# 2004 ARRL September VHF QSO Party Results

# We want more propagation!

Jeff Klein, K1TEO

he 2004 September VHF QSO Party saw generally average conditions throughout, with the exception of some enhancement on Saturday from New England to parts of Michigan, Ohio, Indiana, Ontario and Illinois. Yet, despite the lack of widespread enhancement, a combination of good activity, increased usage of microwave bands and the efforts of many rovers led to some excellent scores and results for many. Submitted logs were the highest in 4 years (566) representing a 9% increase from 2003.

### **Nationwide Perspective**

Despite the lack of any widespread openings, three of the six categories set all-time September contest records. And, the Single Operator High Power category saw not one but two operators break the all-time single op high score for any VHF contest. Good activity, continued expanded use of the microwave bands, and maximal use of the limited openings that did occur helped with these record-setting scores.

To get a better sense of operating experiences from around the country and within different classes, let's take a look at some of the top scorers to see what they're doing to have fun and achieve high scores.

### KA1LMR

After a 10 year hiatus, Chris returned to VHF contesting in 2004. And, he returned in style taking the top spot in the September contest for the Single Operator Portable category! He worked over 400 QSOs and over 100 grids from a hill-top location. Chris noted how hard he worked to balance antenna height with feed-line loss. Adding 1296 MHz this time made it extra important to avoid coax losses. Chris is interested in a wide array of Hamming activities from HF all the way through the microwaves. He cites Dale, AF1T, his high school teacher as having gotten him interested in VHFing.

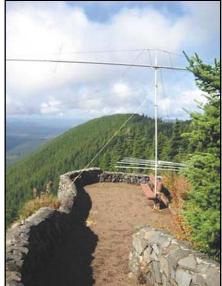
Dale also finished in the Top 10 (SOLP), so not a bad (former) teacher-student combo. Chris is excited to be back into VHF Portable contesting, and intends to add 903 MHz and make further improvements to his mast supports to do even better in 2005.

### W4SHG

Steve is relatively new to VHF contesting. Operating from his home QTH in FM18, Steve was able to place #6 in the SOLP class. Steve doesn't enjoy a great VHF location as he is blocked in two key directions. Despite this, he notes that the challenge is to see how you can improve things each time to better your own results. And that Steve did, as he has added a number of bands and a better setup to help his score. While he didn't notice any real enhancement this time, some of the keys to his success included staying in the chair to take advantage of whatever was available, and following some of the rovers to be sure to work the grids they made available. He also cited keeping an eye out for any 6 meter openings, as doing so allowed him to catch a brief opening to Florida. Steve continues to work on his station and expects to add some digital capabilities for the "downtime" in future contests. Steve's interest in VHF contesting stems from the challenge and need to really hone his operating skills to achieve good results. From the results this time he's obviously learned a lot already.

### KC9BQA

Todd is a relatively new ham having joined the fraternity in 2003. He's a year into VHF contesting and in this contest achieved a #10 showing in SOLP. Todd was an SWL for years but lived in a poor location. He recently moved to a 39 acre QTH on high farmland. That gave him the incentive to get his license, and up went a 100 foot tower and stacked antennas on 2 and 432 and a single antenna for 6. This



Johnny, KE7V, and Mike, K7MDL, operated at 3000 ft from North Point Lookout in CN78.

contest he added 222, which added over 50% to his score. He enjoys chasing new grids and working openings. As others find, one of the appeals of contesting is the high level of activity and the possibility for new grids. The strategy of chasing rovers and the activity is lots of fun—Todd notes it's like a party or a big Packers game! Having already achieved great results, Todd is looking for more, perhaps adding 903 and 1296 MHz down the road. He's done a lot of research to get things going so far, so expect him to continue his VHF and contesting success as he gains more experience.

### W3IY/R

Bill and his roving partner, Christophe, ON4IY, set off once again for the rove from the NC coast up north to Delaware and then west to the mountains of western VA. And, this time they made over 1150 Qs on their way to setting an all-time record score for a rover in September. It helps to have fantastic microwave gearcapable of working over 100 Qs on 903 and 1296, and 70, 61 and 40 on 2.3, 3.4 and 10 GHz, respectively. Anyone who's worked the IY team knows they get louder as you head up in frequency. Other keys to success: Christophe handles the pileups on 2 meters and does the coordination with the microwaves. And, Bill really knows how to run 'em through the microwaves. Bill noted great activity from the DC area this time and some interesting

### **Overall Top 10**

Single Operator		Single Operator		Single Operator Portable		Limited Multioperator		Multioperator Unlimited		Rover	
Low Power		High Power		KA1LMR	61,500	K3YTL	363,553	W2SZ	1,775,246	W3IY	382,194
K1TR	328,482	K1TEO	657,888	K6MI	23,968	W3SO	340,985	K1WHS	1,183,200	N6MU	276,012
K2DRH	228,464	K3EAR	655,710	N7CFO	21,230	W4IY	316,064	N2PA	440,440	KG6TOA	267,894
KB8U	186,702	(K9PW, op)		KI7JA	6,000	AA4ZZ	166,772	N2NK	196,974	W9FZ	112,832
WB1GQR	170,250	KİRZ	327,334	WB2AMU	4,218	K8EP	162,610	K3EOD	179,626	K9JK	88,464
(W1SJ, op)		W4RX	251,363	N8XA	4,032	W1QK	144,450	W2EA	162,180	WB8BZK	83,494
AF1T	77,544	KMØT	224,190	K3AX	3,300	K2BAR	125,538	W9ICE	153,438	K1DS	78,645
W4SHG	62,356	K3DNE	209,088	N7IR	2,240	W4NH	109,020	N3NGE	127,974	K2TER	65,024
NØKP	59,920	K2SMN	142,674	N6DN	2,093	N8ZM	66,144	K5QE	112,189	KF8QL	59,600
K5MA	58,860	K8TQK	122,610	W9SZ	1,653	KB1DFB	63,648	KE1LI	101,432	AL1VE	59,287
N9DG	55,539	K3TUF	102,102								
KC9BQA	53,922	K8MD	98,350								

