

# Results, 1994 ARRL International DX Contest

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The ARRL International DX Contest has been around for a long time. For many, it's the highlight of the operating season. For others, it's an excuse to escape from the winter doldrums, either by DX-peditioning someplace or by hiding out in the shack for a weekend of relaxation and fun. For still others, it's a good chance to work rare DX stations or fill out band-country totals for various awards. For stations outside the US and Canada, it's an opportunity for exciting runs of contacts, or to find elusive band-states for 5-Band Worked All States as the thousands of US hams who turn out bring the bands to life.

Last year's DX Contest writeup started off with "Someone swiped the ionosphere!" To anyone with a passing knowledge of the sunspot cycle, it should come as no surprise that whoever swiped the ionosphere last year didn't give it back. We're clearly on the down side now, and it's time to adjust our expectations (and strategies, and antenna plans) accordingly. Conditions may have been punk, but that didn't stop you from turning out in big numbers and making the best of what propagation was available. After all, everyone is struggling with the ionosphere—it's not just you.

While you're reading this, you should keep one very important thought in mind: We've been spoiled during the past six or so years. With operator, antenna and equipment improvements and burgeoning contest activity, we've been treated to an escalation in contact and multiplier totals reminiscent of the explosion of the real estate market in the '80s. Even though many of this year's Soapbox comments bemoan poor conditions, the truth of the matter is: In almost every category, scores this year are *substantially higher* than those of the sunspot *peak* in the late '70s and early

'80s! Is that really so bad?

As the score boxes clearly show, the place to be during these low sunspot years is just south of the US border. Contesters in Mexico, Aruba, Curacao, Antigua, and the Cayman Islands finished extremely well in the competition. With shorter (or, depending on where you live, nonexistent) high-band openings to Europe, stations from the Caribbean, Central and South America attract a lot of attention. Short skip and transequatorial propagation really come into play on the higher bands. While stateside stations were scratching around for 10-meter contacts and dreaming of the good old days of a couple years ago, the top DX scorers on both modes were busy racking up 59 multipliers and lots of contacts on that band. For example, all-band single-op Dave, K5GN, made 126 contacts on 10 meters during the CW weekend this year (surpassed only by multiops AG6D and W3LPL), compared with the 1064 Bob, KQ2M, made two years ago. Last year's top DX phone single operator, HC8A, made 5364 10-meter QSOs; even with marginal conditions, Bob, WX4G, at P40J still managed 3815 10-meter contacts this time around.

But don't get us wrong—there were European openings if you knew when to look. For example, on CW, top all-band single op Randy, K5ZD, worked a total of six European stations on 10. His best times on 15 were from roughly 1300Z to 1600Z each day, when the Europeans rolled in at a rate of roughly 85 to 90 an hour. There were some JAs to be had on the East Coast on 15, but only for about an hour Saturday night (from 2300Z to 2400Z), and for about 20 minutes or so during the last hour on Sunday. On the West Coast, however, we find a different story. West Coast Region leader KA6SAR (operating at W6EEN) was running even in QSOs with Randy at the be-

ginning of the contest. But what do you do when you run out of JAs to work? Europeans were few and far between in Mike's log, and not being able to surf the airwaves for European hordes hurt both his QSO and multiplier totals.

A similar pattern emerged on phone. Tim, NU6S, at WC6H didn't work his first European until 3 1/2 hours into the contest. What European runs he did have came in small spurts, and 40 meters never opened up there for him at all—he only worked six. On the East Coast, meanwhile, top single op John, K1AR, managed only two Asian stations on 40, and made 76.9% of his QSOs with Europe, mostly on 20 and 15 meters.

With declining sunspots, you'd expect 80 and 160 meters to pick up some of the slack. Not necessarily! On phone, 160-meter scores were about the same or down slightly in most categories, while 80-meter scores were noticeably higher. On CW, the low bands were a



If you didn't work PY0 in the phone contest, don't blame Peter, PY5CC! He completed 6744 QSOs from PY0FM.

## Top Ten

WVE Low-Power		WVE QRP		DX Low-Power		DX QRP	
Call Sign	Score	Call Sign	Score	Call Sign	Score	Call Sign	Score
K7GM	1,111,647	AA2U	384,948	ZF8BS (AA6KX,op)	3,992,028	C6AHL (K3DI,op)	1,715,538
K7SV	964,353	W1QK	157,437	VP2E/WJ2O	3,660,768	7L1ETO/JD1	80,535
W2TZ	875,874	N7IR	138,546	PJ8H (K3UOC,op)	2,830,905	G0TDX	73,476
W1PH	814,752	KA1CZF	128,331	NP2I	2,570,589	LU1FNN	50,619
AC1O/A	794,205	N1AFC	73,632	V31TP (WC0W,op)	2,455,464	EA7AAW	37,524
N8II	585,420	WT3W	72,921	KP4VA (KP4TK,op)	2,235,600	Z32DR	31,845
K1VUT	580,716	N1CWR	71,280	TE5T (TI4SU,op)	2,099,538	JH1HRJ	29,529
K2TE	476,580	KN4QS	70,800	8P9DX (VA3DX,op)	1,437,318	PA0ADT	24,393
WS1E	436,392	W8QZA/6	70,755	PY2OU	1,002,960	IK0CNA	21,708
K5KLA	432,684	WB2CPU	67,320	PT7AQ	909,072	LA2HFA	20,790
<b>Phone</b>		<b>Phone</b>		<b>Phone</b>		<b>Phone</b>	
Call Sign	Score	Call Sign	Score	Call Sign	Score	Call Sign	Score
K2SG	1,008,714	AA2U	424,800	KP2/KE2VB	4,642,596	PY3OC	45,600
K5RX	957,456	KA1CZF	156,843	NP2I	3,257,115	F5BEG	29,925
W2TZ	944,775	N0AFW	150,195	KP2AD (AA9DW,op)	2,511,444	JA2JSF	29,100
WS1A	729,618	W7YAQ	143,658	K6GSS/KH6	1,525,104	JA2IVK	17,835
K7GM	713,625	N6PEQ	130,356	LT1N (LU2NI,op)	1,368,006	I0KHP	15,696
N6WLX/8	667,488	KV8S	108,966	H8OMA	1,271,700	WP4KTF/IHP2	15,120
WA7BNM	651,036	W6CN	105,504	TE5T (TI4SU,op)	870,945	G0NYD	12,321
NM3E	542,568	W2CRS	91,575	PJ8CW	866,520	IS0LLJ	10,323
WD5K	498,636	W8QZA/6	84,762	PR2R (PY2KP,op)	857,220	LU1FNN	9,900
AC0W	448,716	KG6AR	84,480	PW2N (PY2NY,op)	856,818	YL2TF	6,723

## Top 10

### W/VE CW

Call Sign	Score	160	80	40	20	15	10
K5ZD	2,951,676	38/32	185/56	796/83	810/87	774/82	49/31
N2LT	2,374,152	33/27	101/55	584/86	715/84	630/85	53/37
K3ZO	2,355,525	28/21	137/55	618/86	729/90	643/83	44/26
W1KM	2,331,000	25/23	239/62	613/75	584/87	758/78	36/25
W2SC	2,203,848	20/18	145/49	595/84	629/80	712/79	47/32
K1ZZ	1,947,234	30/26	112/46	447/74	553/84	580/86	76/45
K5GN	1,786,560	15/12	60/27	722/85	239/69	699/82	126/45
N2BA	1,749,600	14/12	84/43	411/80	644/89	606/71	41/29
K4PQL	1,673,595	22/18	103/48	535/75	441/75	637/77	33/22
W9RE	1,440,594	10/9	66/39	324/78	345/78	654/85	74/40

### W/VE Phone

Call Sign	Score	160	80	40	20	15	10
K1AR	4,046,805	27/22	186/58	258/71	1396/133	1095/116	83/43
K5ZD	3,669,534	41/28	199/59	250/73	1044/110	1203/118	101/43
N6BV	3,180,384	25/23	189/62	138/61	1293/124	872/103	75/36
W9RE	2,396,676	20/15	90/48	14/58	609/17	1110/123	90/37
N2LT	2,295,408	29/25	85/47	134/63	798/101	846/100	80/43
W3BGN	2,266,041	39/28	142/56	151/52	782/101	785/104	94/38
VO1MP	2,072,391	0/0	192/63	352/70	849/88	649/82	45/28
K3ZO	2,058,402	19/16	116/51	234/63	978/109	569/92	50/18
K5MR	2,018,967	26/20	76/43	224/57	273/64	1255/109	143/44
W2HPF	1,900,500	23/20	96/48	139/54	591/99	802/101	99/40

## W/VE Single Operator Assisted

### CW

Call Sign	Score	160	80	40	20	15	10
K3WW	2,703,834	39/32	140/65	571/94	731/88	649/88	47/39
K1IU	2,064,423	31/30	136/57	365/85	593/93	599/88	45/36
AA1K	1,997,556	33/30	82/51	498/93	445/92	507/91	71/50
N3AD	1,866,834	19/16	78/54	512/91	440/94	530/88	51/39
VE3EJ	1,865,376	37/32	99/59	313/86	485/94	534/93	56/44
K3IPK	1,734,342	20/17	93/51	422/91	521/85	500/83	41/35
N2MM	1,564,362	22/21	90/51	420/90	379/87	443/84	44/40
W2GD	1,546,230	36/31	150/63	412/87	425/90	264/83	58/44
K2SX/1	1,222,716	12/11	71/39	271/82	433/79	469/77	42/26
AA3B	1,199,394	13/12	68/43	181/79	44/80	469/82	62/38

