

2004 ARRL RTTY Roundup Results

A regional look at a premier digital contest.

That was some fun! RTTY contests make you improve your equipment, your operating skills, and yes, you still get bloodshot eyeballs and painful cramps in your shoulders.

This year's propagation dictates that the results be examined on a regional basis. What we saw on the bands in the Pacific Northwest was much different from the picture in the Northeast or Southeast. All 50 States plus DC were available in fairly easy supply this time for those chasing the RTTY WAS award. Even North Dakota became a hot spot with NW0L melting the ice off the antennas.

Interest in the Roundup increased again with 22% more logs submitted over last year. This increase makes it an all-time high of 910 logs received. The RTTY community obviously loves this contest.

DX Perspective

DX contest entries help to make the Roundup very interesting. European DX usually starts the contest on the low bands. ZX2B operated by Wanderly, PY2MNL, took the honors in the Low Power division, setting a new DX Low Power record. He was followed in the standings by Mark, P4/K6UFO, and Mohamed, CN8KD. HI3TEJ, 9A3ZI, FK8HN and OK2CLW also had high scores. High Power Single Operator honors went to Nikola, 9A5W, in a tight race with KH7X operated by Mike, KH6ND. ON4GG, S54E, EO6F (UX0FF, op) and LX9SW (LX1RQ, op) stood next in line.

Repeating in the Low Power Multioperator class again this year was the KP2D crew, followed by LU5EML, then Europe represented by IK1TWC, UT0H and F6FJE. The Japanese were led by JM1NKT.

High Power Multi was won this year by MW2I followed by UZ4E and SP5ZCC.

National W/VE Perspective

The competition for the W/VE categories boiled down to a couple of runaway wins and a couple of interesting races.

Don, AA5AU, has been long recognized as a dominant force in this event. And in 2004, his dominance continued, as he won the Single Operator Low Power category for the 13th time in the 16 RTTY Roundups. Steve, N9CK, edged out Tom, WX4TM, by fewer than 4000 points for runner-up honors. Rick, KI1G, was another repeat winner in the W/VE national scene as he easily outdistanced a valiant effort by runner-up George, W1ZT, in the Single Operator High Power category.

The Multioperator categories showed much closer competition. In Low Power, the stalwarts of N2WK fought back a stiff challenge from K4WW for top honors. The crew at K9NS brought home the High Power title, beating the W4RM effort by about 15,000 points.

Regional Highlights

Northeast Region

Propagation favored New England again this year. They had the advantage of the great stateside rate coupled with the big European runs on 10 and 15 meters. When the A and K rose during the rest period the contest was over for most of the rest of the guys and gals. The 1200Z slot, when the East Coast owns Europe, again gave the East Coast the edge in the contest. Rick, KI1G, repeated as the High Power winner, soundly defeating George, W1ZT, who burned up his amplifier during the contest. May, WA1EHK, notched the Single Operator Low category. The N2WK crew took the Low Power Multi and W2YC the High Power category.

Southeast Region

From the warmer parts of the country Bob, N4BP, took the Southeast Region Single Operator High Power victory from Florida while Don, AA5AU, repeated as the contest Low Power winner again this year. K4MM took the Multi Low Power setting a new Southeastern Division record. The guys from Virginia took the W4RM call to victory in the High Power

Multi category setting a new Roanoke Division record.

Central Region

The Central Region saw Steve, N9CK, repeat as winner in the Single Operator Low Power category. Another Steve, AI9T, and took the honors in the region in the High Power. My old buddy from Kentucky, Shelby, K4WW, along with his packet

Top Ten Scores

Single Operator	Multioperator
W/VE—Low Power	W/VE—Low Power
AA5AU 211,932	N2WK 104,082
N9CK 124,696	K4WW 100,687
WX4TM 120,922	W6OAT 97,092
AD6WL 100,492	N5TW 92,820
KC4HW 97,002	K4MM 89,650
N0AT 91,758	N5ZM 82,818
KR6E 83,622	WS7I 81,627
W0LSD 83,340	KG0QG 64,792
WA1EHK 78,960	W5VZF 62,112
K9MUG 77,518	KO0Z 59,605

W/VE—High Power

KI1G 230,656	K9NS 174,225
W1ZT 167,343	W4RM 159,408
W7WW 133,734	W6YX 149,295
AI9T 133,634	N8NR 134,780
N4BP 133,001	W7RN 129,164
K3MM 124,584	AB5K 118,107
WSAP 124,300	KJ7TH 108,252
W0YK 123,578	KE7AJ 103,828
WA2ETU 122,304	W0MA 103,576
W4UK 118,899	NW0L 100,485

DX—Low Power

ZX2B 133,400 (PY2MNL, op)	KP2D 88,504
P4/K6UFO 95,546	LU5EML 57,123
CN8KD 75,499	IK1TWC 42,480
9A3ZI 57,800	UT0H 34,968
FK8HN 57,521	F6FJE 25,530
OK2CLW 57,421	JM1NKT 23,450
LZ9R 56,640 (LZ3YY, op)	UR4CU 8,528
YV5AAC 56,232	RU6MM 6,118
G0MTN 56,112	MM0BQI 4,932
S57NRO 54,201	UA0LKD 4,374

DX—High Power

MW2I 106,182	UZ4E 70,616
SP5ZCC 51,744	DL4MFP 48,024
KH7X 140,154 (KH6ND, op)	OH4RH 44,712
ON4GG 134,328	JA1BWA 37,228
S54E 121,220	OL5Q 28,548
EO6F 119,325 (UX0FF, op)	OH2K 11,858
LX9SW 97,515 (LX1RQ, op)	KL7CQ 9,331
OH2BP 80,100	SV1XV 3,483
EA1AKS 74,195	
F6IRF 70,798	
CX7BY 64,263	

Region Leaders

The tables list call sign, score, class (S = Single Operator, M = Multioperator) and power (A = Low Power, B = High Power).

