Results, Seventh Annual ARRL 160-Meter Contest

December 4-5 event tops off the 1976 contest calendar.

By Bill Jennings,* WA1AHI

Just like that helium-filled balloon that "escaped" your sweaty little palm at the circus or parade, the 160-meter scores continue to rise, higher and higher, the trailing string just out of grasp. Scores that would have made the top-ten listing only last year, good solid scores, obtained by hours of squeezing very weak signals out of the normally high QRM and QRN levels, miss the elusive 10 highest score listings by several thousand points. Why? Perhaps better propagation conditions. Maybe the easy access to the electronic operator aids; electronic memory keyers and microprocessor "log-keeping machines" that take the burden of a lot of the grunty work away and allow the operator more time to operate rather than perform menial chores, peripheral to the actual working of QSOs and multipliers. The proliferation of multimode, multiband super whoopie, deluxe transceivers that now include 160-meter coverage as a standard feature might also be the answer to the question of why more QSOs and multipliers show up each year to be worked. And the scores continue upward.

The seventh annual running of the 160-Meter Contest drew almost a 20-percent higher turnout in terms of entries received, a total of 364 entries, compared to 306 in the 1975 event.

Even though it took a score 26 percent higher this year just to place in the top ten in the single-operator category than it did last year, six of the top-ten single operators were also in there in 1975. K1PBW repeats this year as the top single operator, even breaking his old all-time single-operator record by over 11,000 points at 111,972. Jim is still the only operator to break the 100,000 point barrier. Other "repeaters" to the top-ten single-operator category are W2DXL, W3IN, K4PUZ, W8LRL and WA9BWY.

On the multioperator side of the ledger, an 11-percent jump in the minimum score needed to make the top-ten listing, and even more of a status quo as far as the stations that did make it. Seven of the top-ten multioperator stations of 1975 also show up on the 1976 list, among them the multioperator stations of WA2SPL and WA8IJI, who retained their positions of numbers one and two respectively, each increasing their total score by about 7,000 points. W4PRO, W4OZF, K8HLR, W8LT and WØAW are the rest of the stations that retained their top-ten positions.

It takes teamwork to build a competitive station. At left is Ken, W9JZE, antenna designer. On the right is Ron, the antenna erector. Seated center is Rod, WA9OGD, who operated the station to 383 QSOs and 54k points in the Illinois Section.

For those of us interested in the number of DX stations worked by each entrant, W3IN has come up with a nifty plug-em-in formula to calculate the number of DX stations, strictly from the information given in the line score for each entrant. The formula is as follows:

$$N = \frac{\frac{A}{B} - 2C}{3}$$

where N = number of DX QSOs, A = total score, B = number of multipliers and C = total number of QSOs.

Contrary to popular belief, KV4 *is* included in the West Indies Section, *not* to be claimed as a separate country multiplier, or as a five-point DX QSO. The rules are quite explicit in stating that QSOs with ARRL sections count two points *not* five points, and KH6 and KL7 as well as KP4 stations all are within ARRL sections. More than a few entrants will find their scores adjusted to reflect the above conditions and to conform to the published rules.

Soapbox

Line noise? Good thing that I didn't have a chain saw. (VE5DX) The 26-year-old vertical with its duplex-control circuits (15 thru 160 meters) still working FB. The only conductors are those of one lone coax, underground. (WØGK) Just testing my new home-brew transverter, using my 80-meter dipole as a

