# Results, Ninth Annual ARRL 160-Meter Contest

## In the spirit of equal rights, can 160 still be called the "gentleman's band"?

By Bill Jennings,* K1WJ and Tom Frenaye,** K1KI

Average. That's about the best way to describe the ninth running of the ARRL 160-Meter Contest. No better than average conditions, average number of participants, average final scores. When you stop to think about it, average isn't such a bad way to describe the previous 160-meter contest — in fact 160-meter operating in general. Average brings to mind a steady yet purposeful type of operator. Not flashy or radical, but an operator willing to sacrifice speed in operation to take time to get the job done right. A gentleman (gentlewoman?) operator.

The 160 regulars, the operators who nursed 160 through the lean years, those who babysat the fledgling "Top Band" since it was opened for amateur use in the late 1920s, will tell you that the "average" 160-meter band conditions and operators suit them to a tee. And if for a couple of special weekends during the winter months, contest operators can take to 160, raise the level of operating activity for a few hours and co-exist with the average 160-meter operator for the mutual benefit of both, then the purpose of holding such an event as the ARRL 160-Meter Contest has been served.

In the aftermath of the weekend of December 1-3, 1978, 352 160-meter contest entries were received, representing every state but South Dakota, four Canadian provinces, and seven DXCC countries. The 352 logs were a mere 5 percent fewer than the total of 373 entries logged in 1977. Average.

DX call signs found in the various entries included all continents but Africa. Some of the prefixes that were on and available to be worked were CO, DK, F, G, GD, HI, JA, KP1, KG4, KG6, KZ5, HP, OK, PAØ, PZ, TG9, VP2D, VP2V, VP9, VR3, YU, YV, 4U1ITU and 6Y5.

In comparing the 1977 and 1978 160-meter contests, one would be hard pressed to find extreme differences. The average Top Ten scores for both single and multioperator stations dropped noticeably by about 17k points per entry to 76,396 points in 1978 compared with over 93k points per entry for the single operators in the 1977 contest. The multioperator stations in the Top Ten posted an average score about 11k points below the 1977 average of 67,000 points.

Competition was extremely tough for Top Ten scores. A few miscopied call signs or duplicates left in the log might have made a difference of several places on the list. The crowded Eastern part of the country accounted for the major portion of the big scores, though a few W5s managed to sneak in. In the West, K6SE just edged out AA7A, operating from W7IUV, with the extra points coming from a greater number of DX QSOs.

As far as contest statistics go, several bright spots, in the form of new All-Time Division Records, appeared. N4PN, aside from turning in the number one single-operator score in the 1978 contest, now holds the Southeastern Division single op record.

The only multioperator station to better previous division records was K5GO in the Delta Division.

Certificate winners can expect their awards about the 15th of the month that this report appears in *QST*.

For those who haven't tried 160, especially during the contest, and feel that operating on 160 is a completely different ball game compared to the other bands, we'll leave you with the thoughts of W1BB, who gave a few tips on operating in the 160-meter band, published in *QST* in conjunction with the announcement of the first ARRL 160-Meter Contest in 1970: "Operating efficiently on 160 is about like operating efficiently on any other band as far as procedures go, except that it is harder to work DX."

WB4JVY, with a little encouragement from his XYL, WA4ZCS, made the 160 bash his very first contest.

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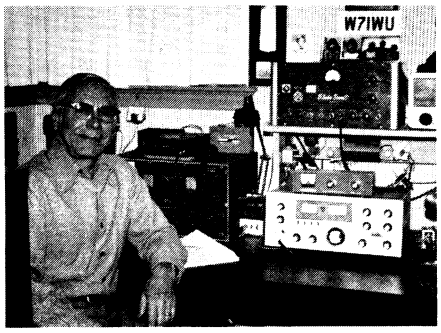
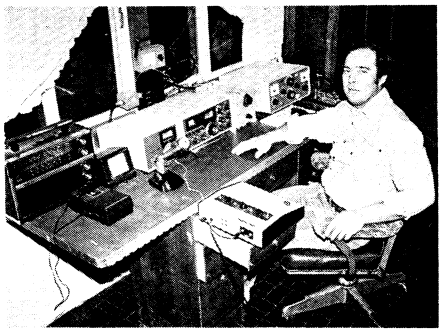



Alan, W7IWU, takes time out from his 160-meter activities to say "howdy from Idaho."