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)			
WA1EHK	78,960	S	A	AA5AU	211,932	S	A	N9CK	124,696	S	A	N0AT	91,758	S	A	AD6WL	100,492	S	A
N1MGO	74,800	S	A	WX4TM	120,922	S	A	W4LC	74,134	S	A	W0LSD	83,340	S	A	KR6E	83,622	S	A
N2DBI	73,790	S	A	KC4HW	97,002	S	A	N8IS	63,936	S	A	KE5OG	74,733	S	A	N6QJ	68,450	S	A
K1PY	73,098	S	A	K9MUG	77,518	S	A	K8IR	57,120	S	A	KT0DX	68,809	S	A	W7LD	56,376	S	A
W1ECT	72,556	S	A	AD4EB	71,070	S	A	W8UL	55,936	S	A	NA5U	66,352	S	A	N7UVH	54,568	S	A
K1IG	230,656	S	B	N4BP	133,001	S	B	AI9T	133,634	S	B	W5AP	124,300	S	B	W7WW	133,734	S	B
W1ZT	167,343	S	B	W4UK	118,899	S	B	VE3NZ	113,848	S	B	K5AM	117,312	S	B	W0YK	123,578	S	B
K3MM	124,584	S	B	N2XD	103,550	S	B	KE9S	94,605	S	B	N5TY	94,905	S	B	WX5S	110,344	S	B
WA2ETU	122,304	S	B	N5PA	91,665	S	B	AB8K	94,160	S	B	W0HW	62,775	S	B	(@N6RO)			
AC1O	115,881	S	B	W4GKM	90,825	S	B	K3GP	84,802	S	B	VE5CPU	61,390	S	B	WK6L	105,696	S	B
N2WK	104,082	M	A	K4MM	89,650	M	A	K4WW	100,687	M	A	N5TW	92,820	M	A	W6OAT	97,092	M	A
N3XLS	45,346	M	A	N5ZM	82,818	M	A	N8LRG	57,321	M	A	KG0QG	64,792	M	A	WS7I	81,627	M	A
KD6NA	23,550	M	A	W5VZF	62,112	M	A	K8VT	40,764	M	A	KOOZ	59,605	M	A	N7PWZ	37,060	M	A
N3RN	19,760	M	A	WC4DC	33,939	M	A	K9OSH	3,080	M	A	WV7T	3,534	M	A	WA6OEC	23,870	M	A
WB3LGC	12,934	M	A									K6OWL					19,278	M	A
W2YC	35,604	M	B	W4RM	159,408	M	B	K9NS	174,225	M	B	AB5K	118,107	M	B	W6YX	149,295	M	B
W3FV	21,528	M	B	K3KO	69,328	M	B	N8NR	134,780	M	B	W0MA	103,576	M	B	W7RN	129,164	M	B
				W4NF	47,094	M	B	KE4YVD	77,100	M	B	NW0L	100,485	M	B	KJ7TH	108,252	M	B
				AA4V	32,676	M	B	N2BJ	56,112	M	B	K0KO	85,540	M	B	KE7AJ	103,828	M	B
								WT8C	53,606	M	B	KD0S	74,424	M	B	N6RC	82,710	M	B

helpers repeated as Low Power Multi winner. The top-notch crew at K9NS was down nearly 50,000 points from 2003 but still managed to take the overall honors in the Multioperator High Power class. Finally, a new Division Record was set in the Great Lakes by the crew at N8NR.

Midwest Region

Ron, N0AT, dug out of the cold Minnesota winter to win the Low Power honors in the Single Operator class. Jim, W5AP, in Texas took High Power. Setting a new West Gulf Division record and winning Low Power Multioperator was N5TW. AB5K won the High Power Multi class.

West Coast Region

The West Coast region covers a huge area and its length causes propagation in the northern part to be vastly different from the southern end. 2004 saw a real lack of openings on any of the high bands into Europe. Yet the Northern California Contest Club guys were out in force and competed very well.

This region had new division records fall in its Southwestern Division as Jim, AD6WL, set a new Single Operator Low Power record. Despite missing only DC and DE multipliers, Ed, W0YK, set a new Single Operator High Power record for the Pacific Division. The W6YX crew set a new Multioperator High Power record. And up in the Northwestern Division Lamar, WA7LT, and WS7I managed a new Multi Low Power record.

David, W7WW, who has been perfecting his SO2R "stuff" won the High Power Single Operator and Rusty, W6OAT, used packet as his second operator to win the Low Power Multi for the region.

Club Competition Results

Medium Club	No.	Score
Northern California Contest Club	35	1,439,443
Potomac Valley Radio Club	16	826,158
Society of Midwest Contesters	14	562,788
Tennessee Contest Group	15	512,040
Florida Contest Group	7	441,171
Minnesota Wireless Assn	10	366,882
Central Texas DX and Contest Club	6	327,370
Contest Club Ontario	8	279,753
Yankee Clipper Contest Club	6	275,514
Frankford Radio Club	9	245,422
Rochester (NY) DX Assn	3	180,820
North Texas Contest Club	3	172,756
Southern California Contest Club	3	161,920
Willamette Valley DX Club	3	142,644
Mad River Radio Club	6	112,053
Carolina DX Assn	4	84,318
Western Washington DX Club	3	41,483
South East Contest Club	3	29,690
Local Club	#	Score
Dauberville DX Assn	3	125,534
Boeing Employees ARS - St. Louis	3	112,738
Columbia-Montour ARC	3	92,431
Sterling Park ARC	3	12,662

Canada

Only two Canadian Multioperator entries were received, but boy did they stage a battle! When the smoke had cleared, the VE3FJB team emerged with a victory over the VE6AO operators by a mere 130 points.