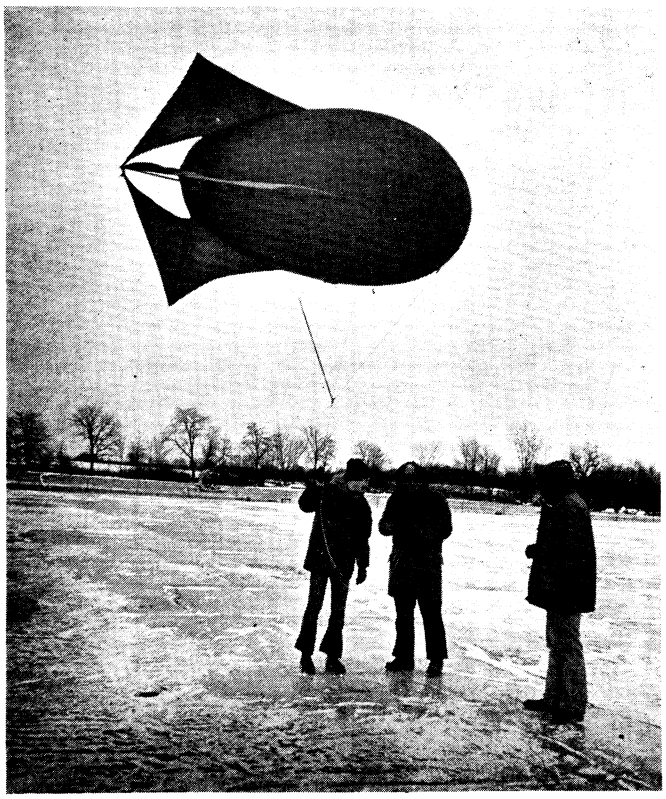
*Communications Assistant, ARRL

The rebirth and death of the Kytoon. Vic, WA1LKU, Bob, W8ERD, Gary, WB8IBZ, and Cathy, WB8TXE, all part of the mob at W8LT, are shown above resurrecting their beloved antenna support balloon, the Kytoon. The Kytoon seemingly met its fate during the 1975 160-Meter Contest (see story in June 1976 *QST*) and the continuing saga of the Kytoon is related to us by Jeff, WB8JXS, another of the Ohio State University Amateur Radio Club members.

"Everything went smoothly as far as the Kytoon was concerned. We lowered it and gave it a booster of gas on Saturday morning, and it kept away from the trees and metal structures. Saturday night was very cold, and on Sunday morning the Kytoon was dragging a bit. It was taken down and given a booster. It flew straight again, and we continued operating. The sun came up. It was getting warmer, and we were glad that we didn't have to gather up all of the antennas in the cold. The gas in the Kytoon expanded (PV=nRT). When the contest had ended and the last push on the Accu-Memory had faded away, we glanced up at the ". . . old dependable Kytoon.

"There was something strange about it. It seemed to have added a new, lighter color to itself. It was too far away to see exactly what was going on, so we took it down.

"It looked like it was giving birth to the largest spawn of guppies recorded in modern times. The outer skin had burst lengthwise, from the nose to the tail, allowing the gas bladder to grow out of it. This is probably the last time that this Kytoon will fly."



