3TM	104,676	671	78	B
N3AM	98,098	637	77	B
W3AZ	45,732	309	74	B
W3HVQ	31,284	237	66	B
W3EF	145,834	923	79	A
K3KU	95,004	609	78	A
AI3M	81,120	520	78	A
W3CB	75,544	497	76	A
WA1LWS	73,476	471	78	A
NS3T	53,436	366	73	A
N3IQ (ND3F, op)	48,664	316	77	A
K3AU (K2YWE, op)	42,912	298	72	A
W3DAD	26,000	200	65	A
W3DOS (K9GY, op)	24,676	199	62	A
K3ASK	2,106	39	27	A
WB8YYY	37,914	267	71	Q
K3DI	102,858	651	79	U
W3UL	52,772	334	79	U
N3II	52,728	338	78	U
N3HUV	9,512	82	58	U
W3LJ	9,504	99	48	U
W2CDO (+K3STX)	101,280	633	80	M

WesternPennsylvania

K3CR (LZ4AX, op)	182,400	1140	80	B
W3SO (W3YOZ, op)	64,678	443	73	B
W3WC	19,698	147	67	B
WA3SES	77,040	535	72	A
W3FI	68,530	445	77	A
N2EM	65,512	431	76	A
N3XF	65,262	447	73	A
K3VX	60,040	395	76	A
N3GJ	45,600	304	75	A
K3JHT	12,672	144	44	A
AA2AD	9,024	96	47	A
KE3KD	7,650	85	45	A
W3WH	26,928	187	72	Q
N3SD	90,720	567	80	U
AD8J	23,852	178	67	U

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Alabama

KC4TEO	89,012	578	77	A
W4NTI	63,232	416	76	A
K4HAL	51,000	340	75	A
W4NBS	27,448	188	73	A
W4DEC	12,768	112	57	A
KG4CUY	9,898	101	49	A
K4TD	90,480	580	78	U
K4WI	24,180	186	65	U

Georgia

K4BAI	174,080	1088	80	B
W4BQF	121,186	767	79	B
K4OGG	45,504	316	72	B
AA4GA	113,440	709	80	A
KU8E	102,904	677	76	A
AE4Y	81,432	522	78	A
K4SB	48,048	312	77	A
W4ATL	42,366	307	69	A
K4LW	30,084	218	69	A
N5VI	14,848	128	58	A
W4Y	11,128	107	52	A
K4OZF	5,440	68	40	A
N4WD	2,728	44	31	A
KT4Q	828	23	18	A
AA4LR	242	11	11	A
K4AQ	47,656	322	74	Q
KE2WB	27,122	191	71	Q
W4JKL	9,702	99	49	Q
N4GG	168,160	1051	80	U
N4PN	144,160	901	80	U
N4LR	82,698	537	77	U

Kentucky

N4GN	196,640	1229	80	B
N4XM	10,332	123	42	B
K4FXN	125,136	792	79	A
K4IE	107,796	691	78	A
KE4LIA	29,118	211	69	A
KO4OL	27,202	203	67	A
KM4FO	24,254	181	67	A
K4AVX	13,908	122	57	Q
KD9B	5,888	64	46	Q
K4SAC	39,024	271	72	U
KC4WQ (+KG4WWE, KI4GDR)	10,340	110	47	S

North Carolina

N4AF	187,360	1171	80	B
N4TL	12,720	120	53	B
K8AC	134,472	862	78	A
K4QPL	115,596	741	78	A
N2NFG	72,996	474	77	A
AA4FU	58,828	382	77	A
K4SV	41,272	308	67	A
W4MY	32,640	240	68	A
AA4NO	28,600	220	65	A
N8FF	27,738	201	69	A
KZ2I	16,848	117	72	A
WA4WPD	9,240	84	55	A
KS4S	6,888	82	42	A
KA8ZUO	6,776	77	44	A
AK4GY	5,822	71	41	A
K3KO	98,720	617	80	U
K4MA	63,674	403	79	U
W3GQ	13,072	86	76	U
W4ZYT (+W4SD, AG4JT, N8CH, W4PRO, KU4EC, W4WV, AF4CD, KH6HHS, KG4PWC)	52,930	335	79	M

Northern Florida

K4PV	137,368	892	77	B
W7QF	37,084	254	73	B
W3TMZ	13,824	96	72	B
WJ9B	143,680	898	80	A
K9OM	69,264	468	74	A
W4RVU	38,500	275	70	A
NF4A	33,020	254	65	A
W2EJG	32,680	215	76	A
KE1F	18,000	150	60	A
W4EBA	12,880	115	56	A

Puerto Rico

WP3R (KE3Q, op)	239,520	1497	80	B

South Carolina

W4OC	128,928	816	79	A
WA8OJR	40,464	281	72	A
W2GJ	14,160	120	59	A
AE4FA	10,878	111	49	A
AA4NN	41,160	294	70	Q
K4QO	13,560	113	60	Q

Southern Florida

W4SAA	146,484	939	78	B
K4WJ	64,780	410	79	B
W4ARM	106,856	722	74	A
N4LF	69,108	443	78	A
N4KK (K9VV, op)	47,424	304	78	A
N4PSE	39,000	260	75	A
AJ2U	15,080	130	58	A
K4RFK	6,400	80	40	A

