## Results, First ARRL UHF Contest

## Uhf: Plenty of room and a big challenge!

By Tom Frenaye,\* K1KI

he first ARRL UHF Contest can best be summed up by saying that enthusiasm was very high, while the conditions were no better than average and the participation a bit less than expected. All in all, the

contest is off to a good start.

Fourteen multioperator and 104 singleoperator entries were received. Participation from areas between Illinois in the East and California in the West was



The winning Pacific Division score came from N6TX. Paul's Mt. Umunhum effort was made possible by his mobile microwave van.

mighty slim, but then the population density is pretty low.

It is not really possible to judge scores on a nationwide basis because of the widely varying numbers of active uhfers. A score of 1500 from Wyoming would have been truly outstanding, but one of 7500 from Connecticut wouldn't have won the division! A comparison of multipliers worked per band will give a better idea of which station/operators deserve the kudos.

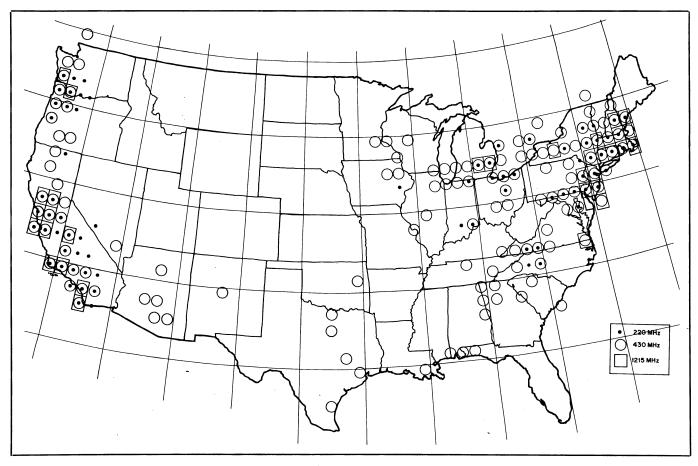
Several scores do merit special attention. N6NB cleaned up in the West with 138 QSOs and 37 multipliers from his favorite spot on Mt. Pinos. In the East, K1FO copped the honors with 96 QSOs and 40 multipliers. The W2SZ/1 group blew everybody away in the East with an outstanding score approaching 30,000 points, from their golden mountaintop. In the West, the K7AUO/7 gang used some ingenuity in building up their 7425 point effort. The club (Tektronix Employees RAC) operated from a hill west of Portland, while a satellite group (K7WW/7) headed out on the road making microwave contacts over 20- to 50-mile paths.

The operating strategies also varied in the single-operator category, with the 220 crowds sharply divided on fm versus ssb. A fair number of 220 fm-only logs were received along with a few stating "no fm," so the battle still rages. N6NB's fine score was greatly aided by his 220-fm setup, though the score would have won the division without fm.

Multipliers on 430 MHz seemed to be easy for K8WW and his four 13-el beams at 85 feet. His total of 27 shows that the Northeast doesn't have it all. WB9SNR, with 21 and VE3BQN at 17 also show that being away from the crowds can be an asset. Of course W3OZ and K1FO may point out that it doesn't hurt to be in the crowd either. N5EX worked everything to

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The feast or famine levels of uhf activity can clearly be seen on this map. The Northeast has the most concentrated activity, with the 220-, 430- and 1215-MHz bands well represented. Except for a few pockets of 1215 and 220 activity, the rest of the East had to make do with 430 MHz. To the west, pickings were very slim until the West Coast was reached and several areas showed good activity. How will the 1979 map look?

be found within 300 miles and only totaled four.

On 1215 MHz, WA3JUF led singleoperator entries with eight multipliers the pair of 7289s and a 4-ft parabolic dish were put to good use.

Above 1215, it was all W7TYR and N6TX, with help from a few friends and some portable gear.

Only a handful of entries showed any operation above 1215 MHz. That will

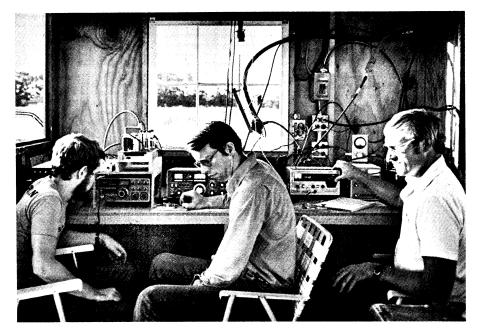
change in future contests with parts becoming available at less expensive prices and the extra points to be gained (though the incentive may still be too low for many).