KØGVB, the lone entry from Iowa, put that section into 220 logs.

Left to right: N4FJ, W4WJ and N4OW, the operators of W4WJ, Southern Florida.

**Soapbox**

Got to learn more about the band for next time (AE5E). It is easier to work JAs from here than to work W1s (W7IUV)! This has become a great club activity — a winter field day (K9IFO). My first serious effort on 160, after 45 years (VE2JR). Thanks to the Horn family for letting me borrow 50 acres of noiseless reception. Should have listened to Uncle Richard's opinion — "They weren't long enough, tall enough or enough of them." His turn next year to lay down 7000 feet of radials (WA9PFB). Can't even guess how our random wire worked (TG9ML). Somewhat of a nostalgia trip for me. When first licensed in 1951, the only phone privileges were 10 and 160 meters. Couldn't afford but one crystal so missed out on 160 (W5SOD). Band was even jammed up here in Wyoming. In the first half hour of operation I worked two other cowboys (W7TO). Heard no signals within 400 miles except N5NR (W5GWD). I invested $100 for each additional 1000 points over last year. Am currently looking for financial assistance (WA7GCI). An especially nice contest for contest operators, but not DXers. Quite a few DX window violations (W1BB). We had a ball getting all set up for what we thought was going to be a killer installation with a 5/8 wave vertical. However, all plans do not go well (W7IXZ). Both the 160- and 10-meter contests are noninsanity contests. They allow you a long break time to recharge yourself, fix antennas, meet other people in your family . . . (WB2JSJ). First contest in 16 years of being a ham (WB4JVY). I thought conditions stunk (W6BA). Balloon-supported wire is the answer to the city lot problem. Couldn't launch it until after dark. Tried it earlier and umpteen B-B guns appeared (W4YOK). Main reason for the improvement over last year was the addition of a Beverage receiving antenna and I spent about twice the amount of time operating rather than fixing things (VE3INQ). The amount of courtesy and good operating practices was overwhelming (W6WBY)! First season on 160. Best contest I have ever entered (WAØDXZ/5). Conditions fair/poor. Very little DX to speak of (W4WJ). This writer's versions of W1FB's "Quickie" preamp and the 4T-ES Loop were battle-tested and both well proved their worth (W7XZ).

**Division Leaders**

| *Single Op* | | *Multiop* |
|---|---|---|
| VE3AKG | Canadian | VE1AXT |
| K3BSY | Atlantic | K3SXA/3 |
| WØAIH/9 | Central | W9AZ |
| WØZTL | Dakota | WBØSNH |
| K5UR | Delta | K5GO |
| N4AR | Great Lakes | W8JI |
| W2YV | Hudson | — — |
| WAØTKJ | Midwest | WØEEE |
| W1PL | New England | N1RI |
| W7NCO | Northwestern | W7IXZ |
| W7XZ | Pacific | AI6V |
| W8LRL | Roanoke | W4PRO |
| KØCL | Rocky Mountain | WØMS |
| N4PN | Southeastern | N4BP |
| K6SE | Southwestern | WB7DDQ |
| K5NA | West Gulf | K5OG |
| JA3ONB | DX | W6QL/6Y5 |