Tennessee

W4PA	191,040	1194	80	B
N4DW	124,320	777	80	B
N4IR	102,336	656	78	B
AD4EB	77,462	503	77	B
K4AMC	72,854	499	73	B
W4BCG	17,920	140	64	B
WA4GLH	1,380	30	23	B
N4ZZ	186,560	1166	80	A
WO4O	143,360	896	80	A
NA4K	140,936	892	79	A
K3CQ	98,434	623	79	A
KØEJ	88,464	582	76	A
K4AL	81,844	518	79	A
N4UW	78,540	510	77	A
N4TN	74,000	500	74	A
W4DAN	48,990	355	69	A
K1GU	41,124	298	69	A
K4BX	39,750	265	75	A
W4HZD	33,408	261	64	A
WA4OSD	29,680	212	70	A
K4BEV	27,676	187	74	A
KE4OAR	12,036	118	51	A
W4NI	11,466	117	49	A
W4OGG	1,000	25	20	A
KI4EZC	510	17	15	A
K4RO	121,280	758	80	Q
NY4N	9,500	95	50	Q
W4NZ	159,200	995	80	U
W6UB	1,508	29	26	U

Virgin Islands

NP2B (N4BP, op)	183,200	1145	80	A
NP2L	10,976	112	49	A

Virginia

N3JT	140,620	890	79	B
KM4M (W3BP, op)	124,488	798	78	B
W4AU	109,668	703	78	B
K4VU	101,794	661	77	B
N4PD	49,392	343	72	B
K4EU	108,862	689	79	A
W4YE	105,228	666	79	A
W4PM	53,818	379	71	A
W3ZI	52,560	360	73	A
WK4Y	51,100	365	70	A
KI4FDF	46,500	310	75	A
KI3O	45,648	317	72	A
W4TFS	45,114	309	73	A
K4FPF	33,592	221	76	A
K4ZW	32,830	245	67	A
AD4AX	26,780	206	65	A
N4ST	25,344	198	64	A
K4AF (K9GY, op)	24,552	198	62	A
AA4KD	20,930	161	65	A
K4RT	20,880	174	60	A
K4IJ	19,008	144	66	A
WB5QVN	17,100	150	57	A
K4JK	15,180	138	55	A
KC9LC	14,364	126	57	A
WB4LNT	14,152	122	58	A
K4FTO	13,750	125	55	A
AF4UU	10,816	104	52	A
W4VG	9,016	92	49	A
KA4GFY	8,262	81	51	A
N8IK	7,280	104	35	A
AE4IX	3,996	54	37	A
WAØWHT	2,576	46	28	A
K3MZ	1,944	36	27	A
WA4PGM	91,040	569	80	Q
K4UK	51,450	343	75	Q
K4ORD	47,888	328	73	Q
K4MX	35,620	274	65	Q
K4WY	30,388	214	71	Q
K2EKM	25,058	187	67	Q
K4KSR	21,708	162	67	Q
W7IY	20,538	163	63	Q
N2UM	18,444	159	58	Q
N4DJ	9,504	108	44	Q
N4UTY	2,494	43	29	Q
W4MYA	157,248	1008	78	U
N6ZO	109,652	694	79	U
K4GMH	55,936	368	76	U
N4MM	50,880	318	80	U
WM3T	44,480	278	80	U
W3YY	37,130	235	79	U
K1KO	32,560	220	74	U
WR4I	12,980	110	59	U
N6MW	12,482	79	79	U
W4RM (+W4NF, K5VG, AJ3G, K4GM, NN3W)	175,680	1098	80	M
W4UG (W8RJL, KT4P, KF4NMK, WA4EUL, KI4VB, ops)	80,160	501	80	M

West Central Florida

N4AO	96,558	627	77	B
K1TO	47,488	371	64	B
K4XSS	24,544	208	59	B
WD4AHZ	121,600	760	80	A
WK2G	86,728	586	74	A
WB9UJS	12,444	122	51	A
W4/KP2N	9,016	92	49	A
K3AN	62,550	417	75	Q
K4XS	32,634	259	63	Q

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Arkansas

W5JJ (K5DB, op)	115,128	738	78	B
KM5G	158,632	1004	79	A
WA5SOG	16,562	169	49	A
WØLK	11,024	104	53	A

Louisiana

W5WMU	176,480	1103	80	B
N5II	19,964	161	62	A
AF5P	17,160	143	60	A
N5YE	13,104	117	56	A
K1DW	4,292	58	37	Q

Mississippi

N4OGW	189,920	1187	80	B
WQ5L	69,920	460	76	A
N5PU	3,780	54	35	A

New Mexico

N2IC	224,160	1401	80	B
K5TA	134,880	843	80	B
W5YZ	47,586	309	77	A
N5CU	9,568	104	46	A
K7UP	62,016	408	76	Q
K7IA	39,050	275	71	Q
NM5U	36,156	262	69	Q
W5TTE	13,098	111	59	Q
NØQT	11,556	107	54	Q
WAØSXV	29,600	185	80	U

North Texas

WXØB (K5GA, op)	214,880	1343	80	B
N5QQ	153,600	960	80	B
N5UM	152,786	967	79	B
K5BG	126,880	793	80	B
K5ZO	121,186	767	79	B
N5PO	119,200	745	80	B
K5SF	45,426	339	67	B
AC5Z	3,780	54	35	B
WD5K	132,800	830	80	A
W8FN	115,024	728	79	A
N5CHA	103,968	684	76	A
W5RYA	85,692	579	74	A
K5QX	77,104	488	79	A
K5IID	73,458	477	77	A
K5RX	64,938	411	79	A
WA5MUF	28,826	203	71	A
AE5P	9,300	93	50	A
W5AH	8,742	93	47	A
W5TV	8,600	100	43	A
WA8ZBT	77,532	497	78	Q
KT5V	35,926	253	71	Q
N5WLA	27,064	199	68	Q
K5UN	140,304	888	79	U
KB5NJD	100,800	630	80	U
W5GN	58,032	372	78	U