A bit of DXpeditioning was undertaken by K6KH and K7WW/7 (+WB7CHK). K6KH made a foray into the mountains to the northeast of Los Angeles on 220 MHz, and the K7WW/7 crew explored Oregon with gear for 220 MHz through 10 GHz (except for 1215 MHz). That's a fine way to see how well your gear works over greater distances, if it can be used in a portable/mobile setup.

The logs show that a total of 80 one-byone-degree multiplier blocks had 220-MHz activity, 139 on 432 MHz, and 31 on 1215 MHz. Compare that to the 900 or so available and you'll see that there is plenty of room for newcomers to the uhf frequencies.

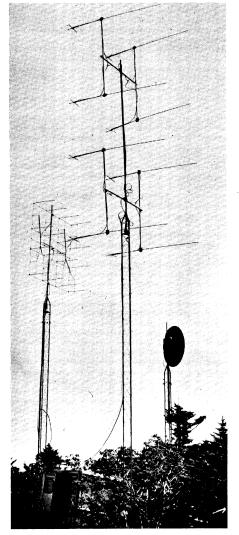
| Division Leaders — Single Operator |         |        | Multiplier Leaders |          |               |    |            |     |          |   |  |
|------------------------------------|---------|--------|--------------------|----------|---------------|----|------------|-----|----------|---|--|
| Canadian Division                  | VE3BQN  | 2112   | 220 MHz            |          | 432 MHz       |    | 1215 MHz   |     |          |   |  |
| Atlantic Division                  | W3HMU   | 8964   | N6NB               | 20       | K8WW          | 27 | WA3JUF     | - 8 |          |   |  |
| Central Division                   | WB9SNR  | 1890   | W2EIF              | 15       | W3OZ          | 25 | N6TX       | 6   |          |   |  |
| Dakota Division                    | _       | _      | K2CBA              | 15       | WB9SNR        | 21 | W3HMU      | 6   |          |   |  |
| Delta Division                     | WB5KIA/ | 36     | K1FO               | 14       | K1FO          | 20 | W2EIF      | 6   |          |   |  |
| Dona Drivolon                      | W5UCY   |        | W3GPY              | 12       | <b>VE3BQN</b> | 17 | K1FO       | 6   |          |   |  |
| Great Lakes Division               | K8WW    | 3645   | W3HMU              | 12       | W3HMU         | 17 | K3IUV      | 4   |          |   |  |
| Hudson Division                    | K2CBA   | 5775   | W1GXT              | 10       | W3IP          | 17 | K2CBA      | 4   |          |   |  |
| Midwest Division                   | KØDAS   | 159    | K6JKQ              | 10       | WA2FUZ        | 17 | W1JR       | 4   |          |   |  |
| New England Division               | K1FO    | 12,480 | WN6CND             | 10       | W1JR          | 17 |            |     |          |   |  |
| Northwestern Division              | W7TYR   | 1404   | W2SZ/1*            | 20       | W2SZ/1*       | 32 | W2SZ/1*    | 10  |          |   |  |
| Pacific Division                   | N6TX    | 7482   | WA2SNA*            | 18       | K2UYH*        | 30 | K2UYH+     | 8   |          |   |  |
| Roanoke Division                   | K4QIF   | 1296   |                    | 10       |               |    |            | Ū   |          |   |  |
| Rocky Mountain Division            |         | _      | 2.3 GHz            |          | 3.4 GHz       |    | 5.8 GHz    |     | 10 GHz   | - |  |
| Southeastern Division              | WB4AEG  | 90     | W7TYR              | 2        | W7TYR         | 2  | W7TYR/N6TX | 1   | N6TX     | 4 |  |
| Southwestern Division              | N6NB    | 15,651 | K7AUO/7*           | 3        | K7AUO/7*      | 3  | K7AUO/7*   | 3   | K7AUO/7* | 1 |  |
| West Gulf Division                 | N5EX    | 60     | *Multioperator     | stations |               |    |            |     |          |   |  |

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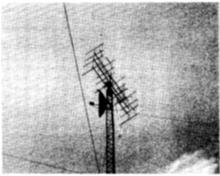


The WB8BKC multiop effort placed first in the Great Lakes Division. Left to right: WA8EUU, WA8HGX, WB8BKC.

