# Results, 1991 ARRL September VHF QSO Party 

## It's surprising what you can work with low power from a good location.-Bob Cook, N2SB

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

If variety is the spice of life, this year's September contest offered lots of spice indeed! The weather and propagation conditions across the US and Canada were quite a mix. Several stations in the west observed great weather and good band conditions, but things seemed to fade to the east. According to WØUC and others, Rover activity helped keep things interesting in the sparsely populated central US, even with only average propagation. In the eastern states, things were downright flat, except where rain scatter made $10-\mathrm{GHz}$ QSOs possible between New Jersey and Maine. K2LNS's observation that "I thought a mountain grew to the east on Saturday" said it all for many New England VHF enthusiasts, who suffered the consequences of a stalled weather front that locked them apart from the rest of the region, cutting QSO totals and top scores by a visible margin from years past.

This was our first contest without the $220-222-\mathrm{MHz}$ segment. The transition was relatively smooth, as W1AIM proudly professed, "For the first time, I worked more stations on 222 than on 432 !" Even QSO totals were a bit higher on the band, as many stations reaffirmed their dedication to 125 cm .

Like the June contest, the September VHF QSO Party has two popular new categories. Of the 415 logs we received this year (down slightly from last year's 440 logs), 299 came from single operators, 46 were limited-multioperator entries, 30 came from Rovers, 20 full-bore multiops sent in logs and 18 QRP-portable stations reported. Two stations also sent in checklogs. In the single-op category, the 1991 contest was almost a repeat of the 1990 event, except that K2LNS's winning 173 k score was down from 207k last year (and his record 235 k set in 1989). WA2TEO, second last September, also repeated his 1991 June VHF QSO Party performance, finishing second by an extremely tight 1100 -point margin. Despite generally worse conditions in the northeast, Jeff made more QSOs than any other single-operator station and bettered his 1990 score in the process. Third


## Division Leaders

## Single Operator

| Division | Call | Score |
| :---: | :---: | :---: |
| Atlantic | WA2FGK | 172,935 |
| Central | *K9PW | 83,720 |
| Dakota | *WAOBWE | 56,835 |
| Delta | WB5IGF | 27,674 |
| Great Lakes | KE8FD | 62,250 |
| Hudson | *N2CEI | 160,648 |
| Midwest | NOLL | 34,928 |
| New England | WA2TEO | 171,810 |
| Northwestern | *KE7CX | 8,722 |
| Pacific | KF6CU | 8,037 |
| Rocky Mountain | W2CRS | 9,180 |
| Roanoke | N4HB | 85,400 |
| Southeastern | KN4QS | 4,032 |
| Southwestern | WB6FCS | 9,760 |
| West Gulf | K9MK | 24,075 |
| Canada | VE3ASO | 79,194 |
| Multioperator |  |  |
| Division | Call | Score |
| Atlantic | W3KWH | 108,500 |
| Central | W0UC/9 | 135,596 |
| Dakota | - |  |
| Delta | KC4YO | 47,710 |
| Great Lakes | W8ULC | 100,956 |
| Hudson | N2WM | 186,238 |
| Midwest | - | - |
| New England | W2SZ11 | 796,635 |
| Northwestern | W7HDD | 5,652 |
| Pacific | - | - |
| Rocky Mountain | *NOKV | 12,948 |
| Roanoke | N8FMD | 224,775 |
| Southeastern | - | - |
| Southwestern | AE6E | 14,640 |
| West Gulf | WQ5S | 37,740 |
| Canada | VE6NOV | 6,474 |
| Limited Multioperator |  |  |
| Division | Call | Score |
| Atlantic | *N2WK | 85,974 |
| Central | - | - |
| Dakota | *WBOGGM | 24,056 |
| Delta | *N5KWB | 9,891 |
| Great Lakes | *N8HNS | 28,458 |
| Hudson | *K2AE | 16,416 |
| Midwest | *WB0DRL | 76,936 |
| New England | *WB1GQR | 105,444 |
| Northwestern | - | - |
| Pacific | *AA6PA | 3,872 |
| Rocky Mountain | *WA4GPM | 6,441 |
| Roanoke | *W4IY | 178,374 |
| Southeastern | *W4AQL | 4,033 |
| Southwestern | *N6RMJ | 16,445 |
| West Gulf | *K5QBM | 6,210 |
| Canada | *VE3BQN | 26,688 |
| *Division record |  |  |

ARRL Laboratory Engineer Zack Lau, KH6CP/1, coordinates a $10-\mathrm{GHz}$ schedule on 2 meters from Mt Washington, New Hampshire, where he operated as part of the 8-man K1TR crew, the ninth-finishing multiop.
was N2CEI, up from fourth place last year, also with a significantly improved score. Stations from the first four call sign areas, W9-land and Ontario made this year's single-op top 10.

