



ARRL June VHF Contest 2017 Results

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Was the glass half empty or half full?

After last year's wonderful contest propagation one could have only hoped the outing on June 10-12 would be its equal or better. While there was a good bit of domestic sporadic E (Es) that was more evenly distributed around the country than usual, it wasn't as long lived or intense. The general result was scores in the ballpark of half of last year's among the top contenders. However, there were enhanced conditions on 2-meters and above reported in some parts of the country. As it turns out, while the glass may have seemed half full in comparison, in reality the propagation was just being doled out in a different-size container.

More logs were submitted this year than we've seen in quite a while, far surpassing last year's 1,132 logs with a whopping 1,297, even higher than 2011's 1,233 logs. There was a huge increase in Single-Op, Three-Band (SO3B) logs this year from 137 to 221, but this did not erode the most popular Single-Op, Low Power (SOLP) category which increased by 43 to 540. Single-Op, FM-Only logs increased from 14 to 27 while the remaining fixed-station categories are holding steady.

The rebound of the Classic Rover (R) over the past few years however took a turn for the worse with only 27 logs, significantly down from 47 last year and 38 in 2015. Hopefully this is an anomaly and they will bounce back stronger again next year. Limited Rovers (LR) gained back some ground from 34 to 45 and this compares favorably to 42 in 2012. Unlimited Rover (RU) continues to be statistically static at less than ten.

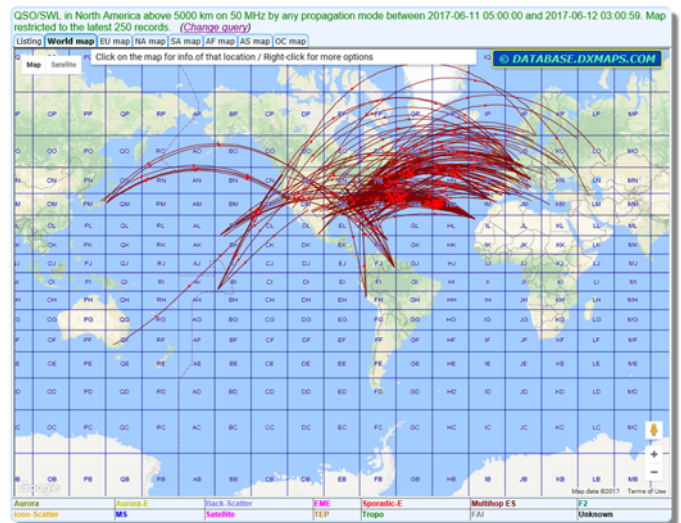
With flatter conditions, few existing records were challenged. Division and Section records for the newer SO3B and SOFM categories and the new Canadian Sections continue to be set. The previous contest score records are available for review on the ARRL website at www.arrl.org/contest-records and will be updated with any new records from 2016.

What About the DX?

This is essentially a North American VHF contest, however some stations had European, Caribbean, South American and African QSOs as well as a few from Japan, Hawaii, and the South Cook Islands. (See Figure 1) In keeping with the general trend for DX QSOs on 6-meters, the majority of these were apparently

accomplished using digital modes, mainly JT65A. Todd, N4QWZ, reported he finally worked KH6 for state #50 on 6-meters in a quest that spanned 20 years!

While the sporadic E (Es) gods were not completely stingy, producing moderate-to-good domestic openings as well as spotlight and very regional openings to Europe, Africa, Asia and even the Pacific, there was nothing like the long duration multi-continent one we saw last year. The majority of the DX was from very weak digital signals that more often were auto-reported to the propagation loggers after "one and done" decodes than that actually resulted in complete QSOs.



A search of DX Maps for QSOs over 5000 km yielded this map for Sunday. This includes stations spotted by CW Skimmer and other digital mode stations. (Maps provided by DXmaps.com)

There were 30 DX logs (not counting Canada) submitted this year. C6ATA, a multiop station in the Bahamas had the top offshore score this year with a respectable 142K, most of it on 6-meters, but with a few QSOs on 2-meters, 222 MHz, and 432 MHz! Canadian participation rose up yet again to 77 logs. The XE contingent doubled this time with 14 logs and Jorge, XE2X, is back on top again this year.

Four stations submitted logs from Cuba; CO9KAA, CO3JA, CO8LY, and CM2XN. Although there were no logs from Alaska, one was submitted from NH6Y this year. KV4FZ and NP2X kept up with the demand for VI along with KP3W and NP3CW for PR. Among the more exotic calls in the database were PV8AZ, EA4DE, SP8FNA, 9M4COK and 9W2VWT.

What About Conditions?

6-meter propagation took its time warming up the ionization patches in the E layer and the contest started out slowly. The 2017 Es summer had not produced an abundance of really good days so more stations seem to have turned to digital modes to find 6-meter DX. There were several good multihop DX days before the contest that seemed to favor the lower Midwest and Western parts of the country rather than the usual East Coast and Southwest. Almost all of it was very weak signals that were better suited to JT65 and some of the other experimental *WSJT* digital modes. Hence the stage had been set for a lot of stations to be listening to the JT65 calling frequency when contest day arrived.

Propagation prognosticators say it's possible that these weak openings below the noise are there more often than we have previously discovered with CW. But a JT65 QSO is slow and often the bubbles only last a minute or two leading to many "one and done" decodes of a DX station's CQ or painfully incomplete QSOs. It is also difficult to coordinate faster experimental modes that are less forgiving of sharing a common dial frequency. Hopefully the newest mode, FT8 — faster but somewhat less sensitive — will remedy some of this problem (for an FT8 user Primer courtesy K5QE see <http://ncjweb.com/features/janfeb17feat.pdf>). While there were some DX contacts reported in the soapbox comments it's more likely that a lot of the lines on the propagation logger's maps during the contest were the result of single decodes or partial QSOs.

Sporadic E on 6-meters seemed to move around a lot when it did arrive. It didn't just favor the usual hot spots of TX and FL, although some in those areas did extremely well. It was not as prevalent on Saturday as it was on Sunday, and most stations reported that it was not as intense or long duration as last year. And while 6-meters was not quite as kind to the far western portion of the country as it was to the SW and NE, most stations did enjoy some good hours.

6-meter Es was moderate in the upper Central Division but much better in more southerly portions of the Central Division landing NV9L (Limited Multiop, LM) and Craig, K9CT, in the money. It was also good as it often is to the Rocky Mountain Division for KØGU in CO, K5AM in NM and NN7AZ (LM) in AZ. The Northeast did well for most of the test as attested by 600-plus numbers posted from K1TEO, W2SZ (M), W3CCX (M), K1IED, and W3EP. Further north and east was less productive.

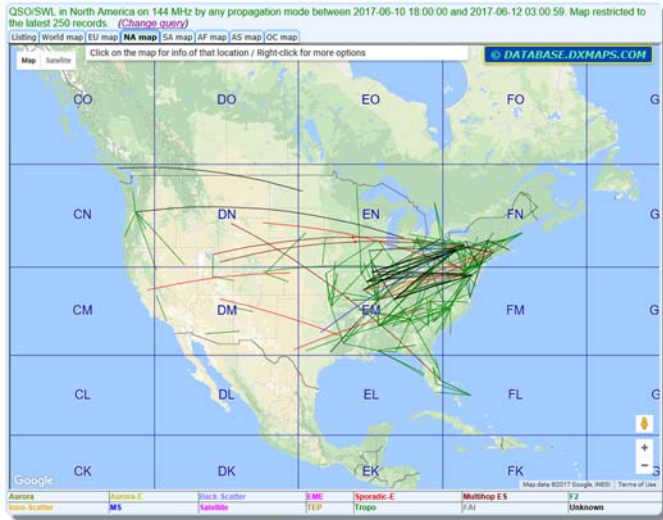
Texas had their usual good rounds of Es posting some of the highest numbers and K5TR, W5PR and K5QE (LM) made the most of them. This time it extended a bit from

TX into MS where K5GDX (LM) got into the action. FL was once again a hotbed of Es with DX openings to the Caribbean and EU and even to Hawaii. N4OX, N4BP, and KC4PX took advantage of this to rack up some of the highest 6-meter numbers in the country while K1TO had the highest 6-meter Single-Op (SO) total of the contest. It also was bountiful to the Southeast, notably SC and GA where AA4ZZ (LM), W4NH (M), N4PN, and K4PI posted big numbers. Last but not least, C6ATA in the Bahamas used big numbers to post the highest score of any DX station, but XE2X was not far behind.

Unlike last year when a whopping 52 stations exceeded the 500-QSO mark, 29 stations were able to reach this level (there were only 9 in 2015). Only 2 stations made it over 1000. Perennial high-number 6-meter operator K5TR had 1042/242 but missed the highest grid total by 2 with 244 logged by NN7AZ (L).

In K5TR's own words, "This year six meters was fairly good — still hard to get used to the idea that making 'only' 1000+ contacts is just an OK weekend in this contest on six meters. The activity seems to keep going up and up. Huge amounts of CW on the band these days. Just amazing." George also puts in a great effort on six bands and posts good numbers for his location where multiband stations and rovers are far and few between. Texas has single-hop geographic access to most of the major ham population centers of the country and is often favored with some of the best Es conditions of the contest. FL has also proven to be a major Es prop center during a lot of June contests and K1TO has taken advantage of this to operate 6-meters only with 1117 QSOs / 169 grids. Not the largess of last year or the really huge 6-meter numbers of 2010 or even 2011, but pretty well distributed around the country and enough to keep it interesting.

For a pleasant change some troposcatter enhancements of the other bands was reported in the soapbox this year. There were 29 stations working more than 100 QSOs on 2-meters this year; more than last year but still a lot less than the 35 in 2014 when some areas had conditions on 2-meters and up that were also above average. Here in the upper Midwest I heard Stan KA1ZE/3 in FN01 for a few hours on Saturday night and K8GP/R in FM08 but that was about all, the main enhancement was apparently further south and the 2-meters grid totals for Craig K9CT and NV9L (L) reflect that. The main path seemed to be between PA/MD/NJ and MO/AR but sometimes spread far as TX/MS on one end and NC/GA on the other. Stan KA1ZE/3 was in the catbird seat for this enhancement and logged 273 Qs and a personal record of 83 grids on 2-meters without any EME. C6ATA rewarded a few lucky stations in FL with Qs on 2-meters, 222 and 432.



The 2-meter map highlights areas that had enhancement on 2-meters and up during the contest period as well as some of the longer distance MSK441 QSOs. (Maps provided by DXmaps.com)

As expected, 13 of the top 2-meter totals were from Multis with W2SZ (M) on top at 319 QSOs in 50 grids despite little enhancement. K2LIM (L) was the only other station above 300 QSOs with 307. Their 66 grids indicate they may have seen some of the enhancement. K1TEO, W3CCX (M), K2LIM (L), N2NT (L), AA4ZZ (L), W3SO (L), KA1ZE/3, and W1VD all posted QSO totals over 200. Top 2-meter grid totals this time didn't go to the usual EME-equipped stations (EME conditions were apparently terrible) but the tropo kings, KA1ZE with 83 and K2LIM (L) with 66. It was nice to note that 9 stations in the above-500 club on 6-meters also had more than 100 QSOs on 2-meters. They were all Multis except for K1TEO.

222 MHz is a great band but there is a limited amount of commercially available equipment. (222 MHz is not an amateur band in Japan.) Most times it has as good or better propagation than 2-meters and better immunity to man-made noise. QSOs score the same higher point value as 432 as well as providing additional multipliers. While competitive multiops, rovers and single ops know they must have it, many stations can't justify a separate rig or transverter for this band because of increased cost and significantly lower QSO total than 2-meters (roughly 35%) or 432 (about 60%). Unfortunately this also tends to make rig unavailability and lower QSO totals on 222 a self-fulfilling prophecy. K2LIM (L) was the only station that had 100 or more QSOs on 222 with exactly 100. Sadly the recent trend towards fewer QSOs on 222 and 432 continues this year with only 5 stations above 100 QSOs on 432; 3 Multiops, 1 SOHP (K1TEO), and 1 RL (WW7D/R).

No enhancement was reported by anyone above 432 MHz. QSOs on 902/3 MHz and above count for more points and additional multipliers, but the technical

complexity and difficulty rises with the frequency. So does the cost to put together an effective station while the QSO total continues to go down. Adding SHF and microwave bands with their higher point values tends to be the province of the more technically minded as well as being a necessity for the more competitive Single Ops, Multiops, Portables and Rovers. But there is a law of geographical diminishing returns that comes with population density where there are few, if any, other stations available to work. Generally rovers and portables have an easier time adding these bands than fixed stations since high-gain antennas are significantly smaller and coax runs are shorter. However the ranks of the Classic and Unlimited Rovers who do carry them continues to dwindle. As a consequence, the number of QSOs other stations make on these bands also dwindles along with their interest in them.