**Feedback**

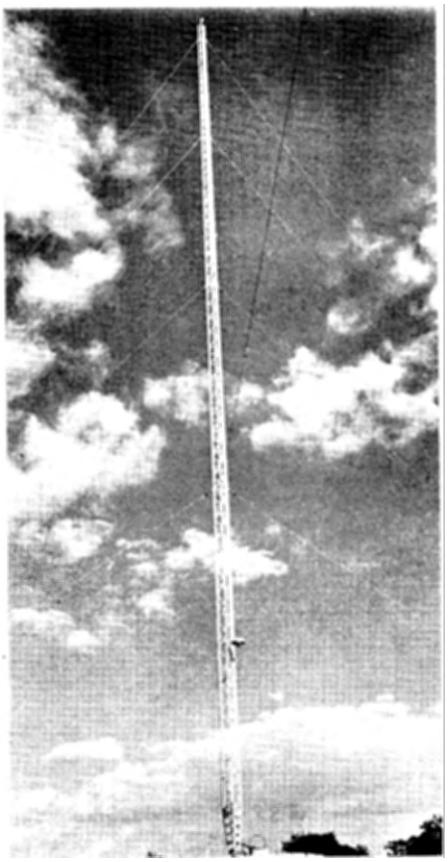
Please note the following corrections to the 1977 160-Meter Contest, the results of which are found starting on page 76 of April 1978 *QST*.

In the Division Leaders Listings, under the multiop heading in the Northwestern Division, the call should read N7NC not N7SC.

The call sign WØBF with a line score of 10,215 - 112 - 45 should be added in second place in the score listings for the Minnesota Section.

**Scores**

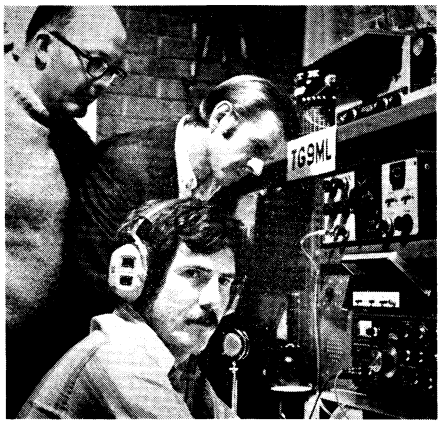
Scores are listed by country, by province within Canada, and by section within each U.S. call area. The highest single-operator station in each ARRL section and in each country receives a certificate. The highest multiple-operator station in each section and country receives a certificate if there are three or more such entrants or, if, in the opinion of the Awards Committee, the entrant displays exceptional effort. Read the score listings as follows: call, score, QSOs, multiplier, hours of operation.



Not everyone has room for a 228-foot vertical but many will envy the W4WJ back forty (or 160?). *(W4WJ photo)*

**Top Ten**

| *Single Operator* | | *Multioperator* | |
|---|---|---|---|
| N4PN | 97,040 | W8JI | 79,849 |
| W8LRL | 88,640 | WA8SJX | 71,923 |
| N4AR | 84,388 | K5GO | 70,664 |
| W2YV | 76,298 | W4PRO | 58,482 |
| K5NA | 75,850 | N4BP | 55,440 |
| N4EA | 75,040 | W8LT | 53,430 |
| WØAIH/9 | 75,024 | K8US | 45,596 |
| K8CCV | 72,494 | K5OG | 41,792 |
| K5UR | 59,685 | W9AZ | 40,946 |
| K9BGL | 59,500 | W5KI | 40,320 |




TG9ML (left), a welcome multiplier in a few logs, shows off his shack to visitors TG9KV and K1MM (sitting).

F8EX sends greetings to fellow 160 buffs from across the big pond.



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## DX

### Cuba
CO2KK 140- 10- 7- 3

### Japan
JA3ONB 1444- 38-19-
JH1LKH 70- 7- 5- 5

### Dominica
VP2DD 234- 13- 9-

### France
F8EX 18- 3- 3- 1

### Guatemala
TG9ML 112- 8- 7-

### Jamaica
W6QL/6Y5(+W6KG) 13,608-162-42-

### Surinam
JA1PIG/PZ 864- 48-18-

## U.S.A.

### 1

#### Connecticut
AA1K 19,695-251-39-28
K1TN 12,648-186-34- 6
N1YL 11,764-175-34-12
W1UL 8745-131-33-13
K1DW 7560-126-30- 9
W1GNC 7223-115-31- 9
K1LGM 6448-124-26- 7
N1JW 4930- 85-29- 5
W1WEF 4860- 81-30- 4
W1WY 4672- 71-32- 4
W1QV 3080- 70-22- 4
W1BWS 2940- 46-30- 5
K1TX 1548- 43-18- 2
K1ZZ 1496- 34-22- 1
K1VKO 882- 21-21- 7
W1BIH 792- 22-18- 1
N1CC 704- 22-16- 3
W1VZ 60- 6- 5- 1