The record-setting QRP-portable score, turned in by WA3YON, up considerably from last year's winning score in that category, substantiates N2SB's opening remark. WB2DNE/1's second-place score also reflects this. Rover scores-including some big ones-came in from all over the country this September, starting this category off in an exciting way. The winning KB $\emptyset Z Q$ Rover team set an impressive 136k scoring mark. Not far behind was WB9EEA, and the KøTLM/AJØE team put in its second Rover effort in 1991, snagging the number-three spot.

In the unlimited multioperator category, W2SZ/1's 19 operators scored another decisive victory with almost 800k. Second was the 12-man team at N8FMD that operated from West Virginia. WQ4V, N2WM and K1WHS rounded out the top five. In the limited-multiop group, W4IY and WB1GQR led the way with scores of 178 k from Virginia and 105k from Vermont, respectively. It looks as though participation in this category will remain high, as many stations find it more enjoyable than the full-scale unlimited-multiop category for a variety of reasons.

As you read this, the January VHF SS is just around the corner-get on for this

Top Ten

| Single | Operator | Multioperator |  |
| :--- | ---: | :--- | ---: |
| Call | Score | Call | Score |
| WA2FGK | 172,935 | W2SZI1 | 796,635 |
| WA2TEO | 171,810 | N8FMD | 224,775 |
| N2CEI | 160,648 | WQ4V | 197,532 |
| W3ZZ | 117,470 | N2WM | 186,238 |
| N4HB | 85,400 | K1WHS | 146,595 |
| K9PW | 83,720 | W0UC/9 | 135,596 |
| K2UOPI4 | 80,656 | W3KWH | 108,500 |
| VE3ASO | 79,194 | W8ULC | 100,956 |
| W3IP | 78,100 | K1TR | 85,176 |
| N1DPM | 70,080 | KC4YO | 47,710 |

QRP-Portable

| Call | Score |
| :--- | ---: |
| WA3YON | 43,672 |
| WB2DNE/1 | 35,870 |
| KB6MEG | 6,771 |
| N6SUN | 4,290 |
| KT2B | 3,500 |
| N1EXG | 2,873 |
| KB4NT | 2,774 |
| K1II | 1,504 |
| NOOY | 1,222 |
| KB1VC | 1,065 |

## Rover

| Call | Score |
| :---: | :---: |
| KB0ZQ |  |
| (+ N0HJZ) | 136,504 |
| WB9EEA |  |
| ( + AA9D) | 111,366 |
| AN0E |  |
| (+KøTLM) | 108,864 |
| KE9QT | 47,892 |
| KB2HQ | 42,000 |
| XE2/N6CA |  |
| (+WB9AJZ) | 36,153 |
| N3KFY | 13,175 |
| K0DI |  |
| (+WD4DWN) | 8,745 |
| WB2VVV | 8,466 |
| WA1MKE | 8,372 |

event, the only ARRL VHF contest in which club competition is involved. It's also a good chance to test new equipment and keep your operating skills warmed up for the June VHF QSO Party, just around the corner. See you on the weekend of January $18-20$; cross your fingers that the ice man stays away!-Rus Healy, NJ2L

## SOAPBOX

Working as a single operator on three bands is tough enough, but "armstrong" rotating the 6-meter beam in the rain takes the cake (KD1AO). My 6 -meter SWR was $4: 1$ and my 2 -meter SWR was $3: 1$. No wonder I couldn't hear anybody (KA1AMR). This was my first real effort in the contest. I enjoyed it (KA2AUQ). I guess everyone thought it was a oneday contest-activity was practically nil on Sunday (WN3A). I'd have traded all my QSOs for one with W5XS/6 (K5MAT). It was a good turnout for the September contest. We had great weather for the mountaintoppers and Rovers (WM7A). I arranged my schedule to be on Mohawk Mountain, elevation 1683 feet, during the contest. It's surprising what you can work with low power from a good location ( $\mathrm{N} 2 \mathrm{SB} / 1$ ). Conditions were good, but I didn't help myself by falling on and squashing the 903 loop antenna (KT2B). Conditions overall were good, but there wasn't much activity on 222 MHz (VE3BFM). Where were all the W7s this year? (VE6BOJ). I had a ball working my first VHF contest and I encourage other Novices to give it a try (KB2CIR). Conditions were good, but a good score is hard to come by from west Texas (WS5C). Conditions were just average, but good Rover activity helped keep us hopping! (WøUC). So many thunderstorms rolled through, I thought I was going to wear out the antenna connectors! (WBØCLL). I had a blast operating QRP portable from Block Island. Conditions seemed down, but activity seemed good (WB2DNE/1). This was my first VHF contest. My score may be small, but I had great fun! (WA5DTK). Hurricanes kept me off the top bands (K1BE). Conditions were awful! If not for a one-hour opening on 6 meters Sunday morning, I would have shut down and gone home (AE6E). I thought a mountain grew to the northeast on Saturday (WA2FGK). There was a short $1 \frac{1}{2}$-hour opening to the west on 6 meters ( N ØFFO). What a blast! (N3KFY). I was glad to see so many people made the conversion from 220


