# June VHF QSO Party, 1985-Style 

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Mother Nature may not reside in Atlantic City, but it's June 8, 1985-June VHF QSO Party time-and the propagation winners are about to be announced. The E-skip envelope, please. No, Bert, we're doing the locations for best supporting tropo first. And the winners are-Seymour, Indiana; Minden, Louisiana; Oklahoma City, Oklahoma; and Muldraugh, Kentucky. Muldraugh what? There must be some mistake. No mistake, Mr. and Mrs. Mid-America. In the June VHF Contest, the gods found favor with your VHF efforts.

Just ask KC4KK/9: "The contest started out fantastic. Six was wide open. Later, 2 meters popped open and, remarkably, 10 W gave us Georgia, Arkansas and Oklahoma for our best DX yet." And WB4NXY in EM77, Kentucky: "Super conditions. I couldn't believe it when I heard WB5LUA and W5GG in South Texas on 1296." "This weekend would rival any low-band excitement that I've had over the last 28 years. I stayed up the entire contest period, since conditions were so fantastic, working grid squares on 432 that I would have thought impossible. We may never see the likes of it again."-K5YY, EM35, Arkansas. "Beautiful duct to the southwest. We copied WBOSIL with strong signals on a rubber duck. We left the operating site filled with exhilaration."-K8CQA, EN90, Ohio. "Wow, what a tropo opening! Best in five years."-WSNZS, EM15, Oklahoma.

Six-meter E-skip kept folks hopping on Saturday: "Six meters to the northeast was 40 over S9 all day."-W1WLE/4, EL97, Florida. And if that wasn't enough, the northern tier found the buzz-saw mode much to their liking, such as WA7VHW, DM07, in Washington state: "What luck! We had an aurora during the last several hours of the contest. I've never heard so much activity. Two meters sounded like 20." It was a propagation bonanza: "Simply the most exciting two days of VHF/UHF operating ever experienced. Aurora, 1000 -mile tropo ducting, meteor scatter and 6-meter E-skip. Many stations worked were well over S9 on both 2 meters and 70 cm at the peak of the tropo opening." WA3TTS, EN90, Western Pennsylvania.

Conditions were not the only highlight, as this first use of grid-square multipliers in the June contest proved overwhelmingly popular. WB6KLL noted: "It makes the contest more fun. With openings, like we had on six at the beginning of the contest, DM05 became like BY1 on 20 meters. I felt like a DX station." Gridpeditions abounded in order to pass out those elusive multipliers, such as WøKEA in DM69 at 10,000 feet near Gypsum, Colorado; and WB6SIL/ $\varnothing$, multiop station in EM46, who didn't even work their own grid square. While


Sunday evening was "electric" at AA9D.

| Single Operator | Multloperator |  |
| :---: | :---: | :---: |
| AA2Z 172,830 | WiVD | 587,972 |
| W8ULC 138,180 | K3MTK | 528,462 |
| WA2FGK 104,228 | W2SZ11 | 507,187 |
| W91P/2 101,985 | K3YTL | 501,320 |
| KøLM 93,955 | W8VP | 357,445 |
| KC2PX 92,340 | N4DT | 316,820 |
| K2CBA 90,138 | WD8ISK | 300,510 |
| KB3QM 89,355 | W9UD | 297,920 |
| N2BJ 83,693 | AB4L | 291,460 |
| K2EK 80,652 | K1TR | 290,958 |

WøETT/7, DN61, who "enjoyed my gridpedition to a rare one in southeast Wyoming," and who "would encourage others to journey to rare squares."
The scores tell the rest of the story, with the June contest traditionally featuring the exploits of the big multiops. A surprise at the top of the leader board, however, as the "W1 Victor David" crew copped top honors at 587 k -with W1VD, WA1STO, K1JX and KA1GD at the controls. The 'Mountaintop Kilowatt," K3MTK, took over the second spot with 528k, while perennial champ W2SZ/1 slipped to third, pursued closely by the "Yellow Traffic Light," K3YTL.
Top single-op laurels again go to AA2Z at WA2OMY's station ( 172 k ), while W8ULC rode the crest of the fantastic midwest conditions to a strong second-place position at 138k. Also


Saturday sunset in Virginia as seen from AB4L.

## End of the World DXpedition

Ah, the mighty Mississippi, gateway to a continent and home to paddewheel steamboats and riverboat gamblers. One group of "riverbott gamblers" was heading downriver in search of adventure, ham radio style-a DXpedition!

A DXpedition usually takes place on a rock that appears at low tide, on a distant Pacific isle or some equally remote place. This was not the "usual" DXpedition, however. Instead, this was actually a "grid-pedition" to put grid square EL58 on the air.

Echo-Lima 58, the last blt of the last part of Loulsiana at the Southwest Pass of the Mississippl, where you can still walk on land before you're treading Gulf of Mexico. Thls is why we called this excursion the "End of the World" DXpedition. We, a group of New Orleans-area hams and non-hams, loaded ourselves into three boats with enough food and gear to survive in the wilderness for a month (even though the plans were to stay only the weekend of the ARRL VHF QSO Party). The amateurs Included WA5WJZ, N5BLW, K5AQY and son Russell (awalting his call), WB5LLI, KA5WJE and WB5NHX.

The trip began early on the morning of June 8, 1985 but planning began months before, when WD5BJT of the Greater New Orieans Amateur Radio Club discovered something very interesting about the remote grid square: a perfect structure for VHF and UHF antennas-an abandoned lighthouse on an island near the mouth.