Regional Leaders Northeast Region (New England, Hudson and Atlantic Divisions; Maritime and Quebec Sections)		(Delta, Roan	Southeast Region (Delta, Roanoke and Southeastern Divisions)		(Central and C	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)		
K1TR WB1GQR (W1SJ, op) AF1T K5MA W1BQ	328,482 / 170,250 / 77,544 / 58,860 / 50,580 /	A W3IP KD4HIK A W4VHF A K4PUF	62,356 27,158 10,856 7,293 7,130	A A A A	K2DRH KB8U N9DG KC9BQA WA1MKE	228,464 186,702 55,539 53,922 36,047	A A A A	NØKP NØHJZ K5WPN NØLL NØVZJ	59,920 31,752 29,127 12,956 11,713	A A A A	N6RMJ KC6ZWT K7YO W7USB N7DB	17,856 13,805 13,500 5,130 4,920	A A A A	
K1TEO K3EAR (K9PW, op K1RZ K3DNE K2SMN	657,888 E 0) 655,710 E 327,334 E 209,088 E 142,674 E	KE8FD W4WA KN4SM	251,363 60,606 40,812 28,126 21,600	B B B B	K8TQK K8MD N2BJ VE3TFU W9GA	122,610 98,350 82,859 73,746 72,576	B B B B	KMØT WØZQ NØURW WØGHZ KØAWU	224,190 72,688 67,620 37,430 27,710	B B B B	N7EPD KJ6KO K6TSK WA7TZY W7GLF	25,960 22,374 20,664 20,008 19,546	B B B B	
K3YTL W3SO W1QK K2BAR KB1DFB	363,553   340,985   144,450   125,538   63,648	L AA4ZZ L K8EP L W4NH	316,064 166,772 162,610 109,020 14,184	L L L	N8ZM K8FH N9TF K4ITF	66,144 21,712 14,560 6,608	L L L	WØVB WØEEA NØUNL KE5CCI WV7T	7,788 6,345 1,820 1,302 192	L L L	VE7DXG AD6IJ W6TE W6QE NW7MT	35,856 13,662 6,075 1,904 20	L L L	
W2SZ K1WHS N2PA N2NK K3EOD	1,775,246 M 1,183,200 M 440,440 M 196,974 M 179,626 M	M AG4V MSDL WC4J	44,770 9,798 6,380 6,006 5,200	M M M M	W9ICE K9CVC K9RN AD8U	153,438 77,859 37,664 2,176	M M M	K5QE KBØHH KØSGI K5LLL W5LCC	112,189 15,520 9,856 8,316 5,070	M M M M	KØDI W6MMM K7TOP KE7V KG6TBR	30,660 16,530 14,248 11,128 5,544	M M M M	
KA1LMR WB2AMU K3AX K4JSI N1MPT	61,500 C 4,218 C 3,300 C 1,647 C 918 C	2			N8XA W9SZ WB8WSF	4,032 1,653 1,092	QQQ	WA5WJY	54	Q	K6MI N7CFO KI7JA N7IR N6DN	23,968 21,230 6,000 2,240 2,093	Q Q Q Q	
K1DS K2TER AL1VE WA2IID K3LFO	78,645 F 65,024 F 59,287 F 57,960 F 40,004 F	R N4OFA R KD5RUJ R WA4JA	382,194 37,224 7,849 1,056	R R R	KF8QL VE3OIL K8DOG NE8I K8MR	59,600 52,815 39,325 35,073 26,535	R R R R	N6MU KG6TOA W9FZ K9JK WB8BZK	276,012 267,894 112,832 88,464 83,494	R R R R	K3UHF W7DHC K6EU WB6JDH KE6HPZ	57,464 33,512 12,599 7,440 6,303	R R R R	

conditions. They managed to work K1WHS through 5.7 GHz while in FM16 at a distance of over 500 miles. Bill and Christophe have done an excellent job of encouraging microwave activity on the East Coast both during and between contests. Bill leads the way with monthly Microwave Activity Days (MAD) with his rover. During contests they provide many rare grids to their faithful followers. Bill and Christophe both noted the incentive to give out rare grids to grid-hungry contesters. It's fair to say that they've achieved an amazing capability of making things a win-win for themselves and the contesting community. Congratulations, guys, and thanks for making it fun for so many others!

Make sure you see the Web report at **www.arrl.org/contests/results** for a sidebar by ON4IY's version on "Why We Rove" as well as several more individual highlights.

### **Overall Category Results**

Single-Operator

Ed, K1TR, repeated in the top Single Operator Low Power spot, again edging Bob, K2DRH. Bob's score went up a good deal this year, but Ed was able to use some of the enhanced conditions from Mt Washington to the upper Midwest to beat his '03 score by over 100k. Ed's score set a new all-time record, breaking his 2001 record for SOLP, this despite the much better conditions in 2001. Ed attributes better microwave gear in 2004 for the results. Bob and Ed have really battled it out over the last few years so stay tuned for the '05 rendition. They may face some tough competition from numbers 3 and 4 in this year's event—Russ, KB8U, and Mitch, W1SJ, operating as WB1GQR. Both were in great locations to benefit from the tropo that occurred and were close behind K2DRH. Mitch's score was

up almost 70% from '03 when he also placed 4th. The SOLP category saw 5 new division records. In addition to Ed, Bob, and Russ, Steve, W4SHG, and Dave, NØKP, set new records in their divisions. Congratulations, guys!

The Single Operator High Power category saw the closest competition for any category in many years. Pete, K9PW, brought his wealth of Midwest contest experience "out east" for a try from the K3EAR mountaintop station in EPA. Last year Stan, KA1ZE, piloted the K3EAR station to a win over Jeff, K1TEO. This year saw the results reversed by an amazingly narrow margin of 2k, or 0.3%! The difference was likely Jeff's CT QTH getting partially into the tropo to the Midwest whereas Pete wasn't able to benefit. Both stations beat the all-time Single Operator score for any VHF contest record, set by W5ZN a number of years ago with the aid of tropo and E-skip on 6 meters during a June con-

### **Affiliated Club Competition Medium Category** North East Weak Signal Group 2,330,628 Potomac Valley Radio Club Mt Airy VHF Radio Club 1,771,142 870,833 Northern Lights Radio Society South Mountain Contest Club 51 851.271 660,380 Rochester VHF Group 531,868 Society of Midwest Contesters 11 495,448 Badger Contesters Pacific Northwest VHF Society 15 22 288,561 255,497 South Jersey Radio Assn 171,204 Contest Club Ontario 10 122,238 Yankee Clipper Contest Club Western States Weak Signal Society 6 12 76,329 75,343 Northern California Contest Club 61,538 Mad River Radio Club Downey ARC 28,435 19,211 **Local Category** Eastern Connecticut ARA 167.752 4 Delaware Valley VHF Society 45,786 North Texas Microwave Society 16.158 Dauberville DX Assn

test. The numbers suggest that given current activity levels and usage of many microwave bands, we may be just a major E-skip/Tropo opening away for the first single-op ever to achieve 1 million points...Dave, K1RZ, repeated in 3rd place with a FB effort from FM19. Jim, W4RX, Mike, KMØT and Ed, K3DNE, all scored over 200k for 4th through 6th place. And, Mike's, KMØT, effort set a new Division Record.

### Multioperator

Three stations in relatively close proximity scored over 300k in the Limited Multioperator category. K3YTL repeated in the top spot, while W3SO reclaimed the 2nd spot only 22k behind. W4IY was right behind in 3rd, moving up from an '03 5th place finish. All three stations are VHF contesting regulars so this sets up some exciting competition ahead. AA4ZZ repeated in the 4th slot followed closely by up and coming K8EP. One Division record was set in Limited Multioperator with the gang at WD4OAR setting a new Delta Division record.