Fred Stefanik, N1DPM, uses this antenna system from his home station. This time he finished tenth in the single-operator category.
to 222 MHz (WB1GQR). My 12-year-old son got bitten by the bug and immediately started studying the code for his Novice license when he got back home (K2KGJ). I worked more stations than I did in June! (WA3GYW). Conditions were poor throughout the contest, but activity picked up on Sunday evening (W9JGV). Propagation wasn't good, but it wasn't bad, either (VE3GBA). There was more activity on FM in this contest as opposed to the other ones (WY2H). Conditions were fair, but where was the activity? I probably could have worked 11-15 more grids if stations had been on (WA3HMK). 222 isn't dead! For the first time, I worked more people on 222 than on 432 (W1AIM) The lack of openings made it sort of a "brute force" contest (N1DIQ). Conditions were poor this year (AA5IB). Propagation was average during the contest in this area (W1EJ). I'm 10 years old and this was my first VHF contest! (N1JJD). Conditions were poor. There was weak scatter to the northeast on Sunday morning, and about 30 seconds of $E_{S}$ (N9BJG). It's amazing how well the signals came in (N1IJJ). The limited-multioperator class is per fect! (W1QK). Next time I'll operate as a Rover

Single Operator QSO Leaders By Band

| 50 MHz |  | 144 MHz |  | 222 MHz |  | 432 MHz |  | 902 MHz |  | 1296 M |  | 2304 MH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WA2TEO | 189 | WN3A | 343 | N2CEI | 80 | K1FO | 134 | WA2TEO | 31 | WA4VHF | 45 | N2CEI | 4 |
| WA2FGK | 138 | WAЗHMK | 342 | NBIQX | 63 | WA2TEO | 116 | N2CEI | 31 | WA2FGK | 44 | N3CX | 9 |
| W3EP/1 | 119 | WA2TEO | 313 | WA2TEO | 62 | NC11 | 109 | WA2FGK | 24 | N2CEI | 41 | WB1FKF | 5 |
| K3z\% | 115 | WA2FGK | 303 | WA2FGK | 55 | WA2FGK | 93 | N4HB | 22 | W31P | 35 | WB2YEH | 5 |
| N2CEI | 113 | WB2000 | 286 | KA2RDO | 49 | N2CEI | 84 | W3ZZ | 20 | N4HB | 34 | N1DPM | 3 |
| W2HRW | 103 | K3ZO | 280 | W1EJ | 46 | W3ZZ | 81 | K2UOP/4 | 20 | K2LME | 32 | W31P | 3 |
| WA1VRH | 99 | W90EH | 261 | N1DPM | 46 | W2HRW | 77 | N1DPM | 18 | K2UOP/4 | 32 |  |  |
| N1DPM | 80 | WA1VRH | 259 | WB2QC | 45 | N4HB | 73 | WB2YEH | 16 | W3Z7 | 29 |  |  |