The lighthouse, although built in 1871, appeared, in recent photographs, to be in fairly good shape. A trip to the island two weeks before the VHF QSO Party confirmed this. The structure still towered almost 130 feet above the flat land of the Mississippi delta.

On Saturday morning, June 8, the crew started on the first leg of the journey by driving to Venice, Louisiana, some 50 miles south of New Orleans. Venice is the farthest place south along the Mississippl that is accessible with wheels-after that, you had better have a boat. After flling a float plan with the Coast Guard, the boats were loaded and launched, and the grid-peditioners were underway for a $25-\mathrm{mile}$ joyride down the Mississippl to EL58-land.

The crew immediately became aware that one of the boats was somewhat underpowered for the load it was carrying. It was decided that the two faster boats would go ahead to the island and begin setting up camp, while the slower boat would follow.

Being aboard one of the faster vessels seemed like an advantage untll they sped right into a thunderstorm. "You haven't seen the Mississippi until you've seen it from a 16 -foot flatboat in a driving thunderstorm," said GNOARC president WA5WJZ.

Ultimately, the island and lighthouse were located. Because the water at the banks was so shallow, the boats had to be anchored several yards out, and the gang slogged ashore through the mud with gear and provisions.

While part of the DXpedition team set up camp at the lighthouse base, another group climbed the rusting, yet fairly solid, spiral staircase to the lighthouse top to set up the station.

By 2.P.M., W5UK was on the air, but with a severe problem: A $435-\mathrm{MHz}$ radio navigation beacon had been installed at the lighthouse by an oll exploration seismic crew, and its rhythmic pulses were wiping out $70 \mathrm{~cm}, 2$ meters and even causing problems on 61 All this way, all of the planning, all of the sweat and now no radio operation?

It became clear that UHF operation would be out of the question for the duration of our stay in EL58, but by rerouting our antenna cables, we were able to put 2 meters and 6 meters on. EL58 was on the air!

Two meters proved disappointing, with few signals heard and most of them from the New Orleans area, but six was sizzling! To the surprise of the W5UK bunch, people were looking for grid square EL58: "Where have you guys been? I've been looking for you," sald one $50-\mathrm{MHz}$ operator. Back in New Orleans, W5TVW had been putting the word out. He had been in on the early planning of the DXpedition, had lent the group some additional equipment and had helped further by telling everyone he could on 6 meters that we would be on from that magic grid square.

The little $10-\mathrm{W}$ signal and the 3 -element Yagi lashed to the lighthouse ralling with tiewraps did not guarantee a potent signal, but the words "Echo-Lima Fifty-Eight" seemed to do the trick.

As WB5LLI and WA5WJZ handled the operating below, the rest of the crew settled down for a lunch break of rust-crunchy sandwiches (rust flakes continually fall from the iron lighthouse). As WA5WJZ tuned around, looking for new QSOs at the top of the lighthouse, the crew on the ground settled down for a well-deserved rest when cool, gusty winds came up, howling through the legs of the lighthouse, blowing the tents around. We scrambled to recover three umbrella-style pop tents and a cabin tent. The cabin tent, unlike the pop tents, was staked to the ground, but the aluminum poles could not take the pressure of the wind blowing through the front door.

It rapidly became clear that the cabin tent would have to come down before the wind did any damage, so we kicked out the poles and let the tent fall, turning our attention to the umbrella tents. After a bit of quick work, the tents were securely lashed down, and the ground crew began to think of other things.

At the top of the lighthouse, WA5WJZ was having an almost religious experience. Over his head the American flag, tied up earlier, stood straight out, as if someone had starched it. As the wind blew, the flag snapped and popped like rifle shots. As the operating table began heaving and vibrating, the logs began to fly, and he noticed that he, too, was moving toward the edge of the tower. Quickly stowing all the gear, he rapidly descended the long, narrow spiral stalrcase of the lighthouse. He reached the bottom, pale and shaken.

After the weather settled down, WA5WJZ returned to the top of the lighthouse, but discovered he could not stay without getting the "heeble-jeebies," so N5BLW took over as chief operator. Later, a raccoon was encountered inside the lighthouse!

After an uneventful meal, work began on a 75 -meter dipole so that the HF station could be put on the alr. Unfortunately, the generator, which was low on oil, decided to take a rest. Someone had left the oil cans along the river bank, a half-mile away. The tide had changed, and, well, there was no oil.

A quick substitute for the missing oll was found-outboard motor oil from the boats. The generator was back on and running, but not everyone was interested in the successful conclusion to this problem.

With VHF conditions dead and not much interest being shown in the HF rig, the decision was made to shut down power for the night. A Coleman lantern was left on to keep the "critters" away and to ald anyone needing to take a walk during the night. Unfortunately, the lanternt began resonating when it ran low on fuel about 4 A.M., and began emitting a low howl. No one was quite sure what was causing the off-and-en tooting that was echoing through the lighthouse, but no one was willing to investigate, either. Near daybreak, K5AQY ventured out and turned off the offending lantern.

After a rust-crunchy breakfast, W5UK was put back on the alr, but conditions were poor on Sunday morning. EL58 was on the alr, but the lonosphere and troposphere were not cooperating! We then decided to begin the task of breaking camp and returning the gear to the riverbank.

The trip upriver went more smoothly than the trip down. The slower boat was loaded with less equipment, 30 the EL58 crew made good time back to Venice, where the boats were unloaded and holsted back onto their trallers.

