# Results, 1987 September VHF QSO Party 

By Billy Lunt, KR1R<br>Contest Manager, ARRL

Imagine you're waiting in the wings, waiting to take center stage following a performance by Linda Ronstadt, Old Blue Eyes, Diana Ross, or Huey Lewis and the News. How could you follow an act like that?

Well, that's what happened in the September VHF Contest. Following the greatest VHF contest conditions ever experienced the previous June, how could September hope to measure up? It couldn't. Not only that, it didn't even come close!

Each VHF contest is unique when it comes to conditions. We have come to expect pretty good E-skip in June, though June ' 87 was something else again. Septembers past have seen some outstanding tropospheric conditions that have more than held everyone's attention. Not so this September. Everyone was left guessing if it was the other fellow getting the good conditions. Well, he wasn't. It was flat for everybody. There was a light touch of aurora on 6 meters late Sunday, but that was about it.

But that's what makes each and every VHF contest a new adventure. You just don't know what's going to happen. And heaven forbid should you miss a great opening. So you take the hand that propagation deity deals and play it the best you can. Hey, we're all at the same gaming tables.

Of course, the mountaintoppers help make it fun for everybody. They increase the number of contacts and grids to be worked, especially on the higher bands. 'Topper N2WM, however, found 50 -foot visibility in the fog improved only when it rained, while Wachusett Mountain (MA) regular K1TR found that tents can become submerged in heavy rains, even at 2200 feet. Out West, NS6X had the company of hang gliders at 8000 feet, while the WD8ISK group found out why W2SZ always does so well, by going mountaintopping this time themselves. And XE2GBO had a great time 2000 feet above Ensenada, Mexico.
The weather had a dampening effect on the contest, as many parts of the country were inundated by two-parts-hydrogen one-partoxygen. "Heavy rain made it seem like maritime mobile."-W1JR. "Rain, rain, rain"-VE3KKL. "If you use 9913 cable, be sure the connections are waterproof; otherwise it makes a great waterhose!"-KT2B. "Had a great time in the QRP class from a 10,000 -foot mountaintop until Mother Nature got mad."-WA5DJJ.

Nonetheless, 386 entries were submitted, with 323 single-ops (of which 17 were QRP portable) and 63 multiops. This represented a total of 46,183 "rogered" contacts and 14,746 grid-multipliers QSL'd. That doesn't
exactly add up to "Dullsville," even though WD5K quipped: "Had time to begin and finish War and Peace in between contacts on 6 meters."
Scorewise, it's obvious from even a cursory look at the top scores that the generally punk conditions favored the Northeast. That's where the bulk of the stations are to be worked even when the conditions are not so grand. Piloting his 6 -band station to a firstplace solo finish was AA2Z, the only singleop 100 k -plus score. Jeff, WA2TEO, just nosed out Eastern Mass's W1GCI for second place. A look at the top ten box shows some fine efforts by stations who "hung in there."

When they came off the mountain, the W2SZ gang was sure that this time they had been done in by adversities. But not so, with 409 k points topping the multi-op category. K3YTL finished a respectable second with 352 K . The only non-East stations to break into the Multioperator Top Ten were

## Single Operator <br> Top Ten

| Call | Score |
| :---: | :---: |
| AA27 | 101,265 |
| WA2TEO | 74,420 |
| Wiccl | 70,350 |
| KB3OM | 64,022 |
| W31P | 58,191 |
| N1DPM | 57,459 |
| N2WK | 48,790 |
| WA10UB | 47700 |
| K1PXE | 46,221 |
| K1RZ | 44,800 |


| Multioperator Top Ten |  |
| :---: | :---: |
| Call | Score |
| W2sz/1 | 409,332 |
| K3YTL | 342,944 $\mathbf{2 4 5 , 3 7 8}$ |
| WD8ISK | 219,010 |
| W2DRz | 200,868 |
| K1TR | 144,305 |
| Wegrar | 142,425 <br> 11842 <br> 1885 |
| K1 ${ }^{\text {K2WM }}$ | 118,542 103,815 |
| VE3LNX | 96,036 |


| QRP Portable Top Ten |  |
| :--- | ---: |
| Cah | Score |
| K1JX | 35,530 |
| W4DO | 7,392 |
| K6LMN | 5,016 |
| KD5RO/2 | 3,016 |
| WA5NFC | 2,888 |
| NM1K | 2,324 |
| N1EWB | 1,962 |
| WB4KPD $/ 3$ | 1,260 |
| KDAZY | 700 |
| N8CUX | 660 |



A look at the $50,144,220$ and $432-\mathrm{MHz}$ antennas used by K9ES/1 in Western Massachusetts.