### Phone

Call Sign	Score	160	80	40	20	15	10
K1DG (WZ1R,op)	2,761,632	29/24	115/57	169/77	1082/122	581/118	88/48
K3WW	2,463,453	30/25	167/63	168/78	844/124	482/113	98/56
N3AD	2,160,504	21/17	110/58	196/77	576/117	572/117	145/58
K2WK	2,087,493	26/24	91/59	93/64	881/115	435/116	81/55
KC1F	1,890,000	15/13	79/44	102/63	1039/115	383/101	62/39
WA8ZDT	1,669,500	15/15	81/50	114/56	543/101	654/102	93/47
K3IPK	1,576,896	19/15	63/43	110/69	523/100	583/114	78/41
ND3A	1,569,225	21/18	83/55	112/70	403/115	474/113	132/56
N3RR	1,451,160	31/26	97/51	119/68	374/107	390/110	149/55
W2GD	1,422,798	35/28	103/61	119/72	358/112	357/111	101/58

## Top 10

### DX CW

Call Sign	Score	160	80	40	20	15	10
V26AS (YU1RL,op)	5,467,200	246/48	550/56	1060/59	1150/59	1259/59	1095/59
P40R (K4UEE,op)	4,786,776	207/43	527/53	854/59	1057/60	1074/59	1087/58
ZF8BS (AA6KX,op)	3,992,028	175/41	474/53	725/58	1214/58	1269/58	354/48
VP2E/WJ2O	3,660,768	32/11	396/49	859/57	942/57	950/58	1058/56
PJ9JT (W1BIH,op)	3,588,138	161/42	325/52	603/56	882/59	901/58	854/54
PJ8H (K3UOC,op)	2,830,905	124/30	339/42	892/56	848/56	655/51	453/50
PS0F (W9VA,op)	2,712,981	65/18	141/37	487/51	1072/57	741/56	831/52
NP21	2,570,589	0/0	252/41	462/52	842/55	892/57	835/56
V31TP (WC0W,op)	2,455,464	0/0	159/41	438/53	909/57	922/56	696/55
OA4CWR	2,423,811	0/0	109/31	246/45	972/57	972/55	972/59

### DX Phone

Call Sign	Score	160	80	40	20	15	10
P40J (WX4G,op)	7,488,954	183/38	474/53	651/57	1444/60	1067/60	3815/59
V26AS (YT1AD,op)	7,175,064	141/45	553/55	867/59	1259/60	1742/60	2508/59
ZF2RT (WA0PUJ,op)	6,715,170	303/47	777/59	548/59	1103/59	2355/59	1459/59
PY0FM (PY5CC,op)	5,381,712	0/0	216/45	537/51	2038/59	1952/57	2001/54
VP5E (WE3C,op)	5,355,663	210/42	822/58	572/56	1155/59	1924/59	844/49
HH2PK	5,238,108	267/44	365/48	572/54	758/55	1605/58	1921/58
KH6WR6R	4,836,000	235/46	663/57	880/56	627/54	1298/57	1257/55
KP2/KE2VB	4,642,596	29/15	405/56	319/44	1479/56	1731/59	1644/46
FG5BP (KA3DSW,op)	4,136,859	126/35	356/48	388/49	1146/57	1065/59	1470/55
NP21	3,257,115	0/0	170/40	153/53	915/56	1245/57	2022/53

## Top DX Single Operator Assisted

### CW

Call sign	Score	160	80	40	20	15	10
NP4Z	4,013,862	112/31	389/50	841/58	979/59	1147/59	793/57
DK3GI	1,019,466	0/0	203/35	301/44	626/54	687/45	10/8
DL7UTA	176,784	0/0	22/11	66/25	232/43	188/37	0/0
JQ1NGT	93,240	0/0	10/3	46/8	12/19	228/36	34/8
JA7SUR	93,138	0/0	38/12	141/25	65/17	83/23	35/9

### Phone

Call sign	Score	160	80	40	20	15	10
EA3BT	167,286	0/0	12/9	8/6	321/41	228/42	0/0
JA2AXB	121,680	0/0	0/0	20/7	197/30	139/29	151/14
OZ1ADL	118,218	0/0	0/0	0/0	646/64	0/0	0/0
GW4BLE	19,200	0/0	3/2	16/14	5/4	104/30	0/0
UC1WWR	13,680	0/0	0/0	0/0	37/17	83/21	0/0

disappointment for just about everyone. CW QSO totals on 80 meters were down by as much as a third compared to last year's totals. Although 15 and 20 meters were okay (if down a bit from last year on both modes), 40 meters was a clear winner both weekends as most of the top-scoring stations cranked out QSO and multiplier totals beating last year's numbers.

## About the Score Listings

Before we discuss the final standings, we'd like to talk about several changes in how we're presenting the results. In keeping with the trend of the past several contests, we are listing single operator all band entries by power, and then by score, instead of by score alone. The popular regional boxes are included for the first time this year, in order to give you a better picture of how things were in your area of the country. Due to limits of space (and possibly interest), we have only included them for the single-operator, W/VE, all-band categories. If there is enough interest, we can explore expanded regional or continental leader listings in *NCJ*.

The number of logs is down a bit from last year. We received 1346 DX logs (663 CW, 683 phone) and 1676 W/VE entries (714 CW, 962 phone), along with 118 check logs, for a total of 3140. This compares with 3654 last year.

## W/VE Highlights

We've already talked about the top all-band, high-power single ops K5ZD (CW) and K1AR (phone), who left everybody else in the dust. The number two spot on CW turned into a very close race between two veterans: Lew, N2LT, topped Fred, K3ZO, by a mere 19,000 points (or, if you prefer, Lew finished 56 QSOs behind, but 13 multipliers ahead.) Although the northeast stations had a decided advantage on both modes, Mike, W9RE,



Ward, N0AX, had his two sons and one of their friends help out on a multisingle effort. (l-r) Ward supervises, while budding contester Reid runs the pileup and Lowell and Webster look for multipliers. He reports, "Their only difficulty is being mistaken for a YL, 'They think I'm a girl!'"

**Top W/VE Multioperator Scores**

**CW**

**Single Transmitter**

Call Sign	Score	160	80	40	20	15	10
AD1C	2,900,502	40/37	191/63	671/95	626/91	726/92	59/40
K1DG	2,639,247	38/33	102/55	617/97	638/93	734/90	54/35
W3BGN	2,504,100	45/35	175/69	651/99	498/91	533/90	62/41
N4AR	1,748,466	25/19	148/59	420/91	328/86	570/93	62/41
K4VX	1,546,620	26/20	83/50	428/79	305/79	589/83	59/35

**Two Transmitter**

Call Sign	Score	160	80	40	20	15	10
K1AR	5,935,980	46/40	310/75	1169/111	1256/122	1034/110	80/50
K1TR	4,437,696	36/36	283/68	941/102	1058/111	792/99	78/48
N3RS	4,434,882	43/36	224/68	988/108	818/111	904/105	90/54
AG6D	1,646,352	4/2	154/26	609/81	563/85	384/69	140/33
W6ISA	1,162,548	0/0	43/17	522/63	382/72	435/97	121/39

**Unlimited**

Call Sign	Score	160	80	40	20	15	10
N2RM	6,016,032	59/42	410/82	1050/116	1218/122	948/109	113/57
W3PL	5,953,164	80/46	409/80	1012/112	1078/122	944/113	145/68
K1KI	5,328,708	69/44	309/78	1000/114	1082/116	915/109	101/50
K3LR	4,791,258	54/41	231/66	811/107	1136/124	867/105	108/55
K5NA	4,148,340	57/44	211/68	716/96	1073/115	742/99	106/54

**Phone**

**Single Transmitter**

Call Sign	Score	160	80	40	20	15	10
K1RX	3,306,450	27/57	235/66	176/80	1167/128	678/122	67/48
K1VR	2,884,935	33/25	169/61	193/74	901/121	766/114	99/46
AA1K	2,815,995	39/30	124/58	233/80	828/125	726/111	116/51
K5NA	2,446,986	32/28	89/57	202/78	714/111	727/119	94/46
K5XI	2,156,220	21/16	86/45	302/63	390/93	852/118	174/61

**Two Transmitter**

Call Sign	Score	160	80	40	20	15	10
AD1C	5,344,038	29/25	406/79	352/88	1425/134	1159/131	115/54
N3RS	4,126,470	31/26	181/70	400/91	956/135	871/137	176/67
K59K	4,109,184	25/20	118/57	264/79	1050/135	1127/140	200/61
W6EEN	2,508,480	12/9	59/26	729/53	335/67	1165/102	380/55
WX0B	2,274,885	26/19	66/39	172/54	434/95	1210/110	147/52

**Unlimited**

Call Sign	Score	160	80	40	20	15	10
N2RM	8,749,500	52/37	464/91	556/102	1596/156	1627/156	455/72
W3PL	8,427,612	61/38	454/88	519/105	1835/156	1251/148	531/69
K3LR	6,840,255	45/35	253/84	452/101	1323/146	1252/149	520/78
KY1H	4,466,844	44/32	358/81	248/83	1282/134	790/117	290/61
W4MYA	3,913,485	43/32	147/66	307/95	1187/144	672/118	177/60