For many who had made the trip, the next workweek seemed like a vacation in comparison to the weekend. Because of erratic band conditions, gusty winds and nasty QRM from the radiolocation beacon, we hadn't made nearly as many QSOs as we had wanted, but we had accomplished something: We had put EL58 on the air!

Above all, we had fun. And long after the EL58 QSLs have been sent out, we'll remember the fellows we overheard on 6 meters: "EL58? There's nothing down there but a lighthousel" That's us-the End of the Worid DXpedition.-Terry Raymond, WB5NHX and Bob Dunn. WA5WJZ
topping the century mark were WA2FGK and W9IP.

The scores below list the rest of the winners, each and every entry in the June 1985 June VHF QSO Party-one many won't forget for a long time. -WIXX

Thanks to Mark Burke, KA1MIS, who helped in the preparation of this report.

## SOAPBOX

Why, oh why did I wait 'til Sunday P.M. to put the 6 -meter beam up? At least, I didn't miss the buzz
(WA1HYN). If anyone thinks CW is not useful, they should try working an aurora without it (W1FXS)! Since I've sold my HF equipment, this is the only contest I can participate in. I enjoyed it. Maybe next time I can find a mountaintop for a few more points (WA1NLD). I wish more people had tried 432 MHz (WA1NLD). I wish more people had tried dead except during the aurora. The band was almost dead except
for the multiop stations (K1FO). Like grid squares!

Division Leaders

| Single Operator Call | Score | Division | Multloperator Call | Score |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { VE3ASO } \\ & \text { AA2Z } \\ & \text { KABMRI/9 } \\ & \text { WEXG } \end{aligned}$ | $\begin{array}{r} 68,058 \\ 172,830 \\ 51,188 \\ 69,906 \end{array}$ | Canada <br> Atiantic Central <br> Dakote | VESONT <br> K3MTK <br> K9HMB | $\begin{aligned} & 172,437 \\ & 658,460 \\ & 206,496 \end{aligned}$ |
| K5YY | 40,424 | Deita | N4VC | 98,488 |
| WBULC <br> WA2FGK | 138,180 104,228 | Great Lakes Hudson | W8VP | 357,445 201,390 |
| KOTLM | 93,955 | Mldwest | WBEDRL | 130,298 |
| K1PXE | 58,520 | New England | W1VD | 587,972 |
| WB8UUP | 7425 | Northwestern | k7AUO | 21,065 |
| W6RXQ | 25,875 | Pacific | KEENS | -48,070 |
| N8FCJ KAOMQA | 81,169 23,268 | Roanoke Rocky Mountain | N4DT WOA | 316,820 16,524 |
| KC3CL | 46,898 | Southeastern | N4EJW | 63,325 |
| WBCPL | 7680 | Southwestern | WAFJTM | -33,220 |
| W5NZS | 37,180 | West Gulf | WB5KTC | 15,168 |

## Top Single Band Scores

| 50 MHz |  | 144 MHz |  | 220 MHz |  | 432 MHz |  | 1296 M Hz |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W9XG | 35,108 | K2LWR | 30,954 | AA2Z | 3588 | K1FO | 15,366 | W3IY/4 | 2320 |
| W3ZR | 32,760 | K2TXB | 30,045 | N 9 HH | 3360 | W9OEH | 11,092 | WA2FGK | 1404 |
| W400 | 27,359 | N4AR | 20,017 | N2BJ | 1870 | KC4EG | 7644 | N6CA | 828 |
| VE3FGU | 25,200 | K2CBA | 19,669 | WA2TEO | 1836 | N180 | 7452 | K1PXE | 750 |
| KC3CL | 22,400 | W8ULC | 18,160 | KC4EG | 1836 | K5YY | 6858 | K6UQH | 675 |
| AA2Z | 22,152 | N8FCJ | 15,895 | K1PXE | 1720 | WB4NXY | 6708 | W2CRS | 627 |
| W91P/2 | 21,733 | K5YY | 13,800 | W2CRS | 1680 | K2EK | 4592 | W1RIL | 576 |
| N4MM | 21,105 | KC4EG | 13,561 | W8ULC | 1610 | W3IP | 4482 | WA1JOF | 552 |
| KB3QM | 21,087 | WB2QOQ | 12,997 | KB3QM | 1292 | WB5AFY | 4440 | WA1MBA | 513 |
| NOLL | 20,800 | W5SUS | 12,141 | WA3FYJ | 1232 | AA2Z | 4420 | WB1FKF | 480 |
| *W1VD | 75,838 | *W1VD | 75,835 | W91P12 | 1080 | *K3MTK | 17,204 | *K3MTK | 3960 |
| *K3YTL | 50,307 | *W8VP | 57,596 | *K3YTL | 13,860 | *W1NY | 16,320 | *K3YTL | 3564 |
| *VE3LNX | 49,980 | *W9UD/9 | 48,720 | *K3MTK | 10,530 | *WIVD | 14,240 | *W2SZ11 | 2304 |
| *denotes multioperator station |  |  |  | *W1VD | 7280 |  |  |  |  |