The uhf setup from Mt. Greylock (W2SZ/1): (left to right) 96-el on 432 MHz; 88-el on 220 MHz; 6-ft solid surface dish for 1296 MHz.



The K2UYH skyscraping antenna consists of a 128-el Yagi array on 432 MHz and a 5-ft dish at 100 feet for 1296 MHz.



The biggest almost of the contest was the "almost QSO" on 432 MHz between WB6NMT and KH6HME. KH6s were heard on 144 MHz on Saturday evening with S7 signals. 432 skeds were made between NMT, HME, KH6BZF, KH6IAA and N6NB with no results. By 8:30 on Sunday morning signals were down to S3 and continuing to drop. Additional skeds were arranged by telephone. WB6NMT reports, "After the 2 P.M. local test, I could hear what was very weak scratching on 432.000. It was just too weak to tell if it was Paul (KH6HME), or if it was a TV birdie, or whatever. I made mv 2-1/2-minute transmission, and when I stopped (now 432.005), the same weak scratching noise was now on my frequency. It was too weak still to tell just what it was but had a strange feeling it might have been Paul. Just got the confirmation I've been waiting for, it apparently was Paul. He copied my signals S3. I was running 35-W output cw. The signal I was hearing, using a 3-dB NF converter with a 1-1/2-dB loss filter in front, indicated signals were at least 10 dB below the noise, which was virtually nil. I even took the filter out but it remained the same. I suspect that Paul's output power must have been in the very few milliwatts at best. Right after this period all signals (KH6) at my OTH ceased on 144 and 146 MHz. As has been suspected, this apparently followed the same sequence (at least on die out) - the bands may open high, drop down in frequency, and then as the duct goes out, go back up in frequency."

All good things come to those who are patient and persistent. The KH6/W6 432-MHz story isn't finished yet!

Certificates will be awarded to all division winners. In divisions where five to 10 entries were received, the second-place