Single Operator Results

Day-to-day VHF weak signal activity has suffered a serious decline over the past 10 years or so, whether due to lack of interest or the aging ham population in general. Unlike in the past, the VHF/UHF bands have become very quiet unless there is a contest or the various indicators show that there may be enhancement. Many operators join the ranks of Single-Op stations and get on the air during contest time hoping to find others to work. They give contesters a lot more stations to work, but the erosion of this base has been evident on 2-meters and above. Stations log on to the ON4KST Region 2 50/144/432 chat rooms where they can make real-time skeds, especially when the prop loggers show some hope of enhancement or Es. Lots of folks are using ON4KST as a contact initiation tool during the contest, too. Digital modes are also beginning to be used by more participants.

Stations with 100-200 watt "bricks" (solid-state amps) have always been the bedrock of VHF contest activity since well before the Single-Op, Low Power (SOLP) category was established. Once again SOLP proved to be most popular with well over 500 logs. For many VHF hams it's still the best way for them to be competitive and maybe earn a Division or Section winner's certificate — but all of us have to submit that first log. The Overall Single Op, Low Power, W3ZZ First Log Award - Memorial has been sponsored by Tim, K3LR, and Dave, W9PA, again this year and goes to Ralph, W4RER, with a significant effort on 6-meters. Well done and welcome to VHF contesting! Please try and share your enthusiasm with all your friends.

Top Ten, Single Operator, High Power				
<i>Call</i>	<i>Score</i>	<i>QSOs</i>	<i>Mults</i>	<i>Bands</i>
K1TEO	589,050	1,188	350	ABCD9EFGHI
K5TR	399,672	1,188	312	ABCD9EI
W5ZN	275,764	794	284	ABCD9E
K1RZ	275,520	691	246	ABCD9EFGHI
K9CT	237,349	725	287	ABCD9E
WØUC	194,023	586	251	ABCD9EFGHI
K1TO	188,773	1,117	169	A
WZ1V	165,330	706	198	ABCDE
K4PI	152,471	913	167	A
KØGU	142,492	727	196	A
Top Ten, Single Operator, Low Power				
<i>Call</i>	<i>Score</i>	<i>QSOs</i>	<i>Mults</i>	<i>Bands</i>
K2DRH	234,818	645	274	ABCD9EFG
AF1T	204,516	721	207	ABCD9EFGHIJP
WB1GQR	148,176	727	168	ABCD9EFG
AD5A	103,255	517	193	ABD
WB2JAY	87,292	405	157	ABCD9EFG
NØLL	65,610	394	162	ABCD
N4QWZ	65,404	316	166	ABCD9E
K1KG	56,502	320	129	ABCD9EFGHI
AA5AM	51,852	313	149	ABCD
W9GA	51,272	313	136	ABCD9E



WB2JAY has created a very effective way to VHF contest from a suburban neighborhood. (Photo provided by Glenn Kammerer, WB2JAY)

Despite mediocre 6-meter propagation and being too far north to take much advantage of the enhanced 2-meter conditions further south, Bob, K2DRH, again took first place SOLP from IL with a score of 239K, however his margin over second place was much smaller this year. This is Bob's 6th win in a row and 14th since the inception of the SOLP category. The rest of the Top 5 were mostly from the Northeast where 6- and 2-meters had better propagation. Dale, AF1T, in NH used those conditions to repeat his 2nd-place win with 205K. WB1GQR manned by Mitch, W1SJ, atop Mt. Equinox in VT took 3rd place again with 148K using 8 bands through 3456 MHz.

Mike, AD5A, from STX intended to operate SO3B again this year but realized on Sunday that he had been running 200 instead of 100W, so he entered the SOLP category to keep within the rules. His integrity is especially commendable considering his 103k 4th-place finish would have earned him 2nd place on SO3B. Finally Glenn, WB2JAY, broke into the Top 5 with a score of 90K on 8 bands from the crowded suburbs of Long Island. Glenn lives in East Northport, NY; the town where the author grew up and was first licensed.

The Single-Op, High Power (SOHP) category is where the true heavyweights in the VHF world can flex their muscles. The consistent winners all have large multiband stations that require a lot of equipment and upkeep. Some just prefer to run higher power and be louder to attract more stations.

After a year off, Jeff, K1TEO, in CT was back in the saddle this year with a vengeance, easily outdistancing his competition with a huge 10-band score of 589K. Conditions for him were above average on 6-meters and good on the other bands but he, too, has noticed the erosion of his totals on 2-meters and above, along with the scarcity of microwave-capable rovers compared to years past. Jeff has won more VHF contests as a Single-Op than anyone else.

Second-place SOHP goes to another perennial top finisher, George, K5TR, in STX (who switched back from the UM category for this year) with 399K. George has been adding more bands and often has one of the top 6-meter totals. Joel, W5ZN, in AR dropped back to 3rd place this year with 276K. This despite having good 6-meter totals and 2-meter tropo enhancement, but suffering from very few EME QSOs.

Dave, K1RZ, in MDC was only a couple hundred points behind to take 4th, where once again 6 meters was apparently not as much of a factor for his 10 band station and his score of 275K. Craig, K9CT, parlayed good 6-meter totals and 2-meter enhancement from IL to make his 237K debut in the Top 5.

Getting Out (and About) – Single-Op Portable

Single Operator Portable (SOP) stations are challenged with QRP power but they can often choose QRO locations! It takes a lot of work to play in this category and they often face daunting weather conditions and equipment challenges. Once again this year’s Top Five finishers are a completely different cast of characters than last year, and three out of five are from the West Coast.

David, W4DVE, seen in his photo (left column), appears to be a relative newcomer to VHF contesting and to his surprise won the Northwestern Division SOP in June 2016. He is an apartment dweller and so must take his efforts to 2200 ft Davis Peak north of Portland in the WWA Section. He set up with a pair of other SOP stations at the same site: K7ALO and KG7VLB, joined by K7KAD/R. Their cooperative efforts netted David first place this year with 9K and his buddy Alex, K7ALO, posted the second-place score at 6K. Tom, W4RXX, rebuilt a motorcycle trailer into a tower trailer, then went to one of the many hilltops in TN to achieve a score of 5K to take third. Bruce, WA2TMC, from WNY bagged fourth place with just over 4K and Mark, KE7MSU, in OR took 5th with slightly under 4K.

Top Ten, Single Operator, Portable				
Call	Score	QSOs	Mults	Bands
W4DVE	8,525	205	31	ABCDE
K7ALO	5,829	143	29	ABCDE
W4RXX	5,247	84	53	ABCD
WA2TMC	4,488	84	51	ABCD
KE7MSU	3,925	124	25	ABCD
KD6RMS	3,822	102	26	ABCD9E
WX3P	3,344	70	44	ABD9
WB2AMU	2,686	68	34	ABCD
W9SZ	2,485	39	35	ABCD9EFG
NV4B	1,656	46	36	A

How Are the New Categories Doing – SO3B and SOFM?

This is the fifth year for the two new Single-Operator categories. SO3B has proven very popular with log submissions skyrocketing and SOFM has almost doubled in size. Bruce, KG6IYN, took his SO3B station into the field to his “secret above ground lair” in San Diego and broke into the Top Five at first place with 124K, almost double the score of his nearest competitor. Excellent 6- and 2-meter totals helped him shatter his own section and Southwest Division records.



SOP winner David, W4DVE, camps on top of Davis Peak. (Photo provided by Dave Reindl, W4DVE)



KG6IYN SO3B portable in DM12rr Southern California 4900’ ASL and 34 degrees F. (Photo provided by Bruce Krypton, KG6IYN)

Pete, K2PS, parlayed excellent 6-meter openings from NFL into a single-band entry that took 2nd place with 58K. Gary, N7IR, had fun in AZ with 6-meters but not so much on 2-meters or 432 MHz, driving his station to 39K and a 3rd-place finish. Bob, KØNR, took 4th from CO with 33K and Mike, KK4MA, rounded out the Top 5 with 30K.

unexpected equipment failures like those that plagued mega-rover K8GP this year or high winds in the upper Midwest that prevented antenna deployment. Some rovers visit only a few grids while others like KØDAS/R do long distance dashes that boggle the mind, like their 22-grid run in this contest!

Top Ten, Single Operator, 3 Band				
Call	Score	QSOs	Mults	Bands
KG6IYN	124,623	607	183	ABD
K2PS	58,464	464	126	A
N7IR	38,645	277	131	ABD
KØNR	33,439	278	119	ABD
KK4MA	30,240	269	112	ABD
W3LL	29,300	288	100	ABD
WA4GPM	23,324	230	98	ABD
N2BEG	17,381	187	91	ABD
N7EPD	17,155	210	73	ABD
K4FJW	16,827	230	71	ABD

Top Ten, Classic Rover					
Call	Score	QSOs	Mults	Grids Act'd	Bands
ACØRA/R	205,200	624	200	8	ABCD9EFG
VE3OIL/R	100,873	344	149	9	ABCD9EFGHIP
VE3WJ/R	46,228	178	127	9	ABCD9EFHIP
KF2MR/R	33,366	246	83	4	ABCD9E
AG4V/R	27,930	201	95	8	ABCD9EF
WA3PTV	27,126	222	66	3	ABCD9EFGI
VE7JH	25,599	276	69	4	ABCD9E
K8GP/R	25,017	160	93	2	ABCD9EFGHI
KT5TE/R	22,800	380	40	8	ABCD
WD5RAH/R	22,796	372	41	8	ABCD

Top Ten, Single Operator, FM Only				
Call	Score	QSOs	Mults	Bands
KK4OSG	5,370	144	30	ABCD
W6KKO	1,125	51	15	ABCD
W6IA	406	40	7	BCD
W2EV	400	21	16	ABCD
N9VM	376	32	8	BCD
K6KQV	330	38	6	ABD
VE7JRX	161	16	7	BCD
KI7NQN	117	25	3	BCD
K7BWH	104	22	4	BD
K6QCB	100	18	5	BD

Top Ten, Limited Rover					
Call	Score	QSOs	Mults	Grids Act'd	Bands
K2EZ/R	64,400	478	100	13	ABCD
WW7D/R	57,132	628	69	10	ABCD
KA5D/R	44,440	318	110	8	ABCD
VE3SMA/R	40,768	314	98	7	ABCD
W3ICC	39,000	306	100	7	ABCD
AE5P/R	24,354	397	41	8	ABCD
AL1VE/R	23,968	214	112	5	AB
N6GP/R	21,420	275	68	5	ABCD
K9JK/R	21,390	252	69	8	ABCD
N2DXT/R	21,168	264	63	4	ABCD

In the wide-open spaces VHF FM activity is very sparse and it's practically nonexistent in the farming communities of the Midwest. Consequently, entries in the SOFM category tend to cluster around population centers. Notably, four of the Top 5 stations turned in golden logs with no mistakes again. Although KK4OSG didn't quite reach the 100-QSO level again on 2-meters with "only" 91, his 5K effort netted him another first place. Rick W6KKO switched from SOP and stayed home in SJV using his omni antennas this time to nail down 2nd place with 1K. In the closest race of the contest W6IA SCV edged out frequent top 5 finisher Ev W2EV WNY by a mere 6 points! And N9VM (Vic N1VM OP) in SJV dropped to 5th this year.

Top Ten, Unlimited Rover					
Call	Score	QSOs	Mults	Grids Act'd	Bands
AB4CR/R	24,225	189	75	3	ABCD9EFGHI
NØLD/R	18,216	155	88	13	ABCDE
KD5IKG/R	17,487	186	67	8	ABCD
KJ1K/R	9,702	90	42	5	ABCD9EFGHI
K7ATN/R	5,336	170	23	2	ABCD9E
WØZF/R	3,936	76	48	6	ABD
W3HMS	3,224	61	26	3	ABCDEFGI
VE7AFZ/R	2,808	67	36	3	ABCDE
VE3KGC/R	1,548	36	18	3	ABDFHIP

On the Rove Again - Rovers

Rovers work hard to find advantageous locations and supply grid multipliers that normally wouldn't be on the air. It takes a lot of time and effort to set up an effective station in a vehicle, scope out locations and plan an effective route. Sometimes there is disappointment from

Classic Rovers (R) can bring as many bands as the multiops to multiple locations and they help fixed stations through the lean hours with grid multipliers on a band run. It's disheartening to see that the number of Classic Rovers took an alarming dip this year.

