# Results, 1994 ARRL June VHF QSO Party 

# The contest was great fun, and I hope more Novices and Technicians try VHF/UHF contesting. Even FM contacts can be fun!-Frank, N8WXQ 

By Billy Lunt, KR1R, and Warren C. Stankiewicz, NF1J<br>Contest Manager Assistant Contest Manager

The run of tremendous propagation we've had for the past several June contests has come to an end, at least for now. It had to, eventually, we suppose; but that doesn't mean we shouldn't take a moment to mourn its passing. Conditions were good this year, but nothing like what we've been used to. The country-wide $\mathrm{E}_{\mathrm{S}}$ openings on 6 meters were not to be found, and 2 meters wasn't what it used to be, either.

The bands weren't completely dead. Nice propagation showed up Sunday, and the beautiful weather across much of the country made mountaintopping just that much more pleasant. Brief occurrences of aurora helped on the higher bands. Six meters gave good single-hop openings on


Dave, NR6E, operated from the Austin Summit off Highway 50 in Nevada. He just wishes he could have found someone to work on 222 or 1296!
the East Coast Saturday afternoon and Sunday morning. Further west, the middle of the country was open to the West Coast on 6 meters from about the start of the contest until 0300 Z . with a couple of southern Florida and Caribbean stations popping in from time to time. A few people noted working Alaska, although some were fooled by KL7MH, who was in EN10.

There were great rover efforts this year. Nine stations activated 10 or more different grid squares. Contest Branch kudos go to Brian, ND3F. who journeyed along the Atlantic seaboard through 14 grids, tops among rovers this year. We wonder how much he spent in tolls? In fact, seven records were set in the rover category this year. It seems to us that the knack of roving may be catching on. and a number of people remarked on what a good time they had finding places to operate. setting up and moving around. The number of people experimenting with "rovermobiles" is increasinghave you ever thought of giving it a try?


Pete, N8YEL, used the contest to go QRP portable along the shores of Lake Michigan, and to demonstrate Amateur Radio at the same time.

There were rarer-than-normal places on the air this year, with a lot of activity from Mexico and Cuba. For details on the Cuban stations' participation, see the article "Cuba: A Week to Remember" by Janet Margelli, WA7WMB, on page 58. To hams who journeyed to those out-of-the-way places to put rare grid squares on the air, thank you-not only for the multipliers, but for helping with VUCC quests.

With the lower bands great, but not fantastic. it took a bit more work on the microwave bands this year to finish with a good score. Tom, WA8WZG, used his tremendous microwave station to catapult him into the top spot this year over perennial winner Jeff, WA2TEO. His heavy reliance on


Roger, KD6EFQ, checks the antennas before leaving on the N7TTO rover expedition. They report that on Saturday morning, when approached by the UCSC campus police, they said they, "were with the 'Sightings' investigation team, and that Amateur Radio was just a cover to deflect suspicion."

## Single-Operator QSO Leaders by Band

| 50 MHz |  | 144 MHz |  | 222 MHz |  | 432 MHz |  | 902 MHz |  | 1296 MHz |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N5JHV | 368 | KA1ZE | 415 | WA8WZG | 91 | KA1ZE | 133 | WA8WZG | 45 | WA8WZG | 67 |
| KN5S | 362 | K2GAL | 390 | WA2TEO | 82 | WB6WLR | 133 | WA2TEO | 21 | WA4VHF | 53 |
| W5UWB | 273 | WA3HMK | 374 | KA1ZE | 79 | K5MA | 131 | K1RZ | 17 | K1RZ | 34 |
| KB5IUA | 259 | WA2TEO | 344 | K5MA | 73 | WA8WZG | 127 | KA1ZE | 16 | KA1ZE | 32 |
| WD5K | 251 | K1RZ | 283 | K1RZ | 65 | WA2TEO | 124 | WA1MBA | 16 | WA2TEO | 31 |
| N5HHS | 250 | WB2QOQ | 281 | WA8NJR | 61 | WA8NJR | 105 | WBAC | 16 | N1DPM | 28 |
| NøLL | 240 | K3ZO | 273 | N1DPM | 52 | K1RZ | 103 | WB5IGF | 14 | K6KLY | 26 |
| K9MK | 214 | K5MA | 254 | WB2DNE | 51 | WB2DNE | 95 | WB2VVV | 12 | WA1MBA | 25 |
| AA4ZZ | 206 | WB2DNE | 213 | K1EM | 46 | N2GHR | 88 | N1DPM | 11 | WAØBWE | 25 |
| NY1E | 203 | WA8NJR | 207 | KE8FD | 46 | KE8FD | 84 | N2BFJ | 11 | N2GHR | 24 |
| WA2TEO | 202 | KE8FD | 198 | AC6BB | 45 | WB5IGF | 80 | N2LIV | 10 | W8AC | 23 |
| WZ8D | 197. | AA8BC | 190 | WB2VVV | 44 | K6KLY | 76 | WA8VPD | 10 | N2LIV | 22 |
| K3ZO | 194 | K8ZES | 189 | NW3C | 44 | W2HRW | 75 | K9OYD | 9 | WAØNTT | 22 |
| N9MKC | 191 | WA1MBA | 177 | WA2BAH | 42 | WA2TIF | 74 | WA8NJR | 9 | KBøIKP | 22 |
| WA8NJR | 188 | WA3BZT | 176 | W2HRW | 41 | WAøBWE | 70 | KB3IB K8MD | 8 | WB2DNE | 21 |