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| Canadian Division    |  |                    | 27-16-D   |                         | 9- 6-D<br>336- 1- 1-С СТ                                 | WA4ZIA                             | 660- 4- 3-C NC   |
|----------------------|--|--------------------|---|-------------------------|--|------------------------------------|--|
|                      |  | WA4IPI             | 1581- 6- 2-C KY<br>17-14-D  | W9KDR/1                 | 13- 7-D  | WA4SBC                             | 16- 8-D<br>594-18-11-D VA  |
| E3BQN(VE3CR          | 2112- 6- 5-C ONT   | K8DW               | 2- 1-I<br>1071- 3- 3-C OH   | W1JOT                   | 150- 8- 4-D EM<br>1- 1-E                                 | K4LHB                              | 390- 8- 6-C VA<br>5- 4-D   |
| E3AEA/3(VE3s         | 26-17-D<br>FDP (QZ,oprs)<br>120- 8- 5-D ONT                    | W8IDU              | 18-14-D<br>1056-17-11-D MI  | WA1HYN                  | 150- 2- 1-C CT<br>5- 4-D                                 | W4MHQ<br>K4PKV                     | 144- 8- 6-D VA<br>108- 6- 6-D NC   |
|                      | 120- 8- 5-D ONT  | K8DIO<br>WB8PAT    | 990-22-15-D OH<br>504-14-12-D OH  | WA1SQB<br>K1SU          | 5- 4-D<br>84- 7- 4-D CT<br>30- 5- 2-D CT                 | WA4WZQ/4(+K<br>WB4UDS,WD4s         | YBL,WAAWZP,  |
| Atlantic Division    |  | WA8ULG<br>K8ZES    | 378-14- 9-D MI<br>270- 3- 3-C OH  | WA1ECR<br>WA1RWU        | 24- 4- 2-D EM<br>24- 4- 2-D EM                           | WB40D3,WD45                        | 540- 3- 3-C NC   |
| <b>V3HMU</b>         | 8964-25-12-C EPA<br>34-17-D                                    | WA8ZCO             | 7- 6-D<br>84- 2- 1-C MI   | K1LJL<br>WA1GTP         | 18- 3- 2-D VT  |                                    | 15- 7-D  |
|                      | 10- 6-E<br>1- 1-F  | WAUZCO             | 3. 2.D  | W2SZ/1(WA)<br>W2GN.N2FU | UGE,WB1CBH,N4CD,   | Southeastern Di                    |  |
| V2EIF                | 8910-38-15-C SNJ   | K8ATQ              | 1- 1-Е<br>27- 3- 3-С ОН   | MHR QCJ,op              | ors) 29202-41-20-C WM<br>76-32-D                         | WB4AEG<br>WA4CQG                   | 90- 6- 5-D GA<br>45- 5- 3-D ALA  |
|                      | 36-12-D<br>8- 6-E<br>4884-22- 4-C EPA                          | WB8BKC(+WA         | 8s EUU HGX)<br>2997- 8- 7-C MI  | W1XM/W1X/               | 20-10-F  | W4CSS                              | 45- 5- 3-D ALA<br>18- 3- 2-D NFL   |
| SIUV                 | 34-16-D  |                    | 27-19-D<br>1- 1-E   | W3HQT,WA4               | G,K1MK,WÃ1ŴŤŪ,<br>ITTG,NØAL,oprs)                        | Southwestern Di                    | vision   |
| V3OZ                 | 9- 4-E<br>4125-55-25-D MD                                      | Hudson Divisio     | n   |                         | 10830-25-11-C EM<br>50-21-D                              | N6NB                               | 15651-99-20-C SB   |
| 2BWR                 | 3243-11- 8-C SNJ<br>36-15-D                                    | K2CBA(WB2B         | YP,opr)<br>5775-22-15-C ENY   | WINY(WIK                | 10- 6-E<br>K,WAIRWU,WBICAC,                              |                                    | 36-14-D<br>3- 3-E<br>2052- 6- 5-C SDG  |
| A3JUF                | 2808-20- 8-C EPA<br>2- 2-D                                     |                    |   | KAIAPR,opr              | (s) 4212-18-12-C EM<br>36-14-D                           | WB6NMT                             | 24-11-D  |
| /3IP                 | 15- 8-E<br>1995- 2- 2-C MD                                     | WA2FUZ             | 5- 4-E<br>2142-42-17-D NU   | WA2JHR/1(+              | WB4RVA)<br>3800-14- 6-C EM                               | AC6C                               | 3- 3-E<br>1872-35- 7-C ORG   |
| 38PP                 | 33-17-D<br>1638- 7- 1-C EPA                                    | N2CB<br>K2SHB      | 1485-33-15-D ENY<br>720-20-12-D ENY                                     |                         | 38-11-D<br>4- 3-E  | WN6CND                             | 13. 6-D  |
| JBFF                 | 17- 8-D  | WA2TEO<br>WA2EUS   | 351-13- 9-C ENY<br>120-10- 4-D NLI                                      |                         |  | W6CN<br>W6NXB                      | 816-34- 8-C LA<br>540-30- 6-C LA   |
|                      | 7- 3-E<br>1- 1-F   | K2ŪŸH(Multic       | (00   | Northwestern            |  | WA6DCT<br>W7LUX                    | 483-23- 7-C LA   |
| B3EFM<br>2LZF        | 1248-26-16-D MD<br>855-11- 9-C WNY                             | W0.000 0 (1400     | 11628-69-30-D NNJ<br>16- 8-E<br>JG,N2AAZ,W2LVT,WA2<br>WB2s LBP LHG UXA, | W7TYR                   | 1404- 2- 2-C ORE<br>4- 3-D<br>3- 2-E<br>2- 2-F<br>2- 2-G | KEIBY                              | 144- 8- 6-D AZ<br>105- 7- 5-C ORG  |
| 3GPY                 | 8- 6-D<br>828-23-12-C EPA                                      | DTJ JUO UPK        | WB2s LBP LHG UXA,   | 5                       | 3- 2-E   | WA6S ATE MBZ                       | 105- 7- 5-C ORG<br>NGAJA,W6YJO,<br>WB6OUZ,WB9KMO,<br>1833-27- 7-C SB               |