(WA1TDA). You should make this a 24-hour contest only. Sunday P.M. becomes a problem for mountain toppers (W3MR/2). This was my first all-CW contest, having lost 3 microphone cables hours before the con test (KC2GI). I had more trouble with my contestlogging program for the $\mathbf{C}-64$ than anything else (WA2CWA). My only disappointment was the lack of activity on 220 MHz (N2WM). Things get boring when you just use 220 and 432 SSB/CW (KS2T). The contest was too long. I believe it should be a 12 -hour sprint or a 24 -hour contest max. (WB2EYX). Wow! (KU2A) No one should complain about conditions this time . . 2 meters was almost enjoyable-not as crowded since everyone was on 6 (WB3JYO). I had a lot of fun chasing our Pack Rat microwave rover to work 10 grids on 2.3 GHz for the VUCC award (WA3JUF). Did you on 2.3 GHz for the VUCC award (WA3JUF). Did you
hear me? I was the FN11 station who didn't destroy your front end (KQ3C). It can get confusing with W2IP, W3IP and W9IP/2 on the same band at the same time (W3IP). Water in coax, tornado watch, pinetree attenuators, low generator output, all rotators
broken, half the crew left early, punctured auto gas tank ( $\$ 150$ ), fire in the camper and a defective fire extinguisher ... still a lot of fun. Just wait 'til next year (K2SPO/3). Missed working 432 VUCC by one grid during the contest (KC4EG). Super conditions on 2, 432 and 1296. While trying to work W5GG on 1296 CW, I heard WBØZJP break on SSB with a 20-over S-9 signal (WB4NXY). What a band opening on 2 ! The contest provided 49 new grids. I'm looking forward to the next VHF contest (AA4FQ). Super weather, location, accommodations and no equipment failures. The only thing missing was propagation. Maybe the propagation gods will smile on us in September (N4HSM). Using grid squares makes the contest more active. They should be adopted worldwide for HF as well as VHF (W4HJW). Contest rule no. 74 should read "If you plan to have breakfast, finish eating before connecting the hardline to the rig'" (AB4L). In this age of modern technology, why can't someone design an alarm clock that is guaranteed to work? Mine didn't, and I missed the best part of the


Dave, AA9D and crew scored 123 k, for a thirdplace multiop finish in Illinois.


The 2-meter position at top Arkansas multiop N4FAC/5, with N4FAC operating.


These aerials helped W9UD cop a Top-Ten multiop finish.

[^0]This was our first outing, but definitely won't be our last (KE7P). Working Texas on 432 was a real highlight. The icing on the cake was the aurora on 2
meters on Sunday night (NI8O). What a contest! I worked VUCC on 2 bands (WD8ISK). Outstanding conditions and a plethora of propagation phenomena
(NC9F). It certainly would be nice if more of the big contest stations turned their attention to EME (DL9KR).

## Scores

Scores are listed by ARRL Section. Within each Section, single-operator, multiband scores are listed first, then the single-operator, single-band scores starting with the lowest frequency band, and then multioperator scores. From left to right, each line score lists: call, score, QSOs, multipliers, bands operated (A-50 MHz; B-144 $\mathrm{MHz} ; \mathrm{C}-220 \mathrm{MHz}$; D-432 MHz; E-1296 MHz; F-2.3 GHz; G-3.4 MHz; H-5.7 GHz; I-10 GHz; J-24 GHz; K-48 GHz; L-light). Among the single-operator statlons, the single-band award winners are Indicated by boldface type for the letter(s) denoting the bands won. For example, in Connecticut, K1PXE is the singleoperator Section award winner, and he also had the highest scores on 220 MHz and 1296 MHz . K1EM had the highest single-band score on 50 MHz , while WB1BXS had the highest single-band score on 144 MHz . K1FO had the top score on 432 MHz . W1VD is the highest-scoring Connecticut multiop.

| Connecticut |  |
| :---: | :---: |
| K1PXE | 58,520-357-110-ABCDE |
| K1EM | 54,360-388-120-ABCD |
| WA1HYN | 26,640-290-74-ABCD |
| KA1BXB | 14,592-168-64-ABCDE |
| AB1U | 5365-116-37.ABCD |
| WA12NT | 3515- 95-37-AB |
| WA1GTP | 1276- 58-22-AB |
| W1WHL | 2804. 84. 31-A |
| WB1BXS | 6076-217. 28-B |
| K1GX | 6020-172-35-B |
| W1FXS | 3775-151-25-B |
| WA1NLD | 102-34-3-8 |
| WIVD ( + WA $\begin{aligned} & \text { STSTO, KA1GD, } \\ & 580,436-1531-308-A\end{aligned}$ |  |
|  |  |
|  |  |
| W1QK (+KA1ECL, N1ABY, N1DBH, WA1WXV, KF6AJ/1) |  |
| W1LIT (+ WB1DNL, WA1CVN) |  |
|  |  |
| WIAW WA1MBK, W1OD, WB2TRN, |  |
|  |  |
| KW1J, oprs.) |  |
| 384-32-12-A |  |
| Eastern Massachusetts |  |
|  |  |
| Wiaxx | 25,432-247-88-ABCD |
| K1KG | 24,565-241-85-ABCD |
| WB1FKF | 15,872-169-64-ABCDE |
| WA1JOF | 14,204-173. 53-BCDE |
| KA1DHO | 13,936-171. 67-ABCDE |
| WiJR | 13,888-128. 62-ABCDEF |
| W1Gxt | 12,825-162. 57-ABCDE |
| K1SRG | 8094-169.38-ABCD |
| k1DAT | 7268-158-46-AB |
| W1TR | 6244. 139-46-AB |
| Kivzı | 4836-103-31-ABCDE |
| W1FM | 1680. 64. 20-ABD |
| K1FWF | 680. 34. 10-CD |
| WA1CRE | 540. 34. 15-ABC |
| K5MA | 7104. 222. 32-B |
| WIPSG | 1200- 75-16-B |
| KATYQ (+K11O, KIYAN, WA1AYS, AJ1E, N1BYS) 40,446-348-107-ABD W1XM (N1s CPK, DAM, DMM, W1GSL, W1XG, oprs.) |  |
|  |  |
|  | 26,013-279-69-ABCDE |
| Malne |  |
| W3HQT/1 | 7084. 112. 46-BDE |
| WA1tRE | 2448. 72.34 -AB |
| K1TOL | 17,220-210-82-A |
| W1PLX | 2548-91-28-B |
| WAITDA ( + K1UTI, WA1QCQ)$980-49-20-A$ |  |
|  |  |