Andy, VE9DX, made off with top honors in the Single Operator Low Power category. Not too far off his heels was a spirited battle between Paul, VA3PC, who edged Richard, VE3IAY, by only 421 points for second place. The final Canadian champion was George, VE3NZ, who fairly easily outdistanced runner-up Scott, VE1OP, in the Single Operator High Power contest.

Affiliated Club Competition

When the RTTY reflector announced a test, run the Friday night before the contest, I knew that there was serious interest

in the Contest Club competition. Kudos to the NCCC for setting up the test run. The club's reflector listed a series of RTTY tips and a team of RTTY operators worked personally with club members to bring them up for the contest. At least one club meeting included a RTTY presentation.

The Northern California Contest Club defeated the Potomac Valley Radio Club in the Medium Club category. On the local level, the Dauberville DX Association beat out the Columbia-Montour ARC for local club pride. Remember that the club rules require three entries for a club to be recognized.

Short & Crisp

Higher rate requires shorter messages. Use short and crisp exchanges for higher efficiency. Many operators send their call twice while in the Search and Pounce mode. Everyone has removed the K from the end of nearly all messages. An exception to "short and crisp" is the need for carriage returns and spaces to make your exchange pop out on the receiving station's screen.

The quality of RTTY operators in the ARRL RTTY Roundup gets better every year. Congratulations all around!

Next Year

Spirited club competition is bound to increase. Can the NCCC continue to beat out the PVRC? Will AA5AU move to High Power for the first time? Will the next winner exceed 2000 contacts? Use the rest of the year to plan strategy for the next Roundup. 2005 is unique as January 1 falls on the first weekend and RTTY Roundup moves to the second weekend. January 8-9 will be the contest dates.



Scores

Scores are listed by DXCC Countries and ARRL\RAC Sections. Line scores list call sign, score, QSOs, multipliers, Single or Multioperator, and power (A = Low Power, B = High Power).

