



# ARRL September VHF Contest

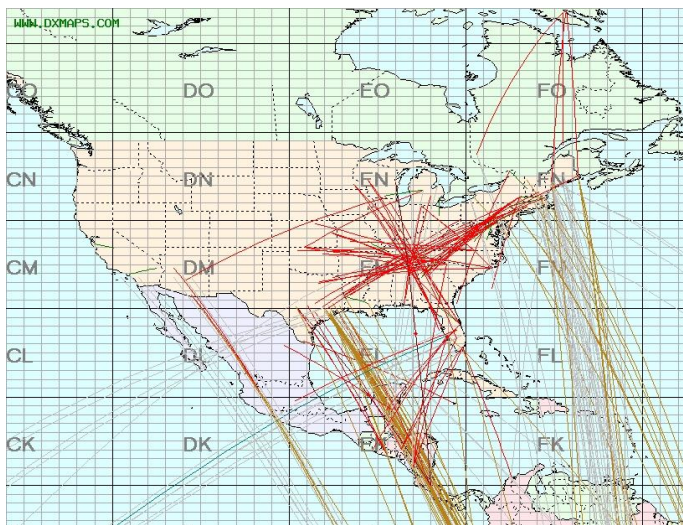
## 2012 Results

by Jeff Klein, K1TEO

### **The Magic Band comes alive in September!**

The 2012 version of the September VHF contest can be characterized as one with modest activity and conditions on most bands, and some unexpected six meter openings for much of the country on both Saturday and Sunday (Sep 8-10). The openings were modest by June contest standards but did include not only E-skip but also some DX openings as well.

Activity was up a small amount with 454 logs received this year. However, while fixed station and multioperator logs were up a bit over 2011, there was a decrease in rover logs received. Numerous stations noted the lower rover activity which has a large impact on the overall results given the ability to work these stations multiple times during a contest. I am sure all VHF contesters are rooting for a quick reversal of the overall rover activity in 2013.



*The 6 meter band came to life during the September VHF Contest with a mix of sporadic E and transequatorial propagation (TEP). (Map courtesy EA6VQ and DXMaps.com)*

One unusual aspect of this year's contest was the large turnover of stations in all categories making the Top Ten lists. Often times VHF contesting top lists have the same "names" (calls) with some musical chairs from year to year for the actual places. 2012 saw at least half of the

calls change in each Top Ten list and several with six or seven new members. For example, in the Single-Operator, High Power category 5 of the 10 were new calls this year, and in the Limited Multioperator category, 6 of the new calls were not on the 2011 list. So as you read this set your plan now for 2013 to determine how you can add your call to the list and continue to keep the top competitors on their toes.

A few new records were set this year with N3LL setting a Southeastern Division record for the Single-Operator, Low Power category while W8ZN did the same for the Roanoke Division's High Power category. While we are accustomed to DX log submissions for the June contest, one result of the six meter conditions during this contest was a larger than normal number of DX logs. Congratulations to CX9AU who had the highest DX score ever for the September contest!

### **Band Conditions**

Contesters always hope for unusual conditions during the event to make things as interesting as possible. September contests hold the best chance for tropo enhancement of the three major ARRL events during the year. As we near the sunspot cycle peak another possibility is an aurora (Au), or some enhanced 6 meter DX via F2 propagation or transequatorial propagation (TEP).

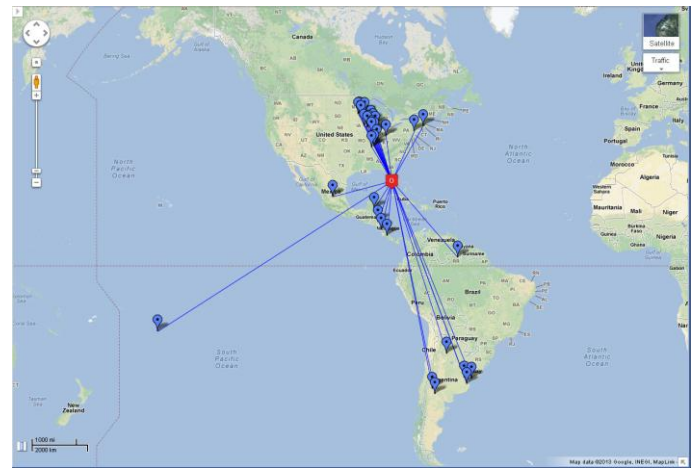
Tropo conditions during the week before the contest were quite good between the Midwest and East Coast. A cold front moving east late in the week ended the Midwest part of the enhancement. By Friday morning and evening there were excellent conditions up and down the East Coast ahead of the front. As the front moved east Saturday, all hope of good tropo conditions ended. In fact the weather was so severe that it spawned tornadoes in parts of New York City – a rare event. In the southeast there were rain showers, in the Pacific Northwest heavy fog in areas, while in California the weather was quite nice but conditions were poor. The APRS maps told the story with virtually no enhancement anywhere across the US for much of the contest period.

While we expect (hope?) for good 6 meter conditions every June, we do not really expect that to happen in September. However, the real story for band conditions in this contest was the E-skip across much of the eastern half of the country both days and some TEP as well. The band was open from the Southeast U.S. to the Northeast for a part of Saturday afternoon and evening. Some in the Northeast were able to link the E-skip with TEP to work into South America. Those in the southern part of the U.S. were able to work the TEP directly and many ended up with quite a few South Americans in the log. The events repeated themselves the following day, ending with a strong E-skip opening from Florida to the north with many Florida stations running stations for several hours.

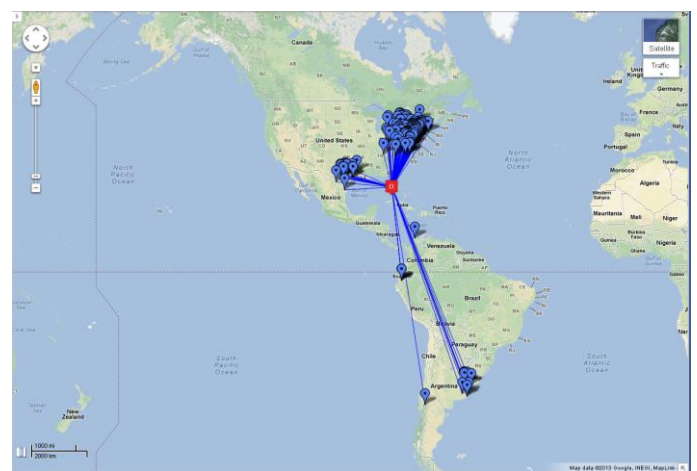
We can look at the logs of three stations for a sense of the magnitude and geography of the openings. N3LL (EL86) ended up with the high 6 meter QSO and grid totals for single-operators despite running low power, K5QE's Multioperator entry (EM31) topped all stations with the highest overall grid totals, while K1TEO (FN31) was the top single-operator station.

Bob, N3LL operates using 7 elements on 6 meters from EL86. Bob was definitely in the right place at the right time. Saturday the band was open mostly for DX in the afternoon and evening. He put PY, LU, CX, TI, V3, YN, HR, and XE in the log before the big catch in the evening a 59+ QSO with E51USA! Add eighteen domestic E-skip contacts in eleven grids and it was a pretty good Saturday from Florida.

Sunday was an even better day for Bob. After more DX in the morning and early afternoon working many of the same countries as the prior day, Bob added HK and HC to his DX list for the contest. The real fireworks occurred over the last few hours of the contest as Bob experienced a strong Es opening to the northern part of the country. He made over 200 E-skip QSOs and added 55 new grids in the US and Canada. He was busy working them right up to the end of the contest. The final 2-day tally was 306 QSOs in 100 grids on 6 meters. 66 of those grids worked on 6 were via E-skip and 18 were via TEP. Adding some local contacts on 144, 222 and 432, Bob tallied 41k points and 7th overall in the Single-Operator, Low Power category. Check out the attached maps to get a clear picture of the openings Bob experienced on 6 meters over the weekend.