## 2

Eastern New York

| K2CBA (WB2DNE, opr.) |  |
| :---: | :---: |
|  | 90,138-458-166-ABCDE |
| N2BJ | 83,693-507-127-ABCDE |
| K2EK | 80,652-529-132-ABD |
| W1XX/2 | 78,470-509-133-ABCD |
| WA2TEO | 76,538- 444-142-ABCDEF |
| W2CRS | 50,630-289-122-ABCDEF |
| WA2RUW | 2132-66-26-BC |
| WB2NDE | 3168- 88-36-A |
| K2QE | 5852-154-38-B |
| W2YJO | 816- 51-16-B |
| KD21X | 600- 50-12-B |
| AB21 (+ AB2J, W2AWX, W2JFB, WA2IID, WB2DVV, K2VNV) |  |
|  | 43,500-427. 87-ABCD |
| W3MR/2 (+K3DI, KK1W, K3VYJ) |  |
| K2XR/2 (KT2B, WB2WIK, oprs.) |  |
|  |  |

$\begin{array}{ll}\text { NYC \& } \text { Long Island } \\ \text { K2OVS } & 10,948-150-68-A B D \\ \text { KA2VKO } & 1104-69-16-\mathrm{B}\end{array}$

| KA2VKO | $1104-$ | 69 | 16-B |
| :--- | ---: | :--- | :--- |
| KC2GI | 525 | $35-15-B$ |  |

Northern New Jersey
WA2FGK (K2LNS,opr.)

|  | 104,228-534-142-ABCDEF |
| :---: | :---: |
| KC2PX | 92,340-436-162-ABCDE |
| WB2INB | 29,820-302. 84-ABCD |
| W2VC | 9840-113-40-DE |
| KA2HZA | 119-13-7-BC |
| WA2CWA | 9042-137. $66-\mathrm{A}$ |
| WB2QOQ | 12,997-317-41-B |
| KA2IVS | 1680-105-16-B |
| W2FCR | $1258-74.17-B$ |
| WA2ALM | 1218-87-14-B |
| K1DK | 168. 24. 7-B |
| N2BOW (+ | 2EOC, KT3U, N2CEI, WB2 |

N2BOW ( + N2EOC, KT3U, N2CEI, WB2WLM, WB2ULI)
KC2GE (+ WP2,390-788-210-ABCDEI K2NJ + K2s PM, 807 TKN 288-311-BCD K2NJ (+ K2s PM, TKN, KA2s WFO, KBX, OEG, RWL, RHL, OEE, KB2HZ, KC2ZA, KD2EL, KQ2O, KU2C, KY2O, KY2W, N2s FFB, EKH, NB2P, NE2P, W2s PSB, GW, WA2RMZ, WA8PSQ, WB2s EPW, ZPH, NQV WB5ASP)
K2DEL (N2s AAM, DXP, FHC, K2s LME, AQG, KA2TGY, NJ2Y, NC2R, WA2s VKH, CRF, DNU, WA1PDK, WB2s AHG, NTP, WA2SNA (K2BJC, KA2s NDZ OVK WA2SNA (K2BJC, KA2s NDZ, OVK, VLP,
N2s AAZ, CJJ, W2s DZ, RS, WCE, WB2RFB N2s AAZ, CJJ, W2s DZ, RS, WCE, WB
oprs.)
$80,509-434-143-A B C D E$ N2WM ( + N2s ERH, EWV, CJO, CJS, WA3WUD) 77,178-538-114-ABCD

| WBigar | 5760. 10 |
| :---: | :---: |
| WA1WIF | 558- 31-18-A |
| WA1ZOJ | 264. 24. 11-B |
| W1TKZ (K1s TK, UR, N1s ADY, CPE, KA1IU, W1GCI, WA1ZLQ, WB1s BUV, BUM, WA2TIF, VE3CGL, oprs.) 253,700-940-215-ABCDEFI K1LPS (+ W1AIM) 38,478- 305-106-ABCDE |  |
|  |  |
|  |  |


| Southern New Jersey |  |
| :---: | :---: |
| K2TXB | 37,960-486-73-BE |
| K3GYS | 35,987-298-97-ABCDE |
| W2EIF | 17,355-168-65-ABCDE |
| N2AHN | 7733-177-37-BD |
| KS2T | 3618- 67. 27-CD |
| WA2ONK | 5292-196-27-B |
| WB2EYX | 969-51-19-B |
| N3AHF | 660-33-20-B |
| K2BWR (+ K2ZRJ) |  |
|  | 50,646-274-138-ABCDE |


| Western | New |
| :--- | :---: |
| York |  |
| Wolp/2 | 101,985- $450-195-A B C D E$ |
| WB2KIW | $31,860-248-118-A B D$ |
| K2LZF | $22,540-181-115-A B C$ |
| WA2BPE | $20,651-193-107-A B$ |
| K2LGJ | $11,245-126-65$-BD |
| KU2A | $3476-62.44-A B D$ |