#### Eastern Massachusetts
W1PL 36,305-335-53-27
W1YN 24,318-285-42-13
K1VV 9660-138-35- 6
W1JR 6318- 78-39- 5
W1BB 5504- 80-32- 9
W1BVL 144- 9- 8- 1
W1MX(K1MK,W1XG,WA4TTG, oprs) 16,728-198-41-

#### Maine
N1DE 25,430-275-15-

#### New Hampshire
WA1TZV 11,088-168-33-10
W1TZ 2448- 51-24- 6

#### Rhode Island
N1RI(+KA1s AIR AYM,N1DM, WB1s DET DEU EHO) 32,148-335-47-29

#### Vermont
WB1GQR(WB2JSJ,opr) 24,854-289-43-15
K1IK 23,664-245-48- 6

#### Western Massachusetts
N1YY 15,873-213-37-13

### 2

#### Eastern New York
W2YV 76,298-549-68-23
W2IB 56,522-476-59-24
K2DW 5882- 85-34- 7
K2MN 2704- 52-26- 5
W2DW 868- 32-14- 2

#### N.Y.C. - L.I.
W2KTU 14,042-205-34-20
W2GP 9870-138-35-
N2KA 8096-125-32- 9
N2MS 5012- 88-28- 9
W2DGZ 2120- 53-20- 7

#### Northern New Jersey
N2LT 33,456-318-51-
W2FJ 25,944-279-46-22
W2BHM 21,240-233-45-17
W2GD 11,040-135-40- 2
K2BK 9916-132-37- 9
W2LVT 8122-131-31-
WB7EME/2 7392-114-32-
K2JT 5160- 86-30- 4
WA2PQU 690- 23-15- 7

#### Southern New Jersey
K2BWR 13,572-171-39-14
W2EHN 8085-114-35- 7

#### Western New York
W2MTA 23,083-280-41-16
WA2IKR 17,958-219-41-12
W2IE 11,988-162-37- 7
W2QIP 11,058-144-38- 7
K2OS 10,332-142-36-12
W2ZOJ 7047-120-29-11
WA2IKO 6144- 96-32-13
WA2UUK 5220- 87-30-23
WB2QAX 3317- 52-31- 6
WA2EYA 3250- 65-25-17
WB2FUY 2024- 46-22- 6
WA2RXB 1922- 31-31-13
WA2AOG 1596- 38-21-
W2AAU 1083- 27-19-
W2STM 1020- 60-17- 3

### 3

#### Delaware
K3HBP 7458-113-33- 8
K3SXA/3(+N3ND,K3SM) 33,746-356-47-35

#### Eastern Pennsylvania
K3UEI 47,681-466-51-23
W3NZ 18,128-203-44- 6
W3AJS 14,436-199-36-15
N3KR 10,980-151-36-13
K3OQF 10,692-147-36-13
W3CNS 7904-104-38- 4
W3AP 5110- 73-35- 2
W3BGN 3380- 65-26- 1
K3NGN 2304- 48-24- 3
W3RJ 480- 24-10-

#### Maryland - D.C.
K3ZJ 41,028-393-52-23
K3ZZ 39,273-363-53-21
W3GN 31,872-329-48-
K3TA 18,791-217-43- 5
N3TR 17,775-196-45- 6
W3FA 13,338-168-39-
K3KA 4402- 71-31- 6
WB3GWM 882- 21-21-
W3PEV 30- 5- 3- 1

#### Western Pennsylvania
K3BSY 50,232-447-56-24

### 4

#### Alabama
K4TO 51,129-366-69-17
WB4JVY 2738- 37-37-16

#### Georgia
N4PN 97,040-590-80-
K4BAI 9435-126-37- 7
AA4EI 1480- 37-20-
WB4NMA(+W4DWE) 800- 25-16- 2

#### Kentucky
N4AR 84,388-561-73-19
K4FU 44,100-350-63-14
W4YOK 35,400-295-60-13
N4XM 10,682-106-49- 7
W4RHZ 6460- 95-34-20
WB4HNH(+WB4ASW) 15,372-183-42-22