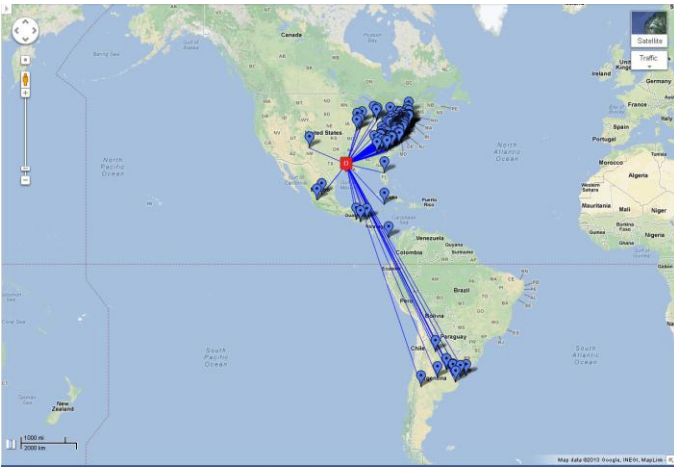


*N3LL – Saturday E-skip and TEP QSOs*

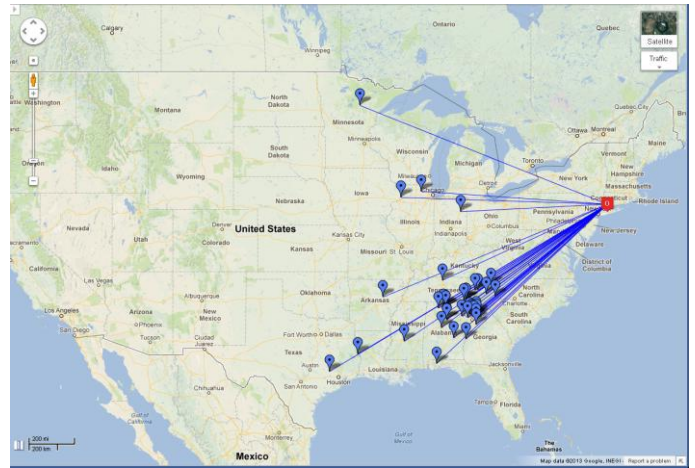


*N3LL – Sunday E-skip and TEP QSOs*

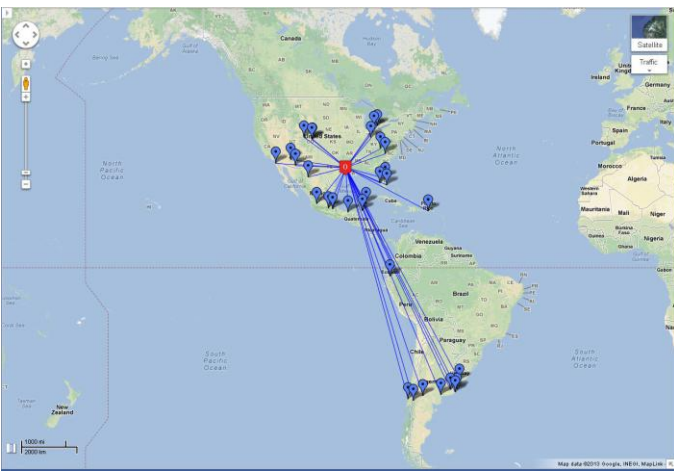
Marshall, K5QE has a top multioperator station in Texas (EM31). They also saw DX both days but their domestic E-skip was better on Saturday than Sunday. On Saturday they experienced a strong E-skip opening to their northeast, working over 100 QSOs in 31 grids during the opening. Like 'LL, they also had some TEP, working 19 DX stations in ZF, CX, HR, YS, LU, HP, TG and XE. Sunday was not as good for E-skip but the TEP to Central and South America was quite good. They added V3, CE, HC, and KP4 to their DX list. In total they worked about 50 E-skip or TEP contacts Sunday. They ended up with a contest high for all stations on 6 meters with 117 grids and just under 300 QSOs. Not bad for a September contest on 6!



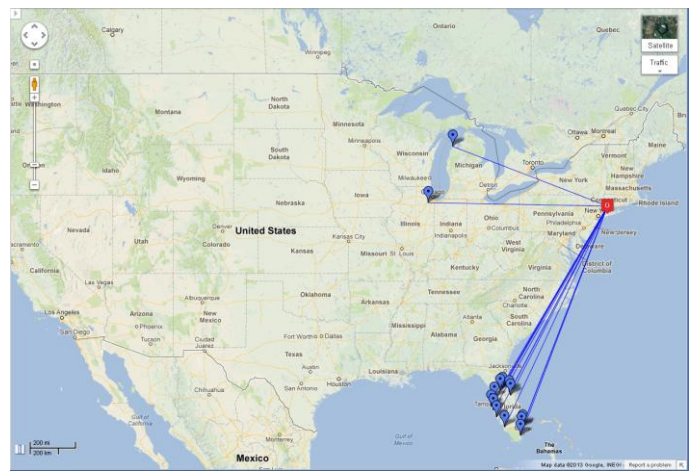
*K5QE – Saturday E-skip and TEP QSOs*



*K1TEO – Saturday E-skip QSOs*



*K5QE – Sunday E-skip and TEP QSOs*



*K1TEO – Sunday E-skip QSOs*

In the Northeast, K1TEO saw E-skip both days to the southwest Saturday and then to Florida on Sunday. While others in New England were able to use the E-skip to link into the TEP to South America, Jeff did not have any luck on that mode. On Saturday, Jeff made 30 E-skip QSOs in 14 grids, and then added 22 more Sunday evening in 11 new grids. The extra QSOs and 25 new grids during the openings helped him achieve the overall top single-operator score.

Even though 6 meters took center seat for this contest, there were many interesting other aspects to the event. Take a look at Bruce, W9FZ's summary of his Panhandle Mania of One (at the end of this article) to see how he continues to make unique rover efforts, activating low-activity grids. He has a lot of fun and increases it for others at the same time. And though they win almost every year, we should acknowledge the W2SZ operators who managed to build a fantastic microwave score even in the face of difficult band and weather conditions. Year after year they do an amazing amount of work to build an impressive station on Mt Greylock for the weekend, allowing them to work DX on the microwaves most of us could only dream about.

## Single-Operator Results

The Single-Operator, Low Power category (SOLP) remains the most popular, with entries up a small amount this year to 234. Bob, K2DRH continues to top this category from his Illinois QTH, once again finishing ahead of Mitch, WB1GQR who operates from Mt. Equinox in Vermont. Bob found conditions and activity to be below average and had to grind it out to achieve the top score. As did many others, he noted the lack of rovers in this contest and the large impact that can have on results. He was also not in the main part of the 6 meter E-skip opening, only having a few QSOs to help his totals. In the end, while 'GQR had 100 more QSOs than Bob, DRH's higher grid totals on all bands made the difference.

### Top Ten – Single-Operator

#### Single Operator, Low Power

K2DRH	103,040
WB1GQR (W1SJ, op)	80,520
K2KIB	78,200
AF1T	69,664
WB2SIH	55,120
K1KG	54,692
N3LL	41,654
N4QWZ	33,696
WA3EOQ	32,344
KX4R	30,738

#### Single Operator, High Power

K1TEO	452,452
W8ZN	361,849
K3TUF	255,509
WA2FGK (K2LNS, op)	211,008
WB2RVX	125,836
W3PAW	106,428
WØUC	66,920
W3IP	55,944
VE3ZV	54,538
N3HBX	50,715

#### QRP Portable

W1MR	31,450
W7LUD	5,110
WB2AMU	2,759
KBØHNN	2,296
N8XA	2,052
NØJK	714
N1PRW	408
KD8IPE	272
KC9MMM	189
K9PLS	138

K2KIB made good use of his portable mountaintop location to move up from 5th in 2011 to 3rd this time around. AF1T and WB2SIH moved up as well this year to finish fourth and fifth respectively, followed by last year's number-four finisher, K1KG. After that it was all

newcomers to the top list as N3LL made great use of the 6 meter Es for over 90% of his QSOs and the second highest band-grid total (100) to take 7th. N4QWZ, WA3EOQ and KX4R rounded out the top SOLP competitors. Greg, KX4R achieved his highest score ever for a September contest with the help of an hour long 6 meter opening Saturday afternoon in which he worked eighty stations, mostly in the FN grids. AF6RR had the top West Coast score while KKØQ led the Rocky Mountain region.