Andrea, K2EZ/R, has been doing long distance grid dashes in her run-and-gun rover truck for a few years now and this time it got her up into the first-place slot for Limited Rover (RL). On a 13-grid marathon through the Atlantic Division she managed to rack up 64K with good



K2EZ/R Run and Gun Rover at the Central States VHF Conference in Albuquerque this July. (Photo provided by Bob Striegl, K2DRH)

6-meter Es totals while keeping the score on 2-meters and the other bands up as well.

Darryl, WW7D/R, moved up also to 2nd place this time out with a repeat of his 10-grid run through the Northwestern Division. Kyle, KA5D/R, (last year KD5EUO/R) in Der Funkwagen, owned by his brother and copilot Kourtney, KB5PRZ, dropped to 3rd this time out after barreling through 8 grids again in STX for 44K.



WW7D/R In Ocean Shores CN72 – The front stack is used while in motion while the rear stack is deployed at stops - note the homebrew antennas. (Photo provided by Darryl Holman, WW7D)

Steve, VE3SMA/R, (with Tom, VE3RSA) has once again downsized to the Limited Rover category (L) but dropped to 4th place on another 7-grid rove around Ontario that netted them 41K. Finally W3ICC/R with his sidekick W2PED made it into the Top 5 with 39K in the Atlantic Division.

In the Classic Rover category (R) the defending champion Grid Pirates of Terry, W8ZN, and Andy, W1RA, had to abort most of their rove due to equipment issues. This opened the door for Wyatt, ACØRA/R, to take the top spot this year with 8 bands of gear and an 8-grid rove through the Midwest Division. Wyatt's efforts certainly added many SHF and microwave mults to K9CT's and K2DRH's Top 5 logs and made up somewhat for the absence of many Northern Lights Radio Society rovers this time out. His 200K score had the highest microwave QSO total of any rover.

Perennial Top 5 contender Russ, VE3OIL/R, moved up a slot too, to take 3rd with 100K on 11 bands in 9 grids from southern Ontario. These same 9 grids were also run by Murray, VE3WJ/R, on 10 bands who took 3rd with 46K. Fourth place was acquired by Jarred, KF2MR/R, who waltzed through 4 grids on 6 bands in WNY for 33K. Let's hope those Rochester VHF Group rovers all met for dinner in Leroy, NY on Sunday again. And to finish up the Top 5 we have Steve, AG4V/R, in the Delta Division who took an 8-grid route with 7 bands for 27K.

There were only nine entries this year in the Unlimited Rover Category (RU). This category encourages multiple operators, unlimited bands, pack roving, and grid circling to rack up massive scores while still being fair to the Classic Rovers. Nevertheless, logs show the full potential and intent of this class is often not realized by the entrants who earn certificates.

Jack, AB4CR/R, tried his hand at RU and took first place with 24K on a 3-grid, 10-band rove in the Atlantic Division. Randy, NØLD/R, took his pals KBØYHT, WØHGJ, and KCØMTM and embarked on a 13-grid grind with 5 bands through the West Gulf Division for 18K much to the delight of the rover-starved fixed stations there. Tim, KD5IKG/R, also serviced the West Gulf Division with a 4-band 8-grid rove that netted him 3rd and 17K. Sig, KJ1K, did 5 grids in the New England Division carrying 10 bands for 10K and Etienne, K7ATN/R, romped through 2 grids with 5 bands for 5K.

Many Hands Make Light Work - Multiop

The Unlimited Multiop (UM) stations can make QSOs from 6-meters to light. Whether fixed or portable it takes a lot of effort and manpower to keep it all going year after year. While their numbers remain static there has been a lot of station turnover in recent times with many new players testing the waters. The Limited Multis (LM) range from a few guys enjoying someone's home station to huge dedicated station building efforts with multiple antenna systems. Multiops provide a place where folks without a competitive station can operate effectively while enjoying the company of other hams who enjoy VHF contesting. While it's sad to see the passing of many of the old guard, it's also encouraging that new stations are taking up the reins and rising to the challenge.

Top Ten, Limited Multioperator

Call	Score	QSOs	Mults	Bands
K5QE	409,260	1,046	359	ABCD
K2LIM	339,212	1,038	274	ABCDE
N2NT	255,486	981	231	ABCD
NN7AZ	234,790	863	265	ABDE
AA4ZZ	227,280	844	240	ABCD
W3SO	214,474	766	226	ABCD
NV9L	167,244	676	231	ABCD
W2LV	155,868	753	186	ABCD
W4IY	134,830	606	194	ABCD
AD4ES	84,560	591	140	ABD

Top Ten, Unlimited Multioperator

Call	Score	QSOs	Mults	Bands
W2SZ	711,900	1,535	315	ABCD9EFGHIJP
W3CCX	529,800	1,243	300	ABCD9EFGHIP
W4NH	193,065	837	211	ABCD
WQØP	146,331	576	229	ABCDE
C6ATA	142,191	771	183	ABCD
N8ZM	137,368	511	223	ABCD9E
W9XA	128,028	603	188	ABCD9E
WE1P	109,120	597	176	ABD
VE3WCC	105,625	398	169	ABCD9EFGHIJP
W7MRF	88,536	467	186	ABD

Marshall, K5QE's, superstation from the South Texas flatlands once again rose to the occasion to win the Limited Multioperator category again this year — the 5th year in a row! While experiencing frustrating conditions on Saturday they stepped back up on Sunday to log some of the best 6-meter numbers of the contest. They were stunted by the "awful" EME conditions on 2-meters and above, posting a score over 200K lower than last year at 409K.

K2LIM went back to LM this year with a 339K 2nd-place final tally after their Top 5 finish in UM last year. Their numbers show they had decent conditions on 6-meters and enhanced propagation on 2-meters. N2NT in NNJ held on to their third-place slot thanks in part to the 2-meter tropo and last minute tower work to replace their 432 MHz antennas and coax. A new station, NN7AZ emerged in 4th place with 235K in their first outing in Arizona with a big boost from good 6M prop. AA4ZZ in NC dropped to 5th place with 227K.

The W2SZ Mt. Greylock Expeditionary Force posted their 27th June VHF win in the UM category with 711K from New England without much help from 2-meter tropo. They posted their usual solid performance on 6- and 2-meters but the totals were down on 222 and 432 MHz compared to previous years. Nor have the SHF/microwave totals rebounded. The Mt Airy VHF Radio Club (aka Pack Rats) on Camelback Mountain pushed W3CCX to another 2nd-place finish with 530K and similar band totals as last year. The Fourlanders Contest Team, Inc. W4NH moved into third place with 193K on the bottom four bands from their "secret" mountaintop location in NC. WQØP in Kansas burst into the Top 5 this year with a 5-band effort that netted them 4th place at 146K. And for the first time an offshore Multiop, C6ATA, cracked the Top 5 with huge 6-meter numbers and 142K.

Affiliated Club Competition

Club	Score	Entries
Unlimited		
Society of Midwest Contesters	983,154	75
Potomac Valley Radio Club	947,612	61
Medium		
North East Weak Signal Group	1,413,117	17
Mt Airy VHF Radio Club	1,135,687	24
Arizona Outlaws Contest Club	562,925	34
Florida Contest Group	529,883	15
Contest Club Ontario	484,229	23
Roadrunners Microwave Group	483,363	7
Northern Lights Radio Society	421,705	20
Frankford Radio Club	418,750	16
New Mexico VHF Society	411,107	18
Pacific Northwest VHF Society	396,815	49
Carolina DX Association	288,821	8
Georgia Contest Group	278,239	9
Yankee Clipper Contest Club	269,448	24
Southern California Contest Club	261,746	14
Alabama Contest Group	250,142	12
Florida Weak Signal Society	208,140	7
Grand Mesa Contesters of Colorado	182,772	12
Central Texas DX and Contest Club	171,490	3
Rochester VHF Group	119,567	15
Texas DX Society	108,130	3
Badger Contesters	106,640	5
Tennessee Contest Group	81,133	7
North Texas Microwave Society	63,356	4
Northern California Contest Club	53,707	27
Michigan VHF-UHF Society	49,765	7
Hudson Valley Contesters and DXers	41,195	5
Rochester (NY) DX Assn	34,853	4
South East Contest Club	28,182	5
North Texas Contest Club	27,957	3
DFW Contest Group	26,764	6
Orca DX and Contest Club	26,439	3
Utah DX Association	25,136	3
Minnesota Wireless Assn	24,146	6
Mad River Radio Club	23,744	9
Saskatchewan Contest Club	19,880	3
Lodi ARC	16,813	5
Big Sky Contesters	15,385	4
South Jersey Radio Assn	15,162	3
North Coast Contesters	13,084	4
Willamette Valley DX Club	11,649	5
Kentucky Contest Group	9,449	3
Swamp Fox Contest Group	1,362	3

Local		
Eastern Connecticut ARA	92,874	5
CTRI Contest Group	64,789	3
Bergen ARA	63,006	8
Stoned Monkey VHF ARC	27,360	3
Bristol (TN) ARC	25,405	4
Pottstown Area ARC	18,794	5
Meriden ARC	15,446	4
Niagara Frontier Radiosport	6,073	5
Ventura County Amateur Radio Society	5,173	3
NorDX Club	2,920	3
Kansas City DX Club	2,623	3

Encouragement and Epilog

This was a contest that many will soon forget since propagation was average for most of us. If you were in the right place you experienced better conditions. During any given June contest conditions will always be better for some and worse for others. Last year may have been a lot better for most of us but all things considered, this year wasn't all that bad compared to some we had a few years back.

The most important part of any contest is to get on and take the best advantage of the conditions you're dealt. Play within the rules. Work the openings when you find them. Do what's necessary to maximize your points and multipliers. Log as accurately as you can. Stay in the seat during the lean hours. Go to CW and digital when things slow down. Use the chat pages to set up longer distance QSOs on CW or digital modes. Keep on making QSOs until the final bell.

It isn't necessarily about who has the biggest station, although that's a definite plus, it's really about who wants it most and is willing to do the things necessary to make it happen. See you all again next year on June 9-11 in the 2018 edition of the June VHF Contest!

73, Bob K2DRH



Ned, AA7A (in the bucket) building an EME antenna array for a remotely controlled 2-meter EME station in DM32. The station should be active soon!
(Photo provided by Ned Stearns, AA7A)

KØDAS/R - June 2017 VHF Contest Report

by Rod Blocksme, KØDAS

Station integration into the vehicle started early - Monday June 5th - with final intensive work and check-out testing conducted the evening of Friday, June 9th and, of course, the morning before the contest started.

By 12:45 PM Saturday we declared the job completed and headed out to Subway for a quick lunch without ever having conducted an on-the-air contact. Leaving Subway on Council St. and Boyson Rd. we made our first QSO with Gregg, KCØSKM, at 1:09 PM. This was 9 minutes into the 33-hour contest - a record early start for this rover team.

Our goal was to operate on-the-go as much as possible in order to activate as many grids as possible. This meant traveling mostly north and south and maximum use of Interstate highways for the higher speed limit and lack of small towns.

Leaving Cedar Rapids on I-380 South we quickly entered EN41 (2nd grid). Turning west on Highway 30, then turning north on 218, we went to Newhall then west to stop momentarily on our favorite hilltop near the cemetery to activate EN31. After a few contacts from there, we next headed north again on 218 and entered EN32 (4th grid) working folks as we drove up through Vinton and Waterloo and eventually joining I-35 west of Charles City. Going north on I-35 we entered EN33 (5th grid) at about 3:50 PM.

At this point the 6-meter signal seemed weak so we put the Lunar PA on the IC-551D transceiver. By 5:20 PM we entered EN34 and proceeded to Minneapolis where we took the beltway around to the west and picked up I-94 heading Northwest. EN35 (7th grid) was obtained about 7:00 PM. An hour later we were in EN25 where we made our first FM contact on 2-meters when we were pulling out of a gas station and heard KE4KE full quieting calling on FM. Up to this point, Bill had been driving and Rod operating but at this gas stop the roles were reversed and we continued up I-94 heading toward Fargo, ND.

A colorful sunset lingered directly in front of us for the next hour (they last longer the further north you are in the summer). About this time consultation with maps on our smart phones convinced us to abandon Fargo and get off I-94 at Fergus Falls, MN and head directly west to Wahpeton, ND. We were in EN16 now but it was late and distances back to the Twin Cities were long and despite parking in the open country and calling CQ for 20 minutes, we had no contacts from this grid. Across

the street was a nice AmericInn where we got a room for the night.