## Single-Operator Multiplier Leaders by Band

| 50 MHz |  | 144 MHz |  | 222 MHz |  | 432 MHz |  | 902 MHz |  | 1296 MHz |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N5JHV | 155 | WA3HMK | 59 | WA8WZG | 31 | WA8NJR | 39 | WA8WZG | 20 | WA8WZG | 24 |
| KN5S | 147 | KE8FD | 55 | WA2TEO | 29 | WA8WZG | 37 | WA2TEO | 15 | WA4VHF | 21 |
| KB5IUA | 123 | KU8U | 54 | KA1ZE | 28 | KE8FD | 37 | K1RZ | 13 | K1RZ | 16 |
| NØLL | 123 | AA8BC | 50 | NW3C | 28 | WA2TEO | 34 | W8AC | 12 | WA2TEO | 14 |
| W5UWB | 122 | WA8NJR | 49 | K1RZ | 26 | KA1ZE | 34 | KA1ZE | 11 | N2GHR | 14 |
| WD5K | 121 | N9MKC | 49 | KE8FD | 25 | WB2DNE | 34 | WA1MBA | 9 | W8AC | 14 |
| N5HHS | 102 | K2GAL | 48 | K5MA | 24 | WB5IGF | 32 | N2LIV | 9 | WAØNTT | 14 |
| K9MK | 96 | K8ZES | 46 | WA8NJR | 24 | K1RZ | 30 | N1DPM | 8 | KA1ZE | 13 |
| WZ8D | 92 | NW3C | 45 | WB2DNE | 23 | NW3C | 29 | WB2VVV | 8 | WA8TJL | 13 |
| AA4ZZ | 90 | WZ8T | 45 | N8TLZ | 23 | WZ8T | 29 | WA8NJR | 8 | WAØBWE | 13 |
| WD5EWD | 90 | NØZKK | 45 | WA3EOQ | 22 | WZ8D | 29 | N2BFJ | 7 | KBØIKP | 13 |
| W5NZS | 90 | K1RZ | 44 | N1DPM | 21 | W8AC | 29 | KB3IB | 7 | N1DPM | 12 |
| W5SXD | 85 | WB5IGF | 44 | AA4ZZ | 21 | K8ZES | 28 | WB5IGF | 7 | WA8NJR | 12 |
| NØLNO | 85 | WZ8D | 44 | WB5IGF | 20 | KU8U | 28 | WA8VPD | 7 | NOLL | 12 |
| KF4FL | 84 | N8TLZ | 44 | WZ8D | 20 | K2AN | 27 | WA8TJL | 6 | KøFQA | 12 |
|  |  | KB9IEC | 44 | NØLL | 20 | AA4ZZ | 27 |  |  |  |  |
|  |  |  |  |  |  | N8TLZ | 27 |  |  |  |  |
|  |  |  |  |  |  | NØLL | 27 |  |  |  |  |

Multioperator QSO Leaders by Band

| 50 MHz |  | 144 MHz |  | 222 MHz |  | 432 MHz |  | 902 MHz |  | 1296 MHz |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W5KFT -L | 472 | K1TR -L | 752 | N2WK | 181 | W2SZ | 282 | N2WK | 77 | W2SZ | 89 |
| W3EP -L | 469 | K3MQH -L | 715 | K6MEP -L | 176 | K1TR -L | 261 | W2SZ | 58 | N2WK | 87 |
| K1TR -L | 436 | W2SZ | 591 | W2SZ | 157 | K3MQH -L | 244 | W3CCX | 38 | W3CCX | 55 |
| W2SZ | 389 | K3UA -L | 571 | K3MQH -L | 143 | W3CCX | 224 | N2WM | 22 | AA9D | 46 |
| W3ZZ | 381 | K3YTL | 560 | K1TR -L | 140 | N2WK | 221 | K3YTL | 22 | W3IP | 39 |
| K3MQH -L | 380 | N8FMD | 537 | W3CCX | 126 | N8FMD | 216 | W3ZZ | 22 | W3ZZ | 38 |
| K3UA -L | 380 | W3CCX | 493 | N2CEI -L | 104 | AA9D | 186 | AA9D | 22 | N2WM | 32 |
| W4NT -L | 365 | W3ZZ | 443 | K3YTL | 97 | W3ZZ | 174 | N8FMD | 18 | N8FMD | 32 |
| N8FMD | 325 | N2WM | 439 | W3ZZ | 95 | WB1GQR -L | 167 | WW8M | 17 | W1XX | 30 |
| W3X0 | 311 | WB1GQR -L | 436 | W3EP -L | 95 | K3YTL | 150 | W1XX | 15 | K3YTL | 30 |
| AA9D | 307 | N2WK | 431 | N2WM | 94 | N2WM | 149 | W3IP | 14 | W4IY | 30 |
| W4IY | 300 | N2CEI -L | 403 | N8FMD | 91 | W4IY | 139 | W4IY | 14 | W6TRW | 30 |
| N2WM | 296 | AA9D | 380 | AA9D | 85 | K6MEP -L | 139 | W10P | 12 | W1OP | 29 |
| N2WK | 294 | W4IY | 359 | WB1GQR -L | 83 | N2CEI -L | 138 | K3YWY | 11 | WW8M | 26 |
| W3CCX | 285 | K6MEP -L | 342 | K3UA -L | 82 | W3EP -L | 107 | WB2IEY | 8 | AB21 | 24 |