In the Single-Operator, High Power (SOHP) category, Jeff, K1TEO managed to hold off a hard-charging W8ZN to take the top spot. Jeff was helped by being in a little better location for the Es this time around, which added 50 QSOs and 25 grids to his 6 meter totals. 'TEO's higher grid totals on the bands outweighed some very impressive microwave QSO totals as Terry led all stations in that area, other than multioperator station W2SZ. "It was tough this time around" noted Jeff, "as my 903 station got water in the feed line from the heavy rains at the start of the contest, and 3 GHz and 10 GHz were not working very well. Fewer rovers were worked than in prior years."

Phil, K3TUF continues to make improvements to his station and moved up a place to third while WA2FGK (K2LNS, op) was right behind with his usual great effort. WB2RVX and W3PAW were fifth and sixth with excellent scores over 100k.



*Paul, W3PAW continues to make improvements to his station vowing to be bigger and better than ever for the 2013 contesting cycle. (Photo from W3PAW)*

Veteran contester Paul, WØUC was next with the contest's top score from the Midwest. Paul found local activity to be fairly good and worked quite a few rovers

though he noted that some dropped to the Limited category this year leaving their microwave gear at home. He also made about 15 6 meter E-skip QSOs to help out the score. W3IP, VE3ZV and N3HBX rounded out the Top Ten for the SOHP category. The top score from the west was N7EPD while NR5M led the scorers in his part of the country. The SOHP category saw an increase of fifteen participants over 2011 with a total of 101.

The Single-Operator Portable category saw the same number of entrants as last year, but a substantial turnover of top participants. While many-time leader Chris, W1MR returned to have the top score, the second-highest scorer was a first-time contestant. Nelson, W7LUD took a logging road to the top of a mountain in CN88 to set up on 50, 144, and 432 SSB. He added 222 and 903 FM to build his score. This was his first time ever on 6 meters and he said “it was so much fun to work weak-signal VHF/UHF that I am hooked.” Welcome Nelson and congratulations on the fine second-place finish – you can read more about his experiences at the end of this article.

Ken, WB2AMU moved up a couple of places to third this time, followed by KBØHHN and N8XA. Last year’s number eight finisher in the category, NØJK, ended up fifth this year while N1PRW repeated in the Top Ten as well.

## Multioperator

Twenty one logs were submitted in the Limited Multioperator (LM) category, with the W3SO team earning a clear win with 171k points. They had high grid totals on all bands although with the poor conditions on 144 MHz and up their totals were down from their typical results. Moving into the second slot was W2LV with solid results on all bands. They totaled just under 100k points, about 10k in front of third place W4IY who moved up from fifth in 2011. The W4NH group moved from the Multioperator category in 2011 to LM in 2012 to take fifth. 92 grids on 6 meters really helped their score as they worked a good deal of E-skip especially on Saturday. They were followed by N8ZM, K1HTV, W1QK, and WØVB. ‘QK and ‘VB both moved up one position from a year earlier.

### Top Ten – Multioperator Categories

#### Limited Multioperator

W3SO	171,310
W2LV	96,200
W4IY	86,180
W4NH	83,985
N8ZM	38,688
K1HTV	18,407
W1QK	13,924
WØVB	10,990

WB6W	9,240
NE1B	6,996

#### Multioperator

W2SZ	745,140
K5QE	252,648
K2LIM	152,640
K3YTL	100,084
W2EA	97,536
KBØHH	72,772
K6MI	41,820
K3EOD	31,948
VE7JH	18,270
N9UHF	17,680

The W2SZ team used their usual portable location on Mt Greylock in Western Massachusetts to dominate the multioperator category nearly tripling the score on the next highest team. With conditions less than favorable they recorded solid scores on the bottom four bands but really excelled with the microwaves. They worked 144 grids on 903 MHz and up, more than most of the competitors tallied on all bands. Add almost 300 microwave QSOs and they scored just under three-quarters of a million points this year.

The K5QE team continues to turn in top notch-scores, placing second with 252k. They used E-skip to great effect, tallying the highest grid total of any station on 6 meters with 117. They also used moonbounce well, working over 100 grids on 2 meters in the contest! Sixty of those grids were worked off of the Moon. The K2LIM group in Western New York continues to make major hardware improvements and it paid off with a third-place finish. K3YTL, a long time contest competitor, made what may be their last group effort pay off, coming in fourth. They have lost many of their long-time operators and do not expect to be able to do all the work needed for future efforts – any newcomers want to jump in and help out?

W2EA and KBØHH continued to take top spots in the category placing fifth and sixth. K6MI had the top West Coast score, operating from Fraizer Mountain in DM04. It was cold and rainy, but helped along by some 10-band runs with rovers they placed seventh. K3EOD was next with another West Coast group, VE7JH, running up a good score from British Columbia. They enjoyed good weather and some nice rover QSOs from their 4000-foot club repeater location on Vancouver Island. N9UHF had the top multiop score from the Midwest to take the final Top Ten position.

## Rovers

Rover entries were down a bit this year to 46. Most of the drop was in the Classic Rover category which had a total of 25 entries. Rovers have a large impact on scores so the drop in entries was noticed by many non-rover participants. Some of the poor weather in key parts of the country may have had an impact on participation this year, too. Let's hope that 2013 sees a return to higher levels of activity!

### Top Ten – Rover Categories

#### Rover

W1RT	99,840
VE3OIL	57,750
NN3Q	51,888
NØLNO	27,200
VE3WJ	19,532
W3HMS	17,110
W1AUV	15,340
AG4V	13,311
N2ZBH	11,250
W9FZ	7,310

#### Limited Rover

K2QO	55,110
K9JK	33,352
WAØVPJ	21,376
N2SLN	8,120
KV2X	4,814
KI6QEL	3,105
WØZF	3,105
AB2YI	2,535
W5VY	2,240
N6ZE	2,000

#### Unlimited Rover

WA3PTV	52,728
WW7D	16,072
KCØP	6,680
KJ1K	5,254
KRØVER	1,764
K8DOG	380

Returning to take the top spot in the Classic Rover category was John, W1RT along with his partner Andy, K1RA. The two debated a number of different routes this year, deciding at the last moment to head east to Cape Cod in the hope of catching some tropo before the massive cold front moved through and eliminated any hope of good tropo conditions. Their plan went awry when significant rig problems curtailed their early efforts. By the time they got things going, any hope of good conditions were lost though they did manage to work a station in Brazil on 6 meters, perhaps the longest rover QSO ever made in a September contest. Poor activity and continuing rig problems plagued them throughout Saturday. After a stop at John's Connecticut

QTH and some damage control, they regrouped on Sunday with much better results. They were unable to recoup Saturday's lost points so their score was down significantly from 2011 but they still scored nearly 100k to take the category.

Last year's number two, VE3OIL, repeated in second place. They didn't experience anything unusual except to work some Florida stations on 6 meters toward the end of the contest while in EN82. NN3Q was third after taking the unlimited rover top spot in 2011, followed by NØLNO, VE3WJ, W3HMS, W1AUV and AG4V. Newcomer N2ZBH picked up the ninth spot, while W9FZ doing his "Panhandle Mania" (see Bruce's article at the end of the results.) rounded out the category's top scores.