Africa												Europe														
Morocco	CN8KD	75,499	733	103	S	A	Croatia	9A3ZI	57,800	680	85	S	A	Hungary	HA1DAE	23,168	362	64	S	S	B	ON5UE	17,577	279	63	S
Antarctica	Antarctica	DP1POL (DL5XL, op)	3,200	80	40	S	B	9A7P (9A5AEI, op)	33,668	443	76	S	A	HA2MV	24,192	384	63	S	S	B	ON5WC	11,008	256	43	S	
Antarctica	Antarctica	DP1POL (DL5XL, op)	3,200	80	40	S	B	9A6DM	11,088	198	56	S	A	HA3OU	14,504	259	56	S	S	B	ON7CFZ	6,624	144	46	S	
Asia	Azerbaijan	4K6DI	3,706	109	34	S	A	9A5W	152,964	1214	126	S	B	Switzerland	HB9BTI	20,658	313	66	S	A	D	ON6LEO	2,442	74	33	S
Asia	Azerbaijan	CT1AOZ	11,407	187	61	S	A	Portugal	HB9DBK	12,096	216	56	S	A	HB9DTM	13,464	198	68	S	A	OZ9GA	40,922	553	74	S	
Cyprus	Cyprus	Fed. Rep. of Germany	DA0BCC (DL9NEI, op)	33,799	463	73	S	A	Italy	IV3WMS	25,256	328	77	S	A	I	I	ON4GG	134,328	1158	116	S				
Oman	A45WD (YO9HP, op)	5B4AHA	18,350	367	50	S	B	DL4RCK	25,350	338	75	S	A	I	I	I	PA3FGJ	20,670	318	65	S					
Oman	A45WD (YO9HP, op)	42,742	602	71	S	A	DL1ZBO	22,892	388	59	S	A	I	I	I	PA0LSK	10,422	193	54	S						
China	B3CE	306	51	6	S	A	DG8LAV	19,154	314	61	S	A	I	I	I	PA3BFH	10,044	186	54	S						
South Korea	DS5KJR	4,950	225	22	S	A	DL1ARJ	12,604	274	46	S	A	I	I	I	PA3CDN	6,783	133	51	S						
South Korea	HL3AHQ	816	68	12	S	A	DL1KUR	5,969	127	47	S	A	I	I	I	PA3HGF	1,035	45	23	S						
Thailand	HS1PDY	4,480	128	35	S	A	DL9DXP	3,780	90	42	S	A	I	I	I	PA5O	180	18	10	S						
Japan	JA7EMH	14,460	241	60	S	A	DK2TG	3,034	74	41	S	A	I	I	I	PA0FAW	117	13	9	S						
Japan	JA1BNW	13,091	247	53	S	A	DL1DWT	2,730	91	30	S	A	I	I	I	PA3EW	12,322	202	61	S						
Japan	JA5WQ	11,312	202	56	S	A	DL5JWL	476	28	17	S	A	I	I	I	PA54E	121,220	1045	116	S						
Spain	JA4EZA	10,065	183	55	S	A	DF8AA	6,480	135	48	S	B	I	I	I	SB6BSK	19,719	313	63	S						
Spain	JA1XRH	9,843	193	51	S	A	DL6FY	2,528	79	32	S	B	I	I	I	SM4XIG	7,098	182	39	S						
Spain	JA2CXY	8,510	185	46	S	A	DL4MFP (+packet)	48,024	552	87	M	B	I	I	I	SM4RIK	6,594	157	42	S						
Spain	JA1BHK	7,314	159	46	S	A	LA7CWA	4,418	94	47	S	A	I	I	I	SM7BJW	6,194	163	38	S						
Spain	JA2BY	7,268	158	46	S	A	EA3NO	2,482	73	34	S	A	I	I	I	SM7ATL	3,036	92	33	S						
Spain	JA3RJY	6,150	150	41	S	A	EA3C3EE	1,647	61	27	S	A	I	I	I	SO6A (SP6IHE, op)	2,340	78	30	S						
Spain	JA2KCY	4,141	101	41	S	A	EA5ME	1,392	48	29	S	A	I	I	I	SM6CRM	2,052	57	36	S						
Spain	JA1EKK	3,404	92	37	S	A	EA4BNQ	1,218	42	29	S	A	I	I	I	SM5UFB	1,344	56	24	S						
Spain	JA5ENO	3,145	85	37	S	A	EA1AKS	74,195	781	95	S	B	I	I	I	SM4XIH	714	34	21	S						
Spain	JA6JCR	2,783	121	23	S	A	EA5FID	32,108	349	92	S	B	I	I	I	SM4RGD	56,871	639	89	S						
Spain	JA1TUX	2,295	85	27	S	A	ES1QV	17,328	304	57	S	A	I	I	I	TS2E (SM2DMU, op)	47,616	512	93	S						
Spain	JA8EIJU	2,220	111	20	S	A	ES4MM	14,768	284	52	S	A	I	I	I	TS3A (SM3CER, op)	31,509	389	81	S						
Ireland	JG1GGU	1,971	73	27	S	A	EW1CQ	51,440	643	80	S	A	I	I	I	SM6WQB	11,250	250	45	S						
Estonia	JH1TUX	620	31	20	S	A	EW7AW	966	46	21	S	A	I	I	I	Poland	PO6A (SP6IHE, op)	27,676	407	68	S					
Moldova	JH2IPK	390	30	13	S	A	F6AJR	12,690	282	45	S	A	I	I	I	SO5RK	17,272	254	68	S						
Estonia	JM1CKW	348	29	12	S	A	F6AJR	4,896	102	48	S	B	I	I	I	SN7NRO	55,201	623	87	S						
Estonia	JM1XPU	161	23	7	S	A	F6AJR	51,440	643	80	S	A	I	I	I	SM7NMA	39,976	526	76	S						
Estonia	JQ1AHZ	104	13	8	S	A	F6AJR	17,199	273	63	S	A	I	I	I	SO54E	11,760	210	56	S						
Estonia	JJ1BDX	9	3	3	S	A	F6AJR	966	46	21	S	A	I	I	I	SB6BSK	19,719	313	63	S						
Estonia	JJ7IC	33,669	387	87	S	B	F6AJR	4,896	102	48	S	B	I	I	I	SM4XIG	7,098	182	39	S						
Estonia	JM1LPN	28,329	399	71	S	B	F6AJR	51,440	643	80	S	A	I	I	I	SM4RIK	6,594	157	42	S						
Estonia	JM1XPU	26,909	379	71	S	B	F6AJR	17,199	273	63	S	A	I	I	I	SM7BJW	6,194	163	38	S						