WB@DRL at 142 k and WD8ISK at 219 k (the latter located in the Eastern periphery).
K1JX blew away all QRP opposition with a strong 33 k score achieved on three bands, as this category continues to gain in popularity.
The accompanying "boxes" tell the rest of the story. We hope you find them meaningful and helpful in planning your future strategy. It's tough waiting from September to January for the next VHF contest bash. So be sure your New Year's resolutions include an operating stop for the January VHF Sweepstakes, January 23-25, 1988. - WIXX

## SOAPBOX

My first VHF contest and I had a heck of a good time! I learned a lot (N2HLZ). Conditions absolutely STINKO! Still had fun! (K2OVS). First VHF contest and I only had the rig two weeks. Now I am halfway to VUCC! (KE8FD). Only licensed since May. What a blast! (N1EWB). Nowhere near the conditions of June, but what else is new! (WW4T). While returning home from vacation, I made several 200 -mile-plus QSOs (NF7X). First time in the contest as a mobile-interesting. (N7DB). Bands were quiet which allowed some time for ragchewing (K6LMN). I suppose any opening on 6 meters was too much to ask for! (KIDAT). Twometer rotor died two hours into the contest and had to use an Armstrong rotor. We took a bath every time we went outside to use it! (WBIGQR). I enjoy going out and activating the rarer grids (KDEZY). This was a terrible contest! What has happened to VHF contesting? (WA6IJZ). Propagation was not

## Single Operator QSO Leaders By Band

| 50 MHz |  | 432 MHz |  |
| :---: | :---: | :---: | :---: |
| N2CEI | 161 | K1FO | 130 |
| WA1OUB | 136 | N3CX | 85 |
| WA2TEO | 117 | K1PXE | 81 |
| AA2Z | 116 | W3IP | 81 |
| W3IFM | 107 | WA1HYN | 80 |
| KtRZ | 106 | AA27 | 76 |
| AK2F | 94 | W82DNE | 75 |
| NN9KO | 92 | K2JWE | 74 |
| WA1VRH | 89 | N2BJ | 70 |
| W1GCl | 87 | W1GCI | 70 |
| N1DPM | 81 | W83JYO | 68 |
| WAITRE | 78 | WA2TEO | 63 |
| K1JX | 76 | KB3QM | 62 |
| ACtJ | 75 | W1JR | 61 |
| WA2BPE | 75 | WB9MSV | 61 |
| 144 MHz |  | W2HRW | 61 |
| K3NXH |  | 902 MHz |  |
| K3NXH | 346 |  |  |
| KA2WKA | 317 | WigCl | 13 |
| K1RZ | 309 | AA27 | 12 |
| WB2QOQ | 271 | WAiMBA | 10 |
| K9ES/1 | 263 | W1JR | 10 |
| AA27 | 259 | WB1FKF | 9 |
| WA1OUB | 257 | WiRIL | 9 |
| VE3DDW | 248 | WA1JOF | 9 |
| W1GCl | 245 | N2WK | 8 |
| N2CEI | 242 | N3CX | 8 |
| WA1VRH | 225 | AB1U | 7 |
| WA2TEO | 221 | N180 | 7 |
| N1DPM | 218 | N11W | 6 |
| KB3OM | 212 | K9MK/5 | 5 |
| W2HRW | 211 | W3IP | 5 |
| 220 MHz |  | 1296 MHz |  |
| WB2IEY | 65 | AA27 | 34 |
| WA2TEO | 60 | K2JWE | 32 |
| AA2Z | 60 | WA1OUB | 28 |
| W1GCl | 54 | KT2B | 28 |
| N2EOC | 52 | WB3JYO | 26 |
| KT2B | 51 | K1PXE | 23 |
| N2B | 51 | NO9Y | 22 |
| N1DPM | 46 | W1JR | 22 |
| KB1I | 45 | WA1JOF | 21 |
| K1PXE | 44 | W3IP | 20 |
| W2EIF | 44 | W1RIL | 19 |
| KB3QM | 43 | WB1FKF | 19 |
| WA1HYN | 42 | W2EIF | 18 |
| W6CPL | 41 | K2GAL | 18 |
| W1JR | 38 | W1GC | 17 |
|  | 38 | K2UOP/4 | 17 |
|  |  | WA1MBA | 17 |

bad on 432 MHz , it was nonexistent! (WBSZDP). Special thanks to the mountaintoppers who kept going despite the weather (K1KA). First big effort at mountaintopping. It was cold at night. Makes you wonder about January (KI6X). Pretty good for