**Top DX Multioperator Scores**

**CW**

**Single Transmitter**

Call Sign	Score	160	80	40	20	15	10
P49V	5,367,627	261/49	492/55	984/57	1170/57	1083/57	1383/58
XE2EBE	3,282,510	149/43	418/65	649/57	705/56	856/56	653/53
V31WWW	3,280,320	178/48	487/55	551/52	782/56	681/53	738/56
EA8ZS	3,193,089	71/19	356/47	756/58	1166/58	1133/57	279/44
6E2T	3,041,280	50/20	476/54	1093/59	881/58	760/57	260/40

**Two Transmitter**

Call Sign	Score	160	80	40	20	15	10
6D2X	8,011,644	386/54	853/59	1842/60	1852/60	1689/58	1030/58
IQ4A	2,027,592	0/0	333/39	1035/57	840/55	877/51	44/14
HG5A	1,318,086	5/4	221/35	643/50	689/59	657/46	657/46
RK2FWA	1,314,819	53/15	311/39	439/52	826/59	468/44	0/0
4N1Z	1,062,270	0/0	165/28	764/51	412/54	558/44	15/8

**Unlimited**

Call Sign	Score	160	80	40	20	15	10
9A1A	2,369,484	33/16	276/35	1086/52	812/58	891/47	139/36
JA1YDU	1,092,618	1/1	156/29	458/47	532/55	493/50	163/20
UT2IZZ	237,405	0/0	23/13	226/42	202/45	144/33	0/0
JA1YFG	33,450	0/0	0/0	44/15	94/13	85/22	0/0

**Phone**

**Single Transmitter**

Call Sign	Score	160	80	40	20	15	10
P40V	9,859,860	337/47	868/59	915/58	1716/60	2107/59	3667/59
V31DX	8,878,584	280/48	804/57	1264/57	1933/60	2124/60	2351/56
JP9B	8,597,292	274/51	593/56	909/57	1667/60	2173/59	2788/58
EA8ZS	4,305,528	26/15	359/53	498/56	2208/61	1786/59	267/35
XE2EBE	3,491,511	370/52	519/55	498/54	355/53	1294/55	755/38

**Two Transmitter**

Call Sign	Score	160	80	40	20	15	10
WPAU	9,424,002	356/52	894/57	1357/59	1888/60	2588/59	2005/59
C6AHK	6,262,191	713/56	1079/57	738/56	2114/60	1685/56	340/28
PR0R	3,961,425	0/0	5/4	294/56	1011/56	1641/59	3024/56
IQ4A	2,887,584	0/0	295/44	997/58	1798/60	1195/57	12/5
RK2FWA	2,018,988	11/8	251/33	300/44	1717/61	1020/59	0/0

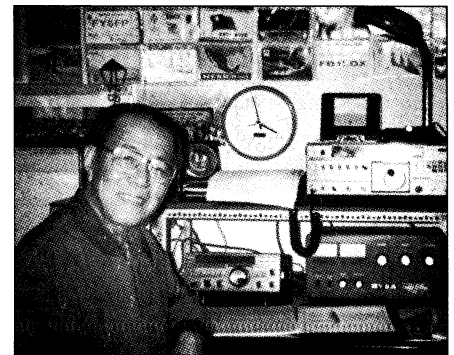
**Unlimited**

Call Sign	Score	160	80	40	20	15	10
6D2X	14,675,778	760/55	1679/59	2023/60	3251/60	3839/60	2267/60
CT5P	3,648,645	0/0	481/50	975/57	2447/60	1355/59	7/5
LU4FM	3,402,648	0/0	0/0	284/40	1018/58	1205/59	2744/59
9A1A	2,652,876	49/16	409/41	638/47	1447/60	1180/58	24/14
PQ4B	2,504,532	0/0	52/26	68/26	1313/59	797/57	1464/58



Sylvie, JP1LAB, enjoys a big pileup, operating as 3D2LA.

snuck into the Top Ten box on both modes from the Black Hole. Dave, K5GN (CW) and Steve, K5MR (phone) made it from Texas, both with especially strong 40 and 15-meter scores. In the Low Power class, winners Rick, K7GM (CW) and K2SG (phone) made over a million points each. QRP champ Randy, AA2U simply blew away the competition on both modes—again. Isn't there someone out there to challenge Randy? In single-op assisted, Charles, K3WW, again won a decided victory on CW but came second on phone to Charlie, WZ1R, at K1DG. The assisted category is proving to be a fun way to generate big scores for the club competition: Most of the Top Ten phone and CW assisted ops contributed their scores to the Frankford Radio Club or the Yankee Clipper Contest Club. There's a lot more geographic diversity



If you've been looking for Taiwan on CW, Tim, BV2A, passed out that rare multiplier to some lucky hams.

**W/VE Plaque Winners—Phone**

**Single Operator**

Position	Winner	Donor
All Band	K1AR	Frankford Radio Club
1.8 MHz	K5UR	Butch Greve, W9EWC, Memorial
3.5 MHz	K1ZM	Kansas City DX Club
7 MHz	KC7EM	David Thompson, K4JRB
14 MHz	KS1L	Dayton Amateur Radio Assn
21 MHz	K1UO	Kenwood Employees ARC, WD6DJY
28 MHz	KE5FI	Border City Radio Club, VE3WHT
Low Power	K2SG	Dauberville DX Assn
QRP	AA2U	Michigan QRP Club
Assisted	K1DG (WZ1R,op)	Bob Reed, WB2DIN

**Multioperator**

Position	Winner	Donor
Single Transmitter	K1RX	Kenwood Employees ARC, WD6DJY
Two Transmitter	AD1C	Kenwood Employees ARC, WD6DJY
Unlimited	N2RM	Western New York DX Assn, W2RR

**W/VE Plaque Winners—CW**

**Single Operator**

Position	Winner	Donor
All Band	K5ZD	Frankford Radio Club
1.8 MHz	K1ZM	George Schultz, W0UA, K0ZZ Memorial
3.5 MHz	W1MK	Dayton Amateur Radio Assn
7 MHz	K8PO	Northern Arizona DX Assn
14 MHz	W3USS (K8OQL,op)	Wayne Carroll, W4MPY
21 MHz	N4CT	Carl Luetschschwab, K9LA
28 MHz	WS1M	ARRL
Low Power	K7GM	Dauberville DX Assn
QRP	AA2U	Tod Olson, K0TO
Assisted	K3WW	Billy Lunt, KR1R

**Multioperator**

Position	Winner	Donor
Single Transmitter	AD1C	Northern Illinois DX Assn
Two Transmitter	K1AR	Kenwood Employees ARC, WD6DJY
Unlimited	N2RM	Ehrhorn Technological Operations Inc

## W/VE Regional Leaders

Boxes list call sign, score and class (A = QRP; B = Low Power; C = High Power)

### CW

Northeast Region (New England, Hudson and Atlantic Divisions; Labrador, New Brunswick, Newfoundland, Nova Scotia, Prince Edward Island and Quebec Provinces)			Southeast Region (Delta, Roanoke and Southeastern Divisions)			Central Region (Central and Great Lakes Divisions; Ontario Province)			Midwest Region (Dakota, Midwest, Rocky Mountain and West Gulf Divisions; Manitoba and Saskatchewan Provinces)			West Coast Region (Northwestern, Pacific and Southwestern Divisions; Alberta, British Columbia, Yukon and NWT Provinces)		
AA2U	384,948	A	N1CWR	71,280	A	N8CQA	62,292	A	WA0RPI	12,402	A	N7IR	138,546	A
W1OK	157,437	A	KN4QS	70,800	A	N9LMU	17,028	A	WD5K	323,604	B	W8QZA/6	70,755	A
KA1CZF	128,331	A	WA4IAR	31,464	A	WD9IWP	4,773	A	KF5AA	310,344	B	K7FR	63,096	A
N1AFC	73,632	A	N4JO	1,008	A	N9RIT	1,296	A	WV5S	262,826	B	N7JXS	24,963	A
WT3FC	72,921	A	K7GM	1,111,647	B	NA1R	275,562	B	N5AW	160,056	B	KF7PG	12,915	A
W2TZ	875,874	B	K7SV	964,353	B	N8AA	256,500	B	W7HS	120,060	B	W6JTI	431,034	B
W1PH	814,752	B	K7SW	794,205	B	N8FU	121,176	B	K5GN	1,786,560	C	K6OY	214,656	B
K1VUT	580,716	B	N8II	585,420	B	WO9S	96,336	B	K5MR	1,313,403	C	N6NF	144,672	B
K2TE	476,580	B	K5KLA	432,684	B	WA8YRS	93,060	B	W5VZL	751,680	C	VE6BF	135,978	B
WS1E	436,392	B	K4PQL	1,673,595	C	W9RE	1,440,594	C	W5UDA	329,778	C	WN7J	134,550	B
K5ZD	2,951,676	C	W3VT	862,524	C	K8GL	1,011,990	C	KJ0G	157,950	C	W6EEN	1,092,444	C
N2LT	2,374,152	C	AC10/4	740,352	C	WB9YXY	674,400	C				(KA6SAR,op)		
K3ZO	2,355,525	C	N8II	585,420	B	N9CKC	390,696	C				K6NA	806,274	C
W1KM	2,331,000	C	K5KLA	432,684	B	VE3KP	372,696	C				W2VJN	494,784	C
W2SC	2,203,848	C	AB4RU	666,600	C							AA6MC	331,890	C
												N6HR	186,120	C