The Limited Rover (RL) category saw a slight downturn in submitted logs this year with a total of 16. K2QO roved once again from New England out toward Western New York to rack up 55k points with over 400 QSOs. They had very high grid totals on 6 and 2 meters for a rove which helped rack up the score. K9JK moved up from fourth in '11 to second this time with a successful try at a very different rove from their typical Chicago area efforts. They started in Northeast Pennsylvania and spent Saturday and some of Sunday morning in the W3 area before heading toward home, just making it into the Chicago area at the end of the contest. Total drive – 1600 miles! WAØVPJ continued his top level Limited Rover efforts with a similar score as last year to take third. N2SLN and KV2X were next while WØZF and the top West Coast Limited Rover, KI6QF, finished in a dead heat for sixth and seventh.

The Unlimited Rover (RU) category continues to have a small group of competitors as once again there were five entrants. Joe, WA3PTV came out on top after a high finish in the Rover category last year. He made an impressive 110 QSOs on the microwave bands to score over 50k points. Second-place WW7D made a lot of folks in the Pacific Northwest very happy, handing out almost 300 Qs on the bottom four bands. While some of his plans to fly to various airports around the region were delayed or cancelled because of weather, he still made it to nine Oregon and Washington grids. His addition of 222 MHz SSB and CW and more Qs this year helped him to more than a 50% increase in score. Others in the category were KCØP, KJ1K and KRØVER, rounding out the places for the RU operators.

## Club Competition

Club submissions were up slightly this year with a total of 26 competitors. Twenty two were in the Medium category while four were in the Local category. About forty percent of all entrants were part of a club score.

In perhaps the closest competition in years, the top two clubs were less than 10,000 points apart. The North East Weak Signal Group (NEWS) edged out the Potomac Valley Radio Club (PVRC) 799,790 to 790,011. The NEWS Group moved up from second a year ago while the PVRC also moved up one position. Last year's champs, the Mt Airy VHF Club (Packrats), had an excellent score this time around as they were also over 700k points. They submitted fewer logs this year while the PVRC showed a nice increase in participation. Fourth and fifth spots were taken by the Nacogdoches ARC and the Contest Club of Ontario. A couple of Midwest clubs were next as the Northern Lights Radio Society and the Society of Midwest Contesters both exceeded the 100k point level.

### Club Competition

<i>Club Name</i>	<i>Logs</i>	<i>Score</i>
<b>Medium</b>		
North East Weak Signal Group	19	799,790
Potomac Valley Radio Club	24	790,011
Mt Airy VHF Radio Club	13	705,816
Nacogdoches ARC	3	262,441
Contest Club Ontario	12	184,001
Northern Lights Radio Society	12	145,281
Society of Midwest Contesters	7	116,009
Florida Contest Group	5	99,336
Florida Weak Signal Society	6	67,151
Badger Contesters	9	59,159
Pacific Northwest VHF Society	12	48,404
South East Contest Club	3	37,580
Tennessee Contest Group	3	33,789
Roadrunners Microwave Group	4	25,284
Frankford Radio Club	5	23,084
Mad River Radio Club	3	18,461
Northern California Contest Club	6	15,772
Yankee Clipper Contest Club	8	15,201
Rochester VHF Group	5	10,975
Western New York DX Assn	3	1,359
Contest Group Du Quebec	3	399
Grand Mesa Contesters of Colorado	3	300
<b>Local</b>		
Murgas ARC	3	312,604
Stoned Monkey VHF ARC	6	18,151
Bristol (TN) ARC	6	11,475
Bergen ARA	3	1,615

Among the four entries in the Local Club category, the Murgas ARC took the top spot. They returned to the lead position after a one-year absence in 2011. Last year's number two and three clubs repeated with the Stoned Monkey VHF ARC and Bristol ARC both doubling the number of entries to help their scores.

## Summary

Having personally participated in this contest for over 35 years, I always hope that something interesting will happen so it won't be "same old same old". There had been good tropo conditions from my QTH for the weeks leading up to the contest, something that makes a contest a lot of fun for me. Knowing the radical weather change was coming and the WWV reports not showing any signs of an aurora over the weekend, I was a bit disappointed starting out the contest. Therefore, what a nice surprise it was to have E-skip on 6 meters and to make it even better have it happen both days! Moral of the story – with all the stations on the air during a VHF contest, something is bound to happen and it is not always the expected. I hope those who participated had fun making contacts, trying out new rigs, greeting old friends and just getting on the air. I hope to be on once again next fall and as always will be rooting for something unusual to happen. As they say, "You gotta be in it to enjoy it!" Hope to see you this September 14-16!

A special thanks to several operators who made contributions to help out with the content of this contest summary: Thanks to N3LL and K5QE who were kind enough to send their logs and provide insights on the 6 meter openings from their QTHs. W3PAW, W9FZ, K6MI, KX4R, W7LUD, VE7JH and WØUC all provided input on their operations. And to K1RA for his help with creating maps summarizing the 6 meter openings and K9AKS who continues to keep the records list for the contest so we know when new ones are set. And finally to my good friend Stan, KA1ZE who helped me find some data for the article. Thanks, guys!

## 2012 ARRL September VHF QSO Party

### Regional Leaders by Category

Boxes list call sign, score, and category (A - Single-Op Low Power, B - Single-Op High Power, Q - Single-Op Portable, L - Limited Multioperator, M - Multioperator, R - Rover, RL - Limited Rover, RU - Unlimited Rover)

Northeast Region			Southeast Region			Central Region			Midwest Region			West Coast Region		
New England, Hudson and Atlantic Divisions; Maritime and Quebec Sections			Delta, Roanoke and Southeastern Divisions			Central and Great Lakes Divisions; Ontario Section			Dakota, Midwest, Rocky Mountain and West Gulf Divisions; Manitoba and Saskatchewan Sections			Pacific, Northwestern and Southwestern Divisions; Alberta, British Columbia and NWT Sections		
WB1GQR (W1SJ, op)	80,520	A	N3LL	41,654	A	K2DRH	103,040	A	KØSIX	13,662	A	AF6RR	8,640	A
K2KIB	78,200	A	N4QWZ	33,696	A	KC9BQA	9,060	A	NØLL	7,980	A	K6TSK	6,960	A
AF1T	69,664	A	KX4R	30,738	A	KF8QL	8,004	A	WB5ZDP	7,810	A	VE7FYC	3,762	A
WB2SIH	55,120	A	N4BP	16,320	A	VA3ELE	7,009	A	W6ZI	6,327	A	N6LB	3,150	A
K1KG	54,692	A	W5MRB	13,689	A	VE3KZ	6,956	A	WØJT	6,123	A	KG7P	2,834	A
K1TEO	452,452	B	W8ZN	361,849	B	WØUC	66,920	B	KØAWU	15,890	B	N7EPD	16,402	B
K3TUF	255,509	B	W3IP	55,944	B	VE3ZV	54,538	B	NR5M	14,018	B	KC6ZWT	12,250	B
WA2FGK (K2LNS, op)	211,008	B	N2CEI	43,875	B	K8MD	39,720	B	K5LLL	12,888	B	K7ND	8,880	B
WB2RVX	125,836	B	W4WA	36,176	B	VA3ST	34,668	B	W3XO/5	11,076	B	W7FI	7,040	B
W3PAW	106,428	B	KE2N	32,943	B	K8TQK	34,572	B	WØLGQ	6,188	B	W7GLF	4,092	B
W1MR	31,450	Q			N8XA	2,052	Q	KBØHNN	2,296	Q	W7LUD	5,110	Q	
WB2AMU	2,759	Q			KC9MMM	189	Q	NØJK	714	Q	KD8IPE	272	Q	
N1PRW	408	Q			K9PLS	138	Q	KØNR	12	Q	KF6CVA	24	Q	
KC2JRK	10	Q			K9HA	72	Q							
					W1MRK	36	Q							
					W1RIE	36	Q							
W3SO	171,310	L	W4IY	86,180	L	N8ZM	38,688	L	WØVB	10,990	L	WB6W	9,240	L
W2LV	96,200	L	W4NH	83,985	L	KY4ARC	169	L	WD5IYF	480	L	K6ZGI	1,224	L
W1QK	13,924	L	K1HTV	18,407	L							N7CKJ	518	L
NE1B	6,996	L	W5ELK	476	L									
W2OW	4,272	L	W4NFR	90	L									
W2SZ	745,140	M	KD2JA	15,405	M	N9UHF	17,680	M	K5QE	252,648	M	K6MI	41,820	M
K2LIM	152,640	M	K1KC	10,146	M	K8MM	17,510	M	KBØHH	72,772	M	VE7JH	18,270	M
K3YTL	100,084	M	W4TUN	648	M	WZ8T	11,502	M	KC5MVZ	1,625	M	W6TV	15,860	M
W2EA	97,536	M	W4YCC	560	M	N2BJ	10,260	M				KD7UO	2,552	M
K3EOD	31,948	M	W4GZX	120	M	K9ZM	169	M				K7BWH	126	M
W1RT	99,840	R	AG4V	13,311	R	VE3OIL	57,750	R	NØLNO	27,200	R	K6EU	3,906	R
NN3Q	51,888	R			VE3WJ	19,532	R	W9FZ	7,310	R	KB5WIA	1,394	R	
W3HMS	17,110	R			VE3CRU	2,871	R	AE5P	5,538	R	N6GP	768	R	
W1AUV	15,340	R			AB8M	966	R	WK5F	4,255	R				
N2ZBH	11,250	R			W9II	833	R	NØHZO	1,890	R				
K2QO	55,110	RL	W5VY	2,240	RL	W8ISS	108	RL	WAØVPJ	21,376	RL	KI6QEL	3,105	RL
K9JK	33,352	RL			VE3RKS	24	RL	WØZF	3,105	RL	N6ZE	2,000	RL	
N2SLN	8,120	RL					KD5EUO	516	RL					
KV2X	4,814	RL					WBØHBJ	156	RL					
AB2YI	2,535	RL												
WA3PTV	52,728	RU			K8DOG	380	RU	KCØP	6,680	RU	WW7D	16,072	RU	
KJ1K	5,254	RU					KRØVER	1,764	RU					