W2SZ led the way again in the MM category with a score similar to '03. But watch out because the K1WHS crew increased their score a good deal and also made the 1 million point level—very impressive for their Down East location. N2PA and team moved up from 4th to 3rd this year, while 4th-7th were very close with N2NK, K3EOD, W2EA and W9ICE battling it out. The K5QE group not only made the Top 10 but also set a new Division record with their efforts.

### Rover

As with the two single-op categories a new all-time September contest record was set in the roving category by W3IY. With Bill mowing them down on the microwaves and Christophe, ON4IY, providing "traffic control" on 2 meters, this team demonstrated what a well equipped, well coordinated team can do even under mostly

normal band conditions. And, as noted earlier, they did so in a way that enhanced many other operators' fun and scores. Congratulations, guys! In 2nd and 3rd places were John, N6MU, and Robert, KG6TOA, who operated in tandem from WTX for over 200k apiece. Bruce, W9FZ, scored over 100k for 4th, followed in tight competition by John, K9JK; Mike, WB8BZK, and Rick, K1DS. In addition to W3IY and N6MU, Dave, KF8QL, and Mike, N4OFA, set new Division records. On behalf of all the non-rover operators, thanks to all the "masters of the macadam" for doing a great job and making the contest a lot more fun for everyone!

### **Regional Highlights**

### Northeast Region

Activity in the Northeast is generally high and the enhancement Saturday night helped to spur activity. WB1GQR, AF1T and K5MA all made the Top 10 nationally in the SOLP category. Likewise for K3DNE, K2SMN and K3TUF in the SOHP category. LM stations W1QK, K2BAR and KB1DFB made the Top 10 as well, as did N2NK, K3EOD, W2EA and KE1LI in MM. The Rover category also saw heated competition as K1DS, K2TER and AL1VE turned in FB Top 10 results. WA2IID just missed making the list by 1k. WB2AMU and K3AX did a great job in the Portable category.

### Southeast Region

Competition in the ML category was especially fierce as four stations made the Top 10 National list. In addition to W4IY near the top, AA4ZZ, K8EP and W4NH all broke 100k and made the Top 10. W4SHG made the Top 10 nationally in SOLP followed by W3IP in Regional results. W4WA moved up to the HP category this year and placed 3rd in the Region just behind KE8FD in SC. The crew at WB4WEN had the top MM score in the Southeast.

### Central Region

Like the Northeast, parts of the Central Region benefited from the same enhancement Saturday. KB8U rode the tropo to finish near the top of the SOLP category, while N9DG and KC9BQA also finished in the Top 10. K8TQK and K8MD made it to the top listing in SOHP, while N2BJ, VE3TFU and W9GA followed closely. N8ZM led the region for ML and W9ICE did the same for MM, also making the National Top 10. N8XA and W9SZ did the same in the Portable category as did KF8QL as a Rover. VE3OIL turned in a fine effort as a rover, just missing the Top 10 list.

### Midwest Region

NØKP led the way in the Midwest with

a #7 finish nationally, followed in the region by NØHJZ and K5WPN. In addition to KMØT's Top 10 finish in SØHP, WØZQ and NØURW turned in highly competitive logs. The gang at K5QE really stood out with the top Regional score in MM and a #9 National finish. The Midwest excelled in the roving class with 5 of the top 6 National scores from N6MU, KG6TOA, W9FZ, K9JK and WB8BZK. Way to go, guys!

### West Coast Region

While the scores generally aren't as high as some other regions, the competition in the West was especially fierce. Only 4k separated the top 3 in SOLP: N6RMJ, KC7ZWT and K7YO. Not to be outdone, the SOHP competition featured 5 ops within 6k of one another—N7EPD, KJ6KO, K6TSK, WA7TZY and W7GLF. The VE7DXG group did a great job in LM to lead the Region, as did KØDI in MM. K6MI, N7CFO and KI7JA finished 2, 3 and 4 Nationally in the Portable Category, with N7IR and N6DN also making the list. K3UHF led the rovers in the West, just missing an overall Top 10 finish.

### Club Competition

Clubs are a great way to find out about VHF operating and contesting. There are great clubs in all sections of the country. Many of these clubs help to generate contest participation by encouraging members to get on the air and help the effort in the Affiliated Club Competition. This year 20 clubs submitted entries. If you're not already a member, take a look at the list to see if there is an active club in your area. Most have Web sites that provide more information.

The North East Weak Signal Group repeated as winners in the Medium class in 2004, with a close win over the Potomac Valley Radio Club. Sizable scores were also submitted by the Mt Airy VHF Radio Club, the Northern Lights Radio Society (51 entries—great job, guys!), the South Mountain Contest Club, The Rochester VHF Group and the Society of Midwest Contesters in 3rd through 7th place. The Eastern Connecticut ARA won in the Local Category, defeating last year's champs, the Delaware Valley VHF Society.

So, another September VHF contest is behind us. This one saw increasing participation, more usage of microwave bands and some record-setting scores. If you want to join the fun on VHF and are just starting out, take a look at the Club listings to see if there's a club near you where you might find some more information. Or, take a look at the list of participants in this one and contact them if you have questions. On VHF more activity makes for more fun. So get on and join the fun in the next event. CU on the bands!

### **Scores**

Each line score lists call sign, score, stations worked, multipliers, Category (A = Single Op Low, B = Single Op High, Q = Single O Portable, L = Limited Multi, M = Multi-Multi, R = Rover), number of grids activated (if Rover), and bands (A= 50 MHz, B = 144 MHz, C = 222 MHz, D = 432 MHz, 9 = 902 MHz, E = 1296 MHz, F = 2304 MHz, G = 3456 MHz, H = 5760 MHz, I = 10 GHz, J = 24 GHz). Band win indicators are listed in boldface type for classes A and B.

### 1 Connecticut

K1ZZ N1OFZ	11,502 6,760	168 143	54 40	A A	ABCD ABD
KA1KOJ	6.636	129			ABD
KB1JDX	2,522	95			ABD
K1WVX	2,175	59	29	Α	ABCD
WA1FVJ	1,460	64	20	Α	ABD
WA1GTP	1,404	39		Α	ABCD
W1DMM	748	44			AB
KB1JDY	150	15			AB_
KA1RWY		12			ABD
K1TEO	657,888				
K1GX	81,380				
N1SXL	1,825	73			
K1QNF	1,560	60			AB
K1TG	750	50	15	В	В
W1QK (+)		1PHG	, KA1	SYC	G, K1XS,
N1ABY,					
	144,450		135	L	ABCD
KB1DFB					
	63,648				ABCD
N1EG (K1					
	5,244	81	46	L	ABCDE
KE1LI (+k					
	101,432	600	124	М	ABCD9EFI