Oklahoma

N5OT	189,440	1184	80	B
K5KA	176,436	1131	78	B
K5YAA	176,012	1114	79	B
K2BA	118,400	740	80	B
N5DY	71,850	479	75	B
K8FU	39,368	259	76	B
K5UV	68,484	439	78	A
KØCIE	4,248	59	36	A
WA5RES	65,254	413	79	Q
NEØP	9,570	87	55	Q
K5HP	49,728	336	74	U

South Texas

K5TR (N5RZ, op)	216,000	1350	80	B
K5GN	204,320	1277	80	B
N3BB	201,280	1258	80	B
K5NA	198,560	1241	80	B
W5KFT (K5PI, op)	193,120	1207	80	B
K5YA	132,440	860	77	B
K5PTC (N1LN, op)	126,400	790	80	B
W5ASP	124,000	775	80	B
W5RQ	118,658	751	79	B
K1TU	49,096	323	76	B
W5XD	12,430	113	55	B
KN5U	224	14	8	B
K5WA	165,120	1032	80	A
N5AW	94,240	589	80	A
K5NZ	80,512	544	74	A
K5OT	63,024	404	78	A
AJ4F	28,776	218	66	A
KA5KLU	23,528	173	68	A
K5IX	23,040	160	72	A
N5AF	20,130	183	55	A
K5CWR	15,080	116	65	A
N5KAE	11,218	79	71	A
KG5U	107,282	679	79	Q
W5EB	10,044	93	54	Q
N5XU (AA5BT, W5BEV, ops)	19,750	125	79	M

West Texas

N5ZC	28,050	187	75	B
N5DO	162,424	1028	79	A
KE5OG	200	10	10	A
N5NA	167,638	1061	79	U
KU5S	10,360	74	70	U

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East Bay

N6PN (@W6JZH)	174,240	1089	80	B
KF6RIP	148,824	954	78	B
NO6X	68,850	459	75	B
W6OSP	30,876	249	62	B
KE6ZSN	22,568	182	62	B
N6JS	9,408	96	49	B
AE6C	17,328	152	57	A
K6SV	10,878	111	49	A
K6XV	8,370	93	45	A
N6DA	5,040	70	36	A
KI6OY	1,428	34	21	A
N6WG	47,100	314	75	Q
N6RO	193,920	1212	80	U
KX7M	166,560	1041	80	U
W6RGG	105,440	659	80	U
W6CQP (AD6E, op @ W6NV)	95,040	594	80	U
WZ6Z	57,760	380	76	U
KE6QR	39,606	287	69	U
K6IW (W6NV, op)	30,628	247	62	U
W6CZ	12,702	87	73	U
W6NV	8,428	98	43	U

Los Angeles

K6LA	201,760	1261	80	B
WA6BOB	19,680	164	60	B
N6GL	44,992	304	74	A
N6TW	43,624	287	76	A
N7KFL	20,160	160	63	A
K6ZCL	12,200	122	50	A
AA6DP	420	15	14	A
NK6A	26,928	204	66	Q
W6RCL	22,050	175	63	Q
W6WQC	12,540	114	55	Q
N5BF	8	2	2	Q
W6KC	49,120	307	80	U
W6SW	15,912	117	68	U

Orange

N6HC	156,800	980	80	B
K6OGO	47,656	322	74	B
W6HT	8,084	86	47	B
K6HRT	7,956	102	39	B
AA6PW	151,048	956	79	A
KQ6ES	34,992	243	72	A
KF6I	34,580	247	70	A
W6ZL	23,296	182	64	A
AA6SS (W6SJ, op)	18,600	155	60	A
N6WK	15,504	102	76	A
W6NT	12,688	122	52	A
WA6GFR	11,500	115	50	A
W6RTW	10,816	104	52	A
KQ6Q	10,404	102	51	A
K6EY	3,248	56	29	A
K6UIZ	2,520	45	28	Q

Pacific

KH6NF (KH6SH, op)	69,464	457	76	A
KH6/WØCN	840	21	20	A

Sacramento Valley

K6TA (N6BV, op)	181,120	1132	80	B
KF6T	158,240	989	80	B
K6MR	155,840	974	80	B
K6SRZ	142,296	924	77	B
W1SRD	131,820	845	78	B
WT6G	112,496	712	79	B
K6LRN	98,720	617	80	B
K9JM	47,808	332	72	B
NT6K	104,720	680	77	A
W6NKR	61,620	395	78	A
K6KYJ	39,192	276	71	A
K6LLK	17,892	142	63	A
W6RFF	11,270	115	49	A
KJ6CA	10,272	107	48	A
N6XI	160,320	1002	80	U
N6RK	105,440	659	80	U
W6EU	98,434	623	79	U
WX6V	86,240	539	80	U
W6RKC	68,800	430	80	U
KI6T	68,256	432	79	U
K6AO (WX6V, op)	45,540	330	69	U
K6DGW	37,100	265	70	U

San Diego

W6MVW	63,200	400	79	B
NF6V	35,088	258	68	B
K6AM	155,520	972	80	A
N7CW	120,640	754	80	A
WN6K	115,192	748	77	A
AA6EE	32,760	252	65	A
NE6I	16,954	173	49	A
K1TKL	9,568	104	46	A
N6NC	912	24	19	A
W6KY	31,104	243	64	Q
NX6T (N6KI, NN6X, ops) 1	26,080	788	80	M