## Single Operator Multiplier Leaders By Band

| 50 MHz |  | 432 MHz |  |
| :---: | :---: | :---: | :---: |
| WA1OUB | 53 | K1FO | 33 |
| NN9K/6 | 51 | N8DGN | 31 |
| K1RZ | 44 | WB9MSV | 30 |
| N2CEI | 42 | WGRAP | 29 |
| W3IFM | 38 | NøLL | 28 |
| WA2TEO | 37 | WB2DNE | 28 |
| WAIVRH | 35 | N3CX | 28 |
| VE3FGU | 34 | N2WK | 27 |
| WA2BPE | 33 | W31P | 25 |
| AA2Z | 32 | K2JWE | 25 |
| N1DPM | 32 | WA8TXT |  |
| $\mathrm{KC3CL}$ | 31 | (WB1CJT,op) | 25 |
| VE3DDW | 29 | K1PXE | 24 |
| WB9MSV | 28 | AA27 | 23 |
| 144 MHz |  | K1JX <br> K2GAL | $\begin{array}{r}23 \\ 23 \\ \hline\end{array}$ |
| VE3DDW | 53 | W377 | 22 |
| KA9BGC | 51 | KB3QM | 22 |
| KE8FD | 51 | 902 MHz |  |
| K3NXH | 48 | AA2Z | 8 |
| WB9MSV | 47 | N3CX | 8 |
| KC3CL | 46 | N2WK | 6 |
| N8DGN | 45 | N 18 O | 6 |
| KEBLY | 45 | W1JR | 6 |
| KB8JI | 44 | W1RIL | 5 |
| W31P | 44 | WA1JOF | 5 |
| VE3FGU | 43 | W1GCl | 5 |
| VE3VAL | 42 | WA1MBA | 5 |
| KB3QM | 42 | AB1U | 5 |
| KA2WKA | 42 | W31P | 4 |
| 220 MHz |  | W6CPL | 3 |
| WB2IEY | 26 | WB1FKF | 3 |
| WA2TEO | 23 | 1296 MHz |  |
| K1PXE | 20 | 1296 MHz |  |
| WB9MSV | 19 | NOOY | 18 |
| AA2Z | 19 | K2JWE | 15 |
| K830M | 19 | K2GAL | 15 |
| KT2B | 18 | W3IP | 13 |
| N2WK | 18 | WDSAGO | 13 |
| W1GCl | 18 | WAgD | 13 |
| KB8ZW | 18 | KB8ZW | 12 |
| N2EOC | 17 | AA2Z | 12 |
| K2GK | 16 | WA10UB | 12 |
| N1DPM | 16 | K1PXE | 12 |
| K2UOP/4 | 16 | WABTXT |  |
| WA8TXT (WB1GIT,op) |  | (WB1CIT,op) | 12 |
|  | 16 | WA1JOF | 10 |
|  |  | KT2B | 10 |
|  |  | N 18 O | 9 |
|  |  | WB2ONA | 9 |
|  |  | WB3JYo | 9 |
|  |  | KB3QM | 9 |

a September Contest (WA2BPE). Rain! Rain! What more can I say! (W1AIM). Activity seemed sparse on all bands except for a few outstanding efforts (K7ICW). Do love that aurora! (NN9K). Had to stop contesting for my daughter's wedding recep-


Ken, VE6AFO, setting up the 144- and $432-\mathrm{MHz}$ antennas at their multiop site in Alberta.
tion. You would think that she would be considerate! (NJ6X). Hope to have better propagation next year, without yellow jackets, rats, bumblebees and horse flies (N5KDA). At least there are blueberries to pick when the contest dies down up here! (KA7SOL). Problems with amp, rain and wind but I had a good time as usual. Looking forward to January contest (VE3LNX). Enjoyable contest for all; however, no one had any DX stories to tell! (K1WHS). Had a great time running through the grids (K9VGE/9). Where were all the 9s hiding? (K8KR). Those long-winded, strong signals should give their grid square when calling CQ, so little guys can know where to look (N8CUX). Worst conditions in years-fortunately, thunderstorms took out commercial power and gave me the excuse I needed to quit (WB4SLM). Unimpressive fun (WAIVRH). Frustration: Call CQ, two answers, go back to one and the other answers, but the first

Division Leaders

| Single Operator |  |  | Multioperator |  |
| :---: | :---: | :---: | :---: | :---: |
| Call | Score | Division | Call | Score |
| KB3QM | 64,022 | Atlantic | K3YTL | 352,944 |
| VE3ASO/2 | 31,464 | Canada | VE3LNX* | 96,036 |
| WB9MSV | 40,796 | Central | WØUC/9 | 28,840 |
| N ¢CIH | 6,533 | Dakota | KC0P | 91 |
| K4RWP | 4,806 | Delta | WB4LHD/5 | 29,574 |
| KB8ZW | 35,752 | Great Lakes | N4EQT | 29,355 |
| WA2TEO | 74,420 | Hudson | N2WM | 103,815 |
| NoLL | 16,265 | Midwest | WBODRL | 142,425 |
| AA2Z | 101,265 | New England | W2SZ/1 | 409,332 |
| W7PUA | 5,115 | Northwestern | WB7PEK | 5,088 |
| WB4AYE/6 | 5,380 | Pacific | WB6ITM | 3,900 |
| K2UOP/4 | 39,200 | Roanoke | WD8ISK | 219,010 |
| KDEGS | 6,713 | Rocky Mountain | Wesil/ | 896 |
| WB4AXQ | 8,680 | Southeastern | W4CMA | 13,596 |
| W6CPL | 18,768 | Southwestern | K6MEP | 2,625 |
| N5HHS | 22,410 | West Gulf | WA5S | 1,890 |