## Eastern Pennsylvania

| AA2Z | $172,830-627-210-A B C D E$ |
| :--- | :---: |
| WB3JYO | $71,022-432-133-A B C D E$ |
| K3HP | $63,765-455-109-A B C D E$ |
| K3IWK | $17,500-240-70-A B D$ |
| N3BBI | $9250-161-75-A B D$ |
| WA3WBU | $8464-151-46-$ BD |
| WA3JUF | $5445-67.33-$ BCDEF |
| W3CL | $3996-82-36-A B C D$ |
| W3GF | $759-33-23-A B$ |
| N3DQZ/3 | $6816-142-48-A$ |
| KQ3C | $4752-144-33-B$ |
| AK3M | $2024-88-23-B$ |

K3MTK (AA3M, KC3QG, KF3D, KM3T, KT3M, N3s EWC, AAX, W3GPY, WA3s VVG, PUL, WB3s ESS, ESQ, YEH, oprs.) 53YTL 528,462-1250-306-ABCDEFGHI K3YTL (KA3EEO, KB3Q1, K3MKZ, N3CXB, YON, oprs.) $501,320-1226-302-A B C D E F$ W3AD (K3HEC, N3BNA, WA3HMK, WB2OOB, oprs.) 150,699-698-191-ABD W3LP (WA3CUQ, W3GFN, W3JUZ, oprs.) 16,767-188-69-ABCD

## Maryland-DC

| W31P | 58,548-344-119-ABCDE |
| :---: | :---: |
| K3ZO | 51,840-405-128-AB |
| W3WFM | 51,783-357-123-ABDE |
| K3AKR | 20,880. 195. 87-ABCD |
| WA3UTE | 7326-159-39-BD |
| W30TC | 4182- 81- 51-AD |
| WA3GYW | 1150- 50- 23-AB |
| W3IFM | 10,290-147. $70-\mathrm{A}$ |
| K3NXH | 7474. 202. 37-A |
| K3TC | 8398-221-38-B |
| N3AM | 4814-160-29-B |
| N3AVA | 1224. 72. 17-B |
| N3DUE | 637. 49-13-B |
| K3ONW (+ WB3LJK) |  |
|  | 61,614- 386-126-ABCD | W3PGA (KA3CUW, WA3LAW, WA3HZJ W3VRD, WB3KUH, oprs.)

7852. 137. 

Western Pennsylvanla WA3FYJ 80,088-345-188-ABCD
WA3TTS 11,928-209-121-ABD
W3HDH 7062-107. 68-A
W3KJM $1989-51.39-A$
WB3EUM 1274-49-26-B
W3GNR/3 (+ KA3AWL, WA3JBV, KA3DWR, WA3FFC, WA3BUX)

102,616-409-202-ABCDE

## K2SPO/3 ( + AF2K, KG2F, KS2Z, KA2APP) $14,615-154-79-A B C D$

4

| Alabama |  |
| :---: | :---: |
| KC4P | 44,420-251-140-ABCD |
| WA4COG | 8498-107. 72-ABCD |
| WB4GFO | 542. 118-46-AB |
| KA4BLN | 3157. 68-41-ABD |
| WA4VUG | 45- \&- 5-B |


| Georgla |  |
| :---: | :---: |
| Nask | 10,412-127-76-ABD |
| W3EP/4 | 3773. 77- 40-AB |
| K4KAZ | 629 30-17-ABCDE |
| KA4KKF | 400- 24-16-ABC |
| WB4WXE | 100-10-10-A |
| Kentucky |  |
| KCAEG | 80,325-347-175-ABCD |
| WB4NXY | 59,584- 288-152-ABDE |
| N4EQT | 44,162-269-142-ABD |
| N4KCM | 12,282-138-89-AB |
| N4FFO | 1248-39-32-A |
| N4AR | 28,017. 283-99-B |
| AA4FQ | 7021-119-59-B |


| North Carolina |  |  |
| :--- | :--- | :--- |
| N2CJP | $4940-$ | $89-52-A B D$ |
| NT4T | $2530-$ | $55-46-A$ |
| KA4NMA | $325-$ | $25-13-B$ |
| N4DT + AAA4S, AJ4N, K4ADI, KJ4BF, |  |  |

    N4DT (+AA4S,
    KJ4X, WQ4V)
316,820- 889-292-ABCDEFHI
N4HSM ( + N3AHI, K4MSK, WA4s OYH, FVT,
WB4s NMA, SLM, TQD, G
ITS, JQV, W4VHH, WS4F
273,612. 756-302-ABCDEFHI
W4CQ ( + K4COG, WB4ETF, WB4MCI,
WA4TIJ, WD4LGN, W4PFM, WB4BQG,
KA4AVL, KB4NLM)
11,514-179-57-ABD

| Northern Florida |  |  |
| :---: | :---: | :---: |
| W5Hua | 34,844- | 255-124-ABD |
| W4ODW | 26,429- | 205-107-ABCDE |
| WB4BSZ | 6138. | 96- 62-ABD |
| KL7JGIM4 | 3502. | 70. 34-BDE |
| W4HJW | 4704. | 96-49-A |
| WB4NJA | 1802- | 53-34-A |
| AA4NA | 378 | 21. 9-D |
| W2LRJ | 16. | 4. 2-D |