The next morning we got up early, ate a good breakfast at the hotel, bought gas (a frequent occurrence on this trip due to the wind drag of the antennas), and drove west to pick up I-29 going south. We still had no contacts from EN16 and we were getting worried this might be a bust. Once on I-29 the speed limit was 75 and a light rain was falling and propagation was very poor. After we crossed into EN15, Bill worked WBØHMM in Sioux Falls, SD followed by KØSIX in the Twin Cities on 144 MHz. By then we were too far south to turn around and go back to EN16 to work these guys. So in the end we visited EN16 but did not "activate" it.

Next was EN14 (our 11th grid) attained at 0815 where we worked more stations. The speed limit in South Dakota is 80 and very few vehicles were out on Sunday morning. This helped our quest for activating grids but the antenna wind drag plus an estimated 20 mph headwind put the gas mileage way down. The antenna system on the vehicle was subjected to a continuous 100 mph wind load which is why rover on-the-go antennas need to be built very ruggedly. Activation of EN13 and EN12 followed in short order as we rolled on southward.

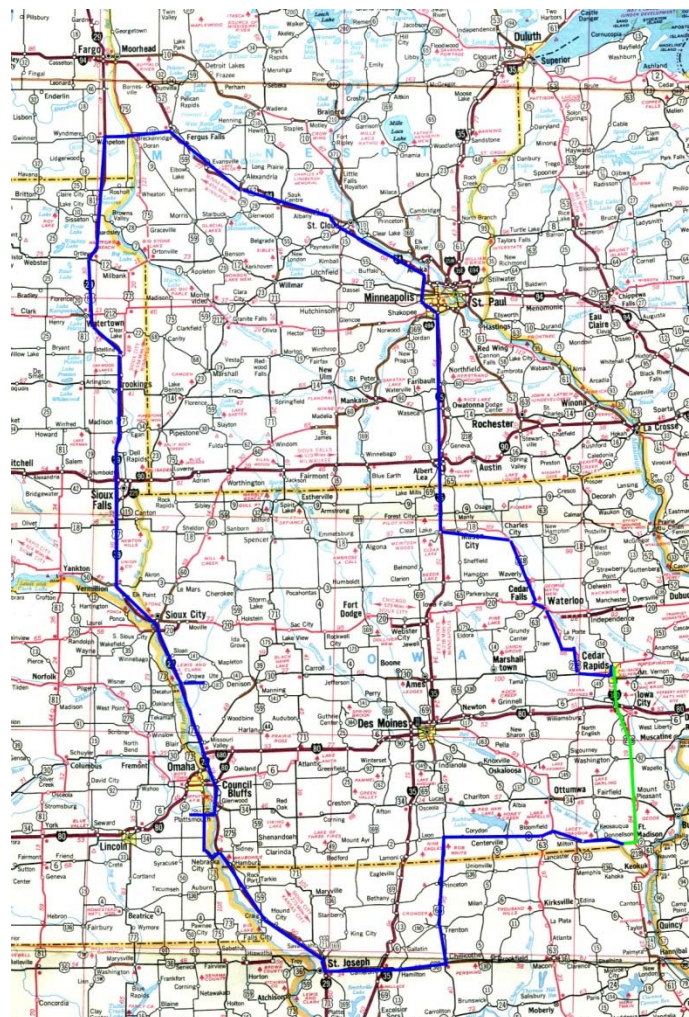
I-29 crosses over into Iowa at Sioux City and continues angling slightly to the east which was an advantage for our quest. We took a short detour off I-29 to run over to the edge of EN22 which we activated at 1240. It was here that we discovered our pre-amp in the 222 PA had died. We made a few quick contacts and then beat it back to I-29 where we continued south into EN11 and EN21 (our 15th & 16th grids). A Subway sign appeared and we pulled off for lunch at about 1400.

After lunch, with Bill now driving and Rod operating, we decided to make another short detour off I-29 and cross the river at Plattsburg, NE south of Council Bluffs to make a run of about 10 miles west to activate EN10. Three quick QSOs with ACØRA/R, EN41, on 144 & 432 plus KMØT, EN13, on 144, and we pulled up and drove back east to pick up Highway 75 south to Nebraska City where we crossed the river back into Missouri. We debated about continuing south on 75 to enter Kansas but decided against it as the next river crossing would require considerable state highway miles and the cost in time was too much.

We entered EN20 at 1540 and now things got exciting. We entered a nice tropo opening from there out into Kansas and Oklahoma. While cruising down the interstate, I was able to work ACØRA/R, EN41; WQØP, EM19; KC9GPJ, EM28; WØRT, EM27; K5SW, EM25; NØLL, EM09; W7QJQ, EM25; WØKKK, EM19; &

WDØBGZ, EM00. By 1730 things were slowing down a bit, my bladder was full, and the gas tank empty (again). So we pulled in to the nearest gas station. When we left, Bill became the operator and I became the driver as we briefly entered EM29.

At 1800 we entered EM39 as we drove east on Highway 36 out of St. Joseph, MO. Bill worked a few stations on tropo until 6-meter sporadic E fired up about 1830. Then it was "game on" again as he steadily filled up the log with exotic grid squares as I trundled through the green hills and valleys of northern Missouri. I turned north on Highway 65 at Chillicothe to run up to EN30, usually a rare grid in these contests, while the flow of 6-meter contacts continued.



Map showing the KØDAS rover route in blue. The route home after the contest ended is in green.

The plan was to get up to Highway 2 in Iowa, then head east through all the county seat towns in an effort to reach EN40 before the contest ended. This looked barely possible without speeding. EN40 was finally entered with just 15 minutes of contest remaining. Bill had several stations cued up waiting for our entry into this

our 22nd grid. So the last 15 minutes were a wild run of stations.

After it was over at 10 PM we drove on into Farmington, IA and stopped for food and other necessities plus explaining what "ham radio" was all about and why it took all those funny antennas. I had never been on Highway 2 before and thought we were somewhere closer to home. But no, the highway had slowly angled southward and we were almost back in Missouri. We hit the road for another 2-hour drive home.

Statistics:

- Number of grids activated: 22
- Miles traveled: 1,440
- Gas consumed: 62.4 gallons
- Average gas mileage: 23 mpg
- States activated: 6 (IA, MN, ND, SD, NE, MO)
- Number of QSOs: 161
- Number of unique grids worked: 67
- Score (preliminary): 17,711

Band	QSOs	Grids	QSO Pts
50	55	27	55
144	68	25	68
222	14	7	28
432	24	8	48
TOTAL	161	67	199

Operators: Bill, NØLNO and Rod, KØDAS
 Rover Vehicle: Bill's 2009 Toyota Sienna Van

Antennas:

- 50 MHz: Horizontal "V" dipole 3 ft above roof and 1/4-wave whip (operator selectable)
- 144 MHz: 7-element Yagi at 12 ft off the pavement
- 222 MHz: 8-element Yagi at 10.5 ft off the pavement
- 432 MHz: 11-element Yagi at 9 ft off the pavement
- (All Yagis rotatable with a Yaesu 800 rotator)
- Dual Band 144/432 mag mount whip for FM

Equipment:

FT-840 transceiver is 28 MHz IF rig

- 50 MHz: DEMI Transverter (10W) to Lunar 100W PA
- 144 MHz: DEMI Transverter (25W) to RF Concepts 160W PA
- 222 MHz: DEMI Transverter (20W) to TE Systems 100W PA
- 432 MHz: DEMI Transverter (10W) to modified RF Concepts 100W PA

144 & 432 MHz FM: Kenwood TM-721A 25W FM Transceiver

Back-up Equipment:

ICOM IC-290H all-mode 25W transceiver
 ICOM IC-551D 6-meter all mode 100W transceiver

Return on Investment:

Gas = \$136.23
 Hotel = \$130.00
 Total = \$266.23
 Cost per QSO = \$1.65
 Cost per Grid Activated = \$12.10
 QSO mileage = 8.9 miles per QSO

Labor hours:

Mobilization = 48 (est.)
 Operating/Driving = 54
 De-mobilization = 8 (est.)
 TOTAL = 110 man-hours

Labor per QSO = 41 minutes
 But the "fun meter" was pegged during the contest!

QSO/Mult Band Leaders by Category	
ROVERS	
Classic Rover	
50 MHz QSOs	
ACØRA/R	228
VE7JH	102
KT5TE/R	95
AG4V/R	94
WD5RAH/R	93
50 MHz Mults	
ACØRA/R	94
AG4V/R	48
VE3WJ/R	37
W5VY/R	35
VE7JH	32
144 MHz QSOs	
ACØRA/R	143
KT5TE/R	95
WD5RAH/R	95
VE7JH	86
VE3OIL/R	72
144 MHz Mults	
ACØRA/R	34
K8GP/R	27
VE3OIL/R	19
KF2MR/R	16
AG4V/R	14
222 MHz QSOs	
KT5TE/R	95
WD5RAH/R	92
VE3OIL/R	59

ACØRA/R	51
WA3PTV	35
222 MHz Mults	
VE3OIL/R	17
ACØRA/R	16
K8GP/R	16
AG4V/R	10
KF2MR/R	10
432 MHz QSOs	
KT5TE/R	95
WD5RAH/R	92
ACØRA/R	90
VE3OIL/R	55
VE7JH	48
432 MHz Mults	
ACØRA/R	26
K8GP/R	15
VE3OIL/R	15
KØMHC/R	11
KF2MR/R	11
902 MHz QSOs	
ACØRA/R	38
KF2MR/R	20
VE3OIL/R	18
VE3WJ/R	10
WA3PTV	10
902 MHz Mults	
VE3OIL/R	10
VE3WJ/R	9
KF2MR/R	8
ACØRA/R	7
K8GP/R	4
1.2 GHz QSOs	
ACØRA/R	37
VE3OIL/R	24
KF2MR/R	19
WA3PTV	15
K8GP/R	11
1.2 GHz Mults	
KF2MR/R	10
VE3OIL/R	10
VE3WJ/R	9
ACØRA/R	7
K8GP/R	7
2.3 GHz QSOs	
ACØRA/R	23
VE3OIL/R	16
VE3WJ/R	10
WA3PTV	10
AG4V/R	4
K8GP/R	4
KCØP/R	4
NØHZO/R	4
2.3 GHz Mults	
VE3OIL/R	10
VE3WJ/R	9
ACØRA/R	6
K8GP/R	3
KCØP/R	3
NØHZO/R	3
WA3PTV	3

3.4 GHz QSOs	
ACØRA/R	14
WA3PTV	8
K8GP/R	3
NN3Q/R	2
VE3OIL/R	2
3.4 GHz Mults	
ACØRA/R	2
K8GP/R	2
VE3OIL/R	2
WA3PTV	2
NN3Q/R	1
VA3CDD/R	1
VE2NR/R	1
5.7 GHz QSOs	
VE3OIL/R	9
VE3WJ/R	9
NN3Q/R	2
K8GP/R	1
VA3CDD/R	1
VE2NR/R	1
5.7 GHz Mults	
VE3OIL/R	9
VE3WJ/R	9
K8GP/R	1
NN3Q/R	1
VA3CDD/R	1
VE2NR/R	1
10 GHz QSOs	
VE3WJ/R	10
VE3OIL/R	9
WA3PTV	5
K8GP/R	1
NN3Q/R	1
VA3CDD/R	1
10 GHz Mults	
VE3OIL/R	9
VE3WJ/R	9
NN3Q/R	2
WA3PTV	2
K8GP/R	1
VA3CDD/R	1
24 GHz QSOs	
VA3CDD/R	1
24 GHz Mults	
VA3CDD/R	1
Light QSOs	
VE3OIL/R	9
VE3WJ/R	9
NE3I	1
NN3Q/R	1
Light Mults	
VE3OIL/R	9
VE3WJ/R	9
NE3I	1
NN3Q/R	1
Limited Rover	
50 MHz QSOs	
WW7D/R	253
AL1VE/R	213

N6GP/R	195
KA5D/R	164
K2EZ/R	149
50 MHz Mults	
AL1VE/R	106
N5XYO/R	72
KA5D/R	71
W3ICC	56
KK6MC/R	55
144 MHz QSOs	
WW7D/R	175
K2EZ/R	163
VE3SMA/R	109
AE5P/R	103
N2DXT/R	90
144 MHz Mults	
KØDAS/R	25
K2EZ/R	23
VE3SMA/R	23
W3ICC	16
KC1EYG/R	14
222 MHz QSOs	
AE5P/R	98
WW7D/R	88
K2EZ/R	85
W5TV/R	61
W3ICC	41
222 MHz Mults	
K2EZ/R	15
VE3SMA/R	13
W3ICC	11
KA5D/R	10
WW7D/R	10
432 MHz QSOs	
WW7D/R	112
AE5P/R	99
K2EZ/R	81
VE3SMA/R	63
W5TV/R	60
432 MHz Mults	
VE3SMA/R	17
K2EZ/R	15
KA5D/R	10
W3ICC	10
WW7D/R	10
Unlimited Rover	
50 MHz QSOs	
WØZF/R	61
AB4CR/R	58
KD5IKG/R	58
K7ATN/R	55
NØLD/R	53
50 MHz Mults	
NØLD/R	40
WØZF/R	33
AB4CR/R	29
KD5IKG/R	29
VE7AFZ/R	19
144 MHz QSOs	
K7ATN/R	58