*denotes new Division Record

| Multioperator QSO Leaders By Band |  |  |  | Multioperator Band |  | Multiplier Leaders |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 50 MHz |  | 432 MHz |  | 50 MHz |  | 432 MHz |  |
| W2SZ21 | 281 | W2SZ/1 | 183 | W1xx/3 | 74 | WD8ISK | 51 |
| K3YTL | 235 | K1TR | 136 | W2DRZ | 67 | WBgoral | 43 |
| W1x wDisk | 232 180 | WD81sk | 113 111 | WD8isk | 64 | W2SRZ | 43 40 |
| W2DRZ | 174 | K1wHS | 107 | WBedri | 53 | W1 $\times$ </3 | 40 |
| ${ }_{\text {K17 }}$ | 166 | W1xX/3 | 105 | K3YTL | 48 | W3KWH | 29 |
| K1WHS | 148 | W2DMC | 105 | Wөuc/9 | 42 | K3YTL | 28 |
| N2WM | 142 | K3YTL | 92 | K1WHS | 41 | WB3LJK | 26 |
| WBIGQR | 100 | WBBDRL | 81 | N2WM | 39 | K1TR | 25 |
| KD2YB | ${ }_{88} 92$ | WB3LJK | 80 | VE3LNX | 37 | N2WM | 25 |
| ${ }_{\text {W2OBA }}$ | 88 | WB1HAB | 75 | KD2YB | $\begin{array}{r}36 \\ 34 \\ \hline\end{array}$ | VE3LNX | 25 24 |
| WBodrl | 83 | N2GHR | 61 | N4EQT | 34 | WB4LHD/5 | 23 |
| WOUC/9 | 77 | WBEGQR | 56 | K1TR | 33 | $\mathrm{K}_{1}$ WHS | 23 |
| WB1HAB | 76 | K2DEL | 55 | WB2PSI | $\stackrel{27}{ }$ | W0UC/9 | 21 |
| 144 MHz |  |  | 55 | WB1GQR | 27 | 902 MHz |  |
| W2Sz/1 | 555 | 902 MHz |  | 144 MHz |  | K3YTL | 16 |
| K3YTL | 492 | K1TR | 32 | WD8ISK | 82 | W2DRZ | 13 |
| N2WM | 393 | K3YTL | 32 | WBodRL | 70 | VE3LNX | 12 |
| WD81SK | 354 | W2SZ11 | 25 | W13X/3 | 63 | W2Sz/1 | 11 |
| K1TR | 341 | VE3LNX | 16 | W2DRZ | 56 | K1TR | 10 |
| W1XX/3 | 320 | W2DRE | 14 | K3YTL | 55 | W82PSI | 8 |
| WB1HAB | 276 |  | 11 | N2WM | 50 | W1xx ${ }^{\text {che }}$ | ${ }_{5}^{8}$ |
| W2DRZ | 261 | WB2PSI | ${ }_{9}^{10}$ | W3KWH | 49 | WD8ISK | 4 |
| K1WHS | 236 | WD81SK | 4 | WB3LJK | 46 |  |  |
| W2DMC | 236 | 1296 MHz |  | VE3LNX | 46 | 1296 MHz |  |
| WB3LJK | 231 |  |  | N4EQT | 44 | WBgDRL | 32 |
| V2DEL VE3L | 225 | K3YTL | 61 | WB4LHD/5 | 43 | W2DRZ | 22 |
| VE3LNX | 221 | W2SZ1 | 49 | WB2PSI | 38 | 3 K3YTL | 22 |
| WBEDRL | 187 | WBedRL | 41 | WB1GQR | 37 | W1XX/3 | 20 |
| N2GHR | 187 | W1xx/3 | 31 | K1TR | 37 | W2SZ11 | 18 |
| 220 MHz |  | K1WHS | 30 30 | 220 MHz |  | VE3LNX | 16 14 |
| K3YTL | 154 | W2DMC | 28 | W2SZ11 | 31 | 1 K2BWR | 14 |
| W2SZ11 | 116 | K23WR | 24 | K3YTL | 30 | W3kWH | 14 |
| K1TR | 71 | K1TR | 20 | W1xX/3 | 27 | 7 W2DMC | 10 |
| N2WM | ${ }^{63}$ | VE3LNX | 19 | WD8ISK | 27 | WB2PSI | 10 |
| $\mathrm{W}_{1 \times \mathrm{X}} / 3$ | 59 | WD81SK | 19 | W2DRZ | 27 | 7 K1wHS | 10 |
| WB1HAB | 55 |  | 19 | W3KWH | 23 | 1 K1TR | 9 |
| W2DMC | 54 46 | WB4LHD/5 | 14 10 | ${ }_{\text {N2WM }}$ | 21 | WB4LHD/5 | ${ }_{6}^{8}$ |
| K28WR | 46 |  |  | WB2PSI | 20 |  |  |
| K1wHS | 45 |  |  | WB3LJK | 19 |  |  |
| WB3LJK | ${ }_{34}^{38}$ |  |  | K1TR | 18 |  |  |
| W3KWH | 31 |  |  | VE3LNX | 18 |  |  |
| W82PSI | ${ }^{30}$ |  |  | W2DMC | 15 |  |  |
| K2DEL | 28 |  |  | WB9DRL | 15 |  |  |

