

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 3½ 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

W/VE Low-Power		W/VE QRP		DX Low-Power		DX QRP	
CW	CW	CW	CW	CW	CW	CW	CW
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	P8BH (K3UOC,op)	2,830,905	G0TDX	73,476
W1PH	814,752	KA1CZF	128,331	NP2I	2,570,589	LU1FNH	50,619
AC10/4	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	T5ET (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
Phone	Phone	Phone	Phone	Phone	Phone	Phone	Phone
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)	2,151,444	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	H18OMA	1,271,700	WP4KTF/HP2	15,120
WA7BNM	651,036	W6CN	105,504	TE5T (TI4SU,op)	870,945	G0NYD	12,321
NM3E	542,568	W2CRS	91,575	P8BCW	866,520	IS0LLJ	10,323
WD5K	498,636	W8QZA/6	84,762	PR2R (PY2PK,op)	857,220	LU1FNH	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	198/77	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
NP2I	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
KH6/WR6R	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
NP2I	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	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 contesteer 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
W3LPL	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
KS9K	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
W3LPL	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
V31WW	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
IO4A	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
JAY1DU	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

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
PJ9B	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

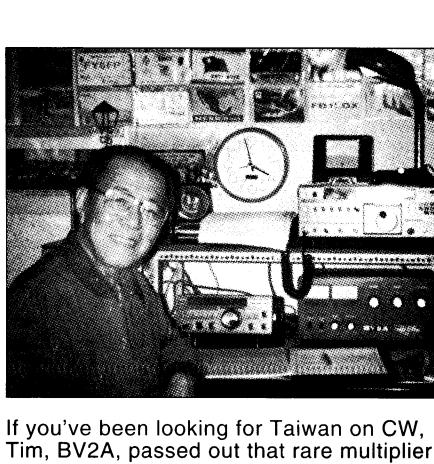
Call Sign	Score	160	80	40	20	15	10
WP4U	9,424,002	356/52	894/57	1357/59	1888/60	2588/59	2005/59
C6AHK	6,262,191	713/56	1079/57	738/56	2114/60	1685/56	340/28
PR0R	3,961,425	0/0	5/4	294/56	1011/56	1641/59	3024/56
IQ4A	2,887,584	0/0	295/44	997/58	1798/60	1195/57	12/5
RK2FWA	2,018,988	11/8	251/33	300/44	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

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	K51L	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