### **Eastern Massachusetts**

K5MA	58,860	402	109	Α	ABCD
WG1Z	38,675	310	85	Α	ABCDE
W1PM	37.380	259	89	Α	ABCD <b>9E</b>
KA1EKR	5,980	89	46	Α	ABCD
KC1MA	2,673	91	27	Α	ABCD
W1DYJ	1,872	72	26	Α	AB
N1BC	1,332	61	18	Α	ABD
WB2PID	416	22	13	Α	ABCD
N1ZMB	392	28	14	Α	AB
W1CRK	200	18	10	Α	ABD
W1GHZ	69,444	407	108	В	ABCD9EI
N1GJ	25,418	227	71	В	ABCD9E <b>F</b>
W1FKF	13,725	127	61	В	ABCD9EFIJK
W1JHR	6,320	105	40	В	ABCD9E
N1MPT	918	51	18	Q	AB
K1VZI	750	33	15	Q	ABDE
N1ZGY	18	4	3	Q	BCD
W1XM (KB	1CGZ, K	Γ1D,	KF4K	ίJQ,	KB9IJB,
KC8OIO,	KB1IBG,	KB1	LLO,	WA <sup>-</sup>	IVRB, KC6F,
W1GSL, op	s)				
	75,924	465	108	M	ABCD9EF

### Maine

W1BQ	50,580	371	90	Α	ABCD9EF			
N4CW	2,050	82	25		AB			
W1EL	1,020	41	20	Α	ABCD			
KQ1V	300	21	12	Α	ABD			
K3AX	3,300	81	33	Q	ABD			
KV1J (+K	KV1J (+KO1I, WA1KKO)							
•	43,516	359	92	L	ABCD9E			
N1BNC (+	-N1WYS)							
•	65	13	5	L	В			
K1WHS (	K1WHS (+K1DY, K1TOL, W1SD, W1MRQ,							
W2PED	, WA1T, N	1DPN	I, N20	CÉI,	BA1LY, logger)			
1	.183.200	1621	400	M	ABCD9EFĞHİJ			

### **New Hampshire**

HIP
LID
41 HF
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### Rhode Island

MHCDC	700	00	40	^	ADCD
W1CPC	703	29	19	А	ABCD

### Vermont

WB1GQR (W1SJ, op)								
K1LPS	170,250 10,920				ABCD9EI			

### **Western Massachusetts**

KA1MDA	11,025	184	49	Α	ABCDE
N1VMJ	2,727	91	27	Α	ABD
K1MAP	126	13	9	Α	ABD
K3GM	48	12	4	Α	Α
W1RZF	39,176	365	83	В	ABCD
N1MUW	11,183	148	53	В	ABCD <b>9E</b>
K5ZD	286	26	11	В	Α
K1TTT	3,293		37		ABD
					, K2MLC, K2TR,
	T, N1MU, N				
	W1SZ, W				
					VA8USA, ops)
					ABCD9EFGHIJK
W1D (KD					/1VAP, KA1QFE,
ops)	8,800	140	50	M	ABCDE

# 2

# Eastern New York

WB2SIH	40,304	317	88	Α	ABCD9E				
WA1RKS	1,375	49	25	Α	ABCD				
KA2CYN	672	56	12	Α	Α				
N2NZD	70	10	7	Α	Α				
					K, KC2KIS,				
	K2YLH, W2JEK, KC2HL, KF2ID, NS2K, N2GM,								
W2DTA, K	2JT, W2C	WA, V	VI2W	', op	s)				
	125,538	853	122	L	ABCD				
					2LXY, KC2HUV,				
KC2HU	T, KC2DM	H, N2	ΧE, 1	<b>120</b>	BY, N2SKP,				
KC2LUR,	K2YS, K0	C2MM	Y, op	s)					
	39,375	445	75	L	ABDE				
N2GCZ	11.590	130	61	М	ABCDE				

### **NYC-Long Island**

N2FKF	9,729	160	47	Α	AB <b>D</b>	
K2OVS	7,296	118	48	Α	ABD	
AG2A	5,852	153	38	Α	<b>A</b> BD	
N2XDR	4,134	129	26	Α	ABD	
KF2XF	3,172	122	26	Α	В	
K2RMX	546	38	13	Α	ABD	
N2KIN	340	28	10	Α	BD	
K2TV	242	22	11	Α	AB	
WM2Z	220	22	10	Α	AB	
WB2AMU	4,218	95	38	Q	ABCD	

### **Northern New Jersey**

WB2CUT	4.160	160	26	Α	В		
K2KIB	1.728	45	24	A	BFG		
WA2NXK	1.380	53	23	A	ABD		
K3GNZ	1.092	41	21	Α	B <b>D</b>		
WV2ZOW	880	39	22	Α	<b>A</b> BD		
KC2KZR	465	31	15	Α	AB		
WA2BKN	294	21	14	Α	AB		
W2UDT	209	16	11	Α	ABD		
W2BVH	176	22	8	Α	В		
W2KV	20,794	240	74	В	ABDI		
N2NK (N2WM, WD3R, N2IEL, K2BM, WB2JKX,							
WB2UFF, WB2JKX, ops)							
	196.974	780	186	М	ABCD9E		

### **Northern New York**

WA2AEY 20,992 211 82 A ABD

WB2KLD 1,440 38 32 A ABD NS2P 100 10 10 A AB W2NNY (W2IB, NT2W, KC2BEZ, ops) 36,960 237 120 L ABCD

### **Southern New Jersey**

K1JT	16,116	194	68	Α	ABD
N2SY	7,536	137	48	Α	ABD
N2SCJ	1,488	42	24	Α	AB <b>C</b> DE
N2DEQ	435	26	15	Α	ABD
K2SMN	142,674	551	158	В	ABCD9EF
W5KI	1,012	44	23	В	AB
K3EOD (	+W2SJ, WA	<b>A3WL</b>	JL, K	3EG	E, WR3P)
				M	ABCD9EFP
W2ZQ (K	C2LCF, K2	QM o	ps)		
	39,525	334	85	M	ABCDE

### **Western New York**

W2WGL	4,692	79	51	Α	ABD		
KC2HQF	1,960	61	28	Α	ABD		
K2UD	1,080	40	27	Α	AB		
	16,182	138	87	В	ABCD		
WA2ZNC					ABCD		
	VSZ, W2						
ops)	440,440	1032	286	M	ABCD9	9EFGHIJ	L
K2IWR (K	B2LUV, +	ops)					
	342	19	18	M	AB		