NØLD/R	57
KD5IKG/R	53
AB4CR/R	39
VE7AFZ/R	20
144 MHz Mults	
NØLD/R	17
AB4CR/R	12
KD5IKG/R	10
VE7AFZ/R	6
WØZF/R	5
222 MHz QSOs	
KD5IKG/R	30
AB4CR/R	29
K7ATN/R	23
W3HMS	9
KJ1K/R	6
222 MHz Mults	
KD5IKG/R	10
AB4CR/R	9
K7ATN/R	4
KJ1K/R	3
NØLD/R	3
VE7AFZ/R	3
W3HMS	3
432 MHz QSOs	
KD5IKG/R	45
NØLD/R	33
AB4CR/R	32
K7ATN/R	29
KJ1K/R	14
432 MHz Mults	
NØLD/R	12
AB4CR/R	10
KD5IKG/R	10
KJ1K/R	5
WØZF/R	4
902 MHz QSOs	
AB4CR/R	11
KJ1K/R	6
K7ATN/R	1
902 MHz Mults	
AB4CR/R	5
KJ1K/R	3
K7ATN/R	1
1.2 GHz QSOs	
KJ1K/R	11
AB4CR/R	9
NØLD/R	7
W3HMS	7
K7ATN/R	4
1.2 GHz Mults	
AB4CR/R	3
KJ1K/R	3
NØLD/R	3
W3HMS	3
K7ATN/R	2
VE7AFZ/R	2
2.3 GHz QSOs	
VE3KGC/R	11
KJ1K/R	9

W3HMS	5
AB4CR/R	4
2.3 GHz Mults	
KJ1K/R	3
VE3KGC/R	2
W3HMS	2
AB4CR/R	1
3.4 GHz QSOs	
KJ1K/R	8
AB4CR/R	4
W3HMS	3
3.4 GHz Mults	
KJ1K/R	3
W3HMS	2
AB4CR/R	1
5.7 GHz QSOs	
KJ1K/R	6
AB4CR/R	2
VE3KGC/R	1
5.7 GHz Mults	
KJ1K/R	2
AB4CR/R	1
VE3KGC/R	1
10 GHz QSOs	
KJ1K/R	6
W3HMS	2
AB4CR/R	1
VE3KGC/R	1
10 GHz Mults	
KJ1K/R	2
AB4CR/R	1
VE3KGC/R	1
W3HMS	1
Light QSOs	
VE3KGC/R	1
Light Mults	
VE3KGC/R	1
Single Operator, High Power	
50 MHz QSOs	
K1TO	1117
K5TR	1042
K4PI	913
N4OX	815
KØGU	727
50 MHz Mults	
K5TR	242
KØGU	196
K5AM	192
N7CW	188
W5PR	184
144 MHz QSOs	
W1VD	284
KA1ZE	273
K1TEO	232
K1RZ	161
W2KV	161
144 MHz Mults	
KA1ZE	83

W5ZN	64
W1VD	55
W2KV	50
K1TEO	49
W3PAW	49
222 MHz QSOs	
K1TEO	99
K1RZ	70
W5ZN	58
VE3ZV	36
K1TR	33
WZ1V	33
222 MHz Mults	
K1TEO	36
W5ZN	33
K1RZ	27
K9CT	22
VE3ZV	21
WØUC	21
432 MHz QSOs	
K1TEO	131
K1RZ	92
W5ZN	79
W3IP	52
WZ1V	50
432 MHz Mults	
K1TEO	39
K1RZ	33
W5ZN	32
K9CT	29
VE3ZV	26
WØUC	26
902 MHz QSOs	
K1TEO	31
K1RZ	27
WØUC	22
VA3ELE	13
W3IP	13
902 MHz Mults	
K1TEO	21
K1RZ	14
WØUC	12
K1GX	9
VA3ELE	9
1.2 GHz QSOs	
K1TEO	40
K1RZ	39
VA3ELE	27
WØUC	25
WZ1V	23
1.2 GHz Mults	
K1TEO	22
K1RZ	20
VA3ELE	17
WØUC	14
VE3ZV	11
WZ1V	11
2.3 GHz QSOs	
K1RZ	21
K1TEO	20
K1GX	8
VE3ZV	8

W3PAW	8
2.3 GHz Mults	
K1TEO	16
K1RZ	9
K1GX	7
K1IIG	5
VE3ZV	5
W2SJ	5
3.4 GHz QSOs	
K1TEO	14
K1RZ	9
W3PAW	7
K1GX	6
WB2RVX	5
3.4 GHz Mults	
K1TEO	13
K1GX	6
K1RZ	6
WB2RVX	5
K1IIG	4
W3PAW	4
5.7 GHz QSOs	
K1RZ	6
K1GX	5
K1TEO	4
WB2RVX	2
K7ND	1
KE7SW	1
WØGHZ	1
WØUC	1
5.7 GHz Mults	
K1GX	5
K1RZ	5
K1TEO	3
WB2RVX	2
K7ND	1
KE7SW	1
WØGHZ	1
WØUC	1
10 GHz QSOs	
K1RZ	9
K1GX	6
K1IIG	5
K1TEO	3
K5LLL	3
K5TR	3
WØGHZ	3
W1FKF	3
10 GHz Mults	
K1RZ	8
K1GX	5
K1IIG	4
WØGHZ	3
W1FKF	3
Light QSOs	
W2SJ	1
Light Mults	
W2SJ	1
Single Operator, Low Power	
50 MHz QSOs	

WB1GQR (W1SJ, op)	490
AD5A	461
AF1T	455
K2DRH	423
NU4Y	399
50 MHz Mults	
AD5A	171
K2DRH	149
NØLL	146
AI5I	133
WA5DM	127
144 MHz QSOs	
WB1GQR (W1SJ, op)	123
AF1T	103
K2DRH	85
WB2CUT	70
KJ4ZYB	68
144 MHz Mults	
K2DRH	37
N4QWZ	30
WA3EOQ	28
WB1GQR (W1SJ, op)	25
KG5MD	23
222 MHz QSOs	
AF1T	42
WB2JAY	35
K2DRH	32
WB1GQR (W1SJ, op)	31
WA3EOQ	30
222 MHz Mults	
K2DRH	21
WA3EOQ	20
N4QWZ	16
VE3DS	14
W9GA	13
WB2JAY	13
432 MHz QSOs	
WB1GQR (W1SJ, op)	53
AF1T	51
K2DRH	51
WB2JAY	48
KJ4ZYB	33
432 MHz Mults	
K2DRH	24
N4QWZ	18
VE3DS	18
WA3EOQ	16
WB2JAY	16
902 MHz QSOs	
AF1T	17
K2DRH	16
WA3EOQ	11
W6IT	10
KC6ZWT	9
902 MHz Mults	
K2DRH	11
AF1T	10
WA3EOQ	7
N9LB	6
VE3DS	6
1.2 GHz QSOs	

AF1T	19
K2DRH	17
W6IT	13
WA3EOQ	13
KC6ZWT	12
WB1GQR (W1SJ, op)	12
WB2JAY	12
1.2 GHz Mults	
K2DRH	13
AF1T	9
WA3EOQ	8
VE3DS	7
WB1GQR (W1SJ, op)	7
2.3 GHz QSOs	
K2DRH	12
AF1T	11
K1KG	6
WØZQ	6
WB1GQR (W1SJ, op)	6
2.3 GHz Mults	
K2DRH	10
AF1T	8
WB1GQR (W1SJ, op)	5
K1KG	4
WØZQ	4
3.4 GHz QSOs	
K2DRH	9
W6IT	9
AF1T	7
K1KG	6
WØZQ	5
WB1GQR (W1SJ, op)	5
WB2JAY	5
3.4 GHz Mults	
K2DRH	9
AF1T	6
WB1GQR (W1SJ, op)	5
K1KG	4
WØZQ	4
W6IT	4
5.7 GHz QSOs	
W6IT	9
AF1T	5
KØBAK	1
K1KG	1
WØZQ	1
5.7 GHz Mults	
AF1T	5
W6IT	4
KØBAK	1
K1KG	1
WØZQ	1
10 GHz QSOs	
AF1T	9
W6IT	9
K1KG	4
WØZQ	2
W3XO	2
10 GHz Mults	
AF1T	6
W6IT	4
K1KG	3

WØZQ	2
W3XO	2
24 GHz QSOs	
AF1T	1
24 GHz Mults	
AF1T	1
Light QSOs	
AF1T	1
Light Mults	
AF1T	1

Single Operator, Portable	
50 MHz QSOs	
WA2TMC	72
W4DVE	56
W4RXR	54
WX3P	53
NV4B	46
50 MHz Mults	
WA2TMC	44
NV4B	36
W4RXR	35
WX3P	34
KQ2RP	24
WK9U	24
144 MHz QSOs	
W4DVE	87
K7ALO	52
KE7MSU	49
VE7FYC	23
WB2AMU	20
144 MHz Mults	
W9SZ	12
KE7MSU	10
VE7FYC	10
WB2AMU	10
K7ALO	9
222 MHz QSOs	
KD6RMS	19
W4DVE	17
KE7MSU	16
K7ALO	13
W9SZ	6
222 MHz Mults	
W9SZ	6
W4DVE	4
W4RXR	4
KD6RMS	3
VE7FYC	3
432 MHz QSOs	
W4DVE	37
K7ALO	29
KE7MSU	17
KD6RMS	16
W4RXR	10
432 MHz Mults	
W9SZ	8
W4RXR	6
KD6RMS	5
NJ7H	4
K7ALO	3

KB1KXL	3
KE7MSU	3
N6BSC	3
W4DVE	3
WX3P	3
902 MHz QSOs	
KD6RMS	2
W9SZ	2
N9REP	1
WX3P	1
902 MHz Mults	
W9SZ	2
KD6RMS	1
N9REP	1
WX3P	1
1.2 GHz QSOs	
K7ALO	8
W4DVE	8
W9SZ	4
KD6RMS	3
N9REP	1
VE7FYC	1
1.2 GHz Mults	
W9SZ	4
K7ALO	2
W4DVE	2
KD6RMS	1
N9REP	1
VE7FYC	1
2.3 GHz QSOs	
W9SZ	1
2.3 GHz Mults	
W9SZ	1
3.4 GHz QSOs	
W9SZ	1
3.4 GHz Mults	
W9SZ	1
10 GHz QSOs	
AA9IL	1
N9REP	1
10 GHz Mults	
AA9IL	1
N9REP	1
Single Operator, 3 Band	
50 MHz QSOs	
K2PS	464
KG6IYN	429
W3LL	273
KK4MA	263
KØNR	252
50 MHz Mults	
KG6IYN	154
K2PS	126
N7IR	114
KØNR	110
KK4MA	107
144 MHz QSOs	
KG6IYN	104
K6MI	81

KCØSKM	47
N7EPD	45
KA2BPP	44
144 MHz Mults	
KA2BPP	17
KG6IYN	17
KC8UDV	15
KR1ST	15
N7EPD	15
222 MHz QSOs	
WJ6N	4
WV3P	3
K9PY	1
222 MHz Mults	
WJ6N	3
K9PY	1
WV3P	1
432 MHz QSOs	
KG6IYN	74
K6MI	32
N7EPD	25
W5MMW	24
KCØSKM	23
432 MHz Mults	
KG6IYN	12
KCØSKM	9
N7EPD	9
WA4LDU	9
N7IR	7
W1DYJ	7
Single Operator, FM Only	
50 MHz QSOs	
KK4OSG	18
W2EV	13
K6KQV	6
W6KKO	5
KC9PCP	2
50 MHz Mults	
W2EV	11
KK4OSG	9
W6KKO	3
K6KQV	2
KC9PCP	1
144 MHz QSOs	
KK4OSG	91
W6IA	22
W6KKO	22
K7BWH	18
N9VM (N1VM, op)	17
144 MHz Mults	
KK4OSG	12
W6KKO	5
K6QCB	4
K7BWH	3
KD2LCH	3
KJ6KK	3
N9VM (N1VM, op)	3
VE7JRX	3
W2EV	3
W6IA	3
222 MHz QSOs	
W6KKO	7