W/VE Regional Leaders

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

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)				
N1CWR	71,280	A	N8CQA	62,292	A	NA1R	275,562	B	KF5AA	323,604	B	WD5K	323,604	B	WDQZA/6	138,546	A	K7FR	63,096	A				
KN4QS	70,800	A	N9LMU	17,028	A	N8AA	256,500	B	WV5S	310,344	B	WV5S	262,626	B	N7JXS	24,963	A	KF7PG	12,915	A				
WA4IAR	31,464	A	WD9IWP	4,773	A	N8FU	121,176	B	N5AW	160,056	B	W7HS	120,060	B	W6JTI	431,034	B	K6OY	214,656	B				
N4JO	1,008	A	N9RIT	1,296	A	K5KLA	432,684	B	WA8YRS	93,060	B	K5GN	1,786,560	C	N6NF	144,672	B	VE6BF	135,978	B				
AA2U	384,948	A	K7GM	1,111,647	B	NA1R	275,562	B	KF5AA	310,344	B	WV5S	262,626	B	WN7J	134,550	B	W6JTI	431,034	B				
W1QK	157,437	A	W3VT	964,353	B	N8AA	256,500	B	WV5S	262,626	B	W7HS	120,060	B	W6JTI	431,034	B	K6OY	214,656	B				
KA1CZF	128,331	A	AC1O/4	794,205	B	N8FU	121,176	B	N5AW	160,056	B	K5GN	1,786,560	C	N6NF	144,672	B	VE6BF	135,978	B				
N1AFC	73,632	A	W3VT	964,353	B	W9YXY	674,400	C	W5UDA	329,778	C	K5MR	1,313,403	C	WN7J	134,550	B	W6JTI	431,034	B				
WT3W	72,921	A	N8II	585,420	B	N9CKC	390,696	C	KJ0G	157,950	C	W6EEN	1,092,444	C	(KA6SAR,op)			K6NA	806,274	C				
W2TZ	875,874	B	K5KLA	432,684	B	WA8YRS	93,060	B	KJ0G	157,950	C	K6NA	806,274	C	W2VJN	494,784	C	W2VJN	494,784	C				
W1PH	814,752	B	K4PQL	1,673,595	C	W9RE	1,440,594	C	K5MR	1,313,403	C	W6EEN	1,092,444	C	AA6MC	331,890	C	AA6MC	331,890	C				
K1VUT	580,716	B	W3VT	964,353	B	K8GL	1,011,990	C	WB5VZL	751,680	C	W6EEN	1,092,444	C	N6HR	186,120	C	N6HR	186,120	C				
K2TE	476,580	B	AC4WO	740,352	C	W9YXY	674,400	C	W5UDA	329,778	C	W6EEN	1,092,444	C	K6NA	806,274	C	W6EEN	1,092,444	C				
WS1E	436,392	B	WZ4F	706,095	C	N9CKC	390,696	C	KJ0G	157,950	C	K6NA	806,274	C	W2VJN	494,784	C	W2VJN	494,784	C				
K5ZD	2,951,676	C	AB4RU	666,600	C	VE3KP	372,696	C	KJ0G	157,950	C	K6NA	806,274	C	AA6MC	331,890	C	AA6MC	331,890	C				
N2LT	2,374,152	C																						
K3ZO	2,355,525	C																						
W1KM	2,331,000	C																						
W2SC	2,203,848	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)				
KV8S	108,966	A	N8AXA	1,254	A	N6WLX/8	667,488	B	N0AFW	150,195	A	W7YAQ	143,658	A	W6QZA/6	138,546	A	N6PEQ	130,356	A				
N1CWR	63,648	A	AD4FX	29,232	A	N9JF	290,784	B	W2CRS	91,575	A	W6CN	105,504	A	KG6AR	84,480	A	N6PEQ	130,356	A				
W1PB	29,232	A	W3VT	713,625	B	VA3TA	212,382	B	W4M2	39,270	A	W6CN	105,504	A	W6QZA/6	138,546	A	W6QZA/6	138,546	A				
KN4QS	17,160	A	N5ZO	351,852	B	WX3N/9	148,404	B	KA5PV	14,229	A	W7YAQ	143,658	A	W6JTI	213,192	B	W6JTI	213,192	B				
AA2U	424,800	A	K4BAI	225,951	B	W9RE	2,396,676	C	K5RX	957,456	B	W6QZA/6	138,546	A	W6JTI	213,192	B	W6JTI	213,192	B				
KA1CZF	156,843	A	WZ4F	1,141,392	C	KE8KQ	378,510	C	N4CBR	1,585,035	C	W6JTI	213,192	B	W6JTI	213,192	B	W6JTI	213,192	B				
KZ1L	32,109	A	K4VUD	1,062,912	C	W9YSX	325,248	C	K9BQL	226,215	B	KC7DB	170,400	B	AA7RN	161,070	B	AA7RN	161,070	B				
NM1Q	20,724	A	K8UNP	982,194	C	N4UH	806,412	C	K5MR	2,047,221	C	W6JTI	213,192	B	W6JTI	213,192	B	W6JTI	213,192	B				
NM1K	18,000	A	K4LTA	714,840	C	K4LTA	714,840	C	NX0I	303,840	C	W6JTI	213,192	B	W6JTI	213,192	B	W6JTI	213,192	B				
K2SG	1,008,714	B																						
W2TZ	944,775	B																						
WS1A	729,618	B																						
NM3E	542,568	B																						
WA2EOV	444,048	B																						
K1AR	4,046,805	C																						
K5ZD	3,669,534	C																						
N6BV	3,180,384	C																						
N2LT	2,295,408	C																						
W3BGN	2,266,041	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.

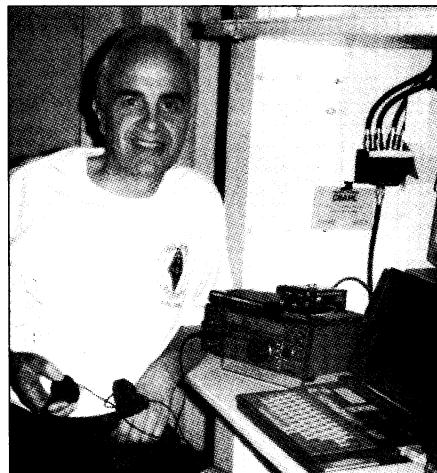
In the multioperator classes, AD1C and crew won the multi-single plaque on CW and then moved up to easily take the multi-two plaque on phone. K1RX and crew took multi-single honors on phone. On CW, K1AR and crew easily won multi-two with a score approaching that of multi-unlimited winner N2RM. The race 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 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	ZS6AJS	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	NO9MK/PK4	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	EA8ZS	Kenwood Employees ARC, WD6DJY
Asia	JJ3YB	Kenwood Employees ARC, WD6DJY
Europe	TM5G	The Radio Place
North America	XE2EEB	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	EA8AFJ	Kenwood Employees ARC, WD6DJY
Asia	JH7DNO	Acadiana DX Assn
Europe	EA3NY	Dr Jerry Griffin, W8MEP/YI0EP
North America	V26AS (YT1AD,op)	Chad 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, AI6V
Africa	EA8ZS	Kenwood Employees ARC, WD6DJY
Asia	JAYBY	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