### 3

### Delaware

WA3BZT	2,343	71 33	Α	AB
W3OR	95,142	370 157	В	ABCD9EFG

### Eastern Pennsylvania

		_			
WA3GFZ W3KJ W3MEL KA3FQS AI3W WS3C W3RT W3FEY KB3JGS WA3AAN WA3EHD N3PLM KB3GJT W3DSX N1XKT W3EFH KB3JST K3EAR (K	655,710		32 38 35 34 23 26 21 12 17 9 12 5 4 2	A A A A A A A A A A A A A B	ABCD ABCD ABCD ABD ABCDE BCDE ABD AB BCD9E AB ABB ABB ABB AB B ABCD9EFGHIJKL
K3TUF W3SZ	102,102 90,767	402 362	143 139		
W3GAD	45,682	324	91		
K3CI	28,519	230	79	В	ABCD9E
WA3DRC N3ITT	26,788				
K3ISH	16,817 16,275	217	75	В	
KB3ZS	14,649	188	57	В	ARCDE
W3CMP	14,058		66		
N3KN KB3HCL	1,456 370	56 23		B B	AB ABCDE
W3HOA	504	33		Q	ABCDE BP
					DA, KB3ACO,
	K3RDA,				N3RN,
WB3FKQ,					4000
WA3UOE	363,553		211	L	ABCD
WASOUL	(+ND3GIV 806	26	26	L	ABD9
W2EA (N2	2FY, KF2Y	′, KV2	M, K		, W2RDS,
K2PS, N	13RG, K2\				
	162,180	805	159	М	ABCD9E

	3,774 2,880 2,736 2,496 2,088 1,377 684 341 327,334 209,088 37,576 6,370 3,589 2,926 N3VOP, W3	647 295 101 97 76	24 27 19 11 227 192 88 49 37 38	A A A A B B B B B B	B AB ABD B ABCD9EFGHI ABCD9EFG ABCDE ABCD AB AB AB ABC
W3RAR	1, ops) 13,772	254	44	1	ABCD
KI3DS (K	3TH, K3AS			ops	
•	3,232	101	32	Ľ	AB
N3OC (+k		440	110		ADODOEEL
WA37KB	79,296 (+KA3EJJ	410	118	М	ABCD9EFI
VVAOZITI	74,952		108	М	ABCD9EFGHI

# Western Pennsylvania

KE3WM	4,636	118	38	Α	<b>A</b> BD	
<b>WA3LTB</b>	3,315	85	39	Α	В	
K3ZCY	1,760	43	32	Α	AB <b>D</b>	
N3HKQ	540	23	20	Α	ABD	
KA1ZE	28,728	399	72	В	В	
K4JSI	1,647	53	27	Q	ABD	
W8IJ	99	10	9	Q	ABD	
					AI3M, W3	SF
W3TEF,	W3YOZ, Ł					
	340,985					
K3HRC (V	V3ERF, N3				ops)	
	2,916	72	36	L	ABD	

# 4

### Alabama

AF4OD 1,488 36 31 B ABCD

### Georgia

WA4IOB	2,250	55	30	Α	ABCD
NX9O	325	17	13	Α	ABCD
W4WA	40,812	263	114	В	ABCD
KD4K	1,056	34	24	В	ABCD
KF4OLO	112	14	8	В	AB
K4NGA (V	/B4AEG,	WA4L	.GP,o	ps)	
	5.687	88	47	L	ABCD

### Kentucky

	-				
W4FVQ	7,257	84	59	Α	ABCDEF
K4LVV	2,184	68	26	Α	<b>A</b> BCD
K4ITF (+A	K4U, KI4F	GF, K	4TD	O)	
	6,608	91	56	L	ABCD

### **North Carolina**

N4HN	3,488	90	32	Α	ABD
K3KO	416	26			AB
N4TL	63	9	7	Α	Α
K4QI	5,888	128	46	В	AB
W4DEX	4,640	59	40	В	ABCD9EFGHI
W4VHH	3,638	56	34	В	B <b>DEF</b> G
AA4ZZ (+/	AA4S, K2	SD, K	4DXA	۱, K	8YC, W4GRW,
W4MW,	W4WJF, V	۷4W۱	JT)		
	166,772	770	173	L	ABCD
W4NH (W	4KXY, K4	EA, K	4SZ,	K4\	/JM, W4SKI,
ops)	109,020	555	158	L	ABCD
WK4Y (+N	I4LSP)				
•	1,150	46	25	L	AB
WB4WEN	(+K4EJQ	)			
	44,770	256	110	M	ABCD9EFGHIJ

### **Northern Florida**

KE4YYD 120 11 10 A **BD** 

### Puerto Rico

NP3CW 18 6 3 A **AB** 

### South Carolina

N4UFP	2,403	63	27	Α	ABCDE
KE8FD	60,606	334	126	В	ABCD9EF

### Southern Florida

NJ2F	627	42	11	Α	ABCD
KG4ZLB	14	7	2	Α	AB
KB2SFA	300	36	6	В	ABCD

### **Tennessee**

KD4HIK	10.856	134	59	Α	ABCD
W4BCU	5,215	101	35	Α	ABCD <b>E</b>
WA4YRK	2,538	63	27	Α	ABDE
WB4IXU	1,620	53	20	Α	ABCD9E
AD4F	1,248	36	26	Α	ABCD
W200	420	24	14	В	ABD
					i4JST, NE4ME,
	N4XYC,		KW,	KG	4AQW,
KG4SVG,					
	14,184		72	L	ABCD
KD4WQE					
	4,686	127	33	L	ABCD
AG4V (+pa					
	9,798	98	71	M	ABCDE
N4JQQ (+					
	5 200	70	52	М	ARCDE

# Virginia w4SHG

W4SHG	62,356	309	119	Α	ABCD9EFG
W3IP	27,158	273	74	Α	<b>A</b> BCD
W4VHF	7,293	112	51		ABCD
K4PUF	7,130	121			ABCD
KI3O	6,670	132			ABD
K4FJW	6,475	131		A	ABCDG
K4FTO	4,719	114	33	A	ABCD ABD
N4MM	3,333	86	33		
K4MSG	3,080	78			ABD
KO4ER AD4TJ	3,016 2,409	90			BD ABD
N4DWK	1,922	55 58	33 31	A	ABD
KC4DPF	1.029	46	21	A	ABD
	) (W4HFH,		۲۱	^	ADD
na iame	990	47	18	Α	ABD
W4BNO	276	23	12		AB
W2YE	231	21	11	Α	Α
KI4FWE	208	26	8	Α	Α
N4JED	35	7	5	Α	
K9TWP	18	6	3	Α	AB
W4RX	251,363		241	В	
KN4SM	28,126	234	98		ABD
N4HB	14,352	152	69		ABDE
WF4R	8,550	110	57 41	В	ABCD
K4WYS	3,280	64	41	В	
K2EVW	1,624	45			ABD
K4UO	836 4CKI, WA	38			B
					BUS, W7IY,
AA4SI.	L, WHDAV,	, 14-1112	, 1	· L - T L	500, W711,
	N4RM W4	INF K	5OF	KG	4URW, KI4GSS
ops)	316,064				
					Y, K4NRA, ops)
`	11,330			L	
N3NYC (+	+N3GLZ)				
	6,880		40		
		W4ML	_N, W	V4J[	DM, KI4CJH,
KF4VK		400			ADOD
WOAL (	5,152	138	32	L	ABCD
WC4J (+h	KR4DO, W		42	М	ABCDE
	6,006	106	42	IVI	ADUDE