Marconi, and surprised at how well it worked! (W2LYH) Conditions on Friday night were very good. On Saturday, a front moved through with static becoming very heavy and signals down in level. I heard all sections but VE7, VE8, KL7 and Montana. It's most frustrating to hear a needed section who slips away never to be heard again, or even worse to hear one call CQ test and you crank away at him with never a reply! (W4QM) The highlight of the contest, for me, was a contact with W6OKK. Pat and I were classmates back in 1942 at Navy Radio Material School, Treasure Island, California. Of the 40 or so hams who were in class 3B this is the first "on-the-air" contact that I've had with any of them. (W6MUV) Boy! What fun this contest is going to be when LORAN is finally removed! (WA6MBP) I noticed that 25 percent of all stations worked were two-letter calls. (K5LZJ) It was a great satisfaction to beat Murphy by having two, 20-year-old SX-99 receivers. The first one blew up half-way through the contest. (W7JAL) I changed my 80-meter dipole to a 160-meter dipole on the second day of the contest with greatly improved results. Seemed to work fine even with the end going in all directions to keep it inside my lot. (WBØBIY) Last year my score was so poor – less than 4000 points – that I didn't bother to send it in. But if I had, I would have won for San Diego Section!! I know of scores higher than mine this year, but here is my log anyway. I've learned my lesson! (W6ABT) The band was unusual this year (that is for 4-land), in that there was a complete absence of atmospheric QRN during the entire contest period. Although I prefer to operate (with my power level) above 1830, LORAN became so intense at times that I was compelled to go below the DX window. Because of the conditions, the low end of the band sounded like 40 meters during the Sweepstakes. (W4FCJ) The activity was so great that DX was very difficult to work. DX stations who tried to work in among the Ws were really clobbered and not many other than the Europeans tried to use the DX window. The window was fairly well respected in principle by the contestants, but they encroached a kHz on each end, which narrowed it down effectively to three kHz. (W9GT) A pox on those that contact a KL7 and then call CQ on that frequency! (W9EI) 160 is the last band populated only by gentlemen and ladies. Nice to work a band where courtesy is taken for granted. (VP1MPW) Condx very good. I had to go to work on Sunday night, so not much of a score. An always pleasant contest. (JA2UEO) Another great 'test. Now up to 47 states worked on 160. Just KL7, KH6 and Idaho to go. Spent 90 percent of my time above 1830 kHz, as there was no room below. (VE3ECP) Haven't heard the old band so busy since before World War II. (VE7AGN) Heard all U.S. call areas, but could only work 6 and 7. Other areas seemed to work only the loud top layer. (VE7XN) Enjoyed meeting old friends and such good operators. A pleasure not to have the usual contest QRM. (W2DW) Understand that 92 multipliers were on the air. Missed simple ones like ND, SD and some close-in DX. Just can't seem to break that magic 100k score. (WA2SPL) Used Yaesu FT 101B, 95 watts and a low *mongrel* dipole. (W2GP) ZL3ZQ blew my mind for some reason. Too bad DX activity was low, I might have recovered more rapidly. (W2MTA) Amazing amount of daylight activity this time. (AC3IN) Antenna is a 66-foot, 7-MHz aluminum dipole roped to a tree. W3IWT shivered out words of encouragement as we laid radials in the snow. (K3BSY) In one 20-minute period on Dec. 5, I counted 12 U.S. stations operating in the DX window. At the very least you should publish their calls; at the very best, make operation in the window a disqualification criteria. (K4SB) After five hours of 2.1-kHz selectivity, my order for rig's cw filter is in the mail. (WA4ECB) Heard a couple of fellows on 80 talking about the contest, so I decided to get on. Built transmitter, a 210 Colpitts oscillator and modified the 75A1 receiver. Lots of fun with 10 watts input. (W4NUM) With a top-loaded vertical, tangled in a 40-meter beam, Globe Chief and VF 1 VFO, I think next year that I will upgrade to a spark gap and a clothesline! (WB5HOD) Recommend that DX-to-DX contacts be allowed in the future to promote more DX activity. (K6SE) Chased all over on Saturday night looking for Maine and Delaware. Almost fell out of my chair when K1RQE (Maine) and W3GL (Delaware) both came back to one of my CQs at the same time. (WB6NRK/7) Too many alligators for us elephants! (K7RA) Seems like the big signals get bigger every year. (WA8SJX) Every QSO is simply more fun on 160. (W8IBX)

Division Leaders

SINGLE OP	*DIVISION*	*MULTIOP*
AC3IN	Atlantic	K3BSY
W9MTT	Central	W9YH
WØHW	Dakota	WØAW
K4PUZ	Delta	
K4GSU	Great Lakes	WA8IJI
W2DXL	Hudson	WA2SPL
WØNFL	Midwest	WØIS
K1PBW	New England	W1MX
W7SUY	Northwestern	K7GGD
W6KQG	Pacific	
W8LRL	Roanoke	W4PRO
WBØLLR	Rocky Mtn.	WØPXO
K4SB	Southeastern	W4OZF
K6SE	Southwestern	WB6HJW
W5SBX	West Gulf	K5QNM
VE3IXE	Canadian	VE1AXT

Jim, WA1WVK, piloted station W1YNC to 26,061 points and third place in the Connecticut Section.