| W3ZZ | 80 | VE3ASO | 221 | W3ZZ | 45 | WB8K | 73 | N2BFJ | 15 | WA2TEO | 28 |  |  |
| KA2RDO | 79 | K20E | 214 | WA3EOQ/8 | 42 | WAgBWE | 70 | W31P | 15 | WB2YEH | 26 |  |  |
| W2XL | 78 | W3ZZ | 212 | KA2AEV/1 | 39 | VE3KDH | 67 | N3CX | 14 | K1FO | 25 |  |  |
| N2LIV | 75 | N2CEI | 201 | WA1HYN | 38 | K9PW | 62 | N2LIV | 13 | N2LIV | 25 |  |  |
| VE3KDH | 71 | VE3KDH | 185 | VE3ASO | 38 | N1DPM | 61 | WB1FKF | 11 | N1DPM | 22 |  |  |
| W3HHN | 70 | W2HRW | 183 | WA2BAH | 37 | K2UOP/4 | 61 | VE3ASO | 10 | N2BFJ | 22 |  |  |
| W31P | 70 | W31P | 176 | N2BJ | 37 | KE8FD | 60 |  |  | N3CX | 21 |  |  |
| KU8Y | 70 |  |  |  |  |  |  |  |  |  |  |  |  |
| Single Operator Multiplier Leaders By Band |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50 MHz |  | 144 MHz |  | 222 MHz |  | 432 MHz |  | 902 MHz |  | 1296 M |  | 2304 M |  |
| K3ZO | 52 | WGOEH | 69 | N2CEI | 30 | K9PW | 40 | WA2TEO | 17 | WA2FGK | 23 | N2CEI | 7 |
| WA2TEO | 39 | WABMZQ | 63 | WA3EOQ/8 | 30 | W3ZZ | 36 | N2CEI | 15 | WA4VHF | 21 | N3CX | 7 |
| WA1VRH | 37 | K9PW | 61 | K9PW | 29 | KE8FD | 36 | WA2FGK | 15 | N2CEI | 18 | WB1FKF | 4 |
| WA2FGK | 37 | K3ZO | 56 | WB2QC | 27 | WA2FGK | 35 | N4HB | 13 | W3IP | 18 | WB2YEH | 3 |
| K9PW | 37 | KE8FD | 54 | WA2TEO | 25 | WAbBWE | 35 | W3ZZ | 12 | N4HB | 16 | W31P | 3 |
| NW3C | 36 | WA3HMK | 53 | WA2FGK | 25 | WB8K | 33 | W3IP | 11 | K2UOP/4 | 16 |  |  |
| NOLL | 35 | W3ZZ | 51 | W3ZZ | 25 | K1FO | 30 | N1DPM | 10 | K2LME | 15 |  |  |
| N2CEI | 33 | WN3A | 48 | KE8FD | 24 | N2CEI | 30 | N2BFJ | 10 | W37Z | 15 |  |  |
| K8MFO | 33 | WA2FGK | 47 | KA2RDO | 23 | N4HB | 30 | WB2YEH | 10 | WA8TJL | 14 |  |  |
| WB5IGF | 32 | WA2TEO | 45 | WABTJL | 22 | WA2TEO | 29 | K2UOP/4 | 10 | VE3ASO | 14 |  |  |
| WA8FTA9 | 32 | WAgBWE | 45 | VE3KDH | 22 | K2UOP/4 | 29 | N2LIV | 8 | N1DPM | 12 |  |  |
| WBECLL | 32 | WA1VRH | 44 | N4HB | 20 | WBDCLL | 29 | N3CX | 8 | N2BFJ | 12 |  |  |
| W3z7 | 31 | KZ3X | 44 | N1DPM | 19 | VE3KDH | 29 | VE3ASO | 8 | N3CX | 12 |  |  |
| W3EP/1 | 30 | W9JGV | 44 | KUBY | 19 | KOIR | 28 | WB1FKF | 6 |  |  |  |  |
| W3IP | 30 | W0RWH | 44 | WAOBWE | 19 | WABTJL | 27 | W4FSO | 6 |  |  |  |  |
| KUBY | 30 |  |  | VE3ASO | 19 | WABMZQ | 27 |  |  |  |  |  |  |
| WABTJL | 30 |  |  |  |  |  |  |  |  |  |  |  |  |