#### North Carolina
W4TMR 47,488-453-56-25
K4JYS 35,616-313-56-18
N4PY 35,496-345-51-23
AA4S 19,656-171-56-10

#### Northern Florida
N4WW 55,699-372-73-25
W4VQ 18,480-159-56- 6
WA4SGF/M 12,804-141-44-13
WB5YLT/4 672- 21-16- 5

#### South Carolina
WA4JWS 5432- 97-28- 8
K4CNW 5162- 89-29- 6

#### Southern Florida
W4OO 43,416-309-67-17
N4IN 39,372-276-68-21
W4BV 8385-106-39-
N4BP(+N4UM) 55,440-367-72-28
W4WJ(+N4s FJ QW,oprs) 29,986-257-58-24

#### Tennessee
N4ZZ 55,945-416-67- 8
K4MZE 616- 22-14- 4
KB4CG 30- 5- 3- 1

#### Virginia
N4EA 75,040-542-67-30
W4YE 25,700-259-50- 8
KA4DSL 25,438-275-46-13
WB4URW 22,638-228-49- 9
N4RA 15,179-176-43- 8
W4DM 11,508-137-42- 4
N4NW 9590-137-35- 5
N4CD 6264-108-29- 7
W4UG 4960- 80-32-11
W4KMS 4500- 75-30- 8
WD4IMB 4050- 45-45-
K4OAQ 2808- 54-26- 2
N4MM 972- 24-18- 1
W4PRO(+K3RUQ,WB3CCZ,N4DJ W4HBK,N5BA) 58,482-507-57-30

### 5

#### Arkansas
K5UR 59,685-428-69-22
K5GO(+K8CC) 70,664-478-73-19

#### Louisiana
K5KLA 23,956-226-53-13
N5AN 20,104-175-56-10
WD5HBK 494- 19-13-11

#### Mississippi
WA0DXZ/5 17,480-187-46-40
N5XA 13,728-140-48-12
AE5H 6228- 85-36- 9
W5AQ 5840- 70-40- 8
W5GWD 4140- 69-30-12
WA5NYG/5(Multiop) 8568-126-34-12

#### New Mexico
W5DO 19,140-162-35- 8

#### Northern Texas
N5JB 23,328-216-54-12
K5RA 12,400-158-40-
N5XU 11,472-117-48-11
W5FIX 9890-112-43-10
W5QF 9758-119-41- 8
WB5RPU 8323-100-41- 7
N5UA 5304- 75-34- 8
W5SOD 3224- 62-26- 8
KA5CDZ 528- 22-12- 2
WD5BIK(+WB5VZL) 1258- 37-17- 5

#### Oklahoma
W5HFN/5 360- 15-12- 9
W5KI(+N5MF,K0JPX) 40,320-317-63-24
KN5TTN(+K5QNM) 5082- 77-33- 9

#### Southern Texas
K5NA 75,850-502-74-20
K5SF 13,865-143-47-15
N7OA/5 4650- 75-31- 7
K5RC 3080- 55-28- 2
K5DL 672- 21-16- 3
K5OG(N5UT,K5NI,oprs) 41,792-319-64-30
K5TM(+K5ZD) 8858-100-43- 5
AE5E/5(+AC5R,WB5s HZC ITT, WD5BIP) 4901- 83-29-15
N5EM(+WA4EWV,K5HGB) 2652- 51-26- 8

### 6

#### East Bay
K6HIH 17,776-199-44-
N6LU 12,160-151-40-17
AD6D 7800-130-30-25
K6TS 7398-137-27-13
WA6EUZ(+WB6OVV) 14,848-181-41-27

#### Los Angeles
K6SE 55,755-399-63-19
WA6MBP 10,400-130-40-13
WB6WQA 6200-100-31-11
W7CB/6 5400-100-27- 9
N6IH 154- 11- 7- 2