## Division Winners

### Single-Operator, Low Power

Atlantic	WA3EOQ	32,344
Central	K2DRH	103,040
Dakota	KØSIX	13,662
Delta	N4QWZ	33,696
Great Lakes	KF8QL	8,004
Hudson	K2KIB	78,200
Midwest	NØLL	7,980
New England	WB1GQR (W1SJ, op)	80,520
Northwestern	N6LB	3,150
Pacific	AF6RR	8,640
Roanoke	K4FJW	4,446
Rocky Mountain	KKØQ	4,025
Southeastern	N3LL	41,654
Southwestern	K6TSK	6,960
West Gulf	WB5ZDP	7,810
Canada	VA3ELE	7,009

### Single-Operator, High Power

Atlantic	K3TUF	255,509
Central	WØUC	66,920
Dakota	KØAWU	15,890
Delta	KG5MD	6,498
Great Lakes	K8MD	39,720
Hudson	W2BVH	8,736
Midwest	WØLGQ	6,188
New England	K1TEO	452,452
Northwestern	N7EPD	16,402
Pacific	KC6ZWT	12,250
Roanoke	W8ZN	361,849
Rocky Mountain	WA7KYM	4,046
Southeastern	N2CEI	43,875
Southwestern	KC6SEH	2,176
West Gulf	NR5M	14,018
Canada	VE3ZV	54,538

### Single-Operator Portable

Central	KC9MMM	189
Dakota	KBØHNN	2,296
Great Lakes	N8XA	2,052
Hudson	WB2AMU	2,759
Midwest	NØJK	714
New England	W1MR	31,450
Northwestern	W7LUD	5,110
Pacific	KF6CVA	24
Rocky Mountain	KØNR	12
Southwestern	KD8IPE	272

### Limited Multioperator

Atlantic	W3SO	171,310
Dakota	WØVB	10,990
Delta	W5ELK	476
Great Lakes	N8ZM	38,688
Hudson	W2LV	96,200
New England	W1QK	13,924
Northwestern	N7CKJ	518
Pacific	WB6W	9,240
Roanoke	W4IY	86,180
Southwestern	K6ZGI	1,224
West Gulf	WD5IYF	480

### Multioperator

Atlantic	K2LIM	152,640
Central	N9UHF	17,680
Delta	W4GZX	120
Great Lakes	K8MM	17,510
Hudson	W2NPT	65
New England	W2SZ	745,140
Northwestern	KD7UO	2,552
Pacific	W6TV	15,860
Roanoke	W4TUN	648
Southeastern	KD2JA	15,405
Southwestern	K6MI	41,820
West Gulf	K5QE	252,648
Canada	VE7JH	18,270

### Classic Rover

Atlantic	NN3Q	51,888
Central	W9II	833
Dakota	NØHZO	1,890
Delta	AG4V	13,311
Great Lakes	AB8M	966
Hudson	N2ZBH	11,250
Midwest	NØLNO	27,200
New England	W1RT	99,840
Pacific	K6EU	3,906
Rocky Mountain	ABØYM	1,224
Southwestern	N6GP	768
West Gulf	W9FZ	7,310
Canada	VE3OIL	57,750

### Limited Rover

Atlantic	K2QO	55,110
Dakota	WAØVPJ	21,376
Delta	W5VY	2,240
Great Lakes	W8ISS	108
New England	W1PL	646
Pacific	KI6QEL	3,105
Rocky Mountain	WBØHBJ	156
Southwestern	N6ZE	2,000
West Gulf	KD5EUO	516
Canada	VE3RKS	24

### Unlimited Rover

Atlantic	WA3PTV	52,728
Dakota	KCØP	6,680
Great Lakes	K8DOG	380
New England	KJ1K	5,254
Northwestern	WW7D	16,072
Rocky Mountain	KRØVER	1,764

## Panhandle Mania of One

Bruce Richardson, W9FZ <w9fz@w9fz.com>

*Great horizons for VHF/UHF/SHF-but the bands sure were quiet!*

For the fourth year in a row, I enjoyed exploring parts of the central U.S. that I've never seen previously. In 2009, I explored 10 grids along the 98th Meridian from northern Nebraska southward to central Kansas. In 2010, I explored the 94th Meridian from south-central Iowa southward to west-central Missouri. 2011 found me out on the 102nd Meridian working along the Colorado eastern border from southwestern Nebraska southward to western Kansas.

During the week leading up to the contest, I call my car-trip "Looking for America" as I use maps, terrain data, and actual poking around to determine good operating locations for the contest on the following weekend.



During the week before, I chirp APRS so that friends and family can follow my wanderings. I make daily travelogue postings on Facebook—with pictures—to keep friends and family aware of what I'm doing. I enjoy photography, bird watching, and breakfasts in small-town café's while

I'm "Looking for America". Some would find the flat terrain dull but I find it beautiful. I grew up on a farm in Illinois so I appreciate seeing successful agriculture in action. In my travels (before the contest begins), I make a point to stop at every historical marker. It forces me to learn more about the area and to keep my pace slow.

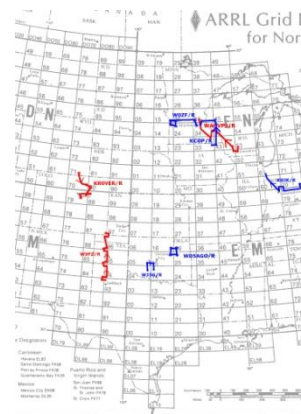
I've been roving for over 23 years. Apartment living has been the largest motivator over the years. But the joys I've found while roving make it an important part of my life. Over the years, I've really responded to thanks when I've helped out an operator with a somewhat rare grid. For that reason, I usually head to rarer grids rather than troll through populous, common grids. Another motivator to activate grids new for me is the Central States VHF Society Reverse VUCC Award Program.