Multioperator QSO Leaders By Band

(W2GKO). It was a slow-going contest. There were no enhanced conditions on any band (N2CKH). The price was high; I lost two preamps, one relay and an amplifier. It was worth it, though (WB8K). Two electrical storms hurt propagation and the poor band conditions made every contact a battle! (VE3KDH). It's amazing who and where you can work on 222 MHz with 75 watts to a dipole while driving down the interstate at $65 \mathrm{mi} / \mathrm{h}$ (NN9K). The $432-\mathrm{MHz}$ tower-mounted preamp acted up at the start of the contest and I had to solder an N connector 48 feet in the air in the dark (WA1LBK). I enjoyed the contest, even though there were no 6 -meter openings. I especially enjoyed working W2CRS on Pike's Peak (W5AL). Rovers make it interesting, especially when they operate multiple bands (WA9LZM). It's time to chalk up another one for the high-torque "Armstrong" rotator (N2KMX). We were investigated by the police,
buzzed by a private plane, and had a National Guard helicopter hover over us trying to figure out what all the aluminum was for (N2WM). There weren't as many 'DXpeditioners"' as there were in June, but there were a lot more Rovers (K6QM) Working QRP portable with good band conditions was a lot of fun! (KB6MEG). We had beautiful weather for mountaintopping, but there wasn't any good tropo (N8FMD). Where's all the simplex activity on 222 MHz ? (N8HNS). The tropo on 144 MHz Saturday evening and the scatter on 50 MHz Sunday morning were the only signs of propagation I could hear through the rain and static (K7VNU). Conditions weren't nearly as good as they were in June, but we had fun and made a reasonable number of contacts (VE6NOV). It was great to operate without any line noise for a change. It made all the difference in the world (K3ZO). I've never seen so much activity out of FN41. The
weather in the northeast dampened plans for a lot of people, including some planned $10-\mathrm{GHz}$ QSOs (K1LPS). It was a great weekend (AA6PA). This was the most different bands I've operated yet in a contest! QRP is where the fun is at! (WA7PIB). Our focus was on operator training, including 6 -meter meteor scatter and weak-signal procedures Contest CW improvement classes will be held over the winter (WøRPK). We had a ball! (WA1QZK). Band conditions were poor. All things considered, it was a great experience for everyone involved (WøEQU). Have the W8s seceded from the Union? It was slow going to the west. Activity was poor but the contest is still fun (KA2RDO). We got a lousy break on conditions again. I wasn't able to spend enough time to run up a good score, but I managed to work my 60th grid (W1PSG). Conditions were great on 2 meters, but we needed more activity. Six meters was quiet (WA2SLY). Condi-


WB9EEA (left) and AA9D (right) placed second in the Rover category.


W2CRS suffered a bent antenna mast in $70-\mathrm{mi} / \mathrm{h}$ winds atop Pike's Peak in Colorado.


The third-place multioperator station, WQ4V, West Virginia, used this antenna system and operating position on 432 MHz .
tions were poor throughout the contest at my location (KD3SW). Conditions were fair for most of the contest and the turnout was the best for a September contest yet (WQ5S). Activity was fairly good, considering everything else that was on that weekend (K9OSH). I was surprised to do as well as I did with poor band conditions (VE3SMA). It was good to hear and work so many new call signs in the contest (WA2TEO). I wish the 6 -meter ops would have been more persistent chasing meteorscatter QSOs around local sunrise. I heard lots of moderate bursts, but no QSOs (AJ6T). Activity was way down here, I didn't hear anything on FM (W8XT). I enjoyed the contest, as always. The transition to 222 MHz seemed smooth, but my transverter quit after five QSOs (WA2UDT). There was a decent tropo opening Sunday morning, but I wish more people had gotten in on it (WA1VRH). I didn't do as well as I did in the last contest I was in. The band conditions seemed squirrely and I'm not sure why (KA3VGD). I roughly doubled my score from last year, partially because of beating the bushes on FM (NØKV). I was happy to work KøMVJ on 2304 in the contest, having tried several times earlier in the summer without success (NTØV). I went camping on top of a mountain in the fog and rain-I don't get that wet in the shower! (N1EXG). I found the conditions on the microwave bands enhanced Sunday morning and again Sunday night (N3CX). I heard more than I could work, I guess I need to get the amplifier online (K1OYB). My thanks to all the ops who took the extra time to dig out my weak signal (WA3YON). I was pleased to catch a surprise $\mathrm{E}_{\mathrm{S}}$ opening on 6 to California, though it was hard attracting attention with only 10 watts. There was tropo enhancement to Dallas/Ft Worth on 144 and 432 Sunday morning (NOØY). I hope to have all the bands running for the next one (KC1ZU). It seems that September has good conditions only one year out of five. Next year, I'll run more power or be certified to an insane asylum (W3ZZ).


These simple antennas helped Jim Marino, KB6MEG, place third in the QRP-portable category, up three spots from his 1990 finish.

## SCORES

Scores are by ARRL/RAC Sections. Within each Section, single-operator scores are listed first, followed by QRP-portable, multioperator, and limited-multioperator scores. Rover scores are listed by division. From left to right, each line lists: call sign, score, QSOs, multipliers, class $(S=$ single operator, $\mathrm{Q}=\mathrm{QRP}$-portable, $\mathrm{M}=$ multioperator, $\mathrm{L}=$ limited multioperator) and bands worked $(\mathrm{A}=50 \mathrm{MHz}, \mathrm{B}=144 \mathrm{MHz}, \mathrm{C}=222 \mathrm{MHz}, \mathrm{D}=432 \mathrm{MHz}, 9=902 \mathrm{MHz}, \mathrm{E}=1296 \mathrm{MHz}$, $\mathrm{F}=2.3 \mathrm{GHz}, \mathrm{G}=3.4 \mathrm{GHz}, \mathrm{H}=5.7 \mathrm{GHz}, \mathrm{I}=10 \mathrm{GHz}, \mathrm{J}=24 \mathrm{GHz}, \mathrm{K}=47 \mathrm{GHz}, \mathrm{L}=$ Light). Among single-operator stations, winners are noted with band letter(s) in boldface print indicating the band won.