### 5

### **Arkansas**

W5ZN					ABCD		
N5DL (+KG5MD, AA5XA, KK5IX)							
•	6,380	81	58	M	ABCDE		

### Mississippi

KJ5RC 16 4 4 A **A** 

### **New Mexico**

K5RHR	1,044	38	18	Α	ABCDE
NK5W	616	44	11	Α	ABD
W5AOX	385	45	7	Α	<b>A</b> BD
WB2FKO	84	14	6	Α	В
K5AM	4	2	2	В	В

### **North Texas**

2,923	69	37	Α	ABD
8,456	111	56	В	ABCD9E
3,456	108	32	В	AB
3,145	68	37	В	ABCDE
54	9	6	Q	В
K5USS)				
1,302	73	14	L	ABCD
NM5M)				
4,557	104	31	M	ABCD9E
	8,456 3,456 3,145 54 K5USS) 1,302 NM5M)	8,456 111 3,456 108 3,145 68 54 9 K5USS) 1,302 73 NM5M)	8,456 111 56 3,456 108 32 3,145 68 37 54 9 6 K5USS) 1,302 73 14 NM5M)	8,456 111 56 B 3,456 108 32 B 3,145 68 37 B 54 9 6 Q KSUSS) 1,302 73 14 L NM5M)

### Oklahoma

K5WPN K5YM NEØP	29,127 798 570	35 26	19	A A	ABD BD ABDE
K5SW	5,841	79	59	В	ABC
KBØHH (+I	KØUO)				
	15 520	1/12	RΩ	NΛ	<b>ARCDE</b>

### **South Texas**

KM5RG	1,750	55	25	Α	ABD			
K5IX	1,242	42	23	Α	ABD			
KZ5CW	418	32	11	Α	ABD			
NØQFV	160	20	8	В	AB			
K5QE (+K5MQ, N5UM, KE5CLR)								
		372	217	M	ABCD9E			
K5LLL (+NI	N5DX)							
	8,316	100	54	М	ABCD9EFGI			

### **West Texas**

W5LCC (KC5OBX, KC5QKV, N5RNY, KD5ZDD, KB5KYJ, ops) 5,070 86 39 M ABCDE

### 6 East Bay

KE6QR	1,386	61	18	Α	ABD
K6MI	23,968	269	56	Q	ABCD9EFIF

### Los Angeles

N6RMJ	17,856	187	64	Α	ABCDEI			
WA6OWM	1,558	57	19	Α	ABCD			
AD6AF	252	16	12	Α	ABD			
KJ6NO	220	18	11	Α	ABD			
KG6GJM	84	9	7	Α	ABD			
KF6QEX	4	2	2	Α	Α			
N6TEB	5,216	108	32	В	<b>A</b> B <b>CDEI</b>			
K6HLH	2,871	59	33	В	A <b>B</b> CDE			
AD6IJ (+KF	AD6IJ (+KF6XA, AC6TK)							
	13,662	221	46	L	ABDE			
KØDI (+KF6	SYYV)							
	30,660	364	60	M	ABCDEI			

### Orange

KC6UIX	1,240	50	20	Α	ABD
K6TSK	20,664	231	56	В	ABCDE
K6IBY	1,265	35	23	В	ABCD
N6DN	2,093	58	23	Q	ABDEI
W6QE (+	K6EY)				
,	1 904	97	16	1	ABD

### Santa Barbara

KE6RCI	639	58	9	Α	BD			
KC6NBI	945	45	21	В	AB			
KG6TBR (+K6WLC, WA6PZK, AB6CF)								
•	5,544	115	36	M	ABCDE			

# Santa Clara Valley

KF6MXK	1,960	73	20	Α	AB <b>CD</b>
AJ6T	1,656	69	24	Α	AB
K6KLY	13.275	220	45	В	ABCDE

### San Diego

N6IEF	245	29	7	Α	ABD
KG6IYN	16,074	258	47	В	ABCDE
K6NKC	2,976	80	24	В	ABCDE
KF6JBB	896	51	14	В	ABCD

### San Francisco

WA6KLK 12,815 168 55 B **ABCDE** W6MMM (WB9NJS, K7WWA, KD6LTB, KD6GIY, WD6HDY, ops) 16,530 219 57 M ABCDE

### San Joaquin Valley

KF6KDA	2,912	84	28	Α	ABCD
KF6CNV	2,350	77	25	Α	ABCD
N6KOG	390	26	15	Α	AB
KG6HHE	104	11	8	Α	ABD
KA6AMD	88	9	8	Α	ABD
KR7O	2,343	70	33	В	ABD
W6TE (+K6	SAAB, W6	SALE,	K6V	LF,	WA6LUT)
	6,075	104	45	L	ABCD

### **Sacramento Valley**

KC6ZWT	13,805	180	55	Α	ABCD
W6EO	176	16	11	Α	AB
NU6T	60	9	5	Α	BD
KJ6KO	22,374	228	66	В	ABCD9EFI
W6KBX	13,298	146	61	В	AB <b>C</b> DE
N6SPE (+	KB6OLL,	KC6U	DS, I	KC6	YFG)
•	2,054	57	26	M	ABCDE

# 7 Arizona

WØRRR	77	9	7	Α	ABC			
N7IR	2,240	54	28	Q	ABCDE			
K7TOP (K7TOP WA7JTM N7AMA)								
•	14,248	191	52	M	ABCD9E			

# **Eastern Washington**

W7QQ	4,905	84	45	Α	ABCD
K7AWB	1,037	50	17	Α	<b>A</b> BCD
W7HDD	70	9	7	Α	ABD
W7JGO	126	14	6	В	ABCD

### Idaho

W7USB	5,130	85	45	Α	ABCDE
W7MEM	3,290	71	35	Α	ABCD <b>E</b>
W7ID	1,767	41	31	Α	ABCD <b>E</b>

### Montana

NW7MT (WA7MT, NW7O,ops) 20 4 4 L AC

### Nevada

K7XC	2,028	57	26	Α	ABCD
W7GK	304	17	16	Α	ABD
AE7DX	1	1	1	Α	В

### Oregon

K7YO	13,500	201	50	Α	ABCD
N7DB	4,920	135	30	Α	ABCD
KA6T	4,704	130	28	Α	ABCDE
K7HSJ	1,960	61	20	Α	ABCD9EF
K7SMA	1,232	66	16	Α	ABD
K7VIT	329	42	7	Α	ABD
KI7.IA	6 000	103	40	Ω	ARCDE

### Utah

NJ7A 882 36 18 A **ABCDE** 

### **Western Washington**

KG7P	2,288	77	22	Α	AB <b>C</b> D
K7WA	1,700	70	20	Α	ABD
WB7FJG	1,248	65	16	Α	<b>A</b> BD
N6KW	444	37	12	Α	AB
K7NWS	42	14	3	Α	Α
N7EPD	25,960	236	59	В	ABCD9EFGHI
WA7TZY	20,008	224	61	В	ABDE
W7GLF	19,546	204	58	В	ABCD9E
WB7BST	17,980	214	58	В	ABD <b>E</b>
KE7SW	13,255	147	55	В	ABCD9EFG
N7CFO	21,230	234	55	Q	ABCD9EFGIP
KE7V (+K7	7MDL)				
	11,128	183	52	M	ABCD9