#### Orange
N6PE 18,135-200-45-13
W6BA 16,544-173-47-13

#### Santa Barbara
W6WBY 3476- 79-22-11
W6JEO 2736- 72-19- 9
K6MXO 722- 19-19- 6
W6TYR 722- 19-19-15
N6VR 420- 21-10- 1

#### Santa Clara Valley
N6RZ 23,712-225-52-18
WB6NSF 15,826-193-41-19
N6QW 1908- 53-18- 8
W6FOF 484- 22-11-14

#### San Diego
N6ND 19,200-200-48-15
K6NY 14,490-153-46-26
WA6VNR 7385-101-35-19
K6XT 5200-100-26-
W6XM 3240- 81-20- 6
W6ZT 154- 11- 7- 6

#### San Francisco
AE6U 9945-109-45- 8
WB6FCR 154- 11- 7- 3

#### San Joaquin Valley
K6MO/6 15,480-167-45-11
K6YK 11,340-135-42- 7
W6MTJ 6912- 96-36-13
N6YD 528- 24-11- 3
AI6V(+W6YKM) 22,654-241-47-

#### Sacramento Valley
N6JV 27,976-269-52-
AA6DX/6 6550-131-25-10
WA6BRV 1764- 49-18- 4

#### Hawaii
KH6IJ 2024- 46-22- 7

### 7

#### Arizona
W7IUV(AA7A,opr) 53,046-400-63-20
WB7DDQ(N7AZ,K7RMJ, WB7AMR,oprs) 25,864-244-53-19

#### Idaho
N7SU 13,366-163-41-
W7HZL 8750-125-35-16
K7FR 3520- 80-22-12
K7TM 2982- 71-21- 3
K7BUY 1682- 29-29-
W7IWU 896- 28-16- 2

#### Montana
K0PP/7 22,672-218-52-22
W7CJB 9792-136-36-19
W7JYW 8680-124-35-17
K7CPC 104- 13- 4- 3

#### Nevada
W7XZ 31,860-289-54-28
WB7OQW(K7OX,opr) 15,238-199-38-19
AE7K 2090- 55-19- 7

#### Oregon
W7NCO 34,587-279-61-
WA7RTA 22,491-199-51-20
WA7PEZ 6250-125-25- 9
W7LT 946- 43-11- 8
W7IMP 684- 38-18- 6
AE7W 616- 28-11- 3
W7IXZ(+KB7BM,W7IYA, WB7VZP) 26,117-259-49-

#### Utah
K7UM 21,700-217-50-13

#### Washington
WA7GCI 32,376-277-57-30
W7NP 17,507-212-41-18
W7DPW 14,828-167-44-21
N7AM 14,212-154-44-11
K7DZ 12,978-147-42-11
W7BYK 7840-112-35-14
K7IDX/7 2688- 56-24- 6
W7TU 2280- 60-19- 5
WB7OVA 1352- 26-26- 5
W7SX(+WA7ZTN) 20,332-221-46-20
N7RV(+WA7FXB) 1856- 58-16- 9

#### Wyoming
W7TO 7056- 98-36- 7
W7IRL 2304- 48-24- 4
WA7ZZY 1512- 42-18- 7

#### Alaska
KL7GIH 4200- 84-25-12
KL7HBK 924- 33-14-13

### 8

#### Michigan
K8MJZ 40,880-365-56-23
W8CNL 27,608-235-58-15
W8IDU 16,320-180-51-25
K8LJG 5600- 80-35- 4
K8NG 5280- 80-33- 7
W8VPC 4582- 79-29- 5
W8JQT 3132- 54-29- 3
W8WVU 2352- 56-21- 4
WA8SJX(+K8s FC JM) 71,923-505-71-32
K8HPS(WB8VDL,W9PX,K0XR, oprs) 18,090-201-45-14