| 1 <br> Connecticut |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| WARTEO | 171,810 | 739 | 166 S | ABCD9E |
| WA1VRH | 42,600 | 392 | 100 S | ABD |
| K2LME | 25,632 | 230 | 72 S | BCDE |
| W3EP/1 | 16,043 | 263 | 61 S | AB |
| K1FO | 14,063 | 159 | 41 S | DE |
| KD1AO | 3,780 | 95 | 35 S | ABD |
| K1THP | 2,190 | 73 | 30 S | AB |
| K1GAO | 1,278 | 55 | 18 S | BD |
| K1CPJ | 1,100 | 48 | 20 S | BCDF |
| K1WVX | 1,098 | 57 | 18 S | ABD |
| KB1ZB | 966 | 41 | 21 S | ABD |
| N1GW | 816 | 68 | 12 S | B |
| WB1U | 396 | 33 | 12 S | B |
| W1FAJ | 252 | 14 | 9 S | C |
| AA2Z | 136 | 16 | 8 S | BD |
| KA1QAS | 4 | 1 | 1 S | F |
| N1EXG | 2,873 | 129 | 17 Q | BCD |
| N2SB/1 | 460 | 23 | 10 Q | D |
| W1QK (+KA1SYG,N1ABY) |  |  |  |  |
|  | 48,981 | 472 | 87 L | ABCD |
| WA1MMZ (+K1JX) |  |  |  |  |
|  | 4,836 | 153 | 31 L | BD |
| Eastern Massachusetts |  |  |  |  |
| WB1FKF | 30,627 | 206 | 83 S | ABCD9EFGHI |
| N18WT | 16,744 | 230 | 56 S | ABCD9 |
| KX1C | 12,240 | 200 | 48 S | ABCD |
| W1GXT | 4,736 | 114 | 32 S | BCD |
| AJ1E | 4,727 | 117 | 29 S | BDE |
| N1GZZ | 3,275 | 102 | 25 S | BD |
| K1MBO | 2,704 | 101 | 26 S | ABC |
| KC1ZU | 1,995 | 133 | 15 S | B |
| W1ZNY | 1,620 | 90 | 18 S | B |
| AA10 | 880 | 45 | 16 S | BD |
| W1PSG | 585 | 45 | 13 S | B |
| KA1AMR | 396 | 33 | 12 S | AB |
| WA1LBK (+N1IGJ) |  |  |  |  |
|  | 7,335 | 115 | 45 M | ABCDE |
| K5MA ( + KA1IOR,N1HOQ,WA1s GPO,YKN) |  |  |  |  |
|  | 47,479 | 510 | 79 L | ABD |
| WA1QZK (+K1DFD, WA1KAT) |  |  |  |  |
|  | 2,736 | 107 | 24 L | ABD |
| Maine |  |  |  |  |
| NY1E | 5,600 | 160 | 35 S | AB |
| W1XN | 2,350 | 94 | 25 S | AB |
| W9KDR/1 | 816 | 43 | 17 S | BD |
| K10YB | 741 | 31 | 19 S | ABCD |
| W1PLX | 630 | 42 | 15 S | B |
| K1WHS (+ AF1T,K1s MNS,WHS,KY1K,WA1NIE, |  |  |  |  |
| W3HQT) | 146,595 | 674 | 145 M | ABCD9EFGI |