San Francisco

W6XU	137,712	906	76	B
N6CT	95,942	623	77	B
K6CTA	63,616	448	71	B
N6ZFO	136,000	850	80	A
N6YEU	62,832	408	77	A
W6IYS	39,936	256	78	A
AA6DX	28,826	203	71	A
WW6D	16,244	131	62	A
W6JTI	91,200	570	80	Q
K6RIM	143,680	898	80	U
K6OWL	54,720	360	76	U
W8NF	13,250	125	53	U

San Joaquin Valley

WC6H	139,678	907	77	B
W6RJ	47,892	307	78	B
AA6G	15,104	128	59	B
K2VCO	105,182	683	77	A
AK7G	63,336	406	78	A
K6VOA	42,612	318	67	A
KD6WW	33,396	242	69	A
K6CSL	24,192	189	64	A
WA6DSK	12,312	108	57	A
N6IV	532	19	14	A
K6MI	5,934	69	43	Q
N6NZ	91,630	595	77	U
K6SRA (K6DGW @WK6I, op)	66,598	469	71	U
WK6I	23,680	160	74	U
KD6UO	2,970	45	33	U
N6EE (+W6XK)	131,360	821	80	M

Santa Barbara

WA6FGV	106,650	675	79	A
W6GL	51,300	342	75	Q
W6TK	86,240	539	80	U
N6VR (+AC6T, KR6X)	216,480	1353	80	M

Santa Clara Valley

N6TV	185,600	1160	80	B
NU6S	155,840	974	80	B
K6VVA	145,834	923	79	B
AE6Y	125,120	782	80	B
N7FF	111,804	726	77	B
K6BL (K6AW, op)	103,806	657	79	B
KA6W	102,542	649	79	B
W6NL	98,280	630	78	B
AB6WM	42,366	307	69	B
W6ISQ	7,400	100	37	B
K6GFJ	7,280	91	40	B
N6EM	53,808	354	76	A
N6NF	39,204	297	66	A
W6IO	34,272	238	72	A
KG6DFM	29,930	205	73	A
W9MAK	24,400	200	61	A
W6PRI	14,700	150	49	A
KO6LU	6,840	90	38	A
W6MMG	2,000	50	20	A
WA4FIB	30	5	3	A
N6KV	34,506	243	71	Q
N2FQ	182	7	13	Q
N3ZZ	140,320	877	80	U
NI6T	133,280	833	80	U
K6XX	123,520	772	80	U
W6RQ	110,400	690	80	U
N6DE @K6GT	106,880	668	80	U
W6LD	106,492	674	79	U
N6TU	106,492	674	79	U
N6IP (K6XX, op @K6RB)	105,120	657	80	U
K6RB	103,680	648	80	U
NZ6K (K6RB, op)	101,278	641	79	U
N7MH (@N6XI)	99,040	619	80	U
WX5S (@W6CS)	95,360	596	80	U
W6FDU (N6DE, op)	87,840	549	80	U
AD6E	86,560	541	80	U
K6SU (K6UFO, op @W6YX)	76,472	484	79	U
ND2T	73,950	493	75	U
K6UFO	69,616	458	76	U
WJ6O (@K6GFJ)	68,160	426	80	U
K6III	64,160	401	80	U
W6CS	64,000	400	80	U
W6AMM (ND2T, op @K6GFJ)	62,342	427	73	U
N6XG	60,522	393	77	U
K6EP	53,920	337	80	U

K2RD	47,804	323	74	U
NW6P	36,680	262	70	U
W6SC	35,360	221	80	U
W6ZZZ	33,740	241	70	U
N6KJ	28,944	201	72	U
K6EU	14,520	121	60	U
W6OAT (+WA1QQK)				
	163,040	1019	80	M
W6YX (KJ9U, K6IF, ops)				
	137,618	871	79	M
N6RC (+WA6O)				
1	32,160	826	80	M
W6ISO (+WX5S)				
	100,320	627	80	M
AA6W (+NU6P)				
	12,220	130	47	M

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Alaska

KL7WV (W3YQ, op)				
	55,334	379	73	B
AL7B	14,796	137	54	A
KL7/N1TX	10,406	121	43	A
KL7J (+WL7SJ)				
	47,596	326	73	M

Arizona

W7ZR	127,040	794	80	B
KC7V	39,262	293	67	B
N7JXS	25,058	187	67	B
K7HP	102,542	649	79	A
W7ZMD	90,480	580	78	A
N7MAL	76,320	477	80	A
W7YS	76,320	477	80	A
AA7A	40,464	281	72	A
K7ZD	27,018	171	79	A
NN7A	22,378	167	67	A
W2HTX	6,478	79	41	A
K7TR	4,560	60	38	A
W6RLL	1,550	31	25	A
N7IR	98,280	630	78	Q
W0YHE	15,390	135	57	Q
K6LL	202,080	1263	80	U
W7SW	72,320	452	80	U
W7WW	50,666	329	77	U
K7UAZ (WY7W, KB7XL, N9ZXW, ops)				
	63,516	402	79	S

Eastern Washington

W7WMO	23,684	191	62	A
WA7LT	12,852	126	51	A
KC7ITP	11,220	102	55	A
K7EKM	7,224	84	43	A
K7MM	108,640	679	80	Q
W7GB	9,400	100	47	Q
K7OX	155,360	971	80	U
WA1PMA	13,860	90	77	U