Belarus	JM6ZPR (JH6JSR, op)	24,765	381	65	S	B	F6AJR	3,622	112	49	S	B	I	I	I	SM7ATL	3,036	92	33	S						
Belarus	JM6ZPR (JH6JSR, op)	24,765	381	65	S	B	F6AJR	22,440	264	85	S	A	I	I	I	SO4CJA	9,212	188	49	S						
Belarus	JM6ZPR (JH6JSR, op)	24,765	381	65	S	B	F6AJR	11,760	296	60	S	A	I	I	I	SO6FHP	8,100	225	36	S						
France	JF1PKJ	21,080	340	62	S	B	F6AJR	4,212	117	36	S	A	I	I	I	SO3HC	7,956	153	52	S						
France	JE1GMM	14,941	223	67	S	B	F6AJR	940	47	20	S	A	I	I	I	SP6EKS	8,100	220	58	S						
France	JF2SVM	14,760	246	60	S	B	F6AJR	70,798	778	91	S	B	I	I	I	SP5KPB	49,966	581	86	S						
France	JF2SVM	13,184	206	64	S	B	F6AJR	11,387	193	59	S	B	I	I	I	SP5ZCC (+SO5WPQ, SO5IRO, SP5HNK, SP5UAF)	51,744	588	88	M						
France	JM1OYN	9,331	217	43	S	B	F6AJR	25,530	370	69	M	A	I	I	I	TF3AO	4,968	108	46	S						
France	JN1BMX	8,330	170	49	S	B	F6AJR	3,040	80	38	S	A	I	I	I	Greece	SV1DPI	21,087	297	71	S					
France	JR1NHD	5,402	146	37	S	B	F6AJR	5,100	146	35	S	A	I	I	I	SV1CAX	15,453	303	51	S						
France	JH2BTM	1,674	54	31	S	B	F6AJR	4,488	132	34	S	A	I	I	I	SV1DPP	13,624	262	52	S						
France	JR1VAY	432	27	16	S	B	F6AJR	4,366	118	37	S	A	I	I	I	SV1CIB	10,120	184	55	S						
France	JM1NKT (+packet)	23,450	335	70	M	A	F6AJR	3,162	93	34	S	A	I	I	I	SV2AEL	16,988	274	62	S						
France	JF2SKV (+packet)	1,360	68	20	M	A	F6AJR	3,040	80	38	S	A	I	I	I	SV1XV (+packet)	3,483	81	43	M						
France	JA1BWA (+packet)	37,228	454	82	M	B	F6AJR	5,392	449	80	S	A	I	I	I	European Russia	UA4FCO	33,573	589	57	S					
Asiatic Russia	RA9MJ	13,662	297	46	S	A	F6AJR	5,048	174	52	S	A	I	I	I	UA3SAQ	33,350	575	58	S						
Asiatic Russia	UA9TO	11,562	282	41	S	A	F6AJR	5,805	129	45	S	A	I	I	I	UA4LEO	24,576	384	64	S						
Asiatic Russia	UA9LAU	9,553	233	41	S	A	F6AJR	4,404	70	22	S	A	I	I	I	UA6XIS	24,070	415	58	S						
Asiatic Russia	UA0LKD	4,374	162	27	S	A	F6AJR	20,274	327	62	S	B	I	I	I	RZ6AEW	23,055	435	53	S						
Asiatic Russia	RX9FG	4,248	118	36	S	A	F6AJR	6,042	114	53	S	B	I	I	I	RW4WZ	22,935	417	55	S						
Asiatic Russia	RA9XF	3,978	117	34	S	A	F6AJR	4,932	137	36	M	A	I	I	I	RV3QX	22,230	390	57	S						
Northern Ireland	GI0NWG	2,808	104	27	S	A	F6AJR	6,042	114	53	S	B	I	I	I	RA4CTR	17,712	369	48	S						
Northern Ireland	GI0NWG	2,808	104	27	S	A	F6AJR	4,932	137	36	M	A	I	I	I	UA4FX	14,805	329	45	S						
Scotland	MM0LVR	990	45	22	S	A	F6AJR	612	36	17	S	A	I	I	I	UA3SAQ	33,350	575	58	S						
Scotland	MM0BQI (+packet)	700	70	10	S	A	F6AJR	4,932	137	36	M	A	I	I	I	UA4LEO	24,576	384	64	S						
Guernsey	UA9OVS	144	16	9	S	A	F6AJR	15,631	319	49	S	B	I	I	I	UA6XIS	24,070	415	58	S						
Guernsey	UA0AZ	7,560	189	40	S	B	F6AJR	319	20	0	S	B	I	I	I	RZ6AEW	23,055	435	53	S						
Guernsey	UA9KG	319	20	0	S	B	F6AJR	106,182	1041	102	M	B	I	I	I	RA4CTR	17,712	369	48	S						
Kazakhstan	UP6P	35,620	548	65	S	A	F6AJR	6,806	166	41	S	A	I	I	I	UA4FX	14,805	329	45	S						
Hong Kong	VR2BG	12,144	276	44	S	B	F6AJR	1,612	62	26	S	A	I	I	I	UA3SAQ	33,350	575	58	S						
Hong Kong	VR2BG	12,144	276	44	S	B	F6AJR	6,806	166	41	S	A	I	I	I	UA4LEO	24,576	384	64	S						
Hong Kong	VR2BG	12,144	276	44	S	B	F6AJR	1,612	62	26	S	A	I	I	I	UA6XIS	24,070	415	58	S						
Hong Kong	VR2BG	12,144	276	44	S	B	F6AJR	6,806	166	41	S	A	I	I	I	RZ6AEW	23,055	435	53	S						
Hong Kong	VR2BG	12,144	276	44	S	B	F6AJR	1,612	62	26	S	A	I	I	I	RA4CTR	17,712	369	48	S						
Hong Kong	VR2BG	12,144	276	44	S	B	F6AJR	6,806	166	41	S	A	I	I	I	UA4FX	14,805	329	45	S						
Hong Kong	VR2BG	12,144	276	44	S	B	F6AJR	1,612	62	26	S	A	I	I	I	UA3SAQ	33,350	575	58	S						
Hong Kong	VR2BG	12,144	276	44	S	B	F6AJR	6,806	166	41	S	A	I	I	I	UA4LEO	24,576	384	64	S						
Hong Kong	VR2BG	12,144	276	44	S	B	F6AJR	1,612	62	26	S	A	I	I	I	UA6XIS	24,070	415	58	S						
Hong Kong	VR2BG	12,144	276	44	S	B	F6AJR	6,806	166	41	S	A	I	I	I	RZ6										