## 8 Michigan

KB8U	186,702	532	222	Α	ABCD9EFG
K8RO	21,894	203	89	Α	ABD
W6AQ	4,366	118	37	Α	AB
W8RU	850	26	25	Α	ABCD
K8MD	98,350	376	175		ABCD9EF
K2YAZ	27,819	187	99	В	ABCD9EF
WB8WSF	1,092	25	39	Q	ABCD
AD8U (K	8ZKJ, WA8	WOQ	, WA	8YL	Z, ops)
•	2,176	59	34	M	ABD

### Ohio

W8PAT	15,138	120	87	Α	AB <b>C</b> DE
N8IR	10,595	122	65	Α	ABD
K8WW	6,888	66	56	Α	ABCD9E
K8AB	3,456	75	36	Α	ABD
K8DXR	1,323	49	27	Α	AB
KB8UUZ	1,127	49	23	Α	Α
N8IE	1,050	42	25	Α	AB
KC8UDV	620	31	20	Α	В
KB8JVH	572	26	22	Α	В
K8TQK	122,610	343	201	В	ABCD9EFGI
K8TVD	4,860	64	54	В	ABCDE
W8KNO	1,288	46	28	В	AB
N8XA	4,032	66	42	Q	ABCD9E
N8ZM (+ I	(D8FO)				
	66,144	342	156	L	ABCD
K8FH (+K	C8QAE)				
	21,712	195	92	L	ABD

### **West Virginia**

KC8KSK	1	1	1	Α	Α
K2UOP	21,600	180	72	В	ABCD9EF
K8EP (K3I					
N3LTQ,	N8II, N8R	AT, W	ØQP	S, V	V3STU, W8CMK
WB8EKG,	WB8NQB	, ops)			
	162,610				
W8MOP (I	N8GK, KG	4MCC	C, KC	T8C	ES, K8WBS,
N8RIG, \	N4OF,ops	)			
	1,674	59	27	L	ABD
K8RL (+N8	BBL)				
•	280	18	14	L	ABD

### 9 Illinois

K2DRH	228,464	607	218	Α	ABCD9EF
N8KWX	9,284	141	44	Α	ABCD9
N9OBB	2,730	65	35	Α	ABD
NT9E	2,400	80	25	Α	ABD
K9IJ	1,917	47	27	Α	ABCDE
W9GKA	1,080	43	20	Α	ABCD
W9SE	340	19	17	Α	ABD
W3HDH	264	22	12	Α	Α
WD9DCW	65	13	5	Α	В
NØICV	1	1	1	Α	Α
N2BJ	82,859	394	133	В	ABCD9EF
K9SM	10,808	120	56	В	ABCD9EF
WB9SNR	2,914	63	31	В	ABCD9E
W9RVG	450	18	18	В	ABCD

W9SZ 1,653 29 29 Q BCD9EF N9TF (+KC9ETU) 14,560 208 56 L ABCD K9RN (KC9AAX, KC9AER, KC9BTW, N9REP, K9TMS, N9TZL, ops) 37,664 338 88 M ABCDE

### Indiana

WA1MKE	36,047	221	113	Α	ABCD9E
AC9X	5,537	113	49	Α	<b>A</b> B
KB9MWA	5,250	95	42	Α	ABD
N7NGO	2,520	58	36	Α	ABD
W9DRB	1,550	41	31	Α	ABCD
N9EGT	144	18	8	Α	Α
K9ZEN	1	1	1	Α	Α
K9EA	68,689	317	149	В	ABCDE
W9ICE (W	B9YCZ, V	VW8F	RR, N	8N0	QG, N9QQY,
WE8W, I	K9ZX, KA	9BFM	, KB	9NV	VP, ops)
	153,438	522	214	M	ABCD9E

### Wisconsin

N9DG	55.539	320	121	Α	ABCD
KC9BQA	53.922	351	114	A	ABCD
N9ISN	35,333	287	89	A	ABCD
K9VHF	26.754	205	91	A	ABCD <b>E</b>
N9LLT	15.640	170	68	Α	ABCD
K9DQ	5.734	91	47	Α	ABCD
KB9Q	3.034	59	37	Α	ABCD
N9UDO	2,542	62	31	Α	ABD
K9VS	1,560	68	20	Α	ABD
N9NDP	1,500	56	25	Α	ABD
N9TTX	1,422	53	18	Α	ABCDE
WX9M	990	38	22	Α	ABD
KC9AXZ	322	20	14	Α	ABD
W9GA	72,576	370	126	В	ABCD9E
NØAKC	37,430	243	95	В	ABCD9E
KB9PJL	36,792	251	84	В	ABCD9EI
K9CVC (K	9MU, KC	9FVW	I, KC	9FQ	D, K9AIH,
N9TTX,	KB9QGL,	ops)			
	77,859	425	123	M	ABCD9EI

## Ø Colorado

NØPOH	705	33	15	Α	ABCD
WVØH	260	19	10	Α	ABD
WØEEA (+N	9KC)				
•	6,345	99	47	L	ABCD
WV7T (+KC	ØSXV, lo	ogger)	)		
•	192	26	6	L	ABD

### Iowa

KMØT	224,190	423	235	В	ABCD9EFGHIJP
NØURW	67,620	345	140	В	ABCD
WØVAN	8	4	2	В	Α

### **Kansas**

NØLL	12,956	110	82	Α	ABCDE
WØRT	3,300	52	44	Α	ABCDE
WØEKZ	6,912	91	54	В	ABCDE

### Minnesota

NØKP	59,920	266	112	Α	ABCD9EFGHI
NØHJZ	31,752	254	81	Α	AB <b>CD</b> EI
NØVZJ	11,713	183	53	Α	<b>A</b> BD
KAØPQW	9,280	114	58	Α	ABCD
KØSHF	7,548	131	34	Α	ABCD9EFI
KØKFC	5,148	110	33	Α	ABCD
KBØLYL	3,636	202	18	Α	В
NGØE	3,315	67	39	Α	ABD
WBØLJC	2,964	89	19	Α	ABCD9EFGI
KFØQ	2,304	58	24	Α	ABCDEI
KCØJFY	1,584	66	24	Α	AB
KBØOZN	1,406	56	19	Α	ABD
WA2VOI	480	27	12	Α	ABCD
WØOHU	336	20	14	Α	BDE
KDØJI	180	20	5	Α	ABCDE
WØEPZ	119	13	7	Α	ABD
WQØA	65	11	5	Α	ABD
KBØPYH	60	6	6	Α	BCD
KCØREO	60	10	6	Α	AB
WIØZ	45	7	5	Α	BD