Idaho

K0TO	133,984	848	79	B
AB7YB	69,108	443	78	A
KK7X	19,886	163	61	A
K7ARJ	10,098	99	51	A
K7TQ	37,654	281	67	Q

Montana

KS7T	63,992	421	76	B
K7ABV	50,076	321	78	B
K7BG	180,320	1127	80	A
W7LR	180	10	9	A
KL7FDQ	16,240	145	56	Q

Nevada

N7TR (N7ON, op)				
	174,720	1092	80	B
K7NV	109,956	714	77	B
K7AO	66,202	419	79	B
K7XC	44,104	298	74	A
AE7DX	14,520	132	55	A
WD7Y	1,102	29	19	Q
W7RN (W0YK, op @K5RC)				
	174,240	1089	80	U
K5RC	119,680	748	80	U
K7RC (K7NV, op)				
	100,172	634	79	U

Oregon

W7GG	156,160	976	80	B
W7HWR	40,880	280	73	B
K7GK (@K7ZSD)				
	170,400	1065	80	A
K4XU	163,040	1019	80	A
W7WHO	106,400	700	76	A
KI7Y	76,472	484	79	A
W3CP	41,180	290	71	A
NB7F	37,346	263	71	A
K7GT	34,914	253	69	A
AL7W	32,504	239	68	A
KR7X	22,912	179	64	A
AA7IH	21,888	171	64	A
K6UM	16,644	146	57	A
WA6PX	14,384	124	58	A
N7VS	13,208	127	52	A
N7OU	105,768	678	78	Q
N7JI	22,320	180	62	Q
K7PJT	14,560	140	52	Q
N0DA	5,200	65	40	Q

W7SIR (+N7HA)				
	46,324	313	74	M
N7TL (+WB7UFJ)				
	12,240	120	51	M

Utah

N5LZ	138,240	864	80	B
W7UT	165,760	1036	80	A
W7HS	2,322	43	27	A
NR7T	2,150	43	25	A
WA7LNW	74,080	463	80	Q
W7CT (+K5KG)				
	160,160	1001	80	M
N7BYU (AD7BN, op)				
	570	19	15	S

Western Washington

K7QQ	168,320	1052	80	B
N4SL	162,880	1018	80	B
W7LKG	100,800	630	80	B
W7VJ	76,812	519	74	B
N7BF	51,392	352	73	B
W7DPW	27,720	198	70	B
WG7X	16,638	141	59	B
N7DM	8,836	94	47	B
N7DOE	7,744	88	44	B
N7LOX	145,120	907	80	A
N7WA	125,268	803	78	A
W7TMT	72,534	471	77	A
K7HBN	71,136	456	78	A
K7WA	63,358	401	79	A
N7ZG	58,608	396	74	A
N7RVD	53,856	396	68	A
W7QN	47,278	307	77	A
KB7N	44,676	306	73	A
AB7RW	17,856	144	62	A
KU7T	17,670	155	57	A
W7POE	17,270	157	55	A
KN0WCW (N7EIE, op)				
	12,138	119	51	A
W6SGJ	11,832	87	68	A
KD7LJ	9,476	103	46	A
WA7ETH	5,680	71	40	A
WB7FJG	2	1	1	A
AC7MA	15,720	131	60	Q
KX7L	2,816	44	32	Q
K7NWS (AA7UA, AE7EE, KB7KYA, KB7OPQ, N7PWO, N7RVF, W7VXS, WA7QQK, WB7AEI)				
	39,744	276	72	M
W7CFR (+W7IST)				
	23,436	186	63	M

Wyoming

K7VU	123,840	774	80	A
W7CA	13,224	116	57	A
WC7S	9,494	101	47	Q
KO7X	174,400	1090	80	U

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Michigan

NU8Z	121,836	781	78	A
W8KW (W8UE, op)				
	116,160	726	80	A
K8IR	100,960	631	80	A
N8SS	95,116	602	79	A
K8SB	89,832	591	76	A
K8BZ	86,400	540	80	A
N8TC	73,120	457	80	A
N8MR	68,850	459	75	A
K8GT	61,560	405	76	A
W8RU	54,316	367	74	A
K8MW	49,454	313	79	A
WD8S	47,520	330	72	A
K8AAX	42,024	309	68	A
NX8K	40,600	290	70	A
N8IA	32,256	224	72	A
K8SAK	28,408	212	67	A
K8AE	28,288	221	64	A
W8EGI	25,476	193	66	A
N8HN	25,116	161	78	A
K8SIA	23,896	206	58	A
N8NX	23,364	198	59	A
K8MM	16,576	148	56	A
K8KHZ	16,320	136	60	A
K8MJZ	16,280	148	55	A
N8QGC	12,644	109	58	A
WA8FRD	11,800	118	50	A
WA8YPY	10,700	107	50	A
N8ZFH	9,476	103	46	A
N8KAM	5,688	79	36	A
AA8UU	5,208	62	42	A
K8RDJ	4,248	59	36	A
NF8M	2,744	49	28	A
WB8LZG	1,782	33	27	A
K8GVK	1,476	41	18	A
WA8VNE	71,100	474	75	Q
KT8K	60,344	397	76	Q
WA8RC	52,592	346	76	Q
WA8REI	35,632	262	68	Q
K8SSB	900	25	18	Q
KT8X	126,560	791	80	U
W4FMS	51,792	332	78	U
K8ZZ	40,176	279	72	U
K8NWD	35,088	258	68	U
W8JJ	34,272	252	68	U
K8CC	181,920	1138	80	M