KK4OSG	6
KI7NQN	5
W6IA	5
N9VM (N1VM, op)	4
222 MHz Mults	
KK4OSG	3
W6KKO	3
N9VM (N1VM, op)	2
VE7JRX	2
W6IA	2
432 MHz QSOs	
KK4OSG	29
K6KQV	17
W6KKO	17
W6IA	13
N9VM (N1VM, op)	11
432 MHz Mults	
KK4OSG	6
W6KKO	4
KJ6KK	3
N9VM (N1VM, op)	3
K6KQV	2
VE7JRX	2
W6CT	2
W6IA	2
Limited Multioperator	
50 MHz QSOs	
NN7AZ	814
K5QE	774
N2NT	574
AD4ES	548
W2LV	546
50 MHz Mults	
NN7AZ	244
K5QE	228
NØKE	154
NV9L	152
AA4ZZ	139
144 MHz QSOs	
K2LIM	307
N2NT	282
W3SO	244
AA4ZZ	214
W4IY	186
144 MHz Mults	
K5QE	79
K2LIM	66
W3SO	57
W4IY	55
AA4ZZ	50
N2NT	50
222 MHz QSOs	
K2LIM	100
W3SO	70
N2NT	54
AA4ZZ	38
K5QE	37
222 MHz Mults	
K2LIM	41
W3SO	32
K5QE	25
AA4ZZ	22

N2NT	22
432 MHz QSOs	
W3SO	113
K2LIM	99
N2NT	71
AA4ZZ	65
K5QE	57
432 MHz Mults	
K2LIM	39
W3SO	38
AA4ZZ	29
K5QE	27
W4IY	26
902 MHz QSOs	
K6YK	1
1.2 GHz QSOs	
N4HB	8
NN7AZ	3
K2LIM	2
1.2 GHz Mults	
N4HB	7
NN7AZ	2
K2LIM	1
Unlimited Multioperator	
50 MHz QSOs	
W2SZ	807
C6ATA	761
W4NH	643
W3CCX	636
W4UAL	493
50 MHz Mults	
C6ATA	176
W7MRF	176
WQØP	164
W3CCX	132
W2SZ	130
W9XA	130
144 MHz QSOs	
W2SZ	319
W3CCX	274
WE1P	139
W4NH	116
N2PA	100
144 MHz Mults	
W2SZ	50
W4NH	46
N8ZM	44
W3CCX	44
WE1P	38
222 MHz QSOs	
W3CCX	95
W2SZ	92
N8ZM	47
N2PA	42
KE1LI	31
222 MHz Mults	
N8ZM	31
W2SZ	27
W3CCX	26
N2PA	23
W4NH	21

432 MHz QSOs	
W2SZ	123
W3CCX	120
N2PA	50
W4NH	50
W9XA	48
432 MHz Mults	
W2SZ	33
W3CCX	29
N2PA	24
W4NH	24
N8ZM	23
902 MHz QSOs	
W2SZ	32
W3CCX	20
KD7UO	6
N4JQQ	6
K6HS	5
VE3WCC	5
902 MHz Mults	
W2SZ	16
W3CCX	14
N4JQQ	6
KV1J	4
KD7UO	3
N9UHF	3
1.2 GHz QSOs	
W2SZ	40
W3CCX	26
KD7UO	15
VE3WCC	11
WQØP	10
1.2 GHz Mults	
W2SZ	18
W3CCX	17
WQØP	7
N4JQQ	6
VE3WCC	6
2.3 GHz QSOs	
W2SZ	33
W3CCX	19
VE3WCC	18
N4JQQ	4
KD7UO	2
2.3 GHz Mults	
W2SZ	11
W3CCX	10
N4JQQ	4
VE3WCC	2
KD7UO	1
VA2OMC	1
3.4 GHz QSOs	
W2SZ	23
W3CCX	14
VE3WCC	4
KD7UO	2
VA2OMC	1
3.4 GHz Mults	
W2SZ	9
W3CCX	8
KD7UO	1
VA2OMC	1

VE3WCC	1
5.7 GHz QSOs	
W2SZ	26
W3CCX	14
VE3WCC	12
KD7UO	2
VA2OMC	1
W4COV	1
5.7 GHz Mults	
W3CCX	9
W2SZ	7
KD7UO	1
VA2OMC	1
VE3WCC	1
W4COV	1
10 GHz QSOs	
W2SZ	28
W3CCX	12
VE3WCC	4
N9UHF	2
W4COV	1
W6TV	1
10 GHz Mults	
W3CCX	10
W2SZ	8
N9UHF	1
VE3WCC	1
W4COV	1
W6TV	1
24 GHz QSOs	
W2SZ	10
VE3WCC	2
24 GHz Mults	
W2SZ	5
VE3WCC	1
Light QSOs	
W3CCX	13
VE3WCC	4
W2SZ	2
Light Mults	
VE3WCC	1
W2SZ	1
W3CCX	1

Limited Rover		
Atlantic	K2EZ/R	64,400
Central	K9JK/R	21,390
Dakota	KMØT/R	130
Delta	NC5AX/R	8,880
Great Lakes	W9YOY/R	7,700
Hudson	N2DXT/R	21,168
Midwest	KØDAS/R	15,725
New England	KC1EYG/R	19,034
Northwestern	WW7D/R	57,132
Pacific	WUØI/R	441
Roanoke	WBØPOH	510
Rocky Mountain	AL1VE/R	23,968
Southeastern	K4OJ	108
Southwestern	N6GP/R	21,420
West Gulf	KA5D/R	44,440
Canada	VE3SMA/R	40,768
Unlimited Rover		
Atlantic	AB4CR/R	24,225
Dakota	WØZF/R	3,936
New England	KJ1K/R	9,702
Northwestern	K7ATN/R	5,336
West Gulf	NØLD/R	18,216
Canada	VE7AFZ/R	2,808
Single Operator, High Power		
Atlantic	K1RZ	275,520
Central	K9CT	237,349
Dakota	KØSIX	58,443
Delta	W5ZN	275,764
Great Lakes	K8ZR	50,960
Hudson	W2KV	32,742
Midwest	KØTPP	36,036
New England	K1TEO	589,050
Northwestern	K7CW	49,914
Pacific	WA6OSX	11,475
Roanoke	W3IP	88,616
Rocky Mountain	KØGU	142,492
Southeastern	K1TO	188,773
Southwestern	N7CW	76,892
West Gulf	K5TR	399,672
Canada	VA3ELE	62,480
DX	XE2X	89,436
Single Operator, Low Power		
Atlantic	WA3EOQ	46,170
Central	K2DRH	234,818
Dakota	NØHJZ	26,418
Delta	N4QWZ	65,404
Great Lakes	K8MR	12,784
Hudson	WB2JAY	87,292
Midwest	NØLL	65,610
New England	AF1T	204,516
Northwestern	K7JX	7,774
Pacific	KC6ZWT	16,531
Roanoke	N4YDU	29,555
Rocky Mountain	A15I	49,632
Southeastern	NU4Y	45,486
Southwestern	W6IT	26,838
West Gulf	AD5A	103,255
Canada	VE3DS	35,518
DX	XE2JS	28,784

Division Winners		
ROVERS		
Classic Rover		
Atlantic	KF2MR/R	33,366
Dakota	KØMHC/R	8,856
Delta	AG4V/R	27,930
Great Lakes	KF8QL/R	2,700
Hudson	WA2CLP	416
Midwest	ACØRA/R	205,200
Northwestern	K7SWS	6,771
Pacific	N6JET/R	9,504
Roanoke	K8GP/R	25,017
Southwestern	N6ZE/R	4,983
West Gulf	KT5TE/R	22,800
Canada	VE3OIL/R	100,873

Single Operator, Portable		
Atlantic	WA2TMC	4,488
Central	W9SZ	2,485
Dakota	NIØW	221
Delta	W4RXR	5,247
Hudson	WB2AMU	2,686
Midwest	W8KSC	81
New England	N1PRW	325
Northwestern	W4DVE	8,525
Pacific	KB1KXL	825
Roanoke	N4ZAK	210
Rocky Mountain	K7LU	60
Southeastern	NV4B	1,656
Southwestern	KD6RMS	3,822
West Gulf	NJ7H	96
Canada	VE7FYC	561
Single Operator, 3 Band		
Atlantic	W3LL	29,300
Central	WB9TFH	10,395
Dakota	KØVG	725
Delta	WF7T	7,236
Great Lakes	KB8UUZ	3,480
Hudson	N2JJ	11,396
Midwest	WDØBGZ	15,486
New England	W1DYJ	14,208
Northwestern	N7EPD	17,155
Pacific	K7XC	9,030
Roanoke	KK4MA	30,240
Rocky Mountain	KØNR	33,439
Southeastern	K2PS	58,464
Southwestern	KG6IYN	124,623
West Gulf	W5/MMØLID	6,831
Canada	VA3TIC	1,650
Single Operator, FM Only		
Atlantic	W2EV	400
Central	KC9PCP	80
Delta	KE5WMA	3
Hudson	KD2LCH	15
Northwestern	KI7NQN	117
Pacific	W6KKO	1,125
Roanoke	KK4OSG	5,370
Rocky Mountain	KG5FHU	6
Southwestern	K6QCB	100
Canada	VE7JRX	161
Limited Multioperator		
Atlantic	K2LIM	339,212
Central	NV9L	167,244
Dakota	NØEO	16,745
Delta	K5GDX	54,972
Great Lakes	KC8AAV	14,365
Hudson	N2NT	255,486
Midwest	KFØM	666
New England	W1QK	42,036
Northwestern	K7TM	5,734
Pacific	WA6ZBL	3,424
Roanoke	AA4ZZ	227,280
Rocky Mountain	NØKE	77,649
Southeastern	AD4ES	84,560
Southwestern	NN7AZ	234,790

West Gulf	K5QE	409,260
DX	XE2N	770
Unlimited Multioperator		
Atlantic	W3CCX	529,800
Central	W9XA	128,028
Delta	N4JQQ	38,352
Great Lakes	N8ZM	137,368
Hudson	WE1P	109,120
Midwest	WQØP	146,331
New England	W2SZ	711,900
Northwestern	KD7UO	41,757
Pacific	WA6OIB	34,452
Roanoke	W4NH	193,065
Rocky Mountain	WØFRC	4,992
Southeastern	W4UAL	56,000
Southwestern	W7MRF	88,536
West Gulf	KC5MVZ	8,890
Canada	VE3WCC	105,625
DX	C6ATA	142,191

Regional Leaders		
West Coast Region		
(Pacific, Northwestern and Southwestern Divisions; Alberta, British Columbia and NT Sections)		
VE7JH	25,599	R
N6JET/R	9,504	R
K7SWS	6,771	R
N6ZE/R	4,983	R
AC7SG/R	3,705	R
WW7D/R	57,132	RL
N6GP/R	21,420	RL
WA8WZG/R	15,678	RL
K7KAD/R	7,099	RL
KD1RX/R	3,549	RL
K7ATN/R	5,336	RU
VE7AFZ/R	2,808	RU
N7CW	76,892	SOHP
K7CW	49,914	SOHP
KE7SW	30,832	SOHP
N6VI	29,640	SOHP
W7FI	27,144	SOHP
W6IT	26,838	SOLP
WJØF	23,681	SOLP
KC6ZWT	16,531	SOLP
VA6AN	14,356	SOLP
K2GMY	8,517	SOLP
W4DVE	8,525	SOP
K7ALO	5,829	SOP
KE7MSU	3,925	SOP
KD6RMS	3,822	SOP
KB1KXL	825	SOP
KG6IYN	124,623	SO3B
N7IR	38,645	SO3B
N7EPD	17,155	SO3B
K7BG	12,191	SO3B
KI6RRN	11,523	SO3B
W6KKO	1,125	SOFM
W6IA	406	SOFM
N9VM (N1VM, op)	376	SOFM
K6KQV	330	SOFM