### Phone

Northeast Region (New England, Hudson and Atlantic Divisions; Labrador, New Brunswick, Newfoundland, Nova Scotia, Prince Edward Island and Quebec Provinces)			Southeast Region (Delta, Roanoke and Southeastern Divisions)			Central Region (Central and Great Lakes Divisions; Ontario Province)			Midwest Region (Dakota, Midwest, Rocky Mountain and West Gulf Divisions; Manitoba and Saskatchewan Provinces)			West Coast Region (Northwestern, Pacific and Southwestern Divisions; Alberta, British Columbia, Yukon and NWT Provinces)		
AA2U	424,800	A	KV8S	108,966	A	N8AXA	1,254	A	N0AFW	150,195	A	W7YAQ	143,658	A
KA1CZF	156,843	A	N1CWR	63,648	A	N6WLX/8	667,488	B	W2CRS	91,575	A	N6PEQ	130,356	A
K21L	32,109	A	W1PB	29,232	A	AA8AV	346,986	B	WM4Z	39,270	A	W6CN	105,504	A
NM1Q	20,724	A	KN4QS	17,160	A	N9JF	290,784	B	KA5PVB	14,229	A	W8QZA/6	84,762	A
NM1K	18,000	A	K7GM	713,625	B	VA3TA	212,382	B	K5RX	957,456	B	K66AR	84,480	A
K2SG	1,008,714	B	AD4FX	351,852	B	WX3N/9	148,404	B	WD5K	498,636	B	WA7BNM	651,036	B
W2TZ	944,775	B	NZ5O	311,370	B	W9RE	2,396,676	C	AC0W	448,716	B	VE6JAV	319,770	B
WS1A	729,618	B	WB4NFS	257,070	B	VE3RM	1,585,035	C	K9BQL	226,215	B	NI7T	213,192	B
NM3E	542,568	B	K4BAI	225,951	B	N4CBR	441,630	C	N7PIB	150,588	B	KC7DB	170,400	B
WA2EOV	444,048	B	WZ4F	1,141,392	C	KE8KQ	378,510	C	K5MR	2,047,221	C	AA7RN	161,070	B
K1AR	4,046,805	C	K4LTA	714,840	C	W9YSX	325,248	C	NX0I	303,840	C	WC6H (NU6S,op)	1,668,744	C
K5ZD	3,669,534	C							N0KV	282,150	C	NB7N	929,640	C
N6BV	3,180,384	C							WK0F	257,784	C	WA7FOE	922,551	C
N2LT	2,295,408	C							NJ1V	231,297	C	VE6JY	839,250	C
W3BGN	2,266,041	C										VE7IN	654,240	C

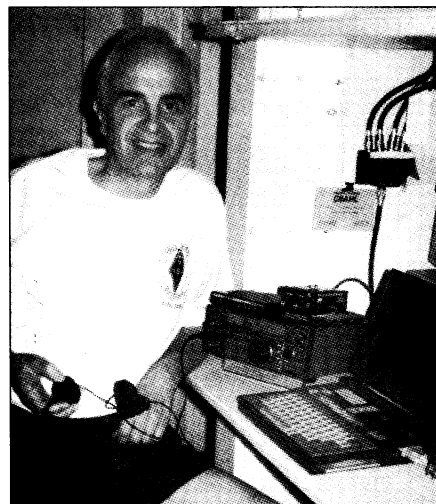
among the single-banders. K1ZM (CW) and K5UR (phone) shared Top Band honors. K1ZM moved up to 80 meters for the phone weekend, while W1MK easily bested all comers on CW. On 40 meters, K8PO narrowly defeated KB0G on CW, while on phone KC7EM fended off a serious challenge from K0GU at W0UN. Top 20-meter ops KS1L (phone) and K8OQL at W3USS (CW) proved that the East Coast was the place to be. Maine was the place to be on 15-meter phone, as K1UO led the pack, while WB4TDH showed that you needed to be a little further south on the CW weekend. And die-hards WS1M (CW) and KE5FI (phone) patiently hung in there to capture the 10-meter trophies.

In the multioperator classes, AD1C and crew won the multi-single plaque on CW and then moved up to easily take the multi-two plaque on phone. K1RX and crew took multi-single honors on phone. On CW, K1AR and crew easily won multi-two with a score approaching that of multi-unlimited winner N2RM. The race for the number two multi-two spot was very tight as K1TR edged out N3RS by a mere 2800 points. N2RM went on to win the phone multi-unlimited title, again in a close race with perennial rival W3LPL.

### DX Highlights

On CW, there were some outstanding efforts turned in, most notably by Yuri, YU1RL, at V26AS, who finished with 5.4 million to claim the top spot, and Bruce, AA6KX/ZF8BS, who not only finished third overall

among all single operators, but did it with just 100 W, blowing the old low power record out of the water. If you're interested in how he did it, check out the sidebar, "Low Power Wins the Day." In the QRP class, K3DI operating as C6AHL made an outstanding 1.7 million points on CW; nobody else was even in the



Dick, K3DI, did a phenomenal job on CW, turning in an incredible 1.7-million-point score running QRP as C6AHL. His nearest competitor was more than 1.6 million points behind him!

contest. On phone, top single op WX4G at P40J beat YT1AD at V26AS primarily on the strength of his 10-meter score. KP2/KE2VB turned in a fine low-power showing that also made the Top Ten overall, while PY3OC took the top 5-W spot. NP4Z easily won the single-op assisted plaque on CW, while EA3BT had the top phone assisted score.

As with the W/VE scores, there's a lot more geographic diversity among the single-band entries, with five continents represented among the top scores. NO9M/KP4 (CW) and K3UOC at PJ8H (phone) used their proximity to the US for easy 160-meter wins. On 80 meters, ON4UN put his big signal to work on CW, while ZF2CF/KE6CF did the trick on phone. On 40 meters, 9Y4VU (CW) and FM5DN (phone) led the pack, while on 20 meters TU2MA garnered the CW plaque and ZF2ND turned in the highest single-band score of the contest on phone. N6OP/NP2 traveled to the Virgin Islands for a fine 15-meter showing on CW, while HC1HC and HC1OT duked it out on phone. V7A (V73C) surprised a lot of folks with a fine 10-meter CW showing, while ZP0Y (ZP5JCY) racked up lots and lots of contacts on phone.

We congratulate the crew at 6D2T, who turned in a tremendous 14 million point phone score (a new record) in the multi-unlimited category, and 6D2X, who did over 8 million on CW. The crew at 9A1A persevered for the multi-unlimited plaque and even made 139 contacts on 10 meters. When it comes to multi-single operating, though, you just can't beat

## DX Plaque Winners

### CW

#### Single Operator

Position	Winner	Donor
World	V26AS (YU1RL,op)	North Jersey DX Assn
Africa	Z56AJS	Byron Peebles Jr, NZ3O
Asia	JA0QNJ	Alamo DX Amigos
Europe	F6FGZ	Dr Jerry Griffin, W8MEP/YI0EP
North America	ZF8BS	Potomac Valley Radio Club
Oceania	A35SQ	Bill Ovca, N1GL, and John Brosnahan, W0UN
South America	P40R (K4UEE,op)	Southern California DX Club
1.8 MHz	NO9M/KP4	Fred Race, AL7JO, in memory of DL1FF
3.5 MHz	ON4UN	Mad River Radio Club
7 MHz	9Y4VU	Thomas Gannon, W3YX, Memorial
14 MHz	TU2MA	Bencher Inc
21 MHz	N6OP/NP2	Southern New England DX Assn
28 MHz	V7A (V73C,op)	Carl Luetzelschwab, K9LA
QRP	C6AHL (K3DI,op)	Dr Jerry Griffin, W8MEP/YI0EP
Assisted	NP4Z	Willamette Valley DX Club

#### Multioperator, Single Transmitter

Position	Winner	Donor
World	P49V	John Brosnahan, W0UN
Africa	E8ZS	Kenwood Employees ARC, WD6DJY
Asia	JJ3YBB	Kenwood Employees ARC, WD6DJY
Europe	TM5G	The Radio Place
North America	XE2EBE	Kenwood Employees ARC, WD6DJY

#### Multioperator, Two Transmitter

Position	Winner	Donor
World	6D2X	Kenwood Employees ARC, WD6DJY
Asia	JR1ZTT	Kenwood Employees ARC, WD6DJY
Europe	IQ4A	Kenwood Employees ARC, WD6DJY

#### Multioperator, Unlimited

Position	Winner	Donor
World	9A1A	H. Stephen Miller, N0SM
Asia	JA1YDU	Kenwood Employees ARC, WD6DJY
Europe	UT2IZZ	Texas DX Society

### Phone

#### Single Operator

Position	Winner	Donor
World	P40J (WX4G,op)	North Jersey DX Assn
Africa	E8AFJ	Kenwood Employees ARC, WD6DJY
Asia	JH7DNO	Acadiana DX Assn
Europe	EA3NY	Dr Jerry Griffin, W8MEP/YI0EP
North America	V26AS (YT1AD,op)	Chod Harris, VP2ML
Oceania	KH6/WR6R	N7AVK—in honor of W7IYW
South America	PY0FM (PY5CC,op)	Kenwood Employees ARC, WD6DJY
1.8 MHz	PJ8H (K3UOC,op)	Fred Race, AL7JO, in memory of ZL2BT
3.5 MHz	ZF2CF (KE6CF,op)	Kenwood Employees ARC, WD6DJY
7 MHz	FM5DN	John Chmielewski, N2BJX
14 MHz	ZF2ND	Central California DX Club
21 MHz	HC1HC	Long Island DX Assn
28 MHz	ZP0Y (ZP5JCY,op)	Long Island Mobile ARC
QRP	PY3OC	Southern Arizona DX Assn
Assisted	EA3BT	Willamette Valley DX Club

#### Multioperator, Single Transmitter

Position	Winner	Donor
World	P40V	Carl Cook, A16V
Africa	E8ZS	Kenwood Employees ARC, WD6DJY
Asia	JA8YBY	Kenwood Employees ARC, WD6DJY
Europe	TM1C	Kenwood Employees ARC, WD6DJY
North America	V31DX	Nick Lash, K9KLR
Oceania	ZK1AVY	Oklahoma Comm Center and AH9B
South America	PJ9B	Kenwood Employees ARC, WD6DJY

#### Multioperator, Two Transmitter

Position	Winner	Donor
World	WP4U	Kenwood Employees ARC, WD6DJY
Africa	EA9IE	Stanley Cohen, WD8QDQ
Asia	JA7YAA	Kenwood Employees ARC, WD6DJY
Europe	IQ4A	ARRL
North America	C6AHK	NF1J and W0UA
South America	PR0R	Kenwood Employees ARC, WD6DJY

#### Multioperator, Unlimited

Position	Winner	Donor
World	6D2X	Wayne Yoshida, KH6WZ
Asia	JA1YXP	Kenwood Employees ARC, WD6DJY
Europe	CT5P	Doug Robbins, KY2O
South America	LU4FM	Kenwood Employees ARC, WD6DJY

Carl Cook's Aruba hideaway! The P49V and P40V scores easily outdistanced the competition, and even beat WP4U's top multi-two score on phone.