Top Ten

SINGLE OP		*MULTIOP*	
K1PBW	111,972	WA2SPL	97,193
K4GSU	99,636	WA8IJI	90,244
K4PUZ	95,978	WØAW	86,250
W2DXL	94,836	K8HLR	85,320
W8LRL	93,808	W9YH	84,916
W9MTT	91,476	W8LT	79,125
AC3IN	89,908	W4OZF	75,522
WA9BWY	85,396	W4PRO	73,416
W9DL	82,288	WA8SJX	56,445
WA5RTG	81,928	K8SJU	54,746

Check Logs

W1HDC W1HGT W2LYH WA9QHO/2 K4JM AA4WCG W5IOU W7IMP W7MKB K9AKC WØAIH WØLNZ VE3AWE.

Scores

Scores are listed by country within each continent, 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. Asterisks denote Hq. staff members, who are not eligible for awards when operating their own station or that of another staff member.

DX

Belize

VP1MPW 9090-101-45-30

Czechoslovakia

OK1ATP 850- 25-17-10
OK2PGU 2- 1- 1- 1

England

G3UBR

G3UBR(G3ZQN,G4s BCH,BTY, oprs.) 5670- 81-35-11

Finland

OH2BO 144- 12- 6- 2

Republic of Ireland

EI9J 30- 5- 3- 2

Japan

JA3ONB 702- 27-13- 4
JA9BOH 108- 9- 6- 3
JA2UEO 96- 8- 6- 2
JH1LKH 2- 1- 1- 1

U.S.A.

1

Connecticut

W1FB* 39,232-296-64-18
W1BIH 27,664-241-56-42
W1YNC(WA1WVK*,opr.) 26,061-254-51- 7
AA1VCG* 21,573-225-47-12
K1TFA 19,044-207-46-13
K1LGM 16,614-213-39-18
W1WY 15,512-128-56-16
K1RGO 8034-103-39- 8
W1VZ 2640- 60-22- 5
K1ZZ* 2184- 52-21- 2
W1QV 2100- 50-21- 2
WA1WVK* 850- 25-17- 2
W1GSH 748- 22-17- 3

Eastern Massachusetts

K2JOC/1 59,592-367-78-21
W1FJJ 33,040-274-59-42
W1PL 26,950-265-50-42
W1RR 15,317-134-53- 6
W1GDB 12,276-186-33-42
AA1MSK 3696- 89-32- 5
W1BB 2472- 35-24- 7
WA1QKD 650- 25-13- 2
W1MX(WA1RJX,WA4TTG,oprs.) 52,930-379-67-42

Maine

K1RQE 42,048-270-73-17
W1HRQ 31,722-308-51-30

New Hampshire

W6MZW/1 27,200-205-64-13
K1GQ 15,635-137-53-42

Rhode Island

K1LPA 42,222-330-62-42
WA1YPN(W1ELQ,WA1s NXW,POJ, RFT,oprs.) 45,568-341-64-42

Vermont

K1IIK 17,888-205-43-10
W1SPK 570- 19-15- 4

Western Massachusetts

K1PBW 111,972-606-86-33

2

Eastern New York

W2DXL 94,836-539-84-42
AA2EAH 66,450-425-75-21
W2LW 25,821-222-57-42
WB2DXL 21,648-221-48-42
W2MNK 18,768-194-48-17
WB2NEC 10,101-135-37-35
W2DW 1890- 45-21- 2
W2IP 300- 15-10-42
WA2SPL(+WB2OEU) 97,193-560-83-42

N.Y.C.-L.I.