#### Ohio
K8CCV 72,494-538-67-30
W8DB 47,502-374-63-15
WA8TNO 23,500-235-50-32
K8FU 17,424-198-44-10
W8EX 11,137-125-43- 6
K8BL 8658-111-39- 5
WB8IGY 6480- 90-36-
K8MR 6200-100-31- 3
K8IQQ 3780- 70-27- 5
K8CQ 3562- 67-26- 3
W8JI(+KA8BVM,N8ABS,WD8s CNQ DXX) 79,849-521-77-
W8LT(K1LT,K8s ND NU,WB8s INY YIJ,WD8AMX,oprs) 53,430-408-65-42
K8US(+W8QWI) 45,595-413-55-20
N8TL(+WB8s MVW QMC) 30,240-280-54-27
AC8E(+W8IDM) 22,748-242-47-24

#### West Virginia
W8LRL 88,640-530-80-
K8OQL 27,489-279-49-
K8SR 468- 18-13- 1
W8JWX 320- 16-10- 1

### 9

#### Illinois
K9BGL 59,500-422-70-22
K9BG 30,894-268-57-18
W9OA 30,804-302-51-12
W9PNE 27,572-220-61-12
WA9PFB 26,847-231-57-22
K9AB 23,808-246-49-13
K9JU 20,910-205-51-14
W9GT 18,336-191-48-10
K9CW 11,760-140-42- 9
W9REC 1932- 42-23-
WD9GGY 1840- 46-20- 3
W9ABA 1496- 44-17- 6
W9HPG 320- 16-10- 1
W9AZ(K9s IFO NR,W9NKR, WB9s WEC WEU ZKK,WD9CJA oprs) 40,946-347-59-21

#### Indiana
WB9QCP 58,630-446-65-24
W9LT 45,087-394-57-19
K9ZUH 22,400-224-50-15
W9JOO 18,216-207-44-11
W9MDW 16,830-165-51- 8
W9RE 11,256-134-42- 4
K9FW 4056- 78-26- 7
AB9U 800- 25-16- 4
W9EI(+W9NJD) 24,200-242-50-16

#### Wisconsin
W0AIH/9 75,024-527-72-18
W9WQ 21,244-226-47-16
N9KS 420- 21-10- 2

### 0

#### Colorado
K0CL 32,547-281-57-10
N0ZA 1428- 34-21- 5
W0MS(+WB0CMM) 34,998-304-57-

#### Iowa
K0GVB 26,840-220-61-18

#### Kansas
WA0TKJ 48,685-370-65-25
N0IN 23,997-209-57- 9
W0AM 19,342-152-63-14
N0UU 14,196-135-52-11
W0UY 9594-117-41-14
K5JZN/0 1680- 35-24-

#### Minnesota
W0EKS 8832- 96-46-
K0SE 2400- 40-30- 4
WB0SNH/0(+WB0NHD) 10,412-137-38-16

#### Missouri
N0TT 41,391-327-63-18
WA0FBQ 28,329-247-57- 9
W0BTD 28,320-236-60-
AE0K 10,912-124-44-16
W0EEE(WA0RAD,WB0s GRJ ZLB,WD0GOX,oprs) 14,022-171-41- 7
W0RGX(+WD9EKB,WD0s EFP FDH) 7490-107-35-25

#### Nebraska
K0UP 37,359-295-63-16

#### North Dakota
W0ZTL 20,300-203-50-11
K0FRP 3696- 66-28- 5
WA6FUZ/0 1216- 32-19- 7

## VE

#### Maritime - Newfoundland
VE1AXT(+VE1BCZ) 18,120-219-40-30

#### Quebec
VE2JR 2880- 60-24-15
VE2OJ(VE2s NM SD,VE3s ABG HJV,oprs) 17,094-231-37-22

#### Ontario
VE3AKG 27,649-320-43-11
VE3INQ/3 12,628-154-41-29

#### British Columbia
VE7CC 25,742-206-61-
VE7BBQ 1764- 49-18-
VE7CMK 280- 14-10-

#### Check Logs
W1AW(W1EH,opr), WA2QKF,K3VA,W4WZR, W6BYH,W7CX,W0RMA

#### Disqualifications
K1PBW,WA1TFF,K2IGW,N5RR (+AA5B),K9MK(+K9s GL VV, WB9TIY),K0JUS(+AE0N,K0s SHO TG).



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