### Club Competition

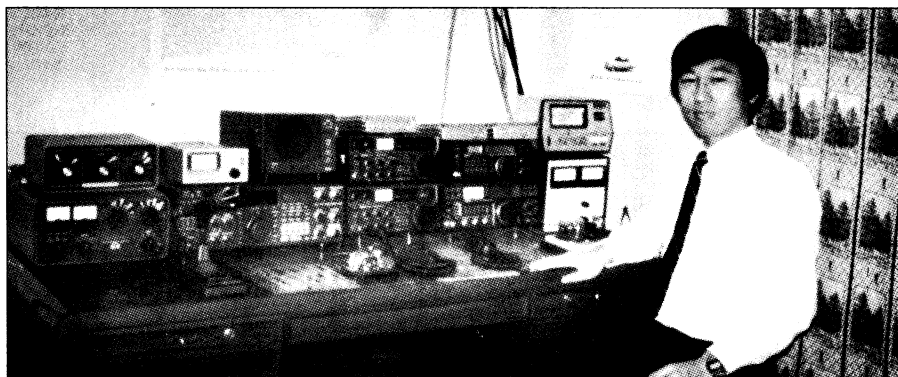
Some folks contest solely for their own amusement. Others take part in order to help their club out in the Affiliated Club Competition. In this year's Unlimited category, the Frankford Radio Club once again added to their collection of lumber, with their 158 entries combining for over 133 million points. The Potomac Valley Radio Club rose to the top of the Medium clubs this year, and the perennial Local club River City Contesters walked away with the top prize. No matter where your club finished in the standings, we'd like to congratulate everyone who made the effort and turned out the members.

What will next year bring? Did you work on your low-band antennas this past summer? If you're feeling lucky, or even just curious, the time to plan your effort is now. The 1995 International DX Contest is right around the corner—February 18 and 19 for CW and March 4 and 5 for phone. Our thanks to Contest Assistant Rich Morris, KB1LE, for his help in preparing these results.

### SOAPBOX

#### DX CW

Next year, I'll put the antenna outside, instead of hiding it under my roof! (EA8CN). It was lots of fun to work from coast to coast short path and long path on 40 meters (HZ1AB). Conditions weren't so good; I wish I could have worked a lot more stations (JH6NBW). I used a hand key and a dipole strung between two buildings. I could only hear the really strong signals, but I enjoyed the contest (9A4DU). This is still a good contest with great operators! I had to go fishing for a lot of signals (CT1YH). By Sunday morning, I knew most of the call signs by heart! (DJ7XA). I was in the middle of university



Takeo, JR1GSE, shows off the station that helped him work 102k points on CW and another 252k on phone.



Toure, TU2MA, gets a little "assistance" from his daughter Flora on his way to earning his plaque for first-place 20-meter phone.

**Top W/VE Single-Band Scores-CW**

160	Score
Call Sign	
K1ZM	12,750
W0RT	9,594
W3GH	6,084
K4TEA	2,208
WA4SVO	1,764
K3UA/2	1,449
W8UVZ	672
N4UH	540
K0CS	390
K5WXZ	360

80	Score
Call Sign	
W1MK	113,280
WE3C	35,880
W9LT	33,852
K1WGM	21,672
K3JGJ	17,136
K1VWL	15,756
W4NL	12,012
W7HR	7,695
W4JKC	3,312
N0BSH	3,306

40	Score
Call Sign	
K8PO	322,500
KB0G	315,222
W0UN (W0UA,op)	291,924
KV0Q	259,281
W5WMMU	240,366
WZ3Q	236,376
W2UP	202,572
WA4CTA	196,686
AA7NX	194,886
K9UWA	174,300

20	Score
Call Sign	
W3USS (K8OQL,op)	156,768
KC0D	108,885
WA0RJY	97,713
N0AX	95,760
KA6A	94,800
WT5U	88,638
N7LOX	85,008
N7RO	84,000
W9OF	75,330
K9CHN	71,841

15	Score
Call Sign	
N4CT	147,465
WB4TDH	132,345
K9QVB	114,048
W6BSY	76,782
K0GU	74,571
K8JM	69,972
N15M	60,918
W0GIL	59,535
K2MFY	51,504
AA7KF	35,100

10	Score
Call Sign	
WS1M	16,992
NW6S	14,280
WA1FCN	7,659
KQ1V	5,643
VE3MX	5,130
N6EE	3,444
KYSN	1,767
WD9EXD	1,008
KL7FAP/W8	336
WA3EEE	108

**Top W/VE Single-Band Scores-Phone**

160	Score
Call Sign	
K5UR	5,460
K4JRB	3,906
K4TEA	1,764
WR8C	1,638
AD1S	1,575
K5WXZ	1,224
WD9INF	810
K0CS	714
W4PSJ	702
WT3W	630

80	Score
Call Sign	
K1ZM	130,410
KQ3V	88,008
W4PZV (WA4SVO,op)	78,447
WB2ABD	67,440
W9LT/8	57,159
W5WMMU (W0MJ,op)	43,044
K9BGL	26,649
KO1F	24,327
K1VWL	21,033
K2IBW	14,076

40	Score
Call Sign	
KC7EM	178,308
W0UN (K0GU,op)	149,202
K8PO	119,592
W3GH	112,728
W5KFT	83,025
KW8N	82,476
W1PH	74,460
K6GX	51,708
KD9ST	48,837
KQ4GC	25,920

20	Score
Call Sign	
KS1L	718,428
W6CCP	304,722
K6KM (WM2C,op)	251,076
K9ES (WD6GTP,op)	218,736
W3USS (K8OQL,op)	194,400
N6JKQ	190,971
N7RO	173,145
K2QMF	165,528
KN6M/5	157,590
K7RI (AA7FT,op)	132,192

15	Score
Call Sign	
K1UO	511,746
K1RU	419,958
K3ZJ/8	368,625
VE9ST	288,600
WA7FAB	214,467
W6BSY	201,372
N3HBX	200,445
K7NO	196,344
N4MO	190,284
NE9U	147,519

10	Score
Call Sign	
KE5FI	71,832
WA7NIY	42,075
NW6S	41,922
W4NL	34,104
KJ6GQ	29,520
VE1DX	27,216
W6ISQ	26,085
K6LEB	25,725
NW7Q/0	23,226
WS1M	20,874

**Top DX Single-Band Scores-CW**

160	Score
Call Sign	
NO9M/KP4	33,579
I3JSS	3,900
JH5FXP	360
JE1SPY	12

80	Score
Call Sign	
ON4UN	68,508
DK8FD	50,160
JH1OGC	41,952
S51W	34,776
F6KBI (F5MZN,op)	34,314
OM7M (OM3TZW,op)	27,510
JA11DY	25,800
S53O	25,602
JH1AEP	22,032
OK1AEZ	18,048

40	Score
Call Sign	
9Y4VU	305,064
VP5B (K9IMM,op)	277,530
LR0DX (LW9EUJ,op)	224,613
YV10B	206,910
I2UIY	196,647
OK1ALW	132,129
9A3IQ	131,040
4N1A (4N1DXX,ops)	129,690
IY0A (I0HCJ,op)	126,150
HZ1AB	112,788

20	Score
Call Sign	
TU2MA	201,144
LU11CX	161,955
OH8LQ	147,498
G4CNY	146,328
9A7A	141,636
OH6NIO	141,069
UA1ZO	115,083
RZ9UA	111,210
DL8WAA	103,785
DL1VJ	90,423

15	Score
Call Sign	
N6OP/NP2	330,840
LR73A (LU6BEG,op)	291,276
VP2E/N4MO	169,008
PY2NQ	144,324
F5NBX	130,203
S50K	110,121
EA2IA	91,740
VK2AYD	86,112
JA7FTR	85,221
9A5Y (9A3LG,op)	82,485

10	Score
Call Sign	
V7A (V73C,op)	138,312
V29AD (YT1AD,op)	123,975
LU6EBY	95,418
LW2EUZ	66,450
LU1FNH	50,619
VK4XA	40,764
JH1HGC	6,681
JA1NLX	3,003
JA1AAT	1,122
JA1VVH	336