WA2YJN 32,460-263-60-19
W2KTU 21,600-240-45-22
WB2FLF 7910-113-35- 5
W2GGP 7750-125-31-42
WB2HZH 3888- 81-24-42

Northern New Jersey

WA2SRQ 38,280-313-60- 9
AB2CST 21,000-250-42-42
WA2UOO 19,787-209-47- 8
W2KHT 16,800-197-42-19
W2WQ 12,616-166-38-42
W2HUG 7400-100-37- 4
W2GXD 7004-103-34- 4
W2MPP 650- 25-13- 5

Southern New Jersey

K2BWR 15,600-153-50-15
W2PAU 11,152-136-41- 6

Western New York

W2MTA 49,302-366-66-42
AA2QKF 22,795-241-47-17
AD2FJ 14,580-162-45-12
AB2ABD 3618- 67-27- 4
WB2JLM 2100- 50-21- 6
WB2GIN 960- 30-16- 7

3

Delaware

W3GL 22,734-206-54- 9

Eastern Pennsylvania

W3FM 55,338-395-69-21
W3NZ 32,872-286-56-42
W3AJS 20,020-226-44-42
W3BGN 19,575-210-45- 9
W3AP 18,084-204-44- 6
K3II 17,908-202-44-42
WA3SXU 9072-126-36- 8
W3NUA 6160- 88-35- 6
K5JZN/3 950- 25-19- 3
K3JJO(+WA3VCA) 14,965-181-41-42

Maryland-D.C.

AC3IN 89,908-581-76-31
WB2JYM/3 25,245-246-51-11
K3ZZ 25,308-219-57-12
AC3USS(WA1FEO,opr.) 23,688-252-47-17
W3FCR 1504- 47-16- 7

Western Pennsylvania

WA3WIK(WA3SZX,opr.) 80,064-550-72-30
W3UHP 30,264-291-52-24
W3HDH 15,006-183-41-10
W3BZN 6734- 91-37-18
W3SN 4898- 79-31- 6
K3BSY(+W3IWT) 49,042-394-62-26

4

Alabama

W8FAW/4 26,818-250-53-10
K4TO 22,048-208-53-42
WB4VKW 12,784-136-47-42
WB4ASV 3132- 54-29- 5

Georgia

K4SB 71,213-497-71-42
K4QMQ 68,724-492-69-25
W4YWX 40,722-304-66-10
WA4IAR 23,744-221-53-42
WB4RUA 22,860-189-60- 9
AC4WRY 5244- 66-38- 6

Kentucky

K4GSU 99,636-648-76-28
K4FU 45,990-327-70-15
W4YOK 12,760-145-44-42
W4KFB 10,406-121-43- 9
WB4ECB 9120-120-38- 5
WA4EBN 8584-116-37-12
WB4KTR 32- 4- 4- 2
WB4NTB(WA4UNJ,WB4DEM, oprs.) 4256- 76-28- 9

North Carolina

W4TMR 47,368-379-62-29
K4JYS 30,385-256-59-26
W4HHN 10,192-101-49- 7

Northern Florida

K4YFQ 48,032-304-76-19
K4IEX 27,328-218-61-10
W4QN 1224- 36-17- 7

South Carolina

WA4UPR 33,728-269-62-35
AD4II 24,300-222-54-16
K4RF 11,850-117-50-11
WB4TGQ(+WA4s JWS,QQG,VZQ, WB4s EFZ,FDU) 8296-122-34-28

Southern Florida

W4QM 47,451-331-69-20
WA4NFF 38,280-281-66-15
W5SUS/4 21,982-188-58-24
W4AWS 11,224-122-46-14
WA4ZHU 7600- 97-38-42
K4JDC 6392- 94-34-14
AA4LZR(WA4FCT,opr.) 4512- 69-32- 7
W4MAN 3648- 54-32-42
W4BAA 1224- 34-18- 3
W4GUU 784- 28-14- 7
W4NUM 348- 13-12-42
W4OZF(+K4DBZ) 75,522-438-82-30