- $L$ denotes Limited multioperator


## Multioperator Multiplier Leaders by Band

| 50 MHz |  | 144 MHz |  | 222 MHz |  | 432 MHz |  | 902 MHz |  | 1296 MHz |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W5KFT -L | 194 | N8FMD | 70 | N2WK | 47 | N8FMD | 46 | N2WK | 32 | N2WK | 29 |
| W3XO | 146 | WøUC | 66 | W3EP -L | 43 | AA9D | 44 | W2SZ | 21 | W2SZ | 24 |
| W3EP -L | 135 | N2WK | 64 | N8FMD | 38 | N2WK | 43 | W3CCX | 17 | W3IP | 19 |
| NOOY -L | 135 | K3UA -L | 64 | K3MQH -L | 36 | K3MQH -L | 40 | W3ZZ | 16 | AA9D | 19 |
| W4NT-L | 127 | W3ZZ | 57 | K3UA -L | 36 | W2SZ | 39 | N2WM | 15 | W3CCX | 18 |
| AA9D | 118 | W8ULC -L | 57 | K1TR -L | 35 | W3ZZ | 39 | K3YTL | 15 | W3ZZ | 18 |
| WA7JTM -L | 110 | AA9D | 57 | K3YTL | 34 | K1TR -L | 38 | AA9D | 15 | N2WM | 17 |
| WQ5S | 109 | W3EP -L | 56 | W2Sz | 33 | W3EP-L | 38 | N8FMD | 12 | K3YTL | 16 |
| W3zZ | 105 | N9LAG -L | 56 | W3ZZ | 33 | W3CCX | 37 | W31P | 10 | N8FMD | 16 |
| WRøG -L | 104 | WW8M | 55 | AA9D | 33 | K3YTL | 37 | WW8M | 10 | KD®DW | 14 |
| KDøDW | 101 | W3CCX | 54 | VE3ONT -L | 32 | K3UA -L | $\begin{array}{r}37 \\ \hline\end{array}$ | W41Y | 8 | NO®Y-L | 14 13 |
| K3UA -L | 100 | VE3ONT-L | 54 | W3WM | 31 30 | WE3ONT -L | 36 35 | W10P | 7 | W4IY | 13 13 13 |
| WøUC | 100 | W2SZ | 52 | WøUC | 30 | WøUC | 35 | K3YWY | 7 | WøUC | 13 |
| WOKEA -L | 95 |  | 52 |  | 29 | N2WM | 32 | KDøDW | 6 | AB21 | 11 |
| N2WK | 92 |  |  |  |  | N2CEI-L | 32 |  |  | WW8M | 11 |
|  |  |  |  |  |  | W4IY | 32 |  |  | WBØGGM | 11 |
| -L denotes Limited multioperator |  |  |  |  |  | NOOY -L | 32 |  |  |  |  |

902, 1296 and 2304 MHz overcame the natural advantage Jeff and other East Coasters had in 6 and 2-meter QSOs.

You'll notice a healthy rover station turnout in the Atlantic Division this time. And you'll notice a very healthy unlimited multiop score from N2WK in Western New York. Using a combination of solid low-
band showings, a great UHF/microwave effort and multiple rovers, N2WK amassed a whopping 356 multipliers (including 32 on $902 \mathrm{MHz}, 29$ on $1296 \mathrm{MHz}, 23$ on 2304 $\mathrm{MHz}, 14$ on 3456 MHz and 7 on 5760 MHz ). They gave perennial multiop leader W2SZ/1 a close race for the top spot.

VHF Contesting isn't just for the rovers
or the "big-gun" stations, though-it's for everybody! If you've got a radio for VHF (even a hand-held), you're just as welcome to get on and have a good time as anyone else is. If you're interested in what it's like, check out the sidebar, "VHF Contesting for the Average Guy." Jack gives an interesting look at the perspectives of VHF con-
testing from both sides.
The K6MEP effort is another good case in point. Their group sets up on Frazier Mountain, a prime location that looks right into the Los Angeles area-perfect for working people with hand-held FM transceivers. Jim, WB2ODH, observes that, "We always see a surge of FM contacts Sunday morning as people head to church." The club has a lot of new members active with 2 -meter and $222-\mathrm{MHz}$ hand-helds, and they set up special hours beforehand where they're looking specifically to work people on FM. Their location and station allows them to work large numbers of these "ham shack on a belt clip" stations. It sure works! Not only did they win the plaque for finishing in fifth place among Limited Multiops, but the club has grown to almost 90 members. Who knows how many will be interested enough to one day try weak-signal operating?

Whether you join a multiop effort, strike out on your own or just operate from the comforts of home, the June VHF QSO party is an enjoyable way to have fun in ham radio. If you got on, you know what we mean. If not, what are you waiting for? The January VHF Sweepstakes is only a few weeks away-why not check it out? Thanks to Contest Assistant Rich Moris, KB1LE, for his help in preparing these results.

## SOAPBOX

I was able to work my first Cuban stations! The contest was great fun, and I hope more Novices and Technicians try VHF/UHF contesting in the future. Even FM contacts can be fun! (N8WXQ). Propagation was fair and I worked FN45 in Quebec. I still find that these events provide strong enjoyment and fun, after 39 years (WIEJ). We had great activity in Vermont for the contest. The weather was beautiful and there were lots of rovers and portables (K1LPS). E skip gave me my first contact on 6 meters, with three worked in five minutes. The EM85 station I worked added icing to the EL83 and EL93 cake (KC2TA). We had a lot of fun in the couple of hours we operated Saturday evening, although the mosquitoes made more contacts than we did! More hams should flip on their hand-held or mobile FM rigs and listen for contesters on the simplex frequencies; they'd be surprised at how many stations they might work (WlEDH). This was my first contest and I worked it from my second-story balcony, quite an enjoyable experience. (N2YCD). We had a lot of fun, but even more exciting was the brief aurora that appeared unexpectedly. Our biggest surprise was at the beginning of the contest, when we were able to work EM74 (WA2AEY). A little sporadic E and great weather made for a great-weekend (KB2DMK). This was our best organized effort ever. Propagation was up and down, we therefore had to work a little harder for those elusive contacts (N2LXD). Although conditions were a little slack, we had an enjoyable time and enjoyed working all the new Technicians on 2 meters (N3FTI). We enjoyed this contest more than some of the past ones. However, one of our ops found that a $5-\mathrm{kV}$ ceramic "doorknob" capacitor was experiencing a catastrophic failure and making things sound exactly like a 12 -gauge shotgun (K3MQH). We had a fantastic setup and an outstanding crew on board. Next contest we'll move to the mountains to improve our chances (KC3EK). Conditions from this station were relatively slow, but I still had fun. That's what it's all about (W4ALJ). We were flooded with QSL cards for this "rare grid." We made a lot of people happy (AA4R). It was great fun, with each contact like pulling teeth, but I hung in there (KD4SZJ). Conditions at this point in the sunspot cycle were a true test of the 20 -second QSO (KD4HXT). The sporadic E cer-