**Top DX Single-Band Scores-Phone**

160	Score
Call Sign	
PJ8H (K3UOC,op)	35,028
CU2AF	13,770
AL7MX	5,778

80	Score
Call Sign	
ZF2CF (KE6CF,op)	355,239
YV1DRK	131,835
OT4T (ON4WW,op)	79,650
KL7Y	63,648
EA8PP	63,342
I4AVG	48,246
G3NLY	48,006
PA3EPN	37,023
S54DL	29,505
S53O	25,398

40	Score
Call Sign	
FM5DN	193,638
CR3R (CT3BX,op)	179,550
VK3EW	149,796
OK1DIX	61,992
OM0W	52,029
IK5EKB	50,148
EA5BY	48,132
OK1AEZ	42,336
PT7WA	41,328
SP6YAO	34,428

20	Score
Call Sign	
ZF2ND	676,260
OH6RM	357,120
OH6NIO	310,860
IT9VDQ	310,680
LZ5W	290,904
IB4M (I4ABF,op)	273,060
S59WA	254,187
9A7A (9A3ER,op)	247,860
RZ9UA	233,463
S56M (S57AL,op)	224,541

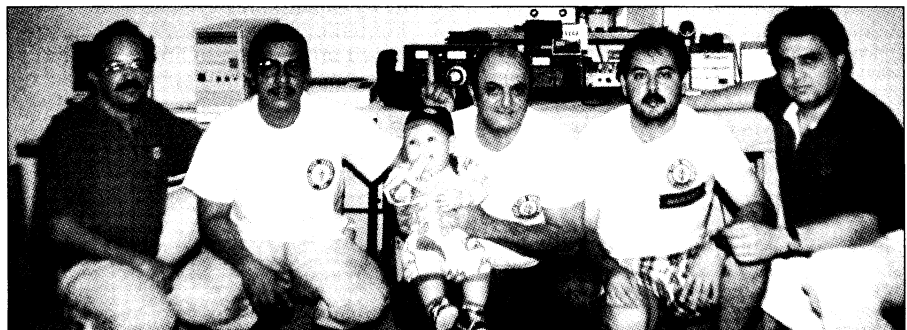
  

15	Score
Call Sign	
HC1HC	591,273
HC1OT	584,820
TG9AJR	339,435
LU6ETB	301,860
XE2DV	246,015
4M5A (WA8RYW,op)	243,600
G4BUO	232,560
S50K	220,761
F5NBX	185,310
I4LEC	180,405

10	Score
Call Sign	
ZP0Y (ZP5JCY,op)	637,200
V29NR	548,700
VP2VF	457,425
V7A (V73C,op)	445,032
CX7BF	408,693
LU2QC	389,367
YV5MRR	347,760
CE6JOE	324,162
CX8AT	260,304
PY2PD	257,868

exams, so there wasn't any time for a real entry (DL20BF). It's nice to work all my friends in the US (DL6RDE). I hope we have better conditions next year (EA7AAW). I can't wait until next year to do it all again (EA5BU). A lot of people must have forgotten what QRL means (F6IIE). I only operated a short time, but really enjoyed the activity on 40 meters! (F6FTB). 10 meters only opened for an hour, but I worked California! (F6FGZ). Conditions improved in time for the contest (G3KNV). Conditions ranged from good to very poor. 10 meters was dead, but 15 and 20 were good at times. The 0s, 6s and 7s were missing this year, so my score is much lower. Considering the conditions, though, I'm not complaining (G4ZME). It was a most enjoyable event with a lot to aim for (G3RSD). 28 MHz seemed pretty dead; 40, on the other hand, was pretty good, by the look of it (G6QQ). A lack of faith in my competitiveness on 40, coupled with tiredness, caused me to take three hours of sleep.



The crew at YV4AA shows off a budding junior operator. Having fun are (l-r) Miguel, YV4FJK; Ben, YV4YC; Omar, YV4GAC; Sebastian, YV4FJJ; and Alex, YV4FZM.



Otherwise I might have beaten F6FGZ (G4BUO). I found conditions this year at an all-time low (GM3ZAS). The dreadful conditions Saturday were even worse on Sunday (GM3CFS). Conditions weren't very good, with just a few hours' opening on 20 and 15 meters (LA4EJ). Conditions were bad this year (OK1BLC). Conditions were great for running QRP (ON7CC). I barely worked 500 stations and only four were on the West Coast! (ON4UN). It was a nice contest with good propagation (OZ7JQ). It's nice to work old friends, and so many new call signs (OZ6PI). I didn't hear any VE stations (PA3BNT). Conditions were better than I expected (PA2REH).

#### DX Phone

It was a nice chance to test my new antenna for a few hours (PA3EPN). The great beauty in working single band is that when the propagation is finished, you get the rest of the day to do other things, like mowing the lawn (VK4ICU). It was nice to finally work so many stations I had heard as an SWL (ON7SS). The conditions were far better than predicted (ON6NL). It was hard going on 80 meters, but I gave thanks for having a voice keyer to ease the strain (G3NLY). This was my first contest and I think it's given me the bug for contesting in the future (GW0PUP). It was easy to copy stations on 40 meters because so many had such big signals (EA5BZS). The door on 10 meters seems to be closing! (JE7DOT). Conditions were below normal and there was heavy noise and QRM (PA0KDM). Conditions were good on 10 meters the last half of Sunday (LW1DIP). A lot of the stations I worked on 10 meters couldn't believe that I was running only 100 W! (LU2QC). There wasn't any propagation! (UUSJ). I was so frustrated by the conditions Saturday night that I went to work instead. At least I finally worked my first DC station! (LA8GV). Anyone who worked me must have had a good antenna system (UT7QF). We operated only for fun (OE2XEL). Conditions were great! (TG9AJR). The contest was enjoyable, especially Saturday with good propagation and high participation from North America. Sunday, though, the band opened two hours later than it had on Saturday (IK4LZH). Where was South Dakota? It was the only one I missed (OZ1ADL). The contest was fantastic. I enjoyed it last year, but I had more experience for this year and my score was a lot higher (PY8AJD). I was surprised by so many stations saying how loud I was (G0NYD). I enjoyed working so many well-remembered stations from previous contests (OZ8T). At the end of the first day, I thought things couldn't get any worse. I was wrong! (OZ2ZZZ).

#### W/VE CW

I found out I need real antennas for 80 and 160 (AA1ER). I think this is the last time I'll operate 10-meter single-band for a while (WA1FCN). I was thrilled to work YB0ASI on 20 meters at 1411Z Saturday! It made up for the meager propagation on 10 meters this year (K8JLF). CW is alive and well in Italy! (W1KM). Using 75 W, a hand key and a dipole is frustrating, but fun! (WX2N). Conditions were noticeably poorer than they were on 80 meters last year. The signals from Europe were fairly weak (WB2AMU). I'm not sure that any logging program handles the Soviet call sign system correctly anymore (AA3FY). Conditions were poor—I didn't work anyone from Europe, and the South American signals were poor (N3CZB). My plans to operate phone from VP5 left little time for a CW effort (WE3C). I had a great time in the contest, and making WAC with just 5 W on 15 meters (K3TW). As one of the least of the little pistols, it's always a tremendous thrill to be able to rub elbows with so many great contest operators (KK4SM). I wish conditions had been better on the higher bands, but I was surprised at how many DX stations I worked on 40 meters with my inverted V (WA4IAR). I could only do a part-time effort because of other commitments, but I had fun. I hope to do it full time next year (KI4HN). My QSO rate of 2 per hour on 160 is an indication of that band's activity (N4UH). This was my first time using a logging program, which sure made it fun. I actually knew when I worked a new country! (KN4Y). In almost 50 years of post-WW II DX contesting, I've seen worse conditions—but not much worse! I was surprised and pleased to get a few Europeans on 10 meters (W3VT). I wish I had more time to spend this weekend on the contest. I still had a ball whenever I could operate (WV5Z). Next time, I'll put more in than 29 hours

### Low Power Wins the Day

By Bruce B. Sawyer, AA6KX/ZF8BS

The most interesting aspect of this contest was learning the difference between a high power and low power entry when on the DX side. I operated the CW contest from exactly the same location with the same setup in two successive years, only the first time I was running high power and the second time I was barefoot. The decision to go barefoot this year was a last minute decision. During the days preceding the contest, I ran experiments to see how various US stations perceived my signal difference with the amp on and then off. Quite a few stations reported that they could tell no difference! Additionally, I got warnings from KR0Y and WN4KKN that there was stiff competition in the high-power category coming from Aruba. I also ran into NP4Z during the warm-up runs and decided that he sounded like he could be serious competition. When I caught the last WWV report before the contest start and learned that the A and K indices were very low (8 and 1, respectively), I decided that I could probably do almost as well running low power as I could running the amp, but would have a better shot at actually winning something on low power.

The first night made me wonder if that was a smart choice. It was very difficult getting through on 40 and 80, though I noticed that my rate was not far short of where I had been the previous year with high power. During the day, on the higher bands, I caught back up to where I had been last year. The only place I saw any difference was when the pileups started to get unruly and the stations answering me couldn't hear me through the continuing calls. This didn't seem to affect the rate much—at most 10%. The second night was just like the first: the lack of power hurt. Where I really got hurt was on Sunday. By that time all of the big guns had worked me on 15 and 20 meters. The only interest they had in me was in taking my frequency. I quickly learned that it was pointless to try to stand my ground in a frequency fight and instead concentrated on learning to find a new run frequency quickly. Each time I lost a frequency, I went and checked 10 meters to see if it had opened up (it never really did), then went back to scrounge a small piece of frequency real estate on either 15 or 20



Bruce, ZF8BS, tries not to let his sweat build up on the keys as he cruises to third place overall and the top low-power score in the CW test.

meters. It went on this way until the last couple of hours, when I picked up enough of a pileup that I could hold the frequency.