South Carolina

| W2CUK | $1085-$ | $35-31-A$ |
| :--- | ---: | ---: |
| NB4S | $1300-$ | $52-25-B$ |
| KA4WNX | 9 | $3-3-B$ |

K4YTZ (+ W1WW, N4DOC, KB4MX, KCAZJ,
KD4RH, AA4AM, KA4s KXM, VUK, WA4s
DZG, QQG)
$\begin{array}{ccc}\text { WD4EOG (+ WA1MKE, } & \text { WA4- } & \text { 31-ABT, } \\ \text { 1500- } & \text { 46- } & \text { 30-ABD }\end{array}$
Southern Florida

| KC3CL | 46,898-325-131-ABCD |
| :---: | :---: |
| W3ZR | 46,644- 333-138-ABC |
| WD4MGB | 23,320- 220-106-AB |
| W1WLE/4 | 11,109-161-60-AB |
| KB4CRT | 10,640-134-70-ABDI |
| W4WSR | 1880- 66- 20-BDE |
| K4DZP | 1486-66-17-BCDE |
| WD4AHZ | 1134. 46-18-BD |
| W400 | 27,359-251-109-A |
| KI4MG | 4187-79-53-A |
| KB4ABT | 484. 22-22-A |
| N4EJW (+ N4EJV) |  |
|  | 63,325-406-149-ABD |
| KA4ULJ/4 (+ K2RTH) |  |

Tennessee
wBAJCa

| WBAJGa | 35,244-287-132-AB |
| :---: | :---: |
| N4MW | 14,469-130-91-ABDF |
| WB4CTW | 9174-130-68-ABCD |
| WA4QYK | 4108- 74. 52-ABC |
| W4FLW | 1610- 46-35-AB |
| W4ZGS/4 | 924- 33-28-AB |
| N5AYD | 2984. 78-38-B |
| KI4JU | 2788- 41-34-D |
| N4VC (+ WD4DGF, WB4KNF) |  |
|  | 98,468- 400-206-ABCD |
| WA4LIT/4 (+ WB4NJG, WB7ECS, KA4VEY) <br> 72,982. 335-182-ABD |  |
| KB4MSC/KT (+ W5US) |  |
|  | 6096-127. 48-AB |
| Virginia |  |
| K2UOPI4 | 50,566-302-131-ABCDE |
| N4MM | 49,345-318-139-ABD |
| W3IY/4 | 41,910-197-85-ABCDE |
| K4LHB | 35,420-257-115-ABCD |
| WD4GXN | 10,595. 130-65-ABD |
| K4JSI | 9120-123-57-ABCD |
| N4RA | 8046-111-54-ABCD |
| K4QIF | 6468- 98-42-BDE |
| WA4SBC | 4922- 83-46-ABCD |
| W4KMS | 1550- 50-31-AB |
| K3ZJ/4 | 1476-82-18-B |



KøTLM put in a 94 k , division-topping effort from Missouri.


WA4GPM (yes, Buzz was in DN31) operated from the north shore of the Great Salt Lake.


Northern New Jersey's number-2 single-op, KC2PX.



W7DTL్7 ( + W7LHA, KD7DR, WA7KUM
WB7BLF, WB7RZZ)
15,730-202-65-ABCD

| Idaho |  |  |
| :---: | :---: | :---: |
| W7ID | 2145- | 61. 33-ABD |
| KD7IY | 1316 - | 44-28-ABD |
| W7CVJ | 140- | 18- 7-ABC |
| WAgDYU | 1222. | 47. 26-B |
| KA7KGF | 112- | 14. 8-B |
| N7EIJ (+ KA7PIE) |  |  |
|  | 1925- | 55-35-ABD |
| Montana |  |  |
| W7HAH | 1568- | 46-32-ABD |
| Nevada |  |  |
| K6LMM | $4323-$ | 98-33-ABCDE |
| K71CW | $4240-$ | 80. 53-AB |
| K7ZOK | 1860- | 52- 30-ABDE |
| W7KYT | 700 | 30- 20-ABD |
| W7ABX | 532- | 19-14-A |
| N7BPA (+ KB7BZ, WAgYPL) |  |  |
|  | 7676- | 127-42-ABCDE |


| Oregon |  |  |  |
| :---: | :---: | :---: | :---: |
| Wa7Bju | 6588 | 134. | 36-ABCDEF |
| WTTYR | 4887. | 113- | 27-ABCDEFGHI |
| N7DB | 4323. | 111- | 33-ABCD |
| K7HSJ | 3297. | 105. | 21-ABCDE |
| W7PUA | 3120. |  | 24-BCDEI |
| W7JXU | 912. | 59 | 12-ABD |
| WB7UNU | 550 | 29 | 10-ABCDEFGHI |
| WA7IQH | 300 | 26-1 | 10-ABD |
| WA7ECY | 180- | 36-1 | 10-AB |
| WA3RMX | 100. | 5. | 5-FGHJK |
| KCVIZ | 60. |  |  |