For the three years 2009-2011, I organized a loose and informal promotion effort called "Midwest Mania" to help spur activity during the September VHF contest in the Great Plains area. It starts with an email blast to all known VHF'ers in the region encouraging them to get on the air for the September contest. Further, it solicits what their plans are and what bands they are active on. Then I take that information and whip it into a little website

such as [w9fz.com/midwestmania11](http://w9fz.com/midwestmania11). The promotion seemed to help and most operators reported that the September contest was more fun than in the past.

For 2012, I knew I wanted to take a car trip again and participate in the September contest. But my life was very busy with work and a competing hobby (Guts Frisbee). I sent some exploratory emails whether another "Midwest Mania" effort would be helpful. I did not get much response. At the Central States VHF Society conference in Cedar Rapids in late July 2012, I talked with Gary KBØHH. His big multi-op station has been one of the primary stations I have been contacting in the previous three years. He sure hoped I'd go out somewhere within range of his station because he'd appreciate the activity. So with my busy life and just one week to go, I whipped up a website called "Not Quite Midwest Mania 2012". ([www.w9fz.com/nqmm12](http://www.w9fz.com/nqmm12))

Planned activity seemed somewhat down. Possibly because of the short notice—but it could be other issues. I decided to rove out on the 102nd Meridian from southwest Kansas southward through the Oklahoma Panhandle in to the Texas Panhandle near Lubbock, TX. Back in the early 80's, I spent 3 years based at Reese AFB in Lubbock, TX and really enjoyed my time there. I was just active on 2 meter FM in those days.



From my home base in the Twin Cities of Minnesota, it is a long way to the Texas Panhandle. Most years I enjoy a slow drive across the plains. This year, I decided to sprint to SW Kansas—I drove 650 miles each day. While sprinting past Topeka, KS, I put out a general "monitoring" call on an FM repeater. Who should hear me but Greg, WQØP—an active VHF'er who I hoped to work during the contest. He invited me over for a shack visit and I changed my plans and spent a few hours seeing his shack and learning about him and his locale. It really was one of the highlights of the trip. When VHF'ers get together for eye-ball QSO's, it makes the world smaller for the next time we connect on the high bands. (Greg multi-op'd with WAØARM at Greg's country hill-top.)

After two days of sprinting, I arrived in southwest Kansas and could slow the pace back down to have fun poking around and find the best operating locations. I

gotta tell you, when the plains are that flat, VHF signals travel nicely and just about any location is as good as another. Still, I used maps and actual site-checkout to settle on where I'd operate during the contest. I'm looking for a trade-off between proximity to the grid-corner and good altitude or horizons. I also look for suitable places to pull off roads and park. In my case, with an immovable antenna rack on the roof, I need to turn the car to spin the beams.

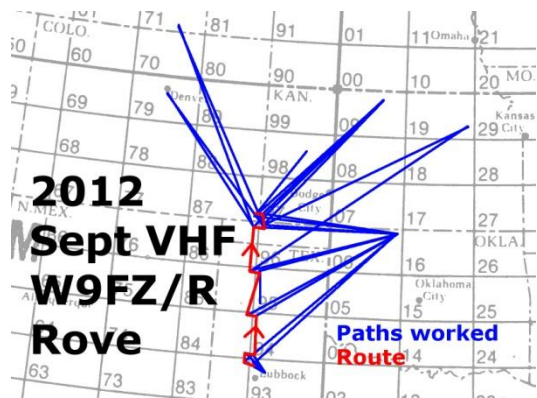
## Contest Results

This was my quietest VHF contest in many years. While I had alerted the region to where I was going, the truth is it's a very long way from Dallas or Denver to the area I was roving. So even though I CQ'd in hopeful directions, I did not get much response. The other issue is that although the weather was good, VHF/UHF radio conditions seemed poor. There was not an obvious spoiler to conditions like a front but the evidence showed conditions to be poor. I worked the KBØHH multi-op station from all of my locations but it was quite difficult from some--more difficult than it should have been. The terrain was flat and the distance not too great—yet we had to battle to complete on 2 meters. That indicated to us that conditions were poor.



W9FZ/R in DM94ax just west of Canyon, TX. Fine horizons in all directions. That's Canyon, TX in the background. (Photo by W9FZ)

However, as seen in the graphic, I was successful on a few long DX QSOs. They were difficult—but we completed. From DM85xx, I worked WAØARM (multi-op) in EM19 at about 390 miles. Also, from DM96xx, I worked WA7KYM in DN71 at about 350 miles. I must mention that Larry, NØLL also did a fine job looking for me and we worked in every grid that conditions would allow.



I ended up with 108 QSO's. That's about 10 per grid. That's less than I hoped for but is understandable considering where I was. Since I wasn't real busy with QSOs, I could bang away and take my time completing the distant contacts that I did make. I'd go back to that area. It was beautiful in its own way. The horizons are incredible. I hope to return to southwest and western Kansas for the Kansas QSO Party some year. Next year I'm looking at the 98th or 94th Meridians but more southerly than I've ever been.



W9FZ/R in DM84xx southwest of Amarillo, TX as evening falls. (Photo by W9FZ)

I caught two Mexican stations on E-skip for 6 meters and they were the only E-skip I worked. At the north end of my rove, I heard the Denver area stations. I only worked them from one or two grids when it should have been four grids. The Denver Broncos were playing an important game that Sunday evening – after game-time, I heard nothing in that direction despite my CQs.

## Hooked on VHF+ Contesting!

By Nelson Ludlow, W7VUD

I very much enjoyed the September VHF Contest. This was not only my first VHF contest but my first contest ever. My first time on 6m actually!

I work at a company that does wireless research and we often are on mountain tops setting up microwave radios. So, I chose a sweet location up a logging road to a clear mountain top, near my home, in CN88 at about 2000' elevation with a clear line of sight to both Seattle and Vancouver Island, BC.

Powered with a motorcycle battery, I worked 6m, 2m, and 70cm using QRP SSB on my ICOM-7000 with beam antennas mounted on a makeshift mast of aluminum tent poles.

I had just purchased an Alinco DJ-G29T handheld and made several contacts on 223.5 FM with 5 watts. I even made one contact to Vancouver Island on 900 MHz using 2.5 watts, using just the handheld and rubber duck antenna. So even being QRP with the two radios which covered five bands, coupled with a great location you can still make several contacts.

We only had one rover in the Pacific Northwest, WW7D/Rover, who I was grateful for as he provided several grids that I didn't hear anyone in otherwise. The QSOs to WW7D/R (Darryl) came in clear, which led me to believe if there were more people on the air in our part of the country, we could achieve higher scores.

Since it was my first VHF contest, I planned to stay up all night to work new stations, but after around 1am, all the bands appeared to be silent, other than one or two diehards who we had already worked...so I got some sleep.

If I remember correctly, I was able to reach both Portland and North Vancouver Island from my location on both 6 and 2m.

The only thing that didn't go as well was getting a flat tire on a marginal logging "road". Luckily it went flat just as I was at the top of the mountain, so I called it good and set up my gear. However, I did miss a guy calling CQ while I was changing the tire the next day, hi hi. Good thing I wasn't planning to be a rover.

Since I am a rookie contester (although I have been a ham since 1974), I learned a few things the hard way. Such as, I plan to use contest logging software next time to keep better track of whether I had already made a QSO with a station. I mistakenly tried to double QSO a couple people via my paper log, and had them politely tell me we already made contact.

Bottom line – it was so much fun to work low signal strength VHF/UHF. I am hooked! After that I joined the Pacific Northwest VHF Society and already planning for the next contest.