| 3CXU/2               | 828-23-12-C EPA<br>594- 6- 3-C SNJ<br>6- 6-D                   | WD2AA1,oprs)       | 34-14-D   |                         | 2- 2-G<br>1- 1-H   | oprs)                              | 1833-27- 7-C SB<br>10- 6-D   |
| /B2EL.8/2            | 3- 2-E<br>378-14- 9-D WNY                                      |                    | 7- 5-E  | K7ND                    | 1- 1-1<br>594- 8- 5-C WN                                 | West Gulf Divisi                   | on   |
| 2EVJ                 | 336- 6- 5-D WNY<br>4- 3-E                                      | Midwest Divisio    |   | WZZSL/7                 | 10- 6-D<br>84- 7- 4-C WN                                 | N5EX                               | 60- 5- 4-D NTX   |
| 3GAS                 | 324-12- 2-C EPA<br>2- 2-D                                      | KØDAS              | 159- 1- 1-C IA<br>12- 6-D   | K7HSJ                   | 72- 5- 3-C ORE<br>1- 1-D                                 | WB5UER                             | 42- 7- 2-D STX   |
| A3W                  | 2. 2.F   | New England C      | Division  | K7AUO/7(W7              | s ADV UDM.WB7s   | DXpeditions*                       |  |
| ASW<br>SCL<br>ASDMF  | 210-10- 7-C EPA<br>189-21- 3-C EPA<br>120- 2- 2-C MD<br>6- 3-D | K1FO               | 12480-29-14-C CT  | PMP OBD,op              | rs) 7425-20-11-C ORE<br>11-10-D                          | • • • • •                          | 070 15 6 0 000   |
|                      | 120- 2- 2-C MD<br>6- 3-D                                       |                    | 59-20-D<br>8- 6-E   |                         | 2- 2-E<br>3- 3-F<br>3- 3-G                               | K6KH (116-34<br>(117-33<br>(117-34 | 3-1-1-C ORG  |
| 2MRB<br>A3TEM        | 90- 6- 5-D WNY<br>66-11- 2-C EPA                               | WIJR               | 6048-12- 7-C EM<br>44-17-D  |                         | 3- 3-G<br>3- 3-H   | (11/-34<br>(118-33                 | 270-15- 6-C ORG<br>3- 1- 1-C ORG<br>3- 1- 1-C ORG<br>3- 1- 1-C ORG<br>6- 2- 1-C LA |
| 3ETB<br>A3VVG        | 54- 9- 2-C EPA<br>48- 4- 4-D EPA                               | WA1TZV             | 8- 4-E<br>3180- 5- 3-C NH   | N7DB/7(+K7              | 1- 1-1<br>TSV) 27- 3- 3-D ORE                            | K7WW/7(+WB70                       | снк)   |
| 3AKR<br>3GNR/3(+K3TF | 48- 4- 4-0 MD<br>L,WA3FFC,WB3DDA)<br>210-10- 7-0 WPA           |                    | 46-16-D   |                         |  | (122-44                            | 840- 6- 5-C ORE<br>2- 2-D<br>2- 1-F  |
|                      | 210-10- 7-D WPA  | W1FMF              | 2322-12- 5-Č NH<br>31-13-D  | Pacific Divisio         |  |                                    | 2- 1-F<br>2- 1-G   |
| entral Division      |  | W1GXT              | 2214-21-10-C EM<br>20- 8-D  | N6TX                    | 7482-22- 5-C SCV<br>30-12-D                              | (123-43                            | 1- 1-H<br>48- 2- 2-C ORE   |
| BISNR                | 1890-30-21-D ILL<br>1173- 4- 4-C IND                           | K1CM               | 1665-37-15-D EM<br>1584- 6- 3-C NH                                      |                         | 11- 6-E<br>1- 1-F  | (123-44                            | 2- 2-D   |
| 9EA                  | 19-13-D  | K1MNS              | 23-11-D   |                         | 1- 1-H<br>1- 4-I   | (123-45                            | 2- 2-D   |
| A9AHZ<br>9XY         | 480-16-10-D ILL<br>72- 6- 4-D WI<br>60- 5- 4-D WI              | WIUHE              | 2- 2-E<br>1512-36-14-D RI   | K6JKQ                   | 2040-16-10-C SJV<br>14- 8-D                              | (123-43)                           | 378-3-2-C ORE<br>3-2-D<br>1-1-F  |
| A9HCZ                | 60- 5- 4-D WI  | W1XP               | 1440-11- 6-C EM<br>11- 6-D  | WB6JMM                  | 2- 2-E<br>576-24- 8-D SJV                                |                                    | 1- 1-G   |
| elta Division        |  | WA1FSZ             | 5- 3-E<br>1260- 7- 3-C NH   | WB6KBZ                  | 540- 2- 2-C SCV<br>13- 7-D                               | * Numbers in par                   | 1-1-H<br>enthesis refer to   |
| B5KIA                | 36- 4- 3-D LA<br>36- 4- 3-D MISS                               |                    | 19-10-D<br>1- 1-I   | WA6ERB                  | 1. 1.F   | the longitude/l<br>each entry.     | atitude QTH for  |
| /5UCY<br>/B4JGG      | 36- 4- 3-D MISS<br>3- 1- 1-D TN                                | K1ZZ               | 1218- 2- 2-С СТ<br>27-12-D  | K7ZOK                   | 72- 8- 3-D SF<br>27- 3- 3-D NEV                          |                                    |  |
| reat Lakes Divis     |  | K1LPS/1<br>W1AIM/1 | 726-22-11-D VT<br>576-16-12-D VT  | Roanoke Divis           | sion   | Check L on                         |  |
| 8WW                  | 3645-45-27-D OH  | KIVYU<br>AA1A      | 480-16-10-D CT<br>384-16- 8-D EM  | K4QIF                   | 1296-20-12-D VA  | Check Log<br>KAE IQ/4/KAE IV       | V.WA4s BGS DFS.  |
| VB8BEM               | 2016- 5- 5-C MI  | WA5IOD/1           | 336- 5- 2-C EM  | N-TOGIT                 | 4- 3-E   | oprs)                              | ,  |