would have been a new grid (K1FO). How about an FM-only class in January? (NM1K). How about an "indoor" antenna class? (WA1NLD). Nice to hear a lot of new operators! (NIIW). Fine time for the 432 module to quit! (W1GUA). Heard more stations than I could work. (K9ES/1). Murphy visited the 2 -meter amp in mid-contest (WA2EIO) One op told me his feet were in water. I asked if he was getting RF burns when he touched the mike. He replied, "No, the coax is under water so everything is at ground potential anyway!" (KA2IVS). Rain, rain go away-come back on Monday! (KA2WKA). Biggest thrill was working W1XX/3 on 2304 with one watt! (N2WK). The 8877 makes an efficient (but expensive) heater for the shack (WB2IEY). Murphy was my second op (KA3CXG). It's hard to contest and go to the Gaithersburg Hamfest, too (KB3HH). I operated overnight from 6288 ft on Mt Washington for the September VHF Contest, Martinique for the ' 87 June VHF Contest and no mention of my portable operations or use of any soapbox comments appeared. As my pro test, I am not submitting any comments this September and I am considering boycotting all future VHF contests (K1FJM/4). Where did all the new blood come from and where did all the regulars go? (K9MK/5). Conditions were fair to poor. Working $1296-\mathrm{MHz}$ EME helped my score! Three new grids off the moon! (WD5AGO). Sorry conditions, worked everything I could hear. Not much activity. I wonder why? (WI5Q). I live in "Black Hole Gulch'" with mountains on 3 sides. Never did get any openings to the east like the guys in LA and San Diego! Complain! Complain! (K6VMN). Missed 2 QSOs of 100 miles on 10 GHz (W6OYJ). Had my wife working the contest with me. She just got her Novice ticket (WB7OHF/KB7CRT). Operated 15 hours for two contacts on 50 MHz (KC7IJ). A remote mountain is great, but 99 per cent of the QSOs were at $150-500$ mile range (WØSII/7). Murphy ate my 432-MHz amp, again! (KB8JI). It was nice to operate from the top of the hills instead of having to work over them, like I do at home! (W8VPD). If Murphy had a license, I would have to file as a multiop. The $220 / 432 \mathrm{HV}$ supply burst into flames (KC3CL). This was my firs VHF contest. It was a blast running my 'Sidewinder' that I picked up for 20 bucks. I am turned on about the world of VHF (KD9TH). Went portable to activate rare EN43, but two other guys had the same idea (W9WI). My best score to date! (VE3VET).

## Scores

Scores are listed by ARRL Sections. Within each Section, single-operator scores are listed first and then multioperator scores. From left to right, each line lists: call, score, QSOs, multipliers and bands worked ( $A=50 \mathrm{MHz}$; $B=144 \mathrm{MHz} ; \mathrm{C}=220 \mathrm{MHz} ; \mathrm{D}=432 \mathrm{MHz} ; 9=902$ $\mathrm{MHz} ; \mathrm{E}=1296 \mathrm{MHz} ; \mathrm{F}=2.3 \mathrm{GHz} ; \mathrm{G}=3.4 \mathrm{GHz} ; \mathrm{H}=5.7 \mathrm{GHz} ; \mathrm{I}=10 \mathrm{GHz} ; \mathrm{J}=24 \mathrm{GHz} ; \mathrm{K}=48 \mathrm{GHz} ; \mathrm{L}=$ Light). An asterisk before the call sign denotes a QRP-portable station; an ( N ) after the call indicates a Novice station. Among the single-operator stations, the singleband winners are noted with band letter(s) being in boldface print indicating the bands won. For example, in Connecticut, AA2Z is the section winner as well as the single-band leader on 50, 144, 220, 902 and 1296 MHz . K1FO is the single-band leader on 432 MHz .