K8JM (+ AC8W, K8DD, K8MV)				
	123,360	771	80	M
W8ZHO (NA8M, AB8SC, ops)				
	16,520	140	59	M
K8ITT (N8PPQ, op)				
	36,156	262	69	S

Ohio

K9NW	171,040	1069	80	B
K8AZ (K8MR, op)				
	70,650	471	75	B
K8MR	59,100	394	75	B
K9TM	54,000	375	72	B
N8IW	47,664	331	72	B
N8TR (K8MR, op)				
	43,608	316	69	B
W8CAR	138,566	877	79	A
K8BL	122,080	763	80	A
KV8Q	115,500	750	77	A
N8AA	109,652	694	79	A
AF8A	105,798	687	77	A
WB8RTJ	70,984	467	76	A
KF8HR	66,430	455	73	A
K8FH	66,044	418	79	A
K8EE	57,888	402	72	A
AC8E (K8MR, op)				
	56,940	390	73	A
WA8YRS	55,796	377	74	A
W8PN	47,400	316	75	A
W8IDM	46,472	314	74	A
W8DHG	46,008	324	71	A
N8CPA	42,750	285	75	A
WB8JUI	23,250	155	75	A
N8UW	22,348	151	74	A
KB8GAE	20,680	188	55	A
AF8C	17,584	157	56	A
W8FAX	16,714	137	61	A
W8EAR	13,230	135	49	A
NS8O	11,984	107	56	A
KF8UN	11,172	114	49	A
AD8P	11,024	106	52	A
NR8CW (WW8MM, op)				
	9,800	98	50	A
KT8Z	9,108	99	46	A
K8AB	8,272	94	44	A
KD8RB	4,028	53	38	A
K8VUS	1,920	40	24	A
WD8AJF	1,452	33	22	A
W8TM	81,158	527	77	Q
N8IE	72,072	468	77	Q
NN8UU (N8VW, op)				
	69,888	448	78	Q
W8VE	32,776	241	68	Q
NO8C	24,800	200	62	Q
NI8W	11,832	116	51	Q
N8WS	3,816	53	36	Q
N8BJQ	131,200	820	80	U
K8AJS	90,376	572	79	U
K8CI	48,984	314	78	U
K5ZG	12,880	115	56	U
W8TK (+K4LT)				
	141,094	893	79	M
W8EDU (W8WTS, W8RZ, ops)				
	113,120	707	80	M
W8FT (N8ET, AD8P, ops)				
	77,578	491	79	M
WC8VOA (W8CDA, W8ND, KB8ZYE, W8FEJ, AB8RF, ops)				
	20,296	172	59	M

West Virginia

N4ZR	135,876	871	78	B
K8JQ	122,276	794	77	B
K2UOP	60,680	410	74	B
N8II	34,638	251	69	A
KG8GW	20,280	169	60	A
W8DL	48,202	313	77	Q
W8ZA	35,668	241	74	U
KZ8E	3,600	50	36	U

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Illinois

K9DX	173,440	1084	80	B
K9YC	128,232	822	78	B
K9CC	127,204	826	77	B
N9TK	105,920	662	80	B
KG9X	89,544	574	78	B
W9YYG	78,386	509	77	B
W8LVN	77,184	536	72	B
W9ZV	58,776	372	79	B
AB9H	49,840	356	70	B
W3HDH	38,304	252	76	B
KG9N	19,600	175	56	B
N9LAH	882	21	21	B
K9UIY	135,248	856	79	A
K9QVB	128,640	804	80	A
N9JF	116,000	725	80	A
K9CS	112,160	701	80	A
WX9U	108,072	684	79	A
K2AAW	97,790	635	77	A
K9ZO	95,840	599	80	A
W9PZT	73,920	462	80	A
K9JE	64,896	416	78	A
W9YK	61,304	388	79	A
K9MMS	55,840	349	80	A
K9WA	50,820	330	77	A
K9FO	49,950	333	75	A
K9OZ	45,298	319	71	A

N9MSG	38,908	274	71	A
N9KO	38,836	266	73	A
W9SZ	33,534	243	69	A
W9OF	33,022	209	79	A
N9KHR	31,248	217	72	A
AA9D	28,928	226	64	A
N9IJ	27,738	201	69	A
W9RM	27,202	203	67	A
W9YS	26,134	179	73	A
W9VA	20,088	162	62	A
N9TF	17,168	148	58	A
N9UM	16,614	117	71	A
W9LYA	16,188	142	57	A
N9LGP	15,600	130	60	A
AK9F	15,312	132	58	A
K9AHH	14,592	128	57	A
K9CJ	13,872	136	51	A
N9NA	12,882	113	57	A
N9GH	11,856	114	52	A
N9AYH	9,350	85	55	A
WD9CIR	9,270	103	45	A
K9KM	7,392	84	44	A
W9IB	6,020	70	43	A
N9BT	4,760	70	34	A
KG9Z	2,900	50	29	A
AA9KH	19,584	153	64	Q
K9EW	2,736	38	36	Q
WB9MII	780	30	13	Q
W9VQ	420	21	10	Q
KI9A	143,622	909	79	U
K9MOT (N9EP, op)				
	124,960	781	80	U
W9CA (N9CO, op)				
	115,498	731	79	U
K9RS	78,080	488	80	U
K9UQN	69,762	453	77	U
K9NR	65,120	440	74	U
N2BJ	60,672	384	79	U
KM9M	60,040	395	76	U
K9PG	51,436	334	77	U
N9QQK	44,304	284	78	U
AA9NF	43,368	278	78	U
K9OR	39,216	258	76	U
N9IO	34,342	223	77	U
N9OH	21,024	144	73	U
WG9L	10,712	103	52	U
K9IR	8,800	88	50	U
WO9LF	4,224	64	33	U
K9JS	3,400	50	34	U
N9GUN	960	24	20	U
K9NS (K9HMB, K9PW, K9XW, KO9A, ops)				
	199,840	1249	80	M
W9DA (K9CG, W9YO, ops)				
	19,152	152	63	M
KK9DX (+N9BX)				
	6,956	74	47	M