entry will receive a certificate and where more than 10 entries are received, the top three will receive one. Congratulations to all!

## Soapbox

The inclusion of 220 MHz (even if it can be argued that 300 MHz and up is true uhf) will hopefully stimulate more cw/ssb activity on that band. Very good. (W3GPY) Thanks to ARRL for providing an opportunity to concentrate on the higher bands in a contest/activity environment. (W3HMU) Much activity on 23 cm. Let's do it again next year! (W1JR) Why longitude first? Since the birth of the latitude-longitude system of coordinating, latitude is first. As an old navigator, I consider this *heresy*. (WA5IOD) The contest did bring some old-timers out of the woodwork. (W7LUX) Cool, dry air did

nothing good for tropo. Activity was not at all up to my expectations. (WB9SNR) Of the contests you have created and sponsored, this is the most worthwhile. (K8ATQ) I don't know how I worked anyone on 1296 - when I checked the transmitter I could not find the output on a 1-watt scale!!! (W2EIF) The station will have many changes for the next contest in August 1979. Contacts on 5.8 and 10 GHz should be worth more than the 12 points - perhaps 20 points to increase the interest and pavoff for effort expended. Contacts above 10 GHz should be worth 30 or 40 points, as long as equipment is not just commercial signal generators. (W7TYR) We got eight members to take part and you will get logs from most. (W6CN for the Northrop Radio Club) I've had more contacts on a normal weekend. (AC6C) How about multipliers on the basis of *differential* in lat/long? This would encourage more DX work. (K7HSJ) [How about it? - Ed.] My dog watched, does that make me multiop? (WA8ULG) Met a few new stations, but no new states. (WA4IPI) Conditions were average with no special propagation enhancements evident and plenty of rain at most locations. (K2UYH) I was pleased to hear all of the OSCAR users trying terrestrial operation. (W1AIM) Best DX from here (on 432) was K2UYH - 335 miles. Even K1ZZ with his low power was no problem. I don't know if I dare suggest the adoption of the grid-coordinate scoring system for all vhf contests. It would likely be a burden on 6 m. Still . . . it would be a nice way to come up with a scoring system that would give the stations in the boondocks a fighting chance. (K1LPS) Q87-