For reference, here are the QSO totals I got in the two years, first as high power and then as low power. Note that I only had 100 W on 160 both years, since the amp was an SB-200.

	1993 (ZF2TV)	1994 (ZF8BS)
160	116	175
80	500	475
40	700	725
20	876	1216
15	1034	1271
10	1150	354
Total	4384	4216

Clearly, conditions were very different during the two contests. Propagation was nowhere near as good in 1994 as in 1993. On the one hand, this meant that there were fewer DX stations for the W/VE operators to choose from, and I'm sure that helped me in 1994. But the low solar flux also hurt my signal. I'm sure it cost me some points, relative to last year. In addition, I have no doubt that I improved my own operating skills over the time interval.

In conclusion, I think the low power operation was actually more fun because it required a little more strategy. While I got tired of constantly being kicked around by guys stealing my frequency—and wasn't always just real nice about it—it demanded agility to find new frequency holes and come back quickly in order to keep the rate up. I will be very interested to see how the high-power scores come in so that I can compare those results with last year.

(AC4WO). Openings were down this year, especially to Japan and southeast Asia (N4CT). Thunderstorms and a brief power outage made Saturday night a long one (K5MR). I can't remember the last time I only needed a 29-cent stamp to mail my log

(KY5N). Spring-like weather and spotty thunderstorms made it virtually impossible for me, operating 80-meter single-band, to hear the DX stations (N5NMX). It's a lot more fun if you don't try to win (AA5ZX). Where were all the Novices the last

## Affiliated Club Program

Club	Score	Entries	CW Winner	Phone Winner
<b>Unlimited Category</b>				
<b>Frankford Radio Club</b>	<b>133,558,035</b>	<b>158</b>	<b>N2LT</b>	<b>N2LT</b>
Yankee Clipper Contest Club	85,940,406	110	K5ZD	K5ZD
<b>Medium Category</b>				
<b>Potomac Valley Radio Club</b>	<b>34,539,150</b>	<b>47</b>	<b>K3ZO</b>	<b>K3ZO</b>
North Coast Contesters	16,660,155	16	K3MD	K3MD
Society of Midwest Contesters	12,751,476	19	W9RE	W9RE
Mad River Radio Club	10,297,653	23	K8GL	AA8AV
North Texas Contest Club	9,014,952	17	K5MR	K5MR
Northern California DX Club	8,389,293	43	AA6MC	WC6H (NU6S,op)
Southern California Contest Club	8,369,976	19	W6EEN (KA6SAR,op)	W7CB/6
Minnesota Wireless Assn	6,051,534	10	N0BSH	AC0W
Central Virginia Contest Club	4,379,208	3	K4BAM	—
Texas DX Society	4,171,455	4	K5GN	KE5FI
Northern California Contest Club	4,110,441	15	N6EE	K6KM (WM2C,op)
Mile-Hi DX Assn	4,109,532	10	KC0D	W0UN (K0GU,op)
Kentucky Contest Group	4,054,917	10	K4LTA	K4LTA
Western Washington DX Club	3,801,498	30	W7IT	NB7N
Rochester (NY) DX Assn	5,637,732	15	W2HPF	W2HPF
Oklahoma DX Assn	3,394,080	9	W5UDA	NJ1V
Southern California DX Club	2,615,673	18	KF6HI	WA7BNM
Northern Alabama DX Club	2,090,136	10	WA4CTA	K0RNX
Southeastern DX Club	1,968,483	10	AB4RU	AB4RU
Schenectady ARA	1,670,514	6	K2SIG	WA2EOV
Kansas City DX Club	1,170,993	10	WA0CLR	WJ0I
Western New York DX Assn	871,710	9	WA2ABN	N2DBI
Wichita ARC	783,900	4	—	WA0NIK
Cascade Contest Club	653,037	5	AA7NX	AA7NX
Salt City DX Assn	550,764	6	W2FR	WF2Y
South Jersey Radio Assn	545,310	13	N2FY	KE2VX
Hamfesters RC	520,914	14	W9LNQ	K9XR
Redwood Empire DX Assn	319,854	4	W6D	W6FSJ
Valley Radio Club of Eugene	310,218	5	AA7FL	AA7FL
Western Illinois ARC	303,174	7	N9JF	N9JF
Sterling Park ARC	294,537	4	W3FTG	W4LMJ
San Diego DX Club	220,662	4	WA6VNR	KD6QK
West Park Radiops	198,162	10	W8IDM	WB8ORV
Wyoming DX Contest Club	171,909	6	W7S	N7MZW
Mississippi Valley DX/Contest Club	139,410	3	K0OD	K0JPL
Eastern Iowa DX Assn	134,997	4	AA0ME	W0PPF
Northrop RC	50,802	5	K6HRT	KK6RG
Woodbridge Wireless	49,191	3	—	WD4KXB
Kettle Moraine Radio Amateurs	26,595	3	N9EZ	K9OSH
<b>Local Category</b>				
<b>River City Contesters</b>	<b>5,370,441</b>	<b>10</b>	<b>—</b>	<b>—</b>
Hudson Valley Contesters and DXers	3,661,221	3	—	—
North Shenandoah DX Assn	2,424,036	7	N4MM	N4MM
Carolina DX Assn	1,722,855	5	AD4MQ	N4UH
Southern Florida DX Assn	1,043,052	5	K5OTI/4	K8UNP
Central Arizona DX Assn	1,031,793	8	N7IR	K7NO
Dauberville DX Assn	666,456	3	W6EC	NM3E
Northern Nevada DX and Contest Club	431,889	5	K6OMB	—
South Coast Wireless Society	411,432	4	—	AA1GV
Hoosier Contesters	408,936	3	K9UWA	KB9BGV (N/T)
Blackstone Valley ARC	343,698	6	W1AUT	NB1U
Indian River ARC	205,629	10	W4YN	AC4IV
Gabilan ARC	199,902	3	—	KB6GV
Old Barney ARC	94,422	3	N2OO	KF2BQ
AK-SAR-BEN	82,155	4	—	KN0L



Bob, K4UEE, operated P40R for 4.7 million points, good enough for second place. If you look close, you can see that he posted goals for himself for each band, an effective technique.



Victor, YV5MRR, says, "...[I] was really surprised by my finish!"

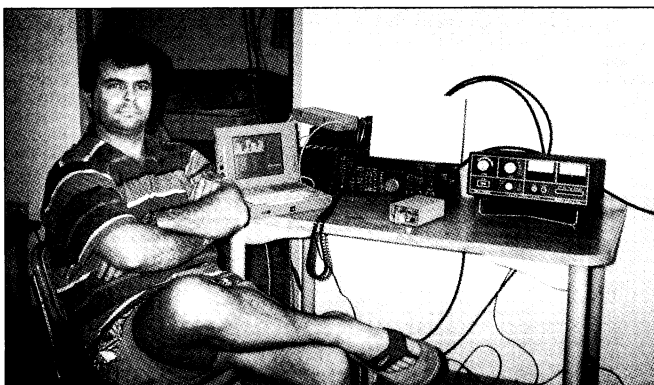
contest? (N6TCZ). This contest hones your operating skills and is a challenge (KM6FW).

### WVE Phone

QRP Phone contesting is definitely a bizarre experience, especially when you use dipoles at 30 feet (NMIQ). It was a great test for such low sunspots. It was nice to be called by JT, BY, BV and SU (KS1L). Is there a category for single-band, single-beam-heading? (K1JB). What a difference a stack makes (K1UO). A lot of stations rolled out the red carpet when they knew I was QRP (KA1SVV). I checked into the Caribbean Net each day at sunrise.

It sure helped my multiplier total! (K1ZM). The 15-meter band seemed good at times. I didn't hear any VKs or ZLs at all (W2FFQ). Conditions were worse than the past three years and my score was the lowest ever (N2LDU). 10 meters was good! It's only dead when no one calls on it (WA2ASQ). I was disappointed when my radio quit and I didn't get to work my usual 100 to 200 contacts (K2RXN). I enjoyed the hunt, but didn't spend enough time at it (WB2ABD). The good conditions Friday night and excellent conditions Saturday night combined to make this a lot of fun (KQ3V). Some stations couldn't believe I was running just 5 W (K3TW). I hope I'll

do even better next time and maybe even figure out computer logging (AA3AZ). My rates the second day were 1/4 to 1/2 of what they were the first day. It was still better than the CW weekend (K3MD). Conditions to Europe were poor here, which lowered the QSO and multiplier counts (K4JRB). The sunspot cycle was evident, with the lower bands showing more contacts, and 10 meters way down (N4UH). 40 meters is a tough band to contest on, next time I'll try 80 meters (KQ4GC). After 45 years of DX contesting, I can tell the neophytes that conditions weren't so bad—they'll get worse before they get better (W3VT). This wasn't a bad effort for low power, poor conditions and a vertical antenna (WIENZ). I received my license after this year's Novice Roundup, so I decided to casually participate. It was a lot of fun and I worked seven new countries (KE4JMY). I improved my score over last year's, while operating for a shorter period, so I'm a happy camper (WA6KUI). It looks as if 10 meters has finally died and my low-band antennas weren't



Hrane, YT1AD, turned in second-place world scores for 10 meters on CW and all-band on phone.