Indiana

N9RV	209,120	1307	80	B
W9RE	176,160	1101	80	B
KE9I	163,520	1022	80	B
WT9U	116,130	735	79	B
KA9F	27,744	204	68	B
AJ9C	134,080	838	80	A
KJ9C	130,400	815	80	A
K1TN	62,012	419	74	A
K9JWI	60,150	401	75	A
N4TZ	50,204	326	77	A
K9BG	45,140	305	74	A
K9WJU (W9CG, op)				
	36,570	265	69	A
WA2USA	32,604	209	78	A
WC9C	24,150	161	75	A
N9SV	23,364	177	66	A
N9XO	21,744	151	72	A
WA1MKE	21,384	162	66	A
K9IG	17,052	174	49	A
KG9HG	15,312	132	58	A
W9CM	8,200	100	41	A
K9WWT	5,440	68	40	A
AD9T	4,420	65	34	Q
W9IU	129,244	818	79	U
K9WX	76,000	475	80	U
W9SN	21,684	139	78	U
K9MI	12,208	109	56	U
WN9O	7,650	75	51	U
KB9AX (+W9TN)				
	152,800	955	80	M

Wisconsin

N0IJ	149,136	956	78	B
W8LQ	120,276	771	78	B
K9BZ	108,960	681	80	B
W9ERW	23,322	169	69	B
N9CK	155,360	971	80	A
K0PJ	97,440	609	80	A
W9WUU	71,440	470	76	A
W9LO	70,500	470	75	A
KB9S	68,586	497	69	A
NE9U	66,720	417	80	A
W9KHH	37,650	251	75	A
KB9OWD	26,390	203	65	A
W9FBC	25,160	185	68	A
KB9YDI	15,008	134	56	A
K9KR	11,904	124	48	A
W9OA	9,152	104	44	A
W9XT	8,096	92	44	A
N9NE	100,962	639	79	Q

WI9WI	100,320	627	80	Q
WT9Q	76,752	492	78	Q
K9WIS	37,346	263	71	Q
WE9V	115,340	730	79	U
WA9IRV	58,800	392	75	U
N9FH	56,980	385	74	U
N9XX	45,430	295	77	U
K9OSH	41,040	270	76	U
KF9YR	32,648	212	77	U

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Colorado

WØUA	201,280	1258	80	B
WØRTT	99,840	624	80	B
KJØG	39,732	258	77	B
KØEU	183,680	1148	80	A
K1CBR	49,728	336	74	A
N1SZ	30,672	216	71	A
WBØDUL	30,624	232	66	A
WØCAR	13,000	125	52	A
WØKU	11,024	104	53	A
KØUK	1,924	37	26	A
WØETT	71,890	455	79	Q
NØSXX	50,516	346	73	Q
KRØU	38,482	271	71	Q
NØKE	23,182	173	67	Q
NØTK	9,588	94	51	Q
KCØATC	6,528	68	48	Q
WØZP	150,720	942	80	U
WØZA	128,856	826	78	U
KFØLA	16,000	100	80	U
WØMU (+WBØIWL)	90,324	579	78	M
WV7T (+KCØSXV, NØQJS, WØTLB, WØROE, KCØHIP,+ops)	16,470	135	61	M

Iowa

NØNI (AG9A, op)	212,480	1328	80	B
NØAC	102,804	659	78	B
NØYY	145,120	907	80	U
KØCF	57,564	369	78	A
KBØCRG	19,344	156	62	A
KEØFT	15,344	137	56	A
KBØSK	11,440	104	55	A
K6MJ	39,680	248	80	Q
WBØB	36,144	251	72	Q
K9IUA	11,550	105	55	Q
NUØQ	65,208	418	78	U
KØINR	29,388	186	79	U

Kansas

WØUY	59,752	388	77	B
KØVBU	81,276	521	78	A
NØQE	25,480	196	65	A
KØRY	24,240	202	60	A
WBØYJT	20,760	173	60	A
ABØTX	20,374	167	61	A
WØYRN	17,100	150	57	A
WN8P	15,568	139	56	A
KAØBHO	8,722	89	49	A
WØBH	135,680	848	80	U
ABØS (+KØWA WØNO)	165,742	1049	79	M