RD3DK	2,277	69	33	S	A	Australia	VK4UC	13,802	206	67	S	A	W2YC (+packet)	35,604	414	86	M	B	N4QVM	7,809	137	57	S	A								
RV3IC	1,904	68	28	S	A	VK6GOM	10,050	201	50	S	S	B	Western New York				N14S	273	21	13	S	A										
RW4NH	851	37	23	S	A	Indonesia	YC2ECG	8,370	186	45	S	A	N4CW	73,944	711	104	S	S	K4MA	20,046	257	78	S	B								
RV3APM	690	30	23	S	A	YC2MM	YB0WWW	6,327	171	37	S	A	K4YL	17,136	252	68	S	B	K3KO (+packet)	69,328	619	112	M	B								
RA3TT	20,460	310	66	S	B	YC3MM	1,944	81	24	S	S	A	Northern Florida				KE1F	27,280	341	80	S	A										
RK6BZ	19,355	395	49	S	B	YF0ANA	1,008	48	21	S	S	A	W4NFB	2,914	62	47	S	A	W9INA	16	4	4	S	A								
RN1AO	10,350	207	50	S	B	YB2DGR	6,794	158	43	S	S	B	W7QF	8,680	155	56	S	B	South Carolina													
RV1CC	2,546	67	38	S	B	New Zealand	ZL2BR	19,500	260	75	S	A	N4AOE	9,918	171	58	S	A	W4VE3XD	14,874	201	74	S	B								
RF4R(UA4RC,op)-5	-1	5	S	B	ZL2AMI	56,240	592	95	S	S	B	K1CRS	8,437	143	59	S	A	KB3L	169	13	13	S	A									
RU6MM (+packet)	6,118	133	46	M	A	South America	N2DBI	73,790	785	94	S	A	W4UK	118,899	1201	99	S	B	N2XD	103,550	950	109	S	B								
Ukraine	UW5U (UY2UA, op)	51,898	674	77	S	A	Uruguay	CX7BY	64,263	691	93	S	B	K0COP	7,134	123	58	S	B	AA4V(+packet)	32,676	389	84	M	B							
UZ7HO	31,490	470	67	S	A	Argentina	L11D (LU4DJC, op)	11,505	177	65	S	A	Southern Florida				KC4HW	97,002	951	102	S	A	WB3LGC (+loggers)	12,934	223	58	M	A				
UY2ZA	9,000	200	45	S	A	ZX2B (PY2MNL, op)	6,069	119	51	S	B	WT5L	24,864	336	74	S	A	W4OXB	104,082	913	114	M	A	W4XJ	14,442	249	58	S	B			
UR3PA	7,120	178	40	S	A	PY3OL	133,400	1160	115	S	A	W44EB	71,070	690	103	S	A	AF4RK	8,722	178	49	S	B	W4WZ	14,874	201	74	S	B			
UT5UKY	6,400	160	40	S	A	PV8AZ	12,296	212	58	S	A	W4MM (+W4IX)	89,650	815	110	M	A	W4XJ	12,934	223	58	M	A	W4XJ	12,934	223	58	M	A			
UT4ZX	4,700	100	47	S	A	PT2BW	7,245	115	63	S	A	W4XJ	19,602	297	66	S	A	W4XJ	14,874	201	74	S	B	W4XJ	12,934	223	58	M	A			
UR5FAV	3,103	107	29	S	A	PY2NA	8,151	143	57	S	A	W4XJ	14,892	219	68	S	A	W4XJ	12,934	223	58	M	A	W4XJ	12,934	223	58	M	A			
UX1IL	3,038	98	31	S	A	PY2SRB	5,166	123	42	S	A	W4XJ	21,070	690	103	S	A	W4XJ	14,874	201	74	S	B	W4XJ	12,934	223	58	M	A			
UR8QR	448	32	14	S	A	PR7AR	2,847	73	39	S	A	W4XJ	24,864	336	74	S	A	W4XJ	14,874	201	74	S	B	W4XJ	12,934	223	58	M	A			
UX1HW	300	20	15	S	A	WB8IMY	600	30	20	S	A	W4XJ	24,864	336	74	S	A	W4XJ	14,874	201	74	S	B	W4XJ	12,934	223	58	M	A			
EO6F (UX0FF, op)	119,325	1075	111	S	B	Venezuela	YV5AAX	56,232	568	99	S	A	W4XJ	24,864	336	74	S	A	W4XJ	14,874	201	74	S	B	W4XJ	12,934	223	58	M	A		
UZ7U (UT3UA, op)	52,359	563	93	S	B	Aruba	P4/K6UFO	95,546	1111	86	S	A	W4XJ	14,892	219	68	S	A	W4XJ	12,934	223	58	M	A	W4XJ	12,934	223	58	M	A		
UR5WCQ	45,288	612	74	S	B	Brazil	W3MEL	62,500	625	100	S	A	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	M	A	W4XJ	12,934	223	58	M	A		
UT2AU	22,100	425	52	S	B	K3QIA	56,515	635	89	S	S	A	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	M	A	W4XJ	12,934	223	58	M	A		
UT5EPP	13,938	303	46	S	B	W4XJ	54,400	544	100	S	S	A	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	M	A	W4XJ	12,934	223	58	M	A		
UT8EL	7,476	178	42	S	B	W4XJ	51,852	552	83	S	S	A	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	M	A	W4XJ	12,934	223	58	M	A		