**QSO Leaders By Band****Single-Operator, Low Power****50 MHz**

N3LL	306
N4BP	204
WB1GQR (W1SJ, op)	166
K2DRH	133
AF1T	115
KX4R	114
W1TR	80
WB2SIH	73
WB2JAY	72
W3EKT	72
K2UNK	70
N4QWZ	70
N3ALN	69
WB4SQ	67
W2BZY	67

**144 MHz**

WB1GQR (W1SJ, op)	164
WB2CUT	130
WB2SIH	125
K2DRH	113
K2KIB	104
AF1T	99
KØSIX	77
K1KG	72
W3EKT	68
KX4R	61
KB4BKV	60
VA3ELE	58
W1TR	56
WA3EOQ	56
WB2JAY	56

**222 MHz**

WB1GQR (W1SJ, op)	62
WB2SIH	54
AF1T	47
K2DRH	46
K2KIB	39
WA3EOQ	32
K1KG	31
WB2JAY	29
N3ALN	28
W3EKT	27
KB4BKV	27
N4QWZ	27
WB3IGR	22
KX4R	19
KC9BQA	19
W5MRB	19

**432 MHz**

WB1GQR (W1SJ, op)	71
K2DRH	68
WB2SIH	65
AF1T	55
K2KIB	46
AF6RR	43
KX4R	42
W3EKT	41
K1KG	41
WB2JAY	39
N4QWZ	36
KØSIX	35
WA3EOQ	34
W1TR	34
VA3ELE	33

**902 MHz**

K2KIB	17
K1KG	17
AF1T	16
WB2SIH	11
W3SZ	11
WA3EOQ	11
N3ALN	9
WB3IGR	9
W3EKT	9
K2DRH	9
W1FKF	8
WB1GQR (W1SJ, op)	8
W5MRB	7
WB2JAY	7
N4QWZ	5

**1296 MHz**

K1KG	27
AF1T	24
K2KIB	20
WB2SIH	17
K6TSK	15
AC1J	13
WB2JAY	13
WB1GQR (W1SJ, op)	13
W3SZ	13
K2DRH	13
W1FKF	11
VA3ELE	10
WB3IGR	10
N3ALN	10
KX4R	10
W3EKT	10

**Single-Operator, High Power****50 MHz**

K1TEO	283
N2CEI	264
W4AS	217
N3HBX	215
WA2FGK (K2LNS, op)	185
W8ZN	159
W3PAW	152
WD4MGB	152
K3TUF	149
W2JJ (WA2VUN, op)	139
WB2RVX	127
W4WA	121
WZ1V	113
W3IP	112
NR5M	109

**144 MHz**

K1TEO	260
W8ZN	231
K3TUF	146
N3HBX	143
WA2FGK (K2LNS, op)	139
WB2RVX	120
WZ1V	96
W3IP	88
W1RZF	88
W2KV	87
KE2N	87
WØUC	84
W3BFC	78
VE3ZV	75
WA3SRU	71

**222 MHz**

K1TEO	101
W8ZN	92
WA2FGK (K2LNS, op)	70
K3TUF	70
WB2RVX	54
VE3ZV	44
W3PAW	41
W3IP	41
WØUC	38
WA3SRU	37
K8TQK	34
KE2N	33
VA3ST	29
N3HBX	28
N1GJ	28

**432 MHz**

K1TEO	139
W8ZN	130
K3TUF	102
WA2FGK (K2LNS, op)	87
WB2RVX	76
W3IP	58
WZ1V	52
WA3SRU	52
WØUC	51
W1ZC	45
VE3ZV	45
W3PAW	43
KC6ZWT	42
KE2N	41
VA3ST	38

**902 MHz**

K3TUF	40
K1TEO	38
W8ZN	37
W3PAW	25
WA2FGK (K2LNS, op)	24
WB2RVX	20
W3IP	17
WA3SRU	16
WØUC	15
WA3DRC	13
VE3ZV	12
KE2N	11
KC6ZWT	9
K8TQK	7
K2HZN	6
W9GA	6
W4WA	6
KU2A	6
K1IIG	6

**1296 MHz**

K1TEO	63
W8ZN	56
K3TUF	54
WB2RVX	31
WA2FGK (K2LNS, op)	28
W3IP	23
W3PAW	22
VE3ZV	21
W1ZC	20
WØUC	20
WA3DRC	19
KE2N	17
WA3SRU	14
VA3ST	13
K8MD	13
K1IIG	13

<b>Single-Operator Portable</b>		W1MR	13	VE7JH	42
<b>50 MHz</b>		KC9MMM	2	N9UHF	38
W1MR	149	K9PLS	2	K6MI	32
N8XA	37	K9HA	1	W6TV	32
W7LUD	35	W1RIE	1	N8ZM -L	32
WB2AMU	33	W1MRK	1		
KBØHNN	22			<b>902 MHz</b>	
N1PRW	11	<b>Multioperator</b>		W2SZ	55
NØJK	6	<b>50 MHz</b>		KBØHH	17
K9HA	1	W2SZ	415	W2EA	13
K9PLS	1	K5QE	298	K6MI	13
KC9MMM	1	W4NH -L	286	K5QE	13
KF6CVA	1	W2LV -L	256	K3YTL	11
		W3SO -L	233	K2LIM	11
<b>144 MHz</b>		W2EA	229	WB6W -L	9
W1MR	68	K2LIM	220	VE7JH	6
KBØHNN	36	KD2JA	195	N9UHF	5
W7LUD	30	W4IY -L	151	W1XM	3
WB2AMU	28	W1QK -L	136	K1KC	2
N8XA	20	K3YTL	135	K3EOD	2
NØJK	14	N8ZM -L	119	WZ8T	2
KD8IPE	12	K1HTV -L	118	W6TV	1
N1PRW	9	K3EOD	111		
KC2JRQ	5	K1KC	73	<b>1296 MHz</b>	
KØNR	4			W2SZ	61
KC9MMM	2	<b>144 MHz</b>		K3YTL	27
K9PLS	2	W2SZ	309	KBØHH	20
W1MRK	1	W3SO -L	239	W2EA	16
K9HA	1	K2LIM	231	K5QE	16
W1RIE	1	W2EA	208	K6MI	16
KF6CVA	1	K3YTL	189	K2LIM	10
		W2LV -L	178	VE7JH	9
<b>222 MHz</b>		K5QE	167	WB6W -L	8
W1MR	22	W4IY -L	157	W6TV	8
W7LUD	14	W4NH -L	99	W1XM	6
WB2AMU	5	N8ZM -L	87	N2BJ	6
K9PLS	2	KBØHH	84	KD7UO	5
KC9MMM	2	K3EOD	80	N9UHF	5
K9HA	1	VE7JH	72	KC5MVZ	4
N1PRW	1	N9UHF	70	K1KC	4
KF6CVA	1	K1HTV -L	65	K8MM	4
				-L denotes Limited Multioperator	
<b>432 MHz</b>		<b>222 MHz</b>			
W1MR	46	W3SO -L	98		
W7LUD	25	K2LIM	86		
KBØHNN	12	K3YTL	73		
KD8IPE	11	W2SZ	71		
WB2AMU	9	W2LV -L	70		
NØJK	7	W4IY -L	51		
N1PRW	6	W2EA	37		
K9PLS	2	KBØHH	35		
KC9MMM	2	K3EOD	31		
W1RIE	1	K6MI	30		
W1MRK	1	K8MM	27		
KF6CVA	1	K5QE	25		
K9HA	1	VE7JH	23		
KØNR	1	N8ZM -L	21		
		W6TV	20		
		<b>432 MHz</b>			
<b>902 MHz</b>		W2SZ	170		
W1MR	11	W3SO -L	129		
K9PLS	2	K3YTL	90		
KC9MMM	2	W2LV -L	83		
W7LUD	1	K2LIM	81		
W1RIE	1	W4IY -L	73		
W1MRK	1	K5QE	63		
K9HA	1	KBØHH	59		
		W2EA	49		
<b>1296 MHz</b>		WB6W -L	44		
		W4NH -L	43		

## Multiplier Leaders By Band

### Single-Operator, Low Power

#### 50 MHz

N3LL	100
N4BP	80
K2DRH	53
WB1GQR (W1SJ, op)	38
N4QWZ	37
W2BZY	36
AF1T	35
CX9AU	32
N4OX	32
KX4R	31
XE2YWH	31
WA3EOQ	31
K2KIB	29
WB2SIH	28
K2UNK	27