## VHF Contesting for the Average Guy <br> By Jack Pfister, KA2IVS <br> 118 Colona St <br> Wyckoff, NJ 07481

This is the lowest score l've submitted in years. Looking back on my log, I notice that I spent less time at the mike and key than I customarily do. I had just completed a grueling business trip and had flown Saturday morning (one of those 4:30 AM wake-up-call flights!), so I know fatigue took a much bigger toll on me than usual, lowering my endurance.

Another observation: I'm saddled with a rooftop tripod beam, up only about 27 feet. I can usually work what I hear, but I'm never able to work the tropo that stations only a few miles away can because most of my signal is soaked up by the oak trees a few feet from my antenna.

This means I get my points, few as they are, by sheer tenacity and QSO totals, not by multipliers. In January, when everyone is sitting around in their warm homes, nearly half of my QSOs come from casual operators "giving out points." In June, when the mountaintoppers are in action, they set up their elaborate stations with 20 operators, stake out a frequency, and call CQ all weekend. The net result is that all those casual operators are gone, off on one mountain, sitting on one frequency for the duration. Where there were 20 stations on 20 frequencies, there's now one "big gun" in one spot. I can understand how they feel the need to justify the effort their team put into the contest, and having 24 hours of 10 megawatts a zillion miles up on the ridge, they feel Mohammed will work the mountain. It's funny, when these stations finally look around the band toward the end of the contest, l'll hear two monster signals that have been 10 kHz away from each other making their first contact with each other!

The "little pistols" like me fill their log sheets because we're the only ones hunting and pecking (or, to put it in submarine lingo, we're the "hunter-killers"). Again, this is an observation, merely a comment on the facts of contest life. I've been on the mountaintop and l've operated from home, too. I settled on the latter because l'm away from home enough on business, and being able to get up from the operating position and play with my seven-year-old during the weekend takes precedence over overflowing the register of my calculator totaling up my score.

I'm moving to a new house where I don't think l'll even get away with my rooftop tripod. KA2IVS, humble but dedicated VHF contest station, will be QRT, but KA2IVS, humble but dedicated VHF contest team member, will be headed back to the mountaintop. I participate in contests for all the usual reasons; for the camaraderie with other contestants, for the chance to hone my operating skills, for the challenge of pulling an exchange out of a signal so weak that ragchewers scratch their heads and hear nothing but white noise and static. But most of all, I do it for the simple, exhilarating glory of it all.

I enjoyed my hiatus from the mountaintop teams, working in my quiet, cool home shack surrounded by family, hot food, cold beer and a flush toilet. l'll climb the mountain again with as much delight. The hardships increase exponentially, but so does the score and so does the glory. But when the rest of the team is on a break and l've got the midnight watch, I just might reach for the VFO. I just might pick up that great big gun...and go hunting.


Tony, XE1GRR, used this antenna system from south of the border for his contacts from DL80.
tainly lived up to its name (AJ6T). It was a big thrill when I was called by KL7MH. I was sure I had the 50th state, but he was in EN 10 (WB2QLP). The gremlins attacked our computer LAN and it went south, our 6-meter beam developed an attitude, and our 6 -meter amp decided it would go on vacation. Yes, Murphy joined our operation. Even with his help, we had a great time and continued to learn about VHF and contest operating (W4IY). This was our first father-and-son operation. We put up a 35 -foot tower with a 10 -element beam and operated from a picnic table in the backyard, close to the house and its refreshments (WØQPD). There wasn't a rip-roaring opening on any band this year, but the contest was still a lot of fun. My thanks to the rover stations that provided the extra activity and to the new hams who got on the bands with minimum antennas, just to have fun (WD5EWD). This is the fourth straight year that I've been assigned to a business trip during the June VHF contest. All my operation was with hand-helds and $1 / 4$-wave whips, as I stood in business attire on the newly cut grass in front of an office building. Just hearing W1s and W6s simultaneously with a whip was impressive! (K1FJM). I want a contest location with no neighbors around for at least 20 miles (WO5S). We operated from South Baldy, southwest of Socorro, New Mexico, at about 10,700 feet elevation. The site is the location for Langmuir Lightning Research Laboratory, and it did live up to its reputation during our operation (N1HR/5). This was my first VHF contest. We had a fantastic location atop Strawberry Peak at the 6100-foot level, taking our breath away, to say the least (AA6U). This is the highest score I've ever made in the QRP-portable class. It was a great contest weekend with excellent weather and outstanding participation by a large number of amateurs. Would you believe I made three contacts on 1296 MHz with the receive preamp terminated into a $50-\mathrm{W}$ dummy load? (WA5DJJ). This was my first contest. It was definitely a blast. I've been bitten by the VHF bug and I'm now a confirmed contester (KN6WY). The weather was excellent at 7500 feet at Big Hole Pass, Montana. (W7HAH). This was my first attempt at portable operation. It was pleasant to operate among the pines, far above the $100^{\circ}$ heat in the valleys (K7NV). The high winds were a problem, to say the least. We were operating from an ice-fishing hut, and at 1 PM on Sunday, a gust lifted the hut with me in it, along with two deep-cycle batteries, the rigs and assorted items, and moved it about six inches. I quickly retreated to the safe operating position in the car (N7WVZ). This was an excellent year in the contest for me. I more than doubled my score from last year and we had a lot of fun (N8VEA). The conditions for the contest were down slightly from last year, but we did well on the 2-meter end of the contest (N9LAG). The biggest assets in the contest were the many rovers that appeared and made the contest interesting (N8UM). The most interesting thing that occurred during the contest weekend was an opening on 50 MHz , when we had a double hop into Mexico on Sunday evening (WA9HCZ). The bands we used over the weekend had a little bit of everything. The most interesting band was 50 MHz , which showed nice things-meteor, $\mathrm{E}_{\mathrm{s}}$, etc (WA9LWJ). I've operated the VHF QSO party in the past, but this is my first actual entry. It was a lot of fun, although it was a challenging weekend (NØIVN). It's not the score that matters, but the opportunity to participate in good, clean fun. That's my reward. I'm looking forward to the next contest (N $\emptyset \mathrm{YGM}$ ). There was outstanding participation in the Rocky Mountain area (NØVSB). We were (as usual) late getting started, but this time we had an excuse-we did very little planning before the day of the contest. Assembling a complete fourband station including the antenna system can be fun. We gave it our all and didn't fare too badly (Wø/G4JEC). We put up a temporary 40 -foot tower the day before the contest, and used small wooden stakes for guy anchors and nylon rope for guy wires. While I was at the top of the tower, I noticed my golden retriever digging up one of the guy wire anchors. A lot of yelling convinced him to move on. The tower stayed up and survived the weekend. The dog survived, but only after he convinced me he was only trying to help (KDØDW). There weren't the best of band conditions, but the participation of the CO and XE ations was a redeeming feature (KøTLM).When we started this contest, we figured