K7AUO (WA3RMX, WB6BGV, K7RUN, W7s
BKN, UDM, VOK, oprs.) KB7WW (+ W7HR, WB7DID)
19,888-231-66-ABCD
KE7P $\left(+\begin{array}{c}\text { N7CNH, WA7s TDU, TDZ }\end{array}\right.$
$5336-108-46-A B C D$

| Utah |  |
| :---: | :---: |
|  |  |
|  |  |
|  |  |
| Washington |  |
| wB7UUP | 7425- 174. 33-ABCDEF |
| NF7X | 6396-143-39-ABD |
| W7FN | 6258- 128-42-ABCD |
| K71DX/7 | 2257- 200-19-AB |
| N7BSN | 1659-64-21-ABCD |
| WA7PVE | 48-16- $3-A B$ |
| N7FXQ | 1233-137. 9-B |
| WATVHW | 464- 29-16-B |
| KB7LQ | 364- 52-7-B |
| WB7ATP | 144- 18-8-B |
| KATLUY | 30-10-3-8 |
| Wyoming |  |
| WEETT/7 | 18,169-233-100-AB |
| WA7LEA | 1071- 36-17-ABDE |
| WATKYM ( | Wbs KJY, SII) |


| Michigan |  |
| :---: | :---: |
| KU8P | 25,630-206-110-ABD |
| WavRP | 17,535-153-105-ABD |
| WD8KLU | 5742- 85- 58-ABD |
| KB8, | 4760- 75-56-ABD |
| NE81 | 1890-47-27-ABCD |
| N8BMM | 1127. 41-23-BD |
| KM8U | 9348-164. 57-B |
| N8CKH | 8400-150-56-B |
| WB800A | 4320-108-40-B |
| WB8BKC ( HTL) | WB8s KAY, TGY, WA8s VPD, 274,480-743-292-ABCDE |
| Ohlo |  |
| W8ULC | 138,180-510-235-ABCD |
| N180 | 37,800-234-120-BD |
| K8TL | 21,462-164-98-BDE |
| WD8CTX | 13,765- 223-134-ABD |
| N8BJN | 6710-112-55-BD |
| N8BTC | 4608-90-4-AD |
| N8CCC | 666- 35-18-ABD |
| W8LLU | 782- 34- 23-A |
| W8NJR | 4293- 81-53-B |
| W8HBG | 2720-80-34-B |
| K8LMN | 2201. 71-31-B |
| K8MR | 189 21-9-B |
| W8VP (K8s AL, IOX, KNL, KA2IQQ, KA8WJE, N8s CQX, FXL, W5UA, WABFHF WB8s DQE, ERB, WB9YCZ, WD8SDH, oprs.) 357,445- 834-335-ABCDE |  |
| WD8ISK (N W9VNE, WB8ZCC | B BPB, ECH, ASZ, KCBRD, WA8s OGS, ONQ, WA3OJX, oprs.) |
|  | 300,510-784-318-ABCDEI |
| K8CQA (+ WB8s JAY, TEI) |  |
|  | 31,388-193-133-ABD |
| KC8TW ( + N8XX) |  |
| 682-31-22-B |  |
| West Virginia |  |
| N8FCJ | 81,169-482-157-ABD |
| W8LSC | 10,508-115-74-ABD |
| WB8DRR | 6881 - 131-51-B |
| K3LNZ/8 ( + K3s DUA, ICH, W3ZZ, WA3s EOQ, OYW, NZL, W4PSJ) |  |
|  |  |
|  | 227,088-765-249-ABCDE |
| N8DKL (N8BZS, N8FWL KC81T, oprs.) |  |
|  | 37,089-317-117-AB |
| 9 |  |
| Illinois |  |
| NC9F | 23,250-263-75-ABCD |
| WB9WMM | 20,601-189-109-ABD |
| K9RO | 14,006-142-94-AC |
| KA9MGR | 5220-81-58-AC |
| WD911X | 3713- 68- 47-ABD |
| KA9QIK | 656- 34-16-BD |
| KA9CLP | 351- 32- 9-BC |
| N9AQ | 2940-70-42-B |
| WB9PQO | 2618-77-34-B |
| K9BQL | 741- 39-19-B |
| KA9QYA | 99-11- 9-B |
| N9HH | 3360-48-35-C |
| KR9G | 2668-46-29-D |
| W9UD/9 ( + K9s AKS, CHZ, WஜOHU, WD9FSA, AKgP, AE9M, WBGMSU, WBgOPI) 297,920-765-320-ABCDE |  |
| K9HMB (+ K9s GL, NO, PW, VV, WB9CAS, |  |
| WB9TIY, WD91IC, NA9D, KC9C, W9WI, |  |
| KA9CJG, WB4YVO) |  |
| 260,496-806-268-ABCDE |  |
| AA9D (+ N9s KC, BD, AZZ, EDT, KA9s CKI, JYI) |  |
|  | 122,859-448-219-ABCD |
| Indiana |  |
| KA8mRUS | 51,188-319-134-ABCD |
| KACHPK | 37,845-198-145-ABCD |
| K9DZS | 19,691-160-97-ABD |
| W9OEH | 14,688-130-54-DE |
| KCaKK/9 | 9936-138-72-AB |
| AF9L | 363- 22-11-BC |




[^0]:    2-meter opening (WB5JAR). Where's the F2 when you need it (KC5GB)? There is not enough CW on 6 (KB6CYB). There didn't seem to be as much activity on the West Coast this year, and no good 6-meter openings to Southern California. Think the grid squares work fine (K6VMN). One watt on 432 is rough (KA6ING). Who says 6 is dead? (WB6KLL). If the East Coast had listened, they could have worked more grid squares while double hop was in (K7ZOK). I'm very satisfied with the change from Sections to grid squares. Now, get the committee to change conditions from poor to good! (W7ABX). One operator went into the contest thinking it would be like November Sweepstakes and. was surprised how helpful the competition was.