| New Hampshire |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| W1EJ | 26,208 | 252 | 72 S | ABCD9E |
| KA1CDZ | 8,568 | 146 | 42 S | ABCD9E |
| WA1T | 6,006 | 130 | 39 S | ABD |
| AC1J | 4,800 | 110 | 32 S | $B C D$ |
| KB1SO | 2,976 | 124 | 24 S | B |
| KA1LMR | 546 | 34 | 14 Q | ABCD |
| K1TR (+N1AFQ,WA1WOK,WB1DSW,AA2Z,NJ2L, KM3T,KH6CP) |  |  |  |  |
| 8, ${ }^{\text {8, }}$ (176 MTM, QFA, N1BAC, WK1P) |  |  |  |  |
|  |  |  |  |  |
|  | 4,928 | 161 | 28 L | BCD |
| AE1D (+ NONDQ) |  |  |  |  |
|  | 672 | 84 | 8 L | B |
| Rhode Island |  |  |  |  |
| WA1HYN | 13,362 | 175 | 51 S | BCD |
| KA2AEV/1 | 8,028 | 184 | 36 S | BC |
| Al1K | 1,700 | 85 | 20 S | B |
| WB2DNE/1 | 35,870 | 282 | 85 Q | ABCDE |
| W1OP (K1s DS, PLX,N1JDA,NZ1K,ops) |  |  |  |  |
|  | 15,105 | 192 | 57 M | ABCD9E |
| W1AQ (K1s AGA,GBU,KA1WVH,KM1X,NO1U,WA1s AHK,VPC,ops) |  |  |  |  |
|  | 18,361 | 255 | 61 L | ABCD |
| Vermont |  |  |  |  |
| W1AIM | 10,488 | 145 | 57 S | ABCD |
| K1LPS | 7,755 | 127 | 47 S | ABCD |
| N1DIQ | 780 | 39 | 20 S | $A B$ |
| KA1BSZ | 720 | 60 | 12 S | B |
| WB1GQR (KA1LEX,WB2USJ,ops) |  |  |  |  |
|  | 105,444 | 694 | 116 L | ABCD |
| Western Massachusetts |  |  |  |  |
| N1DPM | 70,080 | 388 | 120 S | ABCD9EF |
| K11SW | 14,448 | 207 | 56 S | ABCDE |
| NA1W | 8,225 | 131 | 47 S | ABCD9E |
| WA2TIF | 7,668 | 168 | 36 S | BD |
| NC11 | 5,450 | 109 | 25 S | D |
| K1BE | 3,776 | 89 | 32 S | ABCD |
| N1FUS | 2,240 | 104 | 20 S | BD |
| WA3EEC | 867 | 46 | 17 S | ABCD |
| K1JG | 680 | 40 | 17 S | B |
| N1JJD | 210 | 22 | 7 S | ABCD |
| WA1ZUH | 98 | 14 | 7 S | B |
| K111 | 1,504 | 94 | 16 Q | AB |
| KB1VC | 1,065 | 61 | 15 Q | ABDI |
| WT1W | 882 | 59 | 14 Q | ABD |
| W2SZ1 (K1s DH,NKR,KA1PRT,WA1s UGE,ZMS, AB21,KE2TP,N2s GXH,HPA,IKZ,NOI,W2ARQ,WA2s AAU,SPL,WB2KMY,WS2B,WG3,AK4L,WA8USA,ops) |  |  |  |  |
|  |  |  |  |  |
|  | 796,635 | 1635 | 281 M | ABCD9EFGHIJ |


| 2 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Eastern New York |  |  |  |  |
| W2XL | 20,724 | 267 | 66 S | ABDE |
| WA2BAH | 15,072 | 244 | 48 S | ABCD |
| W3HHN | 6,552 | 168 | 39 S | AB |
| K2XA | 6,061 | 167 | 29 S | BD |
| K2QE | 5,992 | 214 | 28 S | B |
| N2LDR | 3,844 | 105 | 31 S | BD |
| WM2Y/1 | 3,078 | 114 | 19 S | ABCD |
| N2IGX | 2,574 | 117 | 22 S | B |
| WB2VVQ | 2,425 | 89 | 25 S | ABC |
| WB2ECL | 2,220 | 113 | 15 S | $A B C D$ |
| W2GKR | 1,755 | 65 | 27 S | AB |
| K2CT (N2JB1,op) |  |  |  |  |
|  | 1,368 | 109 | 12 S | ABC |
| WY2H | 1,288 | 73 | 14 S | BD |
| KA2MCU | 1,241 | 54 | 17 S | ABCD |
| WB2MRX | 1,168 | 73 | 16 S | AB |
| KA2AUQ | 1,125 | 75 | 15 S | B |
| N2KMX | 1,088 | 64 | 17 S | B |
| N2KFR | 924 | 71 | 11 S | BD |
| WA2KPD | 552 | 55 | 8 S | BC |
| K2RI | 504 | 44 | 9 S | BCD |
| Wb20ee | 407 | 37 | 11 S | B |
| N2LIJ | 225 | 45 | 5 S | B |
| Ka2VNP | 116 | 23 | 4 S | BD |
| KB2CIR/N | 112 | 14 | 4 S | C |
| WA2SRP | 52 | 13 | 4 S | B |
| WAZOYV | 40 | 20 | 2 S | AB |
| W2VDI | 39 | 13 | 3 S | B |
| WA2FME | 36 | 18 | 2 S | AB |
| KB2KXC | 24 | 10 | 2 S | BD |
| KD21X | 12 | 3 | 2 S | D |
| K2BST | 2 | 2 | 1 S | B |
| K2KGJ | 688 | 38 | 16 Q | ABCD |
| W2GKO (W2GKR,op) |  |  |  |  |
|  | 520 | 40 | 13 Q | AB |
| K2AE (KB2FTX,N2AQZ,W2s CO,KE,WZ2X,ops) |  |  |  |  |
|  | 16,416 | 249 | 54 L | ABCD |
| NY2U (KA2 | JZJ,VBI, | N2LUD | ,WA3R | (B,ops) |
|  | 2,679 | 120 | 19 L | BD |
| NYC-Long Island |  |  |  |  |
| N2LIV | 51,254 | 356 | 98 S | ABCD9EF |
| N2BFJ | 42,669 | 283 | 99 S | ABCD9E |
| WA2EIO | 6,786 | 122 | 39 S | BDE |
| WA2SLY | 5,053 | 163 | 31 S | AB |
| WB2AMU | 45 |  | 5 S | A |
| K2OVS | 28 | 7 | 40 | A |