Plaque Winners

| Single Operator |  |  |  |
| :---: | :---: | :---: | :---: |
| Position | Winner | Score | Donor |
| 1st | WA8WZG | 241,362 | Mt Greylock Expeditionary Force, W2SZ/1 |
| 2nd | WA2TEO | 215,830 | Bald Knob VHF Contest Group, AA9D |
| 3rd | K1RZ | 169,988 | Kenwood USA Corporation |
| 4th | KA1ZE | 166,935 | Midwest VHF/UHF Society |
| 5th | WA8NJR | 164,024 | Delaware Valley VHF Society |
| 6th | WB5IGF | 116,875 | Ed Parsons, K1TR |
| 7th | NØLL | 114,330 | Eastern VHF/UHF Society |
| 8th | AA4ZZ | 104,256 | Wellesley ARS, Mt Equinox Contest Crew |
| 9th | WB2DNE | 102,227 | KS VHF/UHF Ops Annual On the Hill Get Together |
| 10th | KE8FD | 96,268 | South Mountain Contest Team, K3MQH |
| Single Operator QRP Portable |  |  |  |
| Position | Winner | Score | Donor |
| 1st | KH6CP/1 | 57,232 | Dick, K2RIW, and Jay, K2OVS |
| 2nd | NM1K | 31,270 | Peter Putman, KT2B |
| 3rd | WR31 | 27,571 | Long Island Mobile ARC |
| 4th | WA5DJJ | 22,388 | West Coast VHFer |
| 5th | WA4ALJ | 19,872 | KS VHF/UHF Ops Annual On the Hill Get Together |
| Rover |  |  |  |
| Position | Winner | Score | Donor |
| 1st | KC6WLC | 206,052 | W2SZ/1, in memory of Dick Goodman, WB1HIH |
| Multioperator |  |  |  |
| Position | Winner | Score | Donor |
| 1st | W2SZ/1 | 872,193 | Randy Stegemeyer, W7HR |
| 2nd | N2WK | 854.756 | N2LIV, N2GHR, N2BFJ Contest Team |
| 3rd | AA9D | 495,768 | Kenwood Employees RC, WD6DJY |
| 4th | N8FMD | 449,094 | Harry Stein, W3CL, Memorial |
| 5th | W3CCX | 437,076 | KS VHF/UHF Ops Annual On the Hill Get Together |
| 6th | W3zZ | 431,276 | Rochester VHF Group |
| 7th | K3YTL | 335,920 | Northern Lights Radio Society and WøUC |
| 8th | N2WM | 277,485 | Flagpole Knob Contest Group, W4IY |
| 9th | W4IY | 253,833 | Schenectady ARA, K2AE |
| 10th | WøUC | 212,040 | ARRL |
| Limited Multioperator |  |  |  |
| Position | Winner | Score | Donor |
| 1st | K1TR | 415,910 | W3EP/K9AKS/W91P |
| 2nd | K3MQH | 377,538 | Kenwood USA Corp |
| 3rd | W3EP | 308,720 | Kenwood USA Corp |
| 4th | K3UA | 308,337 | WA2TEO, W2GKR, W2GKO, KA1FVG |
| 5th | K6MEP | 190,302 | Big Mountain ARC |
| Marine Mobile |  |  |  |
| Position | Winner | Score | Donor |
| 1st | N8VOG | 322 | Wayne T. Yoshida, KH6WZ |
| DX Single Operator |  |  |  |
| Position | Winner | Score | Donor |
| 1st | COøEGZ | 5,040 | Bill Tynan, W3XO |
| DX Multioperator |  |  |  |
| Position | Winner | Score | Donor |
| 1st | COøFRC | 34,112 | Robert J. Carpenter, W3OTC |



Ralph, N5RZ, poses besides his "rover machine" at K5MR's QTH.


John, NØHAX, in his pop-up trailer with the $6-$ meter and $432-\mathrm{MHz}$ gear.