VE7JRX	161	SOFM
NN7AZ	234,790	LM
NI6E	17,408	LM
K7TM	5,734	LM
WA6ZBL	3,424	LM
K6YK	1,003	LM
W7MRF	88,536	UM
KD7UO	41,757	UM
WA6OIB	34,452	UM
WA7JTM	30,208	UM
N6MI	15,800	UM
Midwest Region		
(Dakota, Midwest, Rocky Mountain and West Gulf Divisions; Manitoba and Saskatchewan Sections)		
ACØRA/R	205,200	R
KT5TE/R	22,800	R
WD5RAH/R	22,796	R
KØMHC/R	8,856	R
KCØP/R	2,675	R
KA5D/R	44,440	RL
AE5P/R	24,354	RL
AL1VE/R	23,968	RL
KK6MC/R	16,432	RL
KØDAS/R	15,725	RL
NØLD/R	18,216	RU
KD5IKG/R	17,487	RU
WØZF/R	3,936	RU
K5TR	399,672	SOHP
KØGU	142,492	SOHP
K5AM	140,352	SOHP
W5PR	103,408	SOHP
WB2FKO	67,137	SOHP
AD5A	103,255	SOLP
NØLL	65,610	SOLP
AA5AM	51,852	SOLP
AI5I	49,632	SOLP
NØPOH	40,128	SOLP
NIØW	221	SOP
NJ7H	96	SOP
W8KSC	81	SOP
K7LU	60	SOP
KIØG	1	SOP
KØNR	33,439	SO3B
WY7KY	16,200	SO3B
WDØBGZ	15,486	SO3B
KC7QY	11,815	SO3B
N7KA	9,525	SO3B
KG5FHU	6	SOFM
K5QE	409,260	LM
NØKE	77,649	LM
NØEO	16,745	LM
K5LRW	6,969	LM
WØVB	3,795	LM
WQØP	146,331	UM
KC5MVZ	8,890	UM
WØFRC	4,992	UM
Central Region		
(Central and Great Lakes Divisions; Ontario East, Ontario North, Ontario South, and Greater Toronto Area Sections)		
VE3OIL/R	100,873	R

VE3WJ/R	46,228	R
KF8QL/R	2,700	R
VA3CDD/R	611	R
VE2LJV/R	50	R
VE3SMA/R	40,768	RL
K9JK/R	21,390	RL
N9GH/R	18,088	RL
W9YOY/R	7,700	RL
K8DOG/R	4,620	RL
VE3KGC/R	1,548	RU
K9CT	237,349	SOHP
WØUC	194,023	SOHP
VA3ELE	62,480	SOHP
VE3ZV	56,485	SOHP
K8ZR	50,960	SOHP
K2DRH	234,818	SOLP
W9GA	51,272	SOLP
VE3DS	35,518	SOLP
N9LB	34,272	SOLP
K9MU	21,700	SOLP
W9SZ	2,485	SOP
WK9U	648	SOP
N9REP	112	SOP
VA3RKM	45	SOP
VE3EG	16	SOP
WB9TFH	10,395	SO3B
W9VS	7,434	SO3B
WB9HFK	5,152	SO3B
N9LQ	5,044	SO3B
NT9E	4,465	SO3B
KC9PCP	80	SOFM
N9LX	6	SOFM
K9WX	1	SOFM
NV9L	167,244	LM
W9RVG	18,590	LM
KC8AAV	14,365	LM
N9TF	3,116	LM
N8ZM	137,368	UM
W9XA	128,028	UM
VE3WCC	105,625	UM
W9VW	54,528	UM
N9UHF	27,244	UM
Southeast Region		
(Delta, Roanoke and Southeastern Divisions)		
AG4V/R	27,930	R
K8GP/R	25,017	R
W5VY/R	9,042	R
NC5AX/R	8,880	RL
WA4JA/R	575	RL
WBØPOH	510	RL
K4OJ	108	RL
KG4KOW/R	42	RL
W5ZN	275,764	SOHP
K1TO	188,773	SOHP
K4PI	152,471	SOHP
KC4PX	129,156	SOHP
N4BP	116,708	SOHP
N4QWZ	65,404	SOLP
NU4Y	45,486	SOLP
KG5MD	45,210	SOLP

W4RER	34,840	SOLP
AA5AU	30,690	SOLP
W4RXR	5,247	SOP
NV4B	1,656	SOP
K3TW	770	SOP
W2ODH	391	SOP
N4ZAK	210	SOP
K2PS	58,464	SO3B
KK4MA	30,240	SO3B
WA4GPM	23,324	SO3B
K4FJW	16,827	SO3B
AA4SC	13,176	SO3B
KK4OSG	5,370	SOFM
KE5WMA	3	SOFM
K4IMP	1	SOFM
WWØLFE	1	SOFM
K6OBX	1	SOFM
KW4LU	1	SOFM
AA4ZZ	227,280	LM
W4IY	134,830	LM
AD4ES	84,560	LM
N4HB	64,452	LM
K5GDY	54,972	LM
W4NH	193,065	UM
W4UAL	56,000	UM
N4JQQ	38,352	UM
W4COV	10,400	UM
Northeast Region		
(New England, Hudson and Atlantic Divisions; Maritime and Quebec Sections)		
KF2MR/R	33,366	R
WA3PTV	27,126	R
NN3Q/R	4,200	R
VE2NR/R	2,448	R
NE3I	507	R
K2EZ/R	64,400	RL
W3ICC	39,000	RL
N2DXT/R	21,168	RL
KC1EYG/R	19,034	RL
W1RGA/R	11,940	RL
AB4CR/R	24,225	RU
KJ1K/R	9,702	RU
W3HMS	3,224	RU
K1TEO	589,050	SOHP
K1RZ	275,520	SOHP
WZ1V	165,330	SOHP
W3EP	95,608	SOHP
K1IIG	94,828	SOHP
AF1T	204,516	SOLP
WB1GQR (W1SJ, op)	148,176	SOLP
WB2JAY	87,292	SOLP
K1KG	56,502	SOLP
WA3EQQ	46,170	SOLP
WA2TMC	4,488	SOP
WX3P	3,344	SOP
WB2AMU	2,686	SOP
KQ2RP	1,204	SOP
N1PRW	325	SOP
W3LL	29,300	SO3B
N2BEG	17,381	SO3B
N3ALN	16,568	SO3B

AI3Z	14,625	SO3B
W1DYJ	14,208	SO3B
W2EV	400	SOFM
VA2DG	22	SOFM
KD2LCH	15	SOFM
N1MJD	4	SOFM
K2LIM	339,212	LM
N2NT	255,486	LM
W3SO	214,474	LM
W2LV	155,868	LM
W1QK	42,036	LM
W2SZ	711,900	UM
W3CCX	529,800	UM
WE1P	109,120	UM
N2PA	84,160	UM
KV1J	81,844	UM

Thanks to the generous support of the listed clubs, we are pleased to list the winners of the Sponsored June VHF Contest plaques. For more information on plaque sponsorship or to order a duplicate plaque, contact ARRL Contest Branch Manager Bart Jahnke, W9JJ, at 860-594-0232 or contests@arrl.org Plaques cost \$75, which include all shipping charges.

Sponsored Plaque Winners		
Plaque Category	Winner	Plaque Sponsor
Overall Single Operator High Power	K1TEO	Charles Dietz, W5PR
Overall Single Operator Low Power	K2DRH	Jeffrey Klein, K1TEO
Overall Single Operator, 3-Band	KG6IYN	Northern Lights Radio Society
Overall Single Op, Low Power, Rookie	W4RER	W3ZZ First Log Award - Memorial by Tim, K3LR and Dave, W9PA
Overall Rover	ACØRA/R	"In Memory of Tim Ertl,KE3HT, Microwave DX Addict "
Overall Limited Rover	K2EZ/R	Rochester VHF Group
Overall Unlimited Rover	AB4CR/R	Directive Systems and Engineering
Overall Limited Multioperator	K5QE	Gene Zimmerman, W3ZZ Memorial - ARRL Contest Branch
Overall Multioperator	W2SZ	Bart Jahnke, W9JJ – ARRL Contest Branch
Atlantic Division Single Operator High Power	K1RZ	Potomac Valley Radio Club
Atlantic Division Single Operator Low Power	WA3EOQ	Potomac Valley Radio Club
Atlantic Division Single Operator, 3-Band	W3LL	Rochester VHF Group
Central Division Single Operator High Power	K9CT	Society of Midwest Contesters
Central Division Single Operator Low Power	K2DRH	Society of Midwest Contesters
Central Division Single Operator, 3-Band	WB9TFH	Society of Midwest Contesters
Central Division Limited Multioperator	NV9L	Society of Midwest Contesters
Dakota Division Single Operator Low Power	NØHJZ	Northern Lights Radio Society
Delta Division Single Operator High Power	W5ZN	Memorial to Mike Bruck, W5MRB, from his friends
Hudson Division Single Operator Low Power	WB2JAY	Northern Lights Radio Society
Hudson Division Single Operator, 3-Band	N2JJ	Arthur Wolferd, KA2BPP-In memory of Roger Amidon, K2SMN-Sunday Morning Net
Northwestern Division Single Operator High Power	K7CW	Boring, OR Amateur Radio Club
Northwestern Single Operator, 3-Band	N7EPD	Pacific Northwest VHF Society
Roanoke Division Single Operator High Power	W3IP	Potomac Valley Radio Club
Roanoke Division Single Operator Low Power	N4YDU	Potomac Valley Radio Club
Southeastern Division Single Operator High Power	K1TO	Southeastern VHF Society
Southeastern Division Rover	K4OJ/R	Southeastern VHF Society
Southeastern Division Limited Multioperator	AD4ES	Southeastern VHF Society
Southeastern Division Multioperator	W4UAL	Southeastern VHF Society
Southwestern Division Single Operator Low Power	W6IT	Bud Semon, N7CW
Canada Single Operator Low Power	VE3DS	Neil Macklem, VE3SST
Canada Rover	VE3OIL/R	Toronto FM Communications Society