UT0H (UT1HT, +loggers)	34,968	564	62	M	A	W4XJ	510	30	17	S	S	A	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	M	A	W4XJ	12,934	223	58	M	A		
UR4CU (+packet)	8,528	208	41	M	A	WB3LGC (+loggers)	57,123	577	99	M	A	W4XJ	12,934	223	58	M	A	W4XJ	12,934	223	58	M	A	W4XJ	12,934	223	58	M	A			
UZ4E (UR7EU, US-E-601, ops)	70,616	776	91	M	B	Latvia	KN3JX	13,206	213	62	S	A	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	M	A	W4XJ	12,934	223	58	M	A		
Latvia	YL2NN	21,720	362	60	S	A	United States	KN3NC	408	24	17	S	A	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	M	A	
YL3FW	14,161	289	49	S	A	Connecticut	W3TS	87,670	797	110	S	S	B	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	M	A	
YL2KF	779	41	19	S	A	Delaware	W3TSA	34,782	374	93	S	S	B	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	M	A	
YL2LY	43,292	548	79	S	B	Arkansas	W3TCA	24,825	331	75	S	S	B	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	M	A	
YL7A	32,560	440	74	S	B	Alabama	KD3TB	19,425	259	75	S	S	B	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	M	A	
YL2CI	24,255	441	55	S	B	Mississippi	KD3TP	10,241	209	49	S	S	B	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	M	A	
Romania	YO3III	3,052	109	28	S	A	Eastern Massachusetts	KD3TR	12,241	209	49	S	S	B	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	M	A
YO4CVV	1,776	74	24	S	A	Eastern Massachusetts	W3TCA	19,425	259	75	S	S	B	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	M	A	
YO7ARY	832	52	16	S	A	Massachusetts	W3TCA	19,760	260	76	M	A	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	M	A		
YO2RR	22,528	352	64	S	B	W3ZGD (AD3E, K3ZX, ops)	W3TCA	31,509	389	81	S	S	B	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	S	A	W4XJ	12,934	223	58	M	A	
Serbia and Montenegro	YU7AM	54,180	602	90	S	A	New Hampshire	W3TCA	45,346	574	79	M	A	W3FV (+packet)	9,434	178	53	M	A	W3FV (+packet)	21,528	276	78	M	B	W3FV (+packet)	21,528	276	78	M	B	
YU1KT	18,720	312	60	S	A	Alaska	W4LWS	37,840	440	86	S	A	W3FV (+packet)	9,434	178	53	M	A	W3FV (+packet)	21,528	276	78	M	B	W3FV (+packet)	21,528	276	78	M	B		
YU7AE	33,440	418	80	S	B	Alaska	W4LWS	12,626	214	59	S	A	W3FV (+packet)	9,434	178	53	M	A	W3FV (+packet)	21,528	276	78	M	B	W3FV (+packet)	21,528	276	78	M	B		
Macedonia	Z31GX	6,355	155	41	S	A	Maine	W3TCA	11,210	190	59	S	A	W3FV (+packet)	9,434	178	53	M	A	W3FV (+packet)	21,528	276	78	M	B	W3FV (+packet)	21,528	276	78	M	B	
North America	Barbados	8P6SH	2,920	73	40	S	B	New Hampshire	W3TCA	8,909	151	59	S	A	W3FV (+packet)	9,434	178	53	M	A	W3FV (+packet)	21,528	276	78	M	B	W3FV (+packet)	21,528	276	78	M	B
Dominican Republic	HI4TEJ	69,192	744	93	S	A	Wyoming	W3TCA	12,092	1174	103	S	A	W3FV (+packet)	9,434	178	53	M	A	W3FV (+packet)	21,528	276	78	M	B	W3FV (+packet)	21,528	276	78	M	B	
Panama	HP1AC	21,450	286	75	S	A	Wyoming	W3TCA	12,312	81	41	M	A	W3FV (+packet)	9,434	178	53	M	A	W3FV (+packet)	21,528	276	78	M	B	W3FV (+packet)	21,528	276	78	M	B	
Alaska	NL7V	912	48	19	S	A	Wyoming	W3TCA	12,626	214	59	S	A	W3FV (+packet)	9,434	178	53	M	A	W3FV (+packet)	21,528	276	78	M	B	W3FV (+packet)	21,528	276	78	M	B	
NL7VQ (AL1G, KL7FH, KL9A, ops)	9,331	217	43	M	B	Wyoming	W3TCA	12,626	214	59	S	A	W3FV (+packet)	9,434	178	53	M	A	W3FV (+packet)	21,528												