Northeast Region (New England, Hudson and Atlantic Divisions; Maritime and Quebec Sections)

|  |  |  |
| :--- | ---: | ---: |
| WA2TEO | 215,830 | S |
| K1RZ | 169,988 | S |
| KA1ZE | 166,935 | S |
| WB2DNE | 102,227 | S |
| K5MA | 92,230 | S |
|  |  |  |
| KH6CP/1 | 57,232 | Q |
| NM1K | 31,270 | Q |
| N3FTI | 15,768 | Q |
| N1DGF | 1,725 | Q |
| NJ2R | 608 | Q |
|  |  |  |
| K1TR | 415,910 | L |
| K3MQH | 377,538 | L |
| K3UA | 308,337 | L |
| N2CEI | 184,758 | L |
| WB1GQR | 120,416 | L |
|  |  |  |
| W2SZ | 872,193 | M |
| N2WK | 854,756 | M |
| W3CCX | 437,076 | M |
| W3ZZ | 431,276 | M |
| K3YTL | 335,920 | M |
|  |  |  |
| ND3F | 77,812 | R |
| KB2NAV | 52,647 | R |
| N2WSW | 25,350 | R |
| N1ISB | 22,470 | R |
| N1NOE | 9,890 | $R$ |

Southeast Region (Delta, Roanoke and Southeast Divisions)

| WB5IGF | 116,875 | S |
| :--- | ---: | ---: |
| AA4ZZ | 104,256 | S |
| N8TLZ | 83,385 | S |
| N8UM | 53,300 | S |
| NS4W | 51,125 | S |
| WR3I | 27,571 | Q |
| WA4ALJ | 19,872 | Q |
| KI4JU | 6,300 | Q |


| W3EP | 308,720 | L |
| :--- | ---: | :--- |
| W4NT | 126,690 | L |
| N4HB | 79,860 | L |
| AA4R | 55,375 | L |
| W4CMA | 37,544 | L |
|  |  |  |
| N8FMD | 449,094 | M |
| W4IY | 253,833 | $M$ |
| N4XND | 14,008 | M |
|  |  |  |
|  |  |  |
| WR3Z | 58,801 | $R$ |
| KC4WIC | 41,601 | $R$ |
| KD6PUD | 8,880 | $R$ |
| KD4OWS | 3,870 | $R$ |
| KB4PBM | 3,680 | $R$ |


| Central Region (Central and Great Lakes Divisions, Ontario Section) |  |  |
| :---: | :---: | :---: |
| WA8WZG | 241,362 | S |
| WA8NJR | 164,024 | S |
| KE8FD | 96,268 | S |
| WZ8D | 95,090 | S |
| N9MKC | 67,488 | S |
| N8LGP N8AXA | $\begin{aligned} & 3,168 \\ & 2,765 \end{aligned}$ | $\begin{aligned} & \mathbf{Q} \\ & \mathbf{Q} \end{aligned}$ |
| VE3ONT | 185,028 | L |
| W8ULC | 96,600 | L |
| N9LAG | 82,331 | L |
| VE3TMG | 23,700 | L |
| N8KOL | 17,168 | L |
| AA9D | 495,768 | M |
| WW8M | 117,276 | M |
| N8PJP | 26,077 | M |
| KE9QT | 106,330 | R |
| K9JK | 76,544 | R |
| AC4HG | 56,606 | R |
| WB9SNR | 16,013 | R |
| VE3NPB | 2,701 | R |

Midwest Region (Dakota, Midwest, Rocky Mountain and West Gulf Divisions, Manitoba and Saskatchewan Sections) NØL

West Coast Region
(Northwestern, Pacific and
Southwestern Divisions; Alberta, British Columbia and NWT/Yukon Sections)

| $l$ | and NWT/Yukon Sections |  |
| :--- | :--- | :--- |
| K6KLY | 52,574 | S |
| AJ6T | 39,605 | S |
| WB6FCS | 38,841 | S |