Minnesota

KØAD	151,680	960	79	B
KØHB	133,760	836	80	B
WØOR	132,444	849	78	B
KØCAT (K9WIE, op)	121,368	778	78	B
WØAA (WAØMHJ, op)	106,650	675	79	B
K4IU	49,104	341	72	B
NGØR	36,068	254	71	B
WØHW	33,810	245	69	B
NØSTL	23,040	180	64	B
KØVG	4,560	60	38	B
WØMN	3,108	42	37	B
NØAT (NØKK, op)	146,308	926	79	A
NAØN	145,044	918	79	A
WA2MNO	120,276	771	78	A
KMØO	117,600	735	80	A
KØOB	78,256	536	73	A
KØMPH	78,110	535	73	A
K3WT	72,270	495	73	A
WØPI	71,456	464	77	A
KSØT	54,316	367	74	A
NØBUI	52,256	368	71	A
WBØHCH	52,128	362	72	A
KØTT	51,800	350	74	A
NØIM	45,750	305	75	A
NØBM	34,000	250	68	A
KØKX	31,680	198	80	A
NØHJZ	30,498	221	69	A
NØFP	28,140	210	67	A
KØTG	27,694	227	61	A
KØIR	19,488	174	56	A
WAØWOV	16,380	117	70	A
WBØUKI	14,560	140	52	A
WAØRBW	12,200	122	50	A
KØKGS	10,192	98	52	A
NØOA	9,646	91	53	A
WAØOTO	8,528	104	41	A
KØQC	7,920	88	45	A
WAØBNX	2,666	43	31	A
NØUV	2,580	43	30	A
WBØTRA	1,440	30	24	A
KØSV	1,296	27	24	A
NØUR	102,542	649	79	Q
WØZQ	90,744	597	76	Q
KØPC	87,780	570	77	Q
KØUU	42,600	300	71	Q
KEØG	16,432	158	52	Q
KTØR	111,680	698	80	U
ACØW	42,900	286	75	U
WGØM	23,800	170	70	U
KEØL	1,218	29	21	U
KRØB (KSØT, AF9T, KØKP, ops)	128,480	803	80	M
KØJE (+KØJA)	56,980	370	77	M

Missouri

KU1CW	173,120	1082	80	B
WØTT	55,932	354	79	B
KØCA	12,084	106	57	A
KØJPL	11,552	76	76	A
KØLWV	9,400	100	47	A
WØYZZ	9,400	100	47	A
KAØP	4,736	64	37	A
K8QA	2,496	39	32	A
WØVD	80	8	5	A
W7FB	93,912	602	78	Q
NØSS	90,692	574	79	Q
WAØIYY	31,960	235	68	Q
AE9B	42,048	288	73	U
ABØRX	36,494	257	71	U
KBØVVT (+KØOU, KGØUS)	178,560	1116	80	M
KB5ENP (+KC8SDQ)	4,964	73	34	M

Nebraska

KØDI	180,000	1125	80	A
WØKT	62,456	422	74	A

North Dakota

WBØO	177,118	1121	79	B
KØVX	28,408	212	67	B
KEØA	8,924	97	46	A
NØUD	2,080	40	26	A

South Dakota

WØSD (WØDB, op)	195,200	1220	80	B
WDØT	178,240	1114	80	A
KEØZ	38,808	294	66	A
KØEWS	15,846	139	57	A
K7RE	99,684	639	78	Q
KØHW	50,268	354	71	U

Maritime-Newfoundland

VE1JF (W8MJ, op)	170,976	1096	78	B
VY2/AJ6V	140,088	898	78	B
VE1AI	75,306	489	77	B
VE1OP	92,746	587	79	A
VE1RGB	82,836	531	78	A
VE1AWP	79,156	514	77	A
VE1AOE	17,108	182	47	A
VE9DX	53,284	346	77	Q

Newfoundland-Labrador

VO1WIN (W1VE, op)	128,136	843	76	B
VO1HP	58,650	391	75	A
VO1HE	14,400	100	72	A
VO1TA	13,516	109	62	A

Quebec

VE2AWR	91,784	596	77	A
VE2UJ	78,150	521	75	A
VE2FFE	220	11	10	A
VE2OWL	32	4	4	A

Ontario

VE3CR	55,774	353	79	B
VA3EEA	48,326	331	73	B
VE3EJ	27,974	197	71	B
VE3DZ	129,402	819	79	A
VA3NR	107,914	683	79	A
VE3NE	93,694	593	79	A
VE3RZ	72,226	469	77	A
VE3XD	71,840	449	80	A
VE3GLO	61,146	387	79	A
VE3RCN	51,282	333	77	A
VE3IAY	50,616	333	76	A
VA3DX	49,138	311	79	A
VA3EC	33,370	235	71	A
VE3TW	8,256	86	48	A
VE3FU	160	10	8	A
VA3DF	53,200	350	76	Q
VE3LMS	12,138	119	51	Q
VE3GLA	7,872	96	41	Q
VE3RSA	7,500	75	50	Q
VA3JFF	722	19	19	Q

Manitoba

VE4VV	150,416	952	79	A

Saskatchewan

VE5SF	131,200	820	80	A
VE5UF	90,560	566	80	A
VE5AAD	55,796	377	74	A
VE5MX	49,558	349	71	A

Alberta

VE6EX	103,512	681	76	Q
VE6BMX	19,936	178	56	Q

British Columbia

VA7RR	192,602	1219	79	B
VE7XF	110,400	690	80	A
VE7YU	87,672	562	78	A
VE7NI	44,520	318	70	A
VA7LC	41,322	291	71	A
VE7CA	36,708	266	69	A
VE7JKZ	28,140	210	67	A
VE7IN	17,952	132	68	A
VA7CAB	3,008	47	32	A
VA7DER (VE6BIR, op)	37,522	257	73	Q
VA7MM	11,520	128	45	Q
VA7ST	89,920	562	80	U
VE7FO (+VE7VPU, VE7HAK, + ops)	64,622	409	79	M

Northern Territories

VY1JA	86,395	561	77	B

Checklogs

KR6DG, N2FQ, NU7T, W5WZ