2017 June VHF Band Score Leaders

Multioperator																							
50 MHz		144 MHz		222 MHz		432 MHz		902 MHz		1.2 GHz		2.3 GHz		3.4 GHz		5.7 GHz		10 GHz		24 GHz			
Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score		
C6ATA	133936	W2SZ	15950	W2SZ	4968	W2SZ	8118	W2SZ	1536	W2SZ	2160	W2SZ	1452	W2SZ	828	W2SZ	728	W2SZ	896	W2SZ	200		
W2SZ	104910	W3CCX	12056	W3CCX	4940	W3CCX	6960	W3CCX	840	W3CCX	1326	W3CCX	760	W3CCX	448	W3CCX	504	W3CCX	480	VE3WCC	8		
W3CCX	83952	W4NH	5336	N8ZM	2914	N2PA	2400	N4JQQ	108	WQØP	210	VE3WCC	144	VE3WCC	16	VE3WCC	48	VE3WCC	16				
W7MRF	78144	WE1P	5282	N2PA	1932	W4NH	2400	KD7UO	54	VE3WCC	198	N4JQQ	64	KD7UO	8	KD7UO	8	N9UHF	8				
W4NH	77160	N8ZM	4356	W4NH	1176	N8ZM	2024	KV1J	48	KD7UO	180	KD7UO	8	VA2OMC	4	VA2OMC	4	W4COV	4				
WQØP	76424	N2PA	3100	KE1LJ	744	VE3WCC	1260	K6HS	30	N4JQQ	108	VA2OMC	4			W4COV	4	W6TV	4				
W9XA	57590	W9XA	2349	KD7UO	660	W9XA	1248	N9UHF	27	K6HS	96												
WE1P	53940	KE1LJ	1743	W9XA	520	WQØP	1044	W3RFC	24	KV1J	72												
W4UJAL	52751	VE3WCC	1608	VE3WCC	462	WE1P	644	VA3NW	18	WA6OIB	72												
KV1J	41870	WQØP	1596	WQØP	336	KD7UO	612	VE3WCC	15	N8ZM	60												
Limited Multiop																							
50 MHz		144 MHz		222 MHz		432 MHz		902 MHz		1.2 GHz		2.3 GHz		3.4 GHz		5.7 GHz		10 GHz		24 GHz			
Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score		
NN7AZ	198616	K2LIM	20262	K2LIM	8200	W3SO	8588																
K5QE	176472	N2NT	14100	W3SO	4480	K2LIM	7722																
NV9L	80256	K5QE	14062	N2NT	2376	AA4ZZ	3770																
N2NT	79212	W3SO	13908	K5QE	1850	K5QE	3078																
AA4ZZ	73253	AA4ZZ	10700	AA4ZZ	1672	N2NT	2982																
AD4ES	72884	W4IY	10230	W4IY	1360	W4IY	2860																
W2LV	68250	NV9L	4700	W2LV	960	W2LV	1802																
K2LIM	67310	W2LV	3538	NV9L	448	NV9L	1152																
NØKE	59598	N4HB	1475	K2BAR	160	N4HB	986																
K5GDX	53636	NG1R	765	N1GE	120	W4PH	286																
Single Op - High Power																							
50 MHz		144 MHz		222 MHz		432 MHz		902 MHz		1.2 GHz		2.3 GHz		3.4 GHz		5.7 GHz		10 GHz		Light			
Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score		
KSTR	252164	KA1ZE	22659	K1TEO	7128	K1TEO	10218	K1TEO	1953	K1TEO	2640	K1TEO	1280	K1TEO	728	K1RZ	120	K1RZ	288	K1RZ	288	W2SJ	4
K1TO	188773	W1VD	15620	W5ZN	3828	K1RZ	6072	K1RZ	1134	K1RZ	2340	K1RZ	756	K1RZ	216	K1GX	100	K1GX	120	K1GX	120		
K4PI	152471	K1TEO	11368	K1RZ	3780	W5ZN	5056	WØUC	792	VA3ELE	1377	K1GX	224	K1GX	144	K1TEO	48	K1IG	80	K1IG	80		
KØGU	142492	W5ZN	9728	VE3ZV	1512	K9CT	2610	VA3ELE	351	WØUC	1050	VE3ZV	160	W3PAW	112	WB2RVX	16	WØGHZ	36	WØGHZ	36		
K5AM	127488	W2KV	8050	WØUC	1344	WØUC	2548	K1GX	324	WZ1V	759	K1IG	140	WB2RVX	100	WØGHZ	4	W1FKF	36	W1FKF	36		
N4BP	116708	K1RZ	7406	VA3ELE	1152	VA3ELE	2256	W2SJ	288	W3IP	513	W3PAW	128	K1IG	64	WØUC	4	K5LLL	24	WØUC	24		
N4ØX	110025	W3PAW	6272	K9CT	1100	VE3ZV	2236	W3PAW	252	VE3ZV	495	W2SJ	120	W2SJ	36	KE7SW	4	KSTR	24	KSTR	24		
KC4PX	108528	K9CT	3450	W3IP	1020	W3IP	2080	VE3ZV	240	W2SJ	378	WØGHZ	64	WØGHZ	36	K7ND	4	WB2RVX	16	WB2RVX	16		
W5PR	103408	W3IP	2883	WZ1V	924	WZ1V	1700	W3IP	234	K1IG	294	WB2RVX	64	VE3ZV	16			W2KV	16	W2KV	16		
K9CT	99264	W3BFC	2808	W2SJ	832	K5TR	1406	W5ZN	180	K1TR	273	VA3ELE	40	VA3ELE	16			K1TEO	12	K1TEO	12		
Single Op - Low Power																							
50 MHz		144 MHz		222 MHz		432 MHz		902 MHz		1.2 GHz		2.3 GHz		3.4 GHz		5.7 GHz		10 GHz		24 GHz			
Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score		
AD5A	78831	K2DRH	3145	K2DRH	1344	K2DRH	2448	K2DRH	528	K2DRH	663	K2DRH	480	K2DRH	324	W6IT	144	AF1T	216	AF1T	4		
K2DRH	63027	WB1GQR (W1SJ, op)	3075	WA3EOQ	1200	WB2JAY	1536	AF1T	510	AF1T	513	AF1T	352	AF1T	168	AF1T	100	W6IT	144				
AF1T	54600	AF1T	1751	AF1T	1008	WB1GQR (W1SJ, op)	1272	WA3EOQ	231	WA3EOQ	312	WB1GQR (W1SJ, op)	120	W6IT	144	K1KG	4	K1KG	48				
NØLL	54166	WA3EOQ	1540	WB2JAY	910	AF1T	1224	VE3DS	144	VE3DS	252	K1KG	96	WB1GQR (W1SJ, op)	100	WØZQ	4	WØZQ	16				
WB1GQR (W1SJ, op)	49000	KJ4ZYB	1496	N4QWZ	800	VE3DS	1044	N9LB	144	VE3DS	231	WØZQ	96	K1KG	96	KØBAK	4	W3XØ	16				
NØLL	45486	N4QWZ	1380	WB1GQR (W1SJ, op)	620	WA3EOQ	928	W6IT	120	W6IT	195	WB2JAY	60	WØZQ	80								
AI5I	45353	WB2CUT	1330	VE3DS	560	N4QWZ	900	WØZQ	120	WB2JAY	180	VE3DS	32	WB2JAY	60								
WA5DM	39370	WB2JAY	952	WA2VNV	520	KJ4ZYB	858	N4QWZ	105	KC6ZWT	180	N9LB	24	NN4AA	4								
W4RER	34840	WA2VNV	780	W53C	418	W9GA	840	WB2JAY	84	K1KG	162	W6IT	12	KØBAK	4								
NT2X	30970	W9GA	779	W9GA	416	AA5AM	598	WB1GQR (W1SJ, op)	84	W53C	126	KC6ZWT	4	NN4AA	4								
												KØBAK	4										

Single Op - Portable																					
50 MHz		144 MHz		222 MHz		432 MHz		902 MHz		1.2 GHz		2.3 GHz		3.4 GHz		10 GHz					
Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score				
WA2TMC	3168	W4DVE	696	W4DVE	136	W4DVE	222	W9SZ	12	W9SZ	48	W9SZ	4	W9SZ	4	N9REP	4				
W4RKR	1890	KE7MSU	490	KD6RMS	114	K7ALO	174	KD6RMS	6	W4DVE	48					AA9IL	4				
WX3P	1802	K7ALO	468	W9SZ	72	KD6RMS	160	WX3P	3	K7ALO	48										
NV4B	1656	VE7FYC	230	KE7MSU	64	W9SZ	128	N9REP	3	KD6RMS	9										
KQ2RP	840	WB2AMU	200	K7ALO	52	W4RKR	120			N9REP	3										
W4DVE	784	W9SZ	192	W4RKR	40	KE7MSU	102				3										
K3TW	770	W4RKR	120	WB2AMU	20	KB1KXL	48														
WB2AMU	740	KD6RMS	95	VE7FYC	12	NJ7H	32														
WK9U	648	WX3P	72	WA2TMC	12	WB2AMU	24														
K7ALO	533	KB1KXL	72	WA2TMC	8	WX3P	24														
Single Op - 3-Band																					
50 MHz		144 MHz		432 MHz																	
Call	Score	Call	Score	Call	Score																
KG6IYN	66066	KG6IYN	1768	KG6IYN	1776																
K2PS	58464	K6MI	1134	N7EPD	450																
KK4MA	28141	KA2BPP	748	KC0SKM	414																
K0NR	27720	N7EPD	675	K6MI	384																
N7IR	26676	KR1ST	540	W1DYJ	252																
W3LL	24570	KC0SKM	517	N7IR	252																
WA4GPM	17136	A13Z	468	WA4LDU	216																
WD0BGZ	14442	W1DYJ	385	N3ALN	168																
WY7KY	14112	W9VS	380	W5MMW	144																
AA4SC	13176	KC8UDV	375	WB2EOD	136																
Single Op - FM-Only																					
50 MHz		144 MHz		222 MHz		432 MHz															
Call	Score	Call	Score	Call	Score	Call	Score														
KK4OSG	162	KK4OSG	1092	W6KKO	42	KK4OSG	348														
W2EV	143	W6KKO	110	KK4OSG	36	W6KKO	136														
W6KKO	15	W6IA	66	W6IA	20	K6KQV	68														
				N9VM (N1VM, op)		N9VM (N1VM, op)															
K6KQV	12	K6QCB	64		16		66														
KC9PCP	2	K7BWH	54	VE7JRX	12	W6IA	52														
		N9VM (N1VM, op)	51	KI7NQN	10	W6CT	24														
		K6KQV	30	W2EV	4	KI7NQN	18														
		VE7JRX	27	KC9PCP	4	KJ6KK	18														
		W6CT	22	K7WW	2	VE7JRX	16														
		KJ6KK	15																		
Rover (Classic)																					
50 MHz		144 MHz		222 MHz		432 MHz		902 MHz		1.2 GHz		2.3 GHz		3.4 GHz		5.7 GHz		10 GHz		24 GHz	
Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score
AC0RA/R	21432	AC0RA/R	4862	VE3OIL/R	2006	AC0RA/R	4680	AC0RA/R	798	AC0RA/R	777	VE3OIL/R	640	AC0RA/R	112	VE3OIL/R	324	VE3WJ/R	360	VA3CDD/R	4
AG4V/R	4512	VE3OIL/R	1368	AC0RA/R	1632	VE3OIL/R	1650	VE3OIL/R	540	VE3OIL/R	720	AC0RA/R	552	WA3PTV	64	VE3WJ/R	324	VE3OIL/R	324		
VE7JH	3264	K8GP/R	1161	KT5TE/R	1520	KT5TE/R	1520	KF2MR/R	480	KF2MR/R	570	VE3WJ/R	360	K8GP/R	24	NN3Q/R	8	WA3PTV	40		
VE3WJ/R	2479	VE7JH	1032	WDSRAH/R	1472	WDSRAH/R	1472	VE3WJ/R	270	VE3WJ/R	270	WA3PTV	120	VE3OIL/R	16	K8GP/R	4	NN3Q/R	8		
W5VY/R	2135	KF2MR/R	944	K8GP/R	704	KF2MR/R	990	WA3PTV	90	K8GP/R	231	K8GP/R	48	NN3Q/R	8	VA3CDD/R	4	K8GP/R	4		
VE3OIL/R	2130	WDSRAH/R	760	KF2MR/R	660	VE7JH	768	K8GP/R	84	WA3PTV	135	KC0P/R	48	VA3CDD/R	4	VE2NR/R	4	VA3CDD/R	4		
KF2MR/R	1680	KT5TE/R	760	WA3PTV	630	K0MHC/R	748	KC0P/R	63	KC0P/R	63	N0HZO/R	48	VE2NR/R	4						
WA3PTV	1386	K0MHC/R	540	VE7JH	594	K8GP/R	720	N0HZO/R	54	N0HZO/R	63	NN3Q/R	24								
N6JET/R	1360	N6JET/R	504	AG4V/R	540	WA3PTV	560	NN3Q/R	36	AG4V/R	63	AG4V/R	16								
K0MHC/R	1326	AG4V/R	490	VE3WJ/R	198	AG4V/R	560	AG4V/R	18	N6JET/R	60	VA3CDD/R	8								
								N6ZE/R	18												

Rover Limited																					
50 MHz		144 MHz		222 MHz		432 MHz															
Call	Score	Call	Score	Call	Score	Call	Score														
AL1VE/R	22578	K2EZ/R	3749	K2EZ/R	2550	K2EZ/R	2430														
KASD/R	11644	VE3SMA/R	2507	WW7D/R	1760	WW7D/R	2240														
N6GP/R	9555	WW7D/R	2275	AE5P/R	1568	VE3SMA/R	2142														
W3ICC	8064	KØDAS/R	1625	VE3SMA/R	1014	AE5P/R	1584														
N5XYO/R	6984	W3ICC	1248	W3ICC	902	KASD/R	1100														
WW7D/R	6578	N2DXT/R	1080	KASD/R	620	W3ICC	860														
KK6MC/R	6380	KC1EYG/R	1064	W5TV/R	610	N2DXT/R	728														
K2EZ/R	5066	AE5P/R	927	KC1EYG/R	308	N9GH/R	684														
K9JK/R	5031	W1RGA/R	884	W9VOY/R	266	KC1EYG/R	640														
WA8WZG/R	4823	K7KAD/R	774	N2DXT/R	240	W5TV/R	600														
Rover Unlimited																					
50 MHz		144 MHz		222 MHz		432 MHz		902 MHz		1.2 GHz		2.3 GHz		3.4 GHz		5.7 GHz		10 GHz		Light	
Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score	Call	Score
NØLD/R	2120	NØLD/R	969	KD5IKG/R	600	KD5IKG/R	900	AB4CR/R	165	KJ1K/R	99	KJ1K/R	108	KJ1K/R	96	KJ1K/R	48	KJ1K/R	48	VE3KGC/R	4
WØZF/R	2013	KD5IKG/R	530	AB4CR/R	522	NØLD/R	792	KJ1K/R	54	AB4CR/R	81	W3HMS	40	W3HMS	24	AB4CR/R	8	W3HMS	8		
AB4CR/R	1682	AB4CR/R	468	K7ATN/R	184	AB4CR/R	640	K7ATN/R	3	NØLD/R	63	AB4CR/R	16	AB4CR/R	16	VE3KGC/R	4	AB4CR/R	4		
KD5IKG/R	1682	K7ATN/R	232	W3HMS	54	K7ATN/R	174			W3HMS	63							VE3KGC/R	4		
VE7AFZ/R	722	VE7AFZ/R	120	KJ1K/R	36	KJ1K/R	140			K7ATN/R	24										
K7ATN/R	385	KJ1K/R	48	NØLD/R	30	W3HMS	60			VE7AFZ/R	12										
KJ1K/R	108	VE3KGC/R	48	VE7AFZ/R	12	WØZF/R	48														
W3HMS	70	WØZF/R	45			VE3KGC/R	32														
VE3KGC/R	8	W3HMS	44			VE7AFZ/R	30														