| 1 |  | Maine |  |  | N1DPM K9ES/1 | 57,459-410-107-ABCDE <br> 30,976-400-64-ABCD | W2DMC (K2s MME,SK,KA2s IBV,TGQ, KB2AYD,N2s BJ,DL,HDW,HIG,HLU,WA2s |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Connecticut |  | WA1TRE | 7,440- | 152-48-ABC |  |  |  |  |  |
| AA2Z | 101,265-557-129-ABCD9E | KA1ZX W1PLX | 3,000- | 93. $30-\mathrm{ABC}$ | W1RIL | 6,264-74-36-ABCD9EF |  | 69,696-5 | 511-96)-ABCDE |
| K1PXE | 46,221-326-93-ABCDE | K1WHS (+AF1T,AV1S,K1MNS,KY1K, |  |  | K1SF | 5,587-139-37-ABD | K2CBA | 1RKS, WE | 31BTJ,K2SIG,KA2UWI, |
| *K1JX | 35,530-348- 85-ABCD |  |  |  | KA1MDA | 3,256-148-22-B | WA2s | GV,WB2D | ST) |
| WA1VRH | 21,980-314-70-AB |  | 118,542- | 589-138-ABCD9EFGHIJ | *N1EWB | 1,962-68-18-BCD |  | 21,432-2 | 211-76-ABCDEI |
| KB1I | 16,692- 243-52-BCD | New Hampshire |  |  | WA3EEC | 1,273-67-19-AB | W2XL (+ | NE,NJ2L) |  |
| AB1U | 8,602-100- 46-ABCD9E |  |  |  | WB1APD 782- 46- 17-B W2SZ11 (K1DH KA1s DZV KPH NC1B |  |  | 9,849-1 | 188-49-ABD |
| K1FO W3EP/1 | 8,580-130-33-D 3,904-122- 32-AB | WA1OUB AC1J | 47,700- | 421-100-ABE | W2SZ1 (K1DH,KA1s DZV,KPH,NC1B, WA1s,UGE,ZMS,WB1HIH,K2TR,N2s |  | NYC-Long Island |  |  |
| W1FAJ | 3,406- 82-26-BCD | NilW K1KA | 14,245-168-55-ABCD9E |  | BNY,CJJ,GXH,WA2s GFP,KQY,SCA,SPL, |  | Kzovs | 11,150- | 186-50-ABCD |
| W1QK | 3,240-162-20-B |  | 5,643- | 171-33-B | WB2KMY,N4FFD,WABUSA, Ops) |  | WA2SLY | 6,392- | 188-34-B |
| WA1GTP | 2,565- 95- 27-AB | W1JSM | 1,577. | 79-19-BD |  | 409,332-1238-231-ABCD9EFGHI | WA2EIO | 5,049-1 | 117. 33-8D |
| *NM1K | 2,324- 93-14-BCDE | N1HO | 1,344 | 96-14-B | K1TR (+K1BA,N1s AFQ,BEM,WA1PBU,K3WM) |  | KA2BPP | 2,784 | 116-24-B |
| WH6CP/1 | 1,976-104-19-B | WIGUA | 705 | 47-15-AB | K1TR (+K1 |  | WB2CUY | 2,550-110 | 110-17-BD |
| KA1QDC (N) 16-4-2-C |  |  |  | 32- 9-ABCD | WBIHAB( | 41,616-482-68-ABCD | WB2ZEUS | 2,486-1 | 113-22-B <br> 34- 15-BDE |
| W1BCG (K1VYU,KA1s NQY,PFP,N1s CWD, |  | N1DNC N1DYF |  | 20-4-B |  |  | N2HLZ |  | 46-8-B |
| DNP,DNR, | WA1s YCE,ZTD,ops) 14,260-235-46-ABD | Rhode Island |  |  | 2 | , York | N2GHR | AF,WA2U 17,800- | NV,ops) 295- $50-A B D$ |
| Eastern Massachusetts |  | WA1HYN 14,335- 183- 47-BCD Al1K 3,753-139-27-B W1AQ (K1AGA,KA1s IHT,MO,KM1X,WA1s VEK,VPC,ops)1,800-100-18-B |  |  | WA2TEO <br> N2BJ | 74,420-469-122-ABCDEF | Northern New Jersey |  |  |
| W1JR WB1FKF WA1JOF KA1DHO <br> AJ1E <br> K1VZI <br> K1DAT <br> W1GXT <br> W1ZNY | 27,335- 213- 71-ABCD9EF <br> 21,228- 200-61-BCD9EF <br> 16,055- 159- 65-ABCD9E |  |  |  | 35,076- 327-74ABCDE | N2CEI <br> K2JWE <br> AK2F | 39,237- | 427-87-ABC |
|  |  |  |  |  | WA2BAH |  | 7,314-143-46-ABCD | 31,524- | 306- 71-BDE |
|  |  |  |  |  | KA2JUV |  | 4,992-156-32-B | 15,028- | 273- 52-ABC |
|  | 7,320-186-40-ABCDE | Vermont |  |  |  | WA2MJP | 4,768-149-32-B | WB2000 | 8,943- | 271-33-B |
|  | 3,825- 96- 25-BDE |  |  |  | KD21x | 1,919-101-19-B | KA2IVS | 4,920- | 205- 24-B |
|  | 2,750- 92- 22-ABCD |  |  |  | W2AWX | $774.31-18-\mathrm{BD}$ | WA2UDT | 4,080- | 100-30-ABCD |
|  | 2,592-108-24AB | WB1GQR (KA1s LEX,NRR,WB2JSJ,ops) 47,656-440-92-ABCD |  |  | WA2RUW | 480- 20-12-C | K4BNC | 2,821- | 91-31-AB |
|  | 2,320-56-20-CDE |  |  |  | WA2QIN | 84 11- 7-ABC | N2EOC | 1,768- | 52-17-C |
|  | 540-54-10-B | Western Massachusetts |  |  | KA2MCU | 2-1. 1-C | WB2ONA | 583 | 17. 11-EF |
|  |  | W1GCI | 70,350- | 486-105-ABCD9E |  |  |  |  |  |