Tennessee

K4PUZ 95,978-644-74-30
W4LUH 41,040-342-60-19
WA4ATI 7176- 92-39-16
W4FCJ 5624- 74-38- 9
K4MZE 84- 7- 6- 1

Virginia

K4CYU 63,802-428-73-42
W4WSF 41,654-350-59-12
W4DHZ 39,894-318-61-36
W4KFC 34,371-300-57-42
W4ZM 24,024-231-52- 9
K4JWD 14,514-177-41-10
K4RS 12,915-142-45- 9
W4NVN 9360-130-36-36
W4FZG 4158- 77-27- 4
K4KA 4026- 61-33- 3
K4FTO 3952- 76-26-42
W4JVN 3780- 70-27- 8
W4KMS 3500- 70-25-10
WA4MJE 360- 15-12- 2
W4PRO(+K3RUQ,W4HBK, WA4DUS) 73,416-465-76-42

5

Arkansas

WA5RTG 81,928-533-76-29
W5KL 26,400-220-60-42

Mississippi

W5TXA 25,315-206-61-16
WA5NYG/5 19,504-184-53-42
W5XX 9718-113-43- 3
W5AQ 6493- 99-22-20
W5GWD 1716- 39-22-20

New Mexico

W5DO 20,496-183-56-42

Northern Texas

W5ZSX 45,866-320-71-17
K5JVF 36,352-250-71-23
K5QNY 35,092-283-62-22
WB5KIU 32,574-267-61-23
W5FIX 12,136-148-41-17
WA5VOQ 10,528-112-47-10
W5QF 10,336-136-38-42
W5LA 2160- 54-20- 3

Oklahoma

WA5KUD/5 8282-101-41-10
WB5GMK 1344- 32-21- 5
K5QNM(+AB5JFR) 17,680-170-52-25

Southern Texas

W5SBX 58,504-406-71-18
K5DEG 35,216-281-62-18
W5RPJ 15,750-175-45-15
AA5LTQ 12,648-124-51-16
WB5IZN 6916- 91-38- 3
AB2UFG/5 180- 10- 9- 1
WB5HOD 108- 9- 6- 3
K5LZJ(+WB5LVL) 1936- 44-22- 4

6

East Bay

K6HIH 35,526-270-62-42
W6FCU 252- 14- 9-
W6EJA 108- 9- 6- 2

Los Angeles

K6SE 72,930-442-78-26
W6RW 33,215-242-65-11
WA6MBP 10,304-112-46-17
WA6VCZ 7272-101-36-10
K6YFZ 3420- 57-30-42
W6RTT 1024- 32-16- 4