Northern New Jersey
N2CEI $160,648 \quad 569 \quad 172$ S ABCD9EFG

| N2CKH | 11,033 | 156 | 59 S | ABCD |
| :---: | :---: | :---: | :---: | :---: |
| WB200Q | 10,296 | 286 | 36 S |  |
| AA2U | 6,468 | 101 | 49 S | $A B C D$ |
| WA2UDT | 5,632 | 102 | 44 S | ABCD |
| AK2F | 5,617 | 107 | 41 S | ABD |
| KT2B | 3,500 | 75 | 28 Q | ABDEF |
| N2WM (+ K2BJG,N2s AA |  |  |  |  |
|  |  |  |  |  |
| NX2Q (+NJ2Y) |  |  |  |  |
|  | 1,480 | 64 | 20 L | AE |


| Southern New Jersey |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| WB2YEH | 49,980 | 308 | 98 S | ABCD9EFG |
| W2HRW | 25,960 | 363 | 59 S | ABD |
| W2EIF | 13,888 | 156 | 62 | ABCD9E |
| W3BFC | 4,524 | 156 | 29 S | B |
| K2BWR (+ K2ZRN) |  |  |  |  |
|  | 28,569 | 198 | 89 | BCDE |


| Western New York |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| KA2RDO | 57,466 | 350 | 118 S | ABCDEI |
| KA2ENE | 4,410 | 112 | 35 S | ABD |
| W2XG | 3,060 | 128 | 17 S | ABCD |
| KE2GD | 2,450 | 70 | 35 S | B |
| WB2QG | 2,430 | 45 | 27 S | C |
| W2WGL | 2,368 | 57 | 32 S | BD |
| N2WK (+KD5RO,KE2WK) |  |  |  |  |
|  | 85,974 | 485 | 138 L | ABCD |
| N2LXD (+ N2s IYM,JYG,LXS,LYZ,MLT,NY2Z, WA2SXH,ops) |  |  |  |  |
|  | 15,244 | 205 | 74 L | ABD |

3

| Eastern Pennsylvania |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| WA2FGK | 172,935 | 658 | 183 S | ABCD9EG |
| WA3HMK | 18,126 | 342 | 53 S | B |
| N3CX | 16,740 | 107 | 60 S | CD9EFG |
| WN3A | 16,464 | 343 | 48 S | B |
| KZ3X | 6,864 | 156 | 44 S | B |
| KАЗВ | 832 | 52 | 16 S | B |
| KW3F | 572 | 44 | 13 S | B |
| KA3VGD | 324 | 36 | 9 | B |
| W81J | 4 | 2 | 2 | A |
| WA3YON | 43,672 | 281 | 106 Q | ABCD9E |
| WORSJ (+N2MVP) |  |  |  |  |
|  | 40,280 | 318 | 95 M | ABCDEG |
| AC31 + KA3s UBG,WSY,N3s HRQ,IHK,IP |  |  |  |  |
|  | 15,540 | 259 | 60 L | AB |
| Maryland-DC |  |  |  |  |
| W3ZZ | 117,470 | 467 | 170 S | ABCD9E |
| W31P | 78,100 | 369 | 142 S | ABCD9EFI |
| кзZO | 42,660 | 395 | 108 S | AB |