| N2WM ( + KB2BNU,N2s,ERH,GPD, HEB,NV2D,K3QM) 103,815- 652-135-ABCD K2DEL (KA1ZB,WA1PDK,K2s AYR,QBI,ZET, KB2s CRU,DRV,N2s AAM,DXP,FHC,GCM, GXT,HOB,NJ2Y,W2VY,WA2s EQG,ZNP,ops) 26,520-359-60-ABCD |  | North Carolina |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | W4FSO ${ }^{1,050-39}$ - ${ }^{\text {21- }}$ |  |  |
|  |  | W4BFB (WB2NHQ,AA4ZZ,K4s JQU,TP,KA4s FHS,WYC,KB4UFO,WA4UNZ,WB4s NMA, PCS,QCS,SLM,TLX,N9CC,ops) 759 33-23 |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  | Northern Florida |  |  |
| Southern New Jersey |  | WD4FAB | 2,070- | 58-30-A |
| K2GAL | 28,612- 230-92-ABDE | WA4JNE | 684 | 36-19-A |
| W2EIF | 220,957-197- 64 -ABCD9E | South Carolina |  |  |
| KAZWKA | 13,314-317-42-B | WQ4V | 14,842- | 137. 82-ABCDE |
| WB2OC $7,030-190-37-\mathrm{B}$ |  |  |  | 95- 41-ABD |
| K2BWR ( + K2 ${ }^{2}$ | ${ }_{28,971-212.87-A B C D E ~}^{\text {2RJ }}$ | WDAJQV | 1,624- | 39. $28-\mathrm{ABCDE}$ |
| Western New York |  | Southern Florida |  |  |
|  |  | WD4AHZ | 1,122. | 52.17.BD |
| N2WK | 48,790-268-119-ABCD9EF | W4FF | 418 - | 38-11-8 |
| K2GK ${ }_{\text {WARPPE }}$ | 12,740- $130-65-A B C D E$ 10.269 .163 .63 | K4SC | 294 | 21-14.AB |
| WA2VO | ${ }_{\text {coser }}^{10.269-163.63-A B}$ | K1FJM/4 | 54 | 9 - 6 - |
| K2SPO | 6,157-103-47-ABD | Tennessee |  |  |
| WB2IEY | 3,380-65-26-C |  |  |  |
| W2WGL | 3,040- 95- 32-B | KF4FL | 2,520- | 70-38-AB |
| *KDSRO/2 | ${ }^{3,016-104-29-8}$ | K14JU | 2,048- | 58-32-ABD |
| KU2A KA2VCW |  | AD4F | 190- | 19-10-A |
| N2DKP | 1,728-72-24B | Virginia |  |  |
| K2MPE | 1,632- 68.24 B | K2UOP/4 | 39,200 | 294.98-ABCDE |
| NS27 |  | N4HB |  | 113. $52-\mathrm{ABCD}$ |
|  | ${ }_{522 .}^{858-}$ 29. 18.8 | -W4DO | 7,392 | 118-48-ABD |
| W2DRZ (+K2s SMN,TXB,KB2CCQ,N2AHN, W2UCZ,WA2CFN,NI3X) |  | K4FTO | 3,360- | ${ }_{94}^{88}{ }^{\text {a }}$ 23-ABD |
|  |  | KFAKI | $2,162-$ 1,000 | ${ }^{94}{ }^{24} 23-\mathrm{AB}$ |
|  | 200,868-636-228-ABCD9E | N4BG | 660 | 33-20-B |
| 2PSI (WB1 | 1GHG,K2OEQ,KD2OM, 22 S | KE9A/4 | $330-$ | 30-11-B |
| AJX,A,Y W2 | ZAV,WA2S YMS,ZKD, <br> VVQ,ops) | 5 |  |  |
|  | 62,310-316-134-ABCD9EFIL |  |  |  |
| KD2YB ( + KA2TYE) ${ }^{\text {a }}$ ( ${ }^{\text {a }}$ |  | Arkansas |  |  |
| $\begin{aligned} & \text { KA2DQA ( + KA1YE,KA2GLP) } \\ & 4,000-92-40-A B D \end{aligned}$ |  | "WA5NFC 2,888-67-38-ABD WB4LHD/5 (N4FAC,K5s GHR,TNP,KA5s GEX,RDA,SED,UEK,N5s GHJ,HGZ, W5s |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| 3 |  |  |  |  |
| Delaware |  | CDE |  |  |
|  |  |  |  |  |
|  |  | Louisiana |  |  |
| Eastern Pennsylvania |  | NU5F | 1,300- | 65-20-B |
| wвзuyo | 40,33-349-83-ABCDE | Mississippi |  |  |
| KT2B | 36,408-284-82-ABCDE | NSKDA ( + KA5ULI, N5JBZ) |  |  |
| WAZOMY N3CX | 9,776-133-52-ABCD9EF |  |  |  |
| WB3KRW | 6,290-133-37-BD | New Mexico |  |  |
| KB3NO | 4,758-160-26-BCD |  |  |  |
| KC3FT | 2,860-130-22-B | W5FF | 2,546- | 67. 38-A |
| *W84KPD/3 | 1,260-63-20-B | W51XR | 918 | 48-18-8C |