Orange

WB6ZVC 50,694-351-71-24
W6BA 15,510-165-47-17
W6SKQ 2812- 74-19-21
AB6AKR 1326- 39-17- 3

Santa Barbara

W6TYR 1020- 30-17- 7
WB6HJW(+WA6MSN) 34,584-262-66-17

Santa Clara Valley

AA6PGB 44,287-317-67-42
K6STI 41,726-323-62-34
W6OKK 4212- 78-27-42

San Diego

K6NA 29,632-227-64-11
W6BLZ 15,225-100-75-11
WA6CXK 12,848-146-44-42
W6ABT 10,450-103-50-10

San Francisco

W6KQG 47,056-337-68-32
WB6NHF 16,954-173-49-42
K6LRN/6 340- 17-10- 2

San Joaquin Valley

AD6MO/6 23,100-185-60-16
W6MTJ 20,706-203-51-31
K6TG 6820-110-31-16
W6MUV 1360- 40-17- 7
WB6ITM 50- 5- 5- 1

Sacramento Valley

W6ZGM 11,136-116-48- 7
W6OWP 4576- 88-26-15
WA6BRV 1700- 50-17- 4

Hawaii

KH6IJ 12,896-124-52- 7
KH6CHC 11,656-112-47-42

7

Arizona

WB6NRK/7 51,246-345-73-42
WB7CRK 27,918-210-66-17
K7WQO 3080- 55-28-42

Idaho

W7SUY 33,672-276-61-42
W7LDG 6460- 95-34-21

Montana

K7ABV 5110- 72-35- 6
W7LR 4698- 81-29- 5
AD7CPC 4380- 73-30-12
W7CBY 2500- 50-25-15

Nevada

W7MRS 46,308-333-68-19
W7YN(K6ILB,opr.) 38,934-303-63-42
W7ABX 8260-118-35-11
W7DIM 3360- 56-30- 8

Oregon

WA7PEZ 12,870-143-45-15
W7LT 2856- 68-21- 9
W7VSE 2392- 46-26- 6

Utah

W7CYH 16,830-187-45-19
WA7OAU 11,280-120-47-12

Washington

W7DPW 30,680-236-65-42
WA7GCI 24,300-189-60-31
WA9RAT/7 10,500-125-42-42
W7NP 10,668-127-42-15
WA7OFH 9918- 87-57- 8
W7HAD 7424-116-32-24
W7DAZ 6438- 87-37- 9
W7BYK 5814- 75-38-14
K7JRE 1870- 55-17- 6
K7DZ 1848- 44-21- 6
W7DRA 1634- 43-19- 9
K7GGD(+W7DNU,WA7s WMC, WMD) 17,388-189-46-19
K7RA(+K7JCA) 16,640-160-52-42

Wyoming

W7JAL 7030- 95-37-22
W7TO 2376- 44-27- 3

Alaska

KL7GIH 360- 20- 9- 3

8

Michigan

W8YY(WA8ZDR,opr.) 33,728-263-64-29
W8VSK 33,604-271-62-42
WA8WWM 26,290-239-55-13
W8KAZ 14,784-168-44-42
W3GN/8 11,528-131-44-42
W8CNL 10,752-128-42-12
WB8WTD 7276-107-34-42
WB8IOT 5984- 88-34-42
WA8CZH 4340- 70-31- 3
W7KQU/8 3528- 42-42- 3
K8HLR(+K8IDE,WA8s EDC-of JUN) 85,320-588-72-32
WA8SJX(+WA8WCZ) 56,445-396-71-42
W8MAI(K8SLE,W8s GHN,OFG, WWO,WA8s TBL,ZSE,WB8NSF, oprs.) 27,888-249-56-30
WA8TDY(+K8DYZ) 22,936-244-47-42

Ohio

K8CCV/8 65,688-470-69-29
W8DB 59,892-428-69-25
W8QXQ 22,256-214-52- 8
K8CVJ 18,304-176-52- 6
W8EX 12,628-151-41-10
W8PCS 12,341-142-43- 9
W8IBX 11,520-128-45- 4
AA8TYF 2704- 52-26- 2
WA8IJI(+K8KAS,WB8s MZZ,TCO) 90,244-574-77-30
W8LT(WA1LKU,K8MLO,W8ERD, WB8s IBZ,INY,JXS,PHI,TXE, oprs.) 79,125-520-75-36
K8SJ(+K8JK, W8s QHW,QKO, WB8RYZ) 54,746-440-62-26
WA8YEE(+WB8s FMX,WMB) 44,713-365-61-42
WA8ZDF(+WB8RIJ) 41,478-333-62-10

WA8YWX(+W8IDM) 29,680-262-56-18
WB8GUJ(+W8LWA,WB8s GQH, JJI,KGO,MVR) 23,638-223-53-42
AB8OFR(+AB8s ILW,MRU,RDO, WB8s GXB,JKY,NTY,SVN) 23,320-220-53-42