WV5L	4,692	102	46	S	A	K2RD(+packet)	12,980	220	59	M	B	WA7VNI	6,342	151	42	S	A	N0CDA	48,860	698	70	S	A								
WOZW	3,780	84	45	S	A	San Diego		N6PC		50,400	720	70	S	A	N6HR	27,448	376	73	S	B	AB0LR	45,752	602	76	S	A					
AD5GE	1,215	45	27	S	A	W7II		5,194	106	49	S	A	W7OM	26,772	388	69	S	B	NN0G	21,120	352	60	S	A							
K5AM	117,312	1222	96	S	B	AA6VO		1,749	53	33	S	A	W7DPW	18,432	288	64	S	B	N0IBT	15,498	287	54	S	A							
WA0SXV	48,209	679	71	S	B	W6IWO		63,688	838	76	S	B	WG7X	8,200	164	50	S	B	WB0BLV	1,254	57	22	S	A							
North Texas		N4AU		66,352	754	88	S	A	N6QEK	35,424	492	72	S	B	N7VGO	1,316	47	28	S	B	N6BXO	840	30	28	S	A					
N3BHU		27,020		386	70	S	A	N6VH	28,210	434	65	S	B	Wyoming		40,669	607	67	S	A	KB0RJF	224	16	14	S	A					
AD5EN		23,488		367	64	S	A	NF6V	8,379	147	57	S	B	KE7NT		3,744	104	36	S	A	K6FC	48,000	640	75	S	B					
KT5V		9,100		175	52	S	A	San Francisco		8		Michigan		KD7RX		5,838		N0KDI/P		WV7T (-KB2BZY, KC0HIP, N0QJS, N0MUD)		21,905		337	65	S	A				
N5EG		5,254		142	37	S	A	W5AP		124,300	1243	100	S	B	N6OJ	68,450	925	74	S	A	W0ETC	5,838	139	42	S	B					
N5TY		94,905		999	95	S	B	K6UM		19,278	306	63	S	A	K8IR	57,120	672	85	S	A	WY0V	4,218	114	37	S	A					
N5JR		43,795		461	95	S	B	AD6TF		4,641	119	39	S	A	K8RS	45,663	491	93	S	A	W0K0F	58,824	684	86	S	B					
N5KA		7,632		159	48	S	B	NC6P		30	6	5	S	A	W8HCS	32,319	513	63	S	A	W0OBM	3,520	88	40	S	A					
N5YA (+N5KR, W5LL)		34,056		516	66	M	B	K6RIM		31,920	456	70	S	B	W18W	31,032	431	72	S	A	W0VXU	690	30	23	S	B					
KT5V		5,254		142	37	S	A	W6JOX		16,402	278	59	S	B	WA8RC	26,325	351	75	S	A	KA0EIC	690	30	23	S	B					
K6OWL (+packet)		19,278		40,764		19,278		474		86		M		K8VT (+WA8RTP)		40,764		474		86		Iowa		21,905		337	65	S	A		
Oklahoma		W1DY		45,298	638	71	S	A	KC2NYO		17,328	304	57	S	A	K8SIA	21,574	322	67	S	A	W0BR	21,899	359	61	S	A				
WA9AFM		15,892		274	58	S	A	K6XJ		26,460	378	70	S	A	K8T8X	20,658	313	66	S	A	W0OBM	15,012	278	54	S	A					
N5OH		1,316		47	28	S	A	K6CNV		22,568	364	62	S	A	K8RLM	19,924	293	68	S	A	W0VXU	3,520	88	40	S	A					
N5DY		13,770		255	54	S	B	K6MI		13,052	251	52	S	A	AB8ND	2,747	67	41	S	B	KI6DY	20,496	336	61	S	B					
South Texas		KE6RAD		22,168	326	68	S	B	K6FRH		1,404	52	27	S	B	K8V		40,764	474		86	M	A	Minnesota	91,758	1119	82	S	A		
AD6G		18,585		315	59	S	A	W6OEC (+packet)		N8IS		63,936	666	96	S	A	KOTG	24,552	396	62	S	A	W0DK	60,522	786	77	S	A			
N5RZK		10,860		181	60	S	A	K6T		W8UL		55,936	608	92	S	A	K0AD	10,123	191	53	S	A	W0OBM	4,285	487	88	S	A			
W5BBR		10,530		195	54	S	A	K6CNV		N6EE (+packet)		N8GU		52,545	565	93	S	A	NOAA	4,995	111	45	S	A	W0VXU	23,712	304	78	S	A	
K5WW		10,282		194	53	S	A	K6MI		N8Z		WG8Y		39,298	401	98	S	A	KE0WW	4,704	112	42	S	A	W0OBM	19,929	273	73	S	A	
W5BOB		5,848		136	43	S	A	K6RIM		K6FRH		N8W		51,256	596	86	M	B	K0KBD	1,450	50	29	S	A	W0VXU	1,450	50	29	S	A	
KD5OTF		3,154		83	38	S	A	K6OQ (+packet)		K3GP		W8WTS		468	26	18	M	B	K0VG	192	16	12	S	A	W0OBM	62,775	775	81	S	A	
W5GAI		2,961		63	47	S	A	K6PKG		N8CPA		K8FRT		14,210	290	49	S	A	K0IR	24,975	333	75	S	B	W0ML	20,992	328	64	S	B	
K5EJL		1,537		53	29	S	A	K6T		N8A		N8J		1,920	60	32	S	A	K0KO (+KB0IW)	85,540	940	91	M	B	W0VXU	9,291	163	57	S	B	
AJ4F		399		21	19	S	A	K6T		N8Z		K8RJW		4,185	93	45	S	A	K0LY	9,120	160	57	S	A	W0VXU	10,450	190	55	S	B	
N5DD		10,902		158	69	S	B	K6DGW		N8B		K8AJS		26,398	394	67	S	A	K0LY	1,170	45	26	S	B	W0VXU	19,929	273	73	S	A	
N5TW (+KC5YKX)		92,820		910	102	M	A	W6CWM		N8W		N8LRG (+KB8TCF)		9,450	175	54	S	A	K0BX	49,160	880	107	S	B	W0VXU	14,745	242	77	S	A	
AB5K (+N5UXT)		118,107		1193	99	M	B	W6IXP		N8W		N8TNO		5,593	119	47	S	B	W0VXU	64,800	778	109	S	B	W0VXU	19,929	273	73	S	A	
West Texas		KE5OG		74,733	859	87	S	A	K7WLL		N7US		N8J		133,734	1438	93	S	A	K0T	42,704	628	68	S	A	W0VXU	10,450	190	55	S	B
N5IJE		24,750		375	66	S	A	N7US		N7US		N8K		73,800	900	82	S	B	K0T	42,704	628	68	S	A	W0VXU	10,450	190	55	S	B	
N5LUL		3,588		92	39	S	A	K7WLL		N7US		N8K		37,060	545	68	M	A	K0T	42,704	628	68	S	A	W0VXU	10,450	190	55	S	B	
6 East Bay		N6TQS		43,800	600	73	S	A	K7WLL		N7US		N8K		64,859	821	79	M	B	Eastern Washington	12,006	207	58	S	A	W0VXU	59,605	655	91	M	A
AK6DV		41,662		563	74	S	A	K7WLL		N7US		N8K		31,672	344	74	S	A	K0T	42,704	628	68	S	A	W0VXU	10,450	190	55	S	B	
KC6QLV		24,384		381	64	S	A	K7WLL		N7US		N8K		21,672	344	63	S	A	K0T	42,704	628	68	S	A	W0VXU	10,450	190	55	S	B	
K6BIR		15,635		265	59	S	A	K7WLL		N7US		N8K		81,627	897	91	M	A	K0T	42,704	628	68	S	A	W0VXU	10,450	190	55	S	B	
KE6QR		13,420		244	55	S	A	K7WLL		N7US		N8K		81,627	897	91	M	A	K0T	42,704	628	68	S	A	W0VXU	10,450	190	55	S	B	
K6PKG		4,444		101	44	S	A	K7WLL		N7US		N8K		103,828	1028	101	M	B	K0T	42,704	628	68	S	A	W0VXU	10,450	190	55	S	B	
KG6NDO		2,340		65	36	S	A	K7WLL																							

Saskatchewan

VE5SF	26,145	415	63	S	A
VE5CPU	61,390	877	70	S	B

Alberta

VE6RRD	28,288	442	64	S	A
VE6AX	10,505	191	55	S	A
VE6YR	52,925	725	73	S	B
VE6AO (VE6TC, VE6WSI, VE6PR, VE6LFM, ops)	47,390	677	70	M	B

British Columbia

VE7FO	18,368	287	64	S	A
VE7HBS	8,514	198	43	S	A
VE7WU	7,875	125	63	S	A
VA7CPC	1,056	44	24	S	A