WØRKB 45 7 5 A BD KBØARK 40 7 4 A BD	British Columbia	Midwest
WØIS 40 7 5 A ABC AAØGP 36 6 4 A BD KØVG 35 6 5 A BD	VA7MM 30 5 2 B <b>E</b> VE7DXG (+packet) 35.856 368 72 L ABCD	K9JK 88,464 404 114 R ABCD9E WB8BZK 83,494 398 109 R ABCD9E KØDAS (+NØLNO)
KCØTAN 24 7 4 A ABD KAØHBG 15 4 3 A BD NØGEH 10 5 2 A AB	,	28,125 244 75 R ABCD9EF KFØM 12,420 146 60 R ABCD
KCØOIA 3 3 1 A B NØJCF 2 1 1 A D WØZQ 72,688 349 112 B A <b>BCD9EFG</b> I	Rovers Atlantic	New England
WØGHZ 37,430 191 95 B ABCD9EFGHI KØAWU 27,710 219 85 B <b>A</b> BCDEI	K1DS 78,645 376 107 R ABCD9EFGHIP	KJ1K 22,002 168 57 R ABCD9EFGHI KB1EAA (+KB1EUH)
WØAUS 11,250 138 50 B ABCDEFHI KØCJ 9,639 127 51 B ABCDE	K2TER (+KV2X) 65,024 291 128 R ABCD9EFGHI	21,450 230 66 R ABCD9E
WØAMT 7,095 115 43 B ABCD9 NØUK 5,247 104 33 B ABCD9EI KØJO 3,811 73 37 B ABCD9	K3LFO (+W3DIO) 40,004 370 73 R ABCDE KE3HT 30,646 208 77 R ABCD9EFGH	N1FGY (+K2LM) 15,400 150 50 R ABCD9EFGHI W1AUV 12,558 184 46 R ABDEI N1QVE 6,513 87 39 R BCD9EIJ
WØPHD 989 33 23 B ABDE WØLER 817 29 19 B ABDE	K2QO (+K2ZR) 25,988 214 89 R ABCDE	KR1TD 2,875 47 25 R ABCD9EFGHIJ
KC0FQZ 176 22 8 B AB W0VB (+ AA5F) 7,788 102 59 L ABDE	NE3I 16,992 203 48 R ABCD9E WA3PTV 13,400 145 50 R ABDEGI K2LDT (+ K2LDU)	Northwestern
KØSGI (NØRPM, KC0IYT, KD5EMB, ops) 9,856 151 44 M ABCD9EI	12,760 109 55 R ABCD9EFGHIJK WA1HHN 4,470 74 30 R ABCD9EIJKL	K3UHF 57,464 440 88 R ABCD9E W7DHC (+KA7GKK)
Missouri	W3HMS 4,294 73 38 R ABCD9EFG N2SLN 3,600 69 45 R ABC N1ROZ 160 11 8 R ABDJ N3EMF 40 5 5 R BCD	33,512 348 59 R ABCD9EFGI KAØTP 5,376 149 28 R ABCD W7ZZT 3,689 73 31 R ABCDE
WAØFQK 21 7 3 A A WAØCNS 504 32 14 B <b>ABCD</b>		K7TM 2,900 92 25 R ABD KF7CN 1,748 60 23 R ABD
	Central	Pacific
North Dakota	K9ZF 8,007 131 51 R ABD W9RAY 7,616 135 34 R ABCD9E	K6EU 12,599 219 43 R ABCD
KØUD         198         16         11         A         ABD           NTØV         4,606         67         49         B         ABCD9E	N9UX 1,239 49 21 R ABD	KJ6JO 1,125 53 15 R BD K6KL 748 44 17 R AB
Nebraska	Dakota	Roanoke
K1DJW 1,380 55 23 A <b>ABD</b> NØUNL (KCØRNZ, N0KIS, WD0BGZ, ops) 1,820 65 26 L ABD	W9FZ         112,832         680         86         R         ABCD9EFI           K0MHC         16,950         201         50         R         ABCD9EFG           KC0P         4,530         97         30         R         ABDEI           KC0FXY         1,368         45         24         R         ABD	W3IY (+ON4IY) 382,194 1156 153 R ABCD9EFGHI
Maritime-Newfoundland	NØHZO         910         42         14         R         ABDE           KG6GMT         364         24         14         R         ABD           KØNY         98         7         7         R         ABDEI	Southwestern
VE1SKY 35 5 5 A AD	Delta	WB6JDH 7,440 153 30 R ABCDEI KE6HPZ 6,303 103 33 R ABCDEGI N6ZE (+KQ6NO)
Quebec	N4OFA 37,224 249 99 R ABCD9EF	3,816 125 24 R ABD
VE2DC 936 38 24 A <b>ABD</b> VE2HDQ 640 32 20 A <b>B</b> VA2UK 96 31 3 A AB <b>D</b>	KD5RUJ 7,849 139 47 R ABD WA4JA 1,056 42 24 R ABD	West Gulf
VE2XX 9,971 96 59 B <b>ABCD9EFG</b>	Great Lakes	N6MU 276,012 813 123 R ABCD9EFGHI KG6TOA 267,894 791 121 R ABCD9EFGHI
Ontario	KF8QL 59,600 394 80 R ABCD9EFI K8DOG 39,325 319 65 R ABCD9E NE8I 35,073 224 81 R ABCD9EFGHIJK	W5LL (+N5KR) 5,822 120 41 R ABD N5AC 5,538 103 39 R ABDE
VE3SMA 27,063 185 93 A ABC <b>D9EFIJ</b> VA3KA 14,707 141 77 A ABCDE VE3CVG 14,256 142 72 A ABCDE	K8MR (+W1NN) 26,535 277 87 R ABCD	KD5SHM 3,604 87 34 R ABD WDØACD (+K5FOG) 3,240 92 24 R ABDE
VE3HHT 6,413 83 53 A ABCD VA3NFA 2,926 57 38 A ABCDE VE3SPW 2,886 78 37 A <b>B</b>	Hudson	AF5Q 1,380 46 23 R ABCDE KE5BZO (KD5ULG, op)
VE3KZ 2,607 79 33 A B VA3DF 1,040 26 20 A <b>C</b>	AL1VE 59,287 390 101 R ABCDE WA2IID (+KB2SSS)	484 25 11 R ABCDE K6LMN/5 130 13 10 R AB
VE3VHB 910 35 26 A B VA3OR 315 21 15 A A VE3TFU 73,746 298 153 B <b>ABCD9EF</b>	57,960 286 92 R ABCD9EFGHIJ KC2HIZ 8,228 90 34 R ABD9EFGHIJK WB2LLP 5,858 71 29 R BCD9EFGHIJ	Canada
	5,555 25 11 252521 01110	VE3OIL (+VE3NPB)

VE3OIL (+VE3NPB) 52,815 330 105 R ABCD9EFIJP VE7DAY 952 46 17 R ABCD