West Virginia

W8LRL 93,808-548-82-34
K8OQL 30,090-295-51-30
WB8UKQ 4200- 75-28-42

9

Illinois

W9DL 82,288-550-74-23
K9FB 68,072-508-67-42
W9YYG 56,028-403-69-18
WA9OGD 54,040-383-70-35
W9GT 50,470-356-70-21
WA9HHH 35,931-300-59-14
K9AB 23,816-229-52-15
W9OHH 19,502-199-49-10
W9AG 14,896-152-49-42
AD9UKM 11,562-141-41-42
W9UDK 9964-106-47- 5
AC9QWM 9922-121-41-42
K9LWR 9546-129-37-12
W9REC 7200-100-36-42
WA9IXF 6768- 94-36-42
K9KEP 5508- 81-34-10
W9GSB 2450- 49-25- 6
W9ABA 1840- 46-20- 3
WB9KLW 1548- 43-18-15
W9YH(WB9s IJV,IMV,NPB,OEP, oprs.) 84,916-598-71-42
K9UYK(+K9s CHZ,DDA,WA9SBV, WB9s APE,QPI,RRM,WBØWCL) 52,564-385-68-39
W9AZ(multiop) 43,407-343-63-42
W9QVE(WA8AYC,K9IKI, WB9MNT,oprs.) 23,956-226-53-28

Indiana

W9MTT 91,476-585-77-32
WA9BWY 85,396-571-74-30
K9UWA 61,180-437-70-17
W9BRN 49,210-350-70-29
AB9QCP 47,256-355-66-23
AC9LT 43,824-326-66-18
WB9UHI 41,470-319-65-13
K9ZUH 19,458-207-47-20
W9JOO 15,824-184-43-13
WB9BUV 11,040-138-40-42
WA9ITB 10,752-112-48- 6
W9EI(+W9NJD) 39,294-333-59-33

Wisconsin

WA9MCC 80,446-545-73-28
W9GIL 14,490-161-45-42
K9DAF 14,280-140-51-42

Ø

Colorado

WBØLLR 32,949-260-63-15
WØETT 32,004-254-63-42
WØPHF 21,840-182-60-42
WØRE 4950- 75-33-11
K2YYN/Ø 1872- 36-26-42
WØPXO(+WA8BHS,WØECN) 32,028-234-68-42
K8ILI/Ø(+WØMVR) 20,240-184-55-21

Iowa

WØNFL 47,448-328-72-25
WØBQ 2400- 50-24-42
WØIS(+K9DMR,W9AMF,WB9s ASF, FGN,FVY,JWH,MXI,OOS,YTT, WØOJD,WAØs,WGL,WNE, WBØLHE) 52,920-420-63-42
WBØUUA (+KØGXR, WAØs MHJ, ODK,UIB,WBØs KUJ,OLX) 50,952-386-66-33

Kansas

ACØIUB 33,792-264-64-15
WØPSF 16,359-142-57-13
WØAM 16,058-128-62- 6
WAØMLE 16,014-157-51-42
WBØBIY 15,455-139-55- 6
WAØGSG 2800- 50-28- 2
WAØTAS 2214- 41-27- 5

Minnesota

WØHW 57,615-416-69-16
WØBF 19,570-173-45- 6
WØAW(+WAØYLN,WBØs ANT, DSJ) 86,250-572-75-33
KØJUS(+KØSHO,WAØRSE, WBØHLS) 45,696-336-68-41

Missouri

WAØFBQ 42,108-319-66-17
WØGK 20,502-201-51-23
WØJRP 3776- 59-32-42

North Dakota

WØZTL 31,878-253-63-13

VE

Maritime-New Foundland

VE1CD 38,155-271-65-29
VO1HP 2461- 37-23- 7

VE1AXT(+VE1BCZ) 24,192-237-48-32

Quebec

VE2WA 25,116-237-52-15
VE2GS 2750- 55-25- 6
VE2DDH 1020- 34-15- 7
VE2OJ(VE2s DNW,SO,oprs.) 17,100-190-45-17

Ontario

VE3IXE 53,935-398-67-42
VE3ECP 53,064-399-66-42
VE3AUI 15,936-166-48- 4

Manitoba

VE4VV 3650- 73-25-42

Saskatchewan

VE5DX 46,760-334-70-42

British Columbia

VE7AGN 5146- 83-31-42
VE7VO 3822- 91-21-16
VE7XN 1320- 44-15-42