Luis, ZP5JC, used two 6-element W2PV Yagis to win the 10-meter class on phone, making 3600 QSOs as ZP0Y.



up to the task (WB4NFS). In more than 18 years of ham radio, this is the first time I've had the guts to enter a contest (KD9LA). I was just going for some new countries and maybe 10,000 points, but when the bands opened up on Sunday, I found 20,000 points in reach. Here's to doubling that next year (KR4CZ). I didn't think Europe would ever open on 15 meters Sunday morning (N4MO). I was surprised to have a sunspot-peak type opening to JA on 10 meters the last two hours of the contest (K5RX). We had great conditions on 15 to Europe both mornings; it's too bad 20 meters never followed suit (K5MR). Where were the JAs? (W5KFT). I finally graduated from a multiband vertical to decent antennas. It was great running Europeans on 15 meters from the West Coast with low power, even if it was only for a short time (WA7BNM). What a disastrous contest! (N6PEQ). My VOX died and I had to juggle the microphone, radio and the computers. Conditions were beautiful for this time in the sunspot cycle (W6IXP). Condos, computers and contesting don't mix (AE0M). I dearly missed the old 10-meter opening to Europe (AE6Y). 10 meters was hopping! (N2LWL). The bands improved from the CW weekend (K6RN).

### Special Plaques

#### Single Operator

**Position**  
WVE Combined Score  
WVE QRP Combined Score  
WVE 40 Meters Combined Score  
  
WVE Under-18 Combined Score  
World Combined Score  
Japan Combined Score  
Western Japan Combined  
Great Lakes Division CW  
Great Lakes Division Phone  
Hudson Division CW  
Japan All-Band CW  
Japan All-Band Phone  
Japan Low-Power All Band CW  
Poland Phone  
Seventh Call Area All-Band CW  
Seventh Call Area All-Band Phone  
Single Operator Under-18 CW  
Single Operator Under-18 Phone

**Winner**  
K5ZD  
AA2U  
K8PO  
  
KA1NCN  
P9JBT (W1BIH,op)  
JH7DNO  
JH4NMT  
K8GL  
N6WLX/8  
N2LT  
JA2QNJ  
JH5FXP  
JH0KHR  
SP5GRM  
W2VJN  
NB7N  
AC4WO  
KA1NCN

**Donor**  
National Contest Journal  
Dr Marvin Tanaka, KH6MM  
Advanced Electronic Applications, in memory of Jim Rafferety, N6RJ  
Connecticut DX Assn, Father Moran, 9N1MM, Memorial Mike Manafo, K3UOC  
JA7WME, JE7RJS, JH7AFR  
5U7M  
Livonia Amateur Radio Club, MI  
Livonia Amateur Radio Club, MI  
Order of Boiled Owls of NY, W2AO Memorial  
Akita DX Assn  
JH7YJF  
Western Washington DX Club  
Stan Wisniewski, FO5IW  
Willamette Valley DX Club  
Willamette Valley DX Club  
Virginia Greene, WB1AVA  
Virginia Greene, WB1AVA

#### Multioperator

**Position**  
Caribbean Multisingle CW  
Multi-Multi Combined World

**Winner**  
P49V  
JA1YDU

**Donor**  
The YASME Foundation  
W2PV Memorial—Schenectady ARA

### The K3WW ARRL DX Contest Story

For those who don't know Charlie Fulp Jr, K3WW, here's a brief glimpse of one of the East Coast's perennial contesters. Charlie, a dentist in Perkasio, Pennsylvania, was first licensed in 1959, and first started contesting in Field Day as a Novice in the same year. Most recently, he's taken a serious interest in single-op assisted. In the 1994 DX Contest, he finished in first place on CW and in second place on phone in the single operator assisted categories. Here's his story:

The weekend before the contest I get plenty of sleep (even if it means not working the 160 SSB test past midnight). Starting Sunday night, it's off to bed by 9:30 PM every night, if possible. I'm up at 6:44 each morning, except Wednesday, my day off, when I sleep in a few more hours. On Friday, I'm up at 6:44 as always, I see my first patient at 7:45, and my last patient at 5:00 PM. I try to finish by 5:30 (15 minutes early), My associate goes on call at 5:00 so I won't be disturbed by patients with toothaches for the next 50 hours. I turn on the radios, go upstairs (the shack is between the office and the rest of the house), take a shower, get into my jogging suit and running shoes, eat supper, and venture back to the shack between 6:30 and 6:45. I usually know where I hope to start out, and start looking for a frequency. On phone, it's usually 20 meters. I look into the side of a hill (with a

250-foot rise in less than 1/4 mile) toward JA, so my strategy is Europe, Europe, and more Europe. I don't join the guys running JA on 15. My 1994 rate was equal to or above the previous year until before daybreak, when no big runs develop. Multiplier totals on 160 through 40 are similar to last year; the high bands are down, but all in all I kept very busy for the full 48 hours. Saturday night I usually take 10 to 15 minutes at the first quiet time, either 8:00 PM local time or perhaps 2:00 or 3:00 AM. I run upstairs, shave and hunt for some food. I usually eat a late breakfast of jelly toast both days and a light supper Saturday afternoon. Usually I wait for the end of contest to eat Sunday lunch/dinner. I drink coffee at normal meal times and one late night cup. (I recently went to decaf except for contests!) After the contest I gather scores on our club repeater and packet, check out 3830, head upstairs by 7:30 or 8:00 to eat and relax, and get to bed by 9:00 PM. By 6:44 AM Monday, I'm up to get ready for work. None of my ham friends will be on the schedule that day! My first patient will be 7:45 AM. My theory is not to break my normal routine, except to be better rested than usual. I don't have any visible windows in the shack, so I miss blizzards and beautiful springlike days with their frustrations and temptations. I sometimes look out upstairs windows when I take my shaving break Saturday night.

### Scores

The scores are listed by mode—CW and phone. For WVE and DX scores, single-operator scores are listed first, followed by single-operator assisted, multioperator single-transmitter, multioperator two-transmitter, and multioperator unlimited. WVE single operator scores are broken down by call sign area, ARRL Section and Canadian provinces. WVE single operator assisted and multioperator single-transmitter scores are broken down by call area. WVE multioperator two-transmitter and multioperator unlimited scores are grouped together in descending order by score. DX single-operator scores are broken down by continent and country. DX single-operator assisted, multioperator single transmitter, multioperator two-transmitter and multioperator unlimited scores are broken down by continent. Under each ARRL Section and Canadian province (and country for DX), single operator scores are listed in descending order by category. All-band scores are listed first in ascending order of power, followed by 160, 80, 40, 20, 15 and 10. For example, in the Connecticut Section, W1QK is the all-band QRP winner; K1EFI is the all-band low-power winner; K1ZZ is the all-band high-power winner; K1VWL is the 80-meter winner; WV1C is the 15-meter winner; and WA1FCN is the 10-meter winner. Division and Continental leaders are listed in **boldface** type.

#### WVE CW Single Operator

##### Connecticut

**W1QK** 157,437 343 153 A  
KA1CZF 128,331 291 147 A  
NM1Q 13,224 116 38 A  
KA1NCN 3,441 37 31 A  
K1EFI 206,820 383 180 B  
KG1D 96,012 252 127 B  
K1TN 40,479 131 103 B  
AA1ER 24,747 113 73 B  
N1OPZ 7,320 61 40 B  
N2LTK 6,084 52 39 B  
K1ZZ 1,947,234 1798 361 C

WE6G/1 166,320 385 144 C  
W1CNU 20,496 112 61 C  
K1VWL 15,756 101 52 B 80  
WV1C 22,842 141 54 C 15  
WA1FCN 7,659 69 37 B 10

##### Eastern Massachusetts

WB2CPU 67,320 204 110 A  
K1VUT 580,716 849 228 B  
K&JLF 266,541 451 197 B  
W1KEE 234,465 385 203 B  
KA1CLV 176,778 366 161 B  
KB1KM 134,514 282 159 B  
W1FM 86,040 239 120 B  
KC1WD 4,680 52 30 B  
W1KM 2,331,000 2220 350 C  
KA1DWX 358,620 556 215 C

##### Maine

N1AFC 73,632 236 104 A  
NR1F 16,416 114 48 B  
W9KDR 900 20 15 B  
KR1B 106,926 251 142 C  
K1JB 5,850 50 39 C  
KD1SG 21,726 142 51 C 20

##### New Hampshire

AA1CA 20,460 110 62 A

W1PH 814,752 943 288 B  
K2TE 476,580 676 235 B  
WS1E 436,392 638 228 B  
WA1LNP 294,525 525 187 B  
AE1D 18,300 100 61 C  
K1WGM 21,672 129 56 B 80

##### Rhode Island

AA1IF 63,612 228 93 B  
N1QME 48,114 162 99 B  
K1HMO 89,280 240 124 C  
NB1U 10,824 88 41 C  
K2MN 504 14 12 B 20  
W1RFQ 11,880 90 44 B 15

##### Vermont

NW1S 97,980 284 115 B

W1ZK 469,212 641 244 C

##### Western Massachusetts

N1JAC 14,523 103 47 B  
K5ZD 2,951,676 2652 371 C  
W2SC 2,203,848 2148 342 C  
W1AUT 93,636 459 68 C  
WE1B 14,835 115 43 B 15

##### 2

##### Eastern New York

W2QYA 5,145 49 35 A  
KD2IX 27 3 3 A  
W2KHQ 130,620 311 140 B  
WA3INC 30,186 129 78 B  
K2RI 29,106 126 77 B