#### 144 MHz

K2DRH	42
KØSIX	30
WB1GQR (W1SJ, op)	27
N4QWZ	27
K2KIB	27
NØLL	24
WB2SIH	23
K1KG	23
K8WW	23
WA3EOQ	23
KX4R	22
VA3ELE	21
KB4BKV	20
W3EKT	20
WB2CUT	20

#### 222 MHz

K2DRH	30
WB2SIH	20
WB1GQR (W1SJ, op)	19
N4QWZ	19
WA3EOQ	18
K2KIB	17
AF1T	17
W5MRB	17
KX4R	15
KB4BKV	14
NØLL	13
KF8QL	13
WB2JAY	12
K1KG	12
WB3IGR	11
W3EKT	11
W6ZI	11
KC9BQA	11

#### 432 MHz

K2DRH	33
N4QWZ	21
KX4R	19
WB2SIH	19
K2KIB	18
WA3EOQ	18
WB1GQR (W1SJ, op)	18
K1KG	17
W5MRB	15
W3EKT	15
NØLL	14
VA3ZV	14
VA3ELE	14
KØSIX	14
AF1T	14

#### 902 MHz

K2KIB	10
K1KG	10
K2DRH	9
WA3EOQ	7
WB3IGR	7
AF1T	7
WB2SIH	7
WB1GQR (W1SJ, op)	7
W5MRB	7
W3SZ	6
WB2JAY	5
N4QWZ	5
W1FKF	3
W3EKT	3
WB5ZDP	3
WØJT	3
KG7P	3
WD5YT	3
KC9BQA	3

#### 1296 MHz

K2DRH	12
K1KG	12
K2KIB	12
WB2SIH	9
W5MRB	9
N4QWZ	8
W3SZ	8
WB1GQR (W1SJ, op)	8
AF1T	8
WA3EOQ	7
KX4R	7
WB3IGR	6
K6TSK	6
WB2JAY	6
W1TR	5
WB5ZDP	5
VA3ELE	5
AC1J	5
W3EKT	5

### Single-Operator, High Power

#### 50 MHz

W4AS	90
N2CEI	90
K1TEO	67
WA2FGK (K2LNS, op)	61
WD4MGB	60
N3HBX	52
W4WA	47
W8ZN	45
K8MD	43
W3PAW	43
K3TUF	42
WB2RVX	40
WØUC	39
KN4SM	39
NR5M	37
N1IBM	37

#### 144 MHz

K1TEO	53
W8ZN	51
NR5M	49
WA2FGK (K2LNS, op)	46
WB2RVX	40
K3TUF	34
K8TQK	34
VE3ZV	34
WØUC	33
VA3ST	30
KN4SM	28

N3HBX	27
W2KV	25
W3IP	24
WM8I	24
W9GA	24

#### 222 MHz

K1TEO	40
WA2FGK (K2LNS, op)	32
W8ZN	32
K8TQK	29
VE3ZV	27
K3TUF	24
WB2RVX	21
VA3ST	19
WØUC	19
K8MD	17
W9GA	16
W3PAW	16
W3IP	15
KG5MD	15
WA3SRU	14

#### 432 MHz

K1TEO	39
W8ZN	38
WA2FGK (K2LNS, op)	34
K3TUF	29
K8TQK	26
WB2RVX	25
VE3ZV	24
WØUC	23
VA3ST	21
W9GA	20
W3IP	20
K8MD	19
W3PAW	18
WZ1V	17
W4WA	17

#### 902 MHz

K1TEO	20
K3TUF	14
WA2FGK (K2LNS, op)	13
W8ZN	11
WØUC	10
W3PAW	10
WB2RVX	9
VE3ZV	9
WA3DRC	8
WA3SRU	7
W9GA	6
W4WA	6
K8TQK	6
W3IP	6
W3GAD	4
KE2N	4
K1IIG	4
WA8RJF	4
K2YAZ	4
N1GJ	4
K5LLL	4

#### 1296 MHz

K1TEO	26
K3TUF	17
W8ZN	17
WA2FGK (K2LNS, op)	14
VE3ZV	12
WØUC	12

W3PAW	11	W7LUD	1	KBØHH	25
WB2RVX	10	W1RIE	1	K3YTL	24
WA3DRC	9	K9HA	1	W2LV -L	22
W3IP	8	W1MRK	1	N8ZM -L	20
K8MD	8	K9PLS	1	W4NH -L	19
W1ZC	8	KC9MMM	1	WZ8T	17
K3MD	7			K8MM	16
K1IIG	7	<b>1296 MHz</b>		W2EA	14
W4WA	7	W1MR	4	K3EOD	14
VA3ST	7	KC9MMM	1	WØVB -L	14
KE2N	7	K9HA	1		
K8TQK	7	K9PLS	1	<b>902 MHz</b>	
		W1MRK	1	W2SZ	29
<b>Single-Operator Portable</b>		W1RIE	1	KBØHH	16
				K3YTL	8
<b>50 MHz</b>		<b>Multioperator</b>		K5QE	8
W1MR	31	<b>50 MHz</b>		W2EA	8
N8XA	26	K5QE	117	K6MI	7
WB2AMU	15	W4NH -L	92	K2LIM	7
W7LUD	11	KD2JA	79	VE7JH	4
KBØHNN	8	W3SO -L	59	WB6W -L	4
NØJK	5	W2SZ	59	K1KC	2
N1PRW	4	W4IY -L	55	WZ8T	2
K9HA	1	N8ZM -L	54	K3EOD	2
KF6CVA	1	W2LV -L	53	N9UHF	1
K9PLS	1	K2LIM	53	W1XM	1
KC9MMM	1	K1HTV -L	46	W6TV	1
		KBØHH	43		
<b>144 MHz</b>		K3EOD	40	<b>1296 MHz</b>	
W1MR	16	W2EA	37	W2SZ	27
KBØHNN	16	K3YTL	31	KBØHH	18
WB2AMU	11	W1QK -L	26	K5QE	11
NØJK	10			K3YTL	11
N8XA	10	<b>144 MHz</b>		W2EA	9
W7LUD	9	K5QE	103	W6TV	8
N1PRW	4	W2SZ	63	K2LIM	7
KD8IPE	4	W3SO -L	53	K6MI	7
KC2JRQ	2	K2LIM	50	WB6W -L	5
W1RIE	1	W4IY -L	47	VE7JH	4
KC9MMM	1	W4NH -L	45	KC5MVZ	4
K9PLS	1	KBØHH	37	K8MM	3
KØNR	1	N8ZM -L	35	N2BJ	3
KF6CVA	1	K3YTL	34	K1KC	3
K9HA	1	W2EA	33	W1XM	3
W1MRK	1	W2LV -L	31	K3EOD	3
		K8MM	23		
<b>222 MHz</b>		K1HTV -L	22	-L denotes Limited Multioperator	
W1MR	8	WZ8T	21		
W7LUD	7	K3EOD	21		
WB2AMU	2				
KC9MMM	1	<b>222 MHz</b>			
N1PRW	1	W3SO -L	36		
K9HA	1	K2LIM	35		
K9PLS	1	W2SZ	25		
KF6CVA	1	W2LV -L	24		
		W4IY -L	23		
<b>432 MHz</b>		K3YTL	23		
W1MR	11	K5QE	22		
W7LUD	7	KBØHH	22		
NØJK	6	K8MM	19		
KBØHNN	4	K3EOD	17		
KD8IPE	4	W2EA	16		
WB2AMU	3	N8ZM -L	15		
N1PRW	3	WZ8T	14		
K9PLS	1	WØVB -L	13		
W1RIE	1	N2BJ	12		
W1MRK	1				
KC9MMM	1	<b>432 MHz</b>			
K9HA	1	K5QE	42		
KØNR	1	W2SZ	39		
KF6CVA	1	W3SO -L	37		
		W4IY -L	30		
<b>902 MHz</b>		K2LIM	28		
W1MR	4				