K9N
KB5IUA
N
W

| WA2AEY | 4,251 109 | 39 S | Georgia |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{\mathrm{N} 2 \mathrm{HFO}}$ | 3,672 ${ }^{136}$ | 27 S | WS4F | 33,354 228 | 109 S ABCD9EFG |
| W2WGL | 1,798 62 | 29 S B | W4WDH | 1,400 56 | $25 S A B$ |
| KB2NFS | 936 <br> 85 <br> 885 | 9 S BD | KC4YOJ | $117{ }^{13}$ |  |
| ${ }^{\text {N2RHL }}$ | 825 | 15 S B | N4XND | z,kC4DOO,w | WA4s |
| W2UAD | 7924 | 18 S B |  | 14,008 174 | 68 M ABC |
| ${ }^{\text {N2HJD }}$ | 64624 | 17 S ABCDF | W4NT (AA4S, | ,AB4RU,WD4D | WN,WQ4V,AEEE,K9VV, |
| WA2YBM $3264{ }^{\text {S }}$ S 8 d |  |  | KøDI, ops) 126,690 538 205 L ABCD ${ }^{\text {a }}$, |  |  |
| N2WK (+K2OS,KA2s HSK,RDO,KB2SE,KE2 N2VTB,W2s DYY,HPF,WB2QCJ,KD5RO,NS |  |  | W4CMA (AC4OP,AD4QR,K4AEK,KC4S DHJ,ZUA, KD4s HLG,HME,KA5WZY,ops) |  |  |
| WB2ELB (+ops) |  |  | AC4UQ (+KQ4LE,KR4IP) |  |  |
|  |  |  |  | 2,464 67 | 32 L ABCD |
|  |  |  | KC4GCK (+KE4IXE) ${ }^{\text {2,46 }}$ |  |  |
| $70,605418135 \mathrm{~L}$ ABCD <br> N2LXD (+AA2GV,KB2s OAZ,MRZ,KF2PD,N2s LYZ, MHD,WA2AWX,N3s MLO,MLX,MTW,NKW,ops) |  |  | $600 \quad 50 \quad 12 \mathrm{~L}$ |  |  |
|  |  |  |  |  |  |
|  |  |  | Kentucky |  |  |
|  |  |  | KN4OL | 6,270 99 | 57 S ABD |
| KE2PM (+K2s MPE,SPO,N2s PBU,PBX,QYN,WKT, VBM,ops) $55,440 \quad 375 \quad 126$ L ABCD |  |  | KC4JGS | 5,265 99 | 45 S ABD |
|  |  |  | KD4SZJ | 2,997 81 | 37 SAB |
| NU2U (+N2s WPB,VSR,XDP) |  |  | WA4FVQ | 72040 | 18 S AB |
|  |  |  | North Carolina |  |  |
| N2VXE (+K |  |  |  |  |  |
| 3 |  |  | AA4ZZ | 104,256 | 181 S ABCD |
|  |  |  | N4YZJ | 8,320 134 | 52 S ABCD |
|  |  |  | KS4S | 16814 | 12 S |
| Delaware |  |  | KE4ERB | 27,51 1 | 1 S |
|  |  |  | WRI JU $6,300108 \quad 45$ |  |  |
| N3KSE | 4,826 119 | ${ }_{38} \mathrm{~S}$ ABD | AA4R (+K4MOG,WA4VCC) |  |  |
| WA3BZT | 4,576 | 26 S B | W4DW (KS2Z,AC4ZO,K4SAN,KC4UQN,KE4s DRJ,FCJ,N4YTO,NA4G,WA4s BPJ,LHE,ops) |  |  |
| АСЗТ (KA3B,op) ${ }_{1,089}^{4,089}$ 33 ${ }^{43} \mathrm{~S}$ |  |  |  |  |  |
|  |  |  |  |  |  |
| Eastern Pennsylvania |  |  | KQ4MS (+AC4UD,AD4PY,KA4PUV,KB4ZMB,KC4s PHJ,YLE,KD4s BSP,WJP,WKD,KE4s MET,MGK, KQ4MS,N4NTO, WA4SIS, WB4IUY, N8ROR) |  |  |
| квзів | 34,823 233 | $97 \mathrm{~S} \mathrm{ABCD9E}$ |  |  |  |
| N3FUS | 30,814 336 | 71 S ABCD |  | 16,800 194 | 70 L ABCD |
| WАЗНМ | 22,066 374 | 59 S B | W4BFB (KB2LH,WB2NHQ,AB4IE,KC4YOY,KD4s |  |  |
| K3GNC | 12,798 174 | 54 S BCD | W4BFB (KB2LH, WB2NHQ,AB4IE,KC4YOY,K |  |  |
| N3ADC | 8,632 134 | 52 S ABDE |  |  |  |
| KB3ZS | 6,567 152 | 33 S BDE |  | 11,376 143 | 72 L ABCD |
| N3LKI | 6,396 134 | 39 S ABD | Northern Florida |  |  |
| N3JNX | 1,830 56 | 30 S ABD |  |  |  |
| WA3CSP | 1,288 46 | 28 S A | WB4JEM | 16,065 160 | 85 S ABDE |
| N3OGF | 1,232 56 | 22 S B | N4TWX | 6,384 102 |  |
| K3ARR | 79231 | 24 S ABD | KD4CLA | 83644 | 19 S B |
| KB3YL | 79244 | 18 S | KD4HXT | 71331 | 23 S |
| W3JS | 57441 | 14 S B | WE2M | 20 | 4 S |
| K3KEL | 26020 | 13 S B | South Carolina |  |  |
| N3BDA W3ucc | 256 | ${ }^{8} 8 \mathrm{SBC}$ |  |  |  |
| ${ }_{\text {W3FTI }}$ | 11216 15,768254 | 74 S 54 ABCD | AA8Q $\quad 247 \quad 19 \quad 13$ S |  |  |
| W3CCX (WA1YHO,K2UYH,WB2YEH,K3S ESJ,MFI, |  |  |  | 3,332 91 | 34 L ABD |
|  |  |  | Southern Florida |  |  |
| KU3A, N3s EVV, EXA, GSA,W3GAD, WA |  |  |  |  |  |
|  |  |  | WB2QLP | 14,250 187 | 75 S ABD |
| JYO ops) | 437,076 1261 | 228 M ABCD9EFGHIJ | WD4MGB | 11,324 134 | 76 S ABD |
| KЗYTL (WAIMKE, K3MKZ,KA3s EEO,ZHT, KB3OI, |  |  | WD4AHZ | 2,254 79 | 23 S BD |
| N3s OCG,OCI,PBH,W3DZH,WA3s JWP,YON, WB3s FAA, FKQ,FYT,ops) |  |  | W400 | 1,350 45 | 30 S A |
|  |  |  | K04PI | 1,176 39 | 24 S ABDE |
| 335,920 1139221 M ABCD9EFG K3YWY (+N3s LJK,MYM,DAP, WA3VGP,WB3ESS) |  |  | W4FNR | 51327 | 19 S |