| WA3JUF | 928- 31-16-BCDE |  | ${ }_{216}$ | 17. 12-ABD |
| KZZXX 799- 47- <br> WA3KFT $140-18$  <br> Ki- 18-ABC  <br> K3YTL (WA1MKE,K2LNS, NA2T,K3MKZ,KA3S EEO,QPQ,KB3OI,N3s CXB,DAP,FJA,W3DZH, WA3s JWP,JWV,NVS,YON,WB3s FAA,FKQ, FYT,IWZ,ops) |  | -WA5DJJ | 216. | 17-12-ABD |
|  |  | North Texas |  |  |
|  |  | K9MK/N5WSAA5AMKF5PE | 7,486-158-38-ABD9E$6,480-138-40-\mathrm{BE}$ |  |
|  |  |  |  |  |
|  |  | 2,376- | $80-27-\mathrm{ABC}$ |
|  |  | 2,241- | 61-27-8E |
| W3LP (W3s GFN,GZN, JUZ, WA ${ }^{\text {a }}$ |  |  | WBsZzP | 1,692- | 47-18-D |
|  |  | WA5zKO | 756 | 40-18-89 |
| AC31 ( + K3s EEL,SQO,KA3GHA,N3EMI, W3GF,WA3SDQ) |  |  | WD5K | 406 - | 29.14A |
|  |  | Oklahoma |  |  |
|  |  |  |  |  |
| WA3KEY (+ | WA3RXP) ${ }_{2}$ (11- $65-27-$ ABD | $\begin{aligned} & \text { K5SW } \\ & \text { WD5AGO } \end{aligned}$ |  | 120. $78-A B C D E$ $65.450-\mathrm{BDE}$ |
| Maryland-DC |  | WB5DSH | 377. | 29.13 |
|  |  | South Texas |  |  |
|  | 58,191-337-119-ABCD9E |  |  |  |  |  |
| K1RZ | 44,800-426-100-ABE | N5HHS | 22,410 | 228-83-ABD |
| W3zz | 29,520-285-90-ABCD | WB5OBS | 9,936- | 150-48-BDE |
| WB2DNE | 28,560-282-80-ABD | KASTJI | 2.314 | ${ }_{86}^{89-17-8}$ |
| K3NXH | 16,608-346-48-B | WBEN | 1,122- | 66-17-B |
| KЗАКR | 7,399-117-49-ABCD | WA5S (+K | C5FP) |  |
| W3GN | 5,320-123-40-ABD |  | 1,890- | 52-30-ABD |
| WA3EOQ W3IFM |  | West Tex |  |  |
| WA3Grw | 403-31-13-AB | W5AL | 2,340- | 56-36-ABD |
| KA3CXG | $240-2410-\mathrm{B}$ | WI5Q | 1,350- | 44 25-BD |
| W3LMC | $200-20.10-\mathrm{B}$ |  |  |  |
| W3MSN | 147. 18- 7-ABD | 6 |  |  |
| WB3LJK (K3ONW,N8CMH,WD8CDT,ops) 55,833- 375-111-ABCDE |  | Los Angeles |  |  |
|  |  |  |  |  |  |  |
| N2GTE (+N2 | $\begin{aligned} & \text { 2GAR) } \\ & 8,496-152-48-A B D \end{aligned}$ | W6CPL W6PFE | $\begin{array}{r} 18,768- \\ 430- \end{array}$ | 233-51-ABCD9EF <br> 38- 10-ABC |
| KB3HH ( + NG | G1W,KA3PRC) | K16X ( + AA | 6BE) |  |
|  | 2,754-84-27-ABD |  | 2,451- | 105-19-B |
| Western Pennsylvania |  | Orange |  |  |
| W3HDH W3KJM W1XX/3 (+K W3KWH (Al3 | 3.237- 83-39-AB | K6CHWB9AJZ/6 |  |  |
|  | 216-18-12-A |  |  |  |  |  |
|  |  | N6NVF |  | 101-18-ABC |
|  | W\%кw ${ }^{245,378-764-238-A B C D 9 E F}$ | WA6SNN |  | 48-12-BD |
| W3s $\mathrm{HH}, \mathrm{OO}$ | H,TVB,WA3TTS, WB3EML,.ops) | Pacific |  |  |
|  | 71,121-339-151-ABCDEI | кH6Hme |  | 27. 6-BD |
| 4 |  | Sacramento Valley |  |  |
| Alabama |  | -K6LMN WB6VYH | $\begin{gathered} 5,016-106-33-A B C D E \\ 290-29-10-A \end{gathered}$ |  |
|  |  |  |  |  |
|  |  | San Diego |  |  |
|  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  | W6OYJ |  | 23-11-BCDI |
| Georgia |  | San Joaquin Valley |  |  |
|  |  | WB4AYE/6 5,180-113-37-ABCD <br> WB81TM (+KB6NCF,WA6YDI,WB6COT) |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  | Santa Barbara |  |  |
|  |  | WD6BCN $1,026-$ 46- 18-ABD |  |  |
|  |  |  |  |  |  |  |
|  |  | K6MEP (KB6JWV,NS6X, WA6FPX,ops)$2,625-58-35-A B C D E I$ |  |  |
|  |  |  |  |  |  |  |