|  |  |  | Tennessee |  |  |
| K1TR (+K1EA,KA1IGD,N1AFQ,WS1C,K3II,KM3T) |  |  |  |  |  |
|  |  |  | N8UM | 53,300335 | 130 S ABCD |
|  |  |  | ${ }_{\text {NSA4H }}$ | 51,125309 19,285 19 | 125 S ABCD9E |
|  |  |  | KBAFFAI | 19,285 7,224 172 | 42 S ABCDE |
| N3FJA (+N3ORF) ${ }^{377,5381482202 \mathrm{~L}}$ ( ABCD |  |  | AD4F | 1,175 47 | 25 S AB |
|  |  |  | Virginia |  |  |
|  | 3,304 | 28 L BD |  |  |  |
| Maryland-DC |  |  | K90YD | 29,154 21,996 218 | 86 S 78 S ABCD9E ABCD9E |
| K1RZ | 169,988 664 | $182 \mathrm{~S} \mathrm{ABCD9E}$ | K0¢U/4 | 17,030 195 | 65 S ABDE |
| WB2dNe | 102,227 489 | 151 S ABCDE | AD4DG | 15,075 172 | 67 S ABD |
| K3ZO | 51,837 467 | 111 S AB | KN4SM | 11,385 137 | 69 S ABD |
| WA4VHF | 13,754 115 | 46 S DEF | W4DO | 9,576 114 | 57 S ABCDE |
| N3IZR | 5,845 167 | 35 S B | N4MM | 9,333 161 | 51 S ABD |
| W3GN | 5,160 107 | 40 S ABD | KC4YHI | 7,140 144 | 42 S ABD |
| W6AXX | 3,552 148 | 24 S | WA4OVW | 6,776 103 | 56 S ABD |
| KH2CY/3 | 1,782 71 | 22 S ABCD | K4FTO | 5,940 117 | 44 S ABD |
| W3AZ | $\begin{array}{ll}1,586 & 61 \\ 1\end{array}$ | 26 S AB | N4KWX | 5,428 <br> 5 <br> 106 | 46 S ABCDE |
| WB28ZR/3 | 1,365 54 | 21 S ABCD | KD4EAO | 5,106 91 | 46 S ABD |
| K3TEZ | 1,160 58 | 20 S B | N4YKD | 833 38 | 17 S BCD |
| кзЗMV | 90050 | 18 S B | K4ME | $455 \quad 35$ | 13 S B |
| WA3SEE | 759 | 23 S A | W4LMJ | 435 | 15 S A |
| WA3GYW | 74139 | 19 S AB | W4IY (AC4XT | ,K4HWG,KA4CK | KI,KD4NNI,KE4s DFI, |
| W3MSN | 49031 | 14 S ABD | GMV,KJ4VG | G,KO4FM, N4DX | XS,WB4s NFS,RDV, |
| W3IP (+K3YDX,KD3YU,N3s CBJ,OES,WB6VGI)$157,416 \quad 674 \quad 168 \mathrm{M}$ ABCD9EFI |  |  | 253,833 904211 M ABCD9EI |  |  |
|  |  |  |  |  |  |
|  |  |  |  | NT,WB4WTC,W | gIP,VE3ASO) |
| KC3EK (+KA3EJJ,KE3GB,N3ELK)$39,312 \quad 345 \quad 91 \mathrm{~L}$ |  |  | N4HB (+AB4SF,AD4KE,N4PAT,W4APQ,WU4G) |  |  |
| NV3Z (+N3AVQ, NA3T) |  |  | ${ }^{79,860} 482$ 132 L ABCD |  |  |
|  |  |  |  |  |  |
|  | $\begin{gathered} \text { E3FB,N3QPD,W } \\ 5,180 \quad 185 \end{gathered}$ | $\begin{aligned} & \text { NB3UTC) } \\ & 28 \mathrm{~L} \text { B } \end{aligned}$ | WøQDP (+KE | $\begin{array}{ll} 1,159 \quad 46 \\ \text { 4UZK) } \end{array}$ | 19 L BD |
| Western |  | Western Pennsylvania |  | $585 \quad 39$ | 15 L |
| NW3C ${ }_{\text {W9,642 }} 364146 \mathrm{~S} \mathrm{ABCD}$ |  |  | 5 |  |  |
|  |  |  |  |  |  |
| AA3GM | 5,400 85 | 54 S ABD | Arkansas |  |  |
| N3GSC | $760 \quad 38$ | 20 S B |  |  |  |
| W3KJM | $435 \quad 29$ | 15 S A | WBsigF | 116,875 448 | 187 S ABCD9E |
| WBolwg | 16 | 4 S AB | KSYY | .28,892 208 | 124 S ABD |
| WB3CXR | 12 117 | 3 S A | WM4Z | 4,884 90 | 44 S BD |
|  |  |  | kB5YUA | 1,800 50 | 36 S |
| WD8ISK) | 431,2761161 | 274 M ABCDSEF | Louisiana |  |  |
|  |  |  | N7JJS | 17,100 180 | 95 S AB |
|  |  |  | N5MYH | 3,276 64 | 39 S BD |
|  |  |  | NSKWB | 2,520 56 | 35 S BD |
|  |  |  | WSFYZ | 2,4948 | 29 S B |
| 4 |  |  | Mississippi |  |  |
| Alabama |  |  | KG5MZ | $425 \quad 25$ | 17 S B |
| $\begin{array}{lllll}\text { WA4ZZW } & 4,692 & 81 & 51 \\ \text { S ABD }\end{array}$ |  |  | New Mexico |  |  |
| KE4FRZ | 2,254 74 | 23 SBD | N5.JHV | 71,449 400 | 173 S ABD |
| KD4ZO | 1,782 64 | 27 S ABD | KN5S | 58,435 377 | 155 S AB |
| W4NTI | 45927 | 17 SAB | N7KA | 13,695153 | $8^{83} S^{\text {ABD }}$ |
| N4AHJ | 29421 | 14 S A | KASEBL | 11,570 124 | 89 S ABD |
| KD4FPY | 12 | 3 SAB | K5MAT | 6,01889 | 51 S ABCD |
| *WA4ALJ | 19,872 222 | 69 Q ABCDE | $\begin{aligned} & \text { K5RHR } \\ & \text { N5ZGD } \end{aligned}$ | $\begin{array}{ll}1,589 \\ \mathbf{3 , 5 8 9} & 67 \\ 2,108\end{array}$ | $\begin{aligned} & 37 \mathrm{~S} \text { BCD } \\ & 34 \mathrm{~S} \\ & \mathrm{AB} \end{aligned}$ |