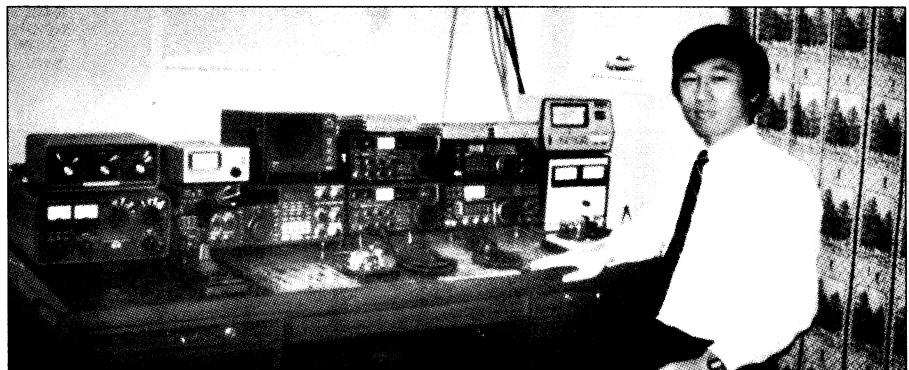
Position	Winner	Donor
World	6D2X	Wayne Yoshida, KH6WZ
Asia	JA1YXP	Kenwood Employees ARC, WD6DJY
Europe	CT5P	Doug Robbins, KY2O
South America	LU4FM	Kenwood Employees ARC, WD6DJY

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.

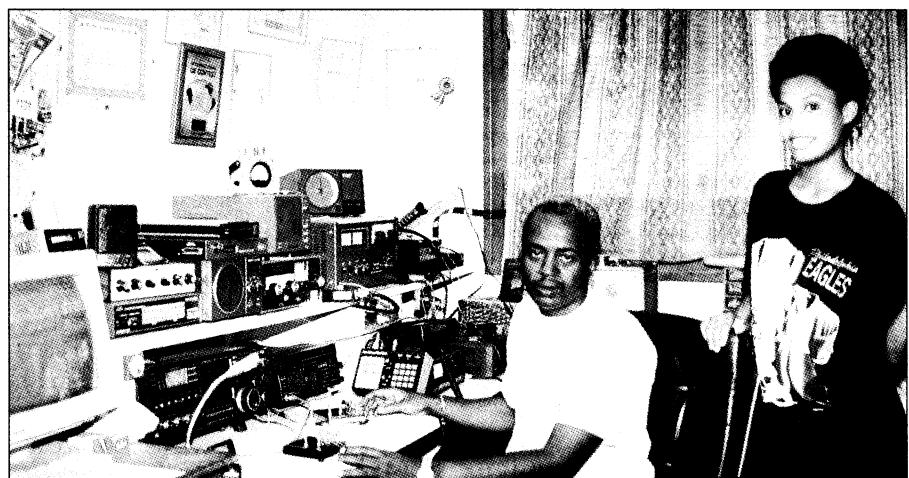
Club Competition

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 Moris, KB1LE, for his help in preparing these results.



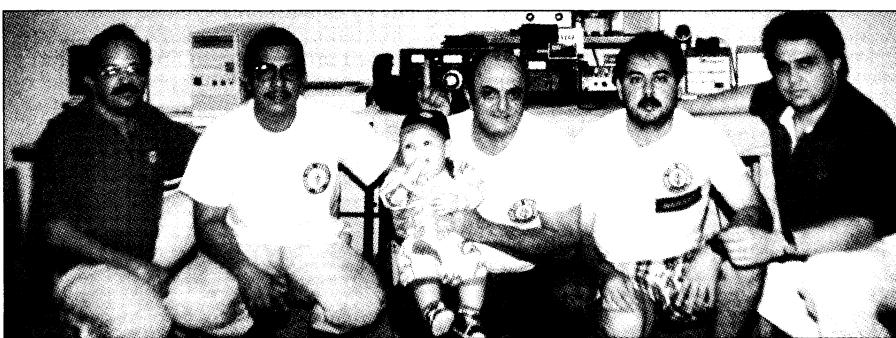
Takeo, JR1GSE, shows off the station that helped him work 102k points on CW and another 252k on phone.



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		Top W/VE Single-Band Scores-Phone		Top DX Single-Band Scores-CW		Top DX Single-Band Scores-Phone	
160		160		160		160	
Call Sign	Score	Call Sign	Score	Call Sign	Score	Call Sign	Score
K1ZM	12,750	K5UR	5,460	NO9MKP4	33,579	PJ8H (K3UOC,op)	35,028
W0RT	9,594	K4JRB	3,906	I3ISS	3,900	CU2AF	13,770
W3GH	6,084	K4TEA	1,764	JH5FXP	360	AL7MX	5,778
K4TEA	2,208	WR8C	1,638	JE1SPY	12		
WA4SVO	1,764	AD1S	1,575				
K3UA/2	1,449	K5WXZ	1,224	80		Call Sign	Score
W8UVZ	672	WD9INF	810	ON4UN	68,508	ZF2CF (KE6CF,op)	355,239
N4UH	540	K0CS	714	DK8FD	50,160	YV1DRK	131,835
K0CS	390	W4PSJ	702	JH1OGC	41,952	OT4T (ON4WW,op)	79,650
K5WXZ	360	WT3W	630	S51W	34,776	KL7Y	63,648
				F6KBI (F5MZD,op)	34,314	EA8PP	63,342
80		80		OM7M (OM3TZW,op)	27,510	I4AVG	48,246
Call Sign	Score	Call Sign	Score	JA1IDY	25,800	G3NLY	48,006
W1MK	113,280	K1ZM	130,410	S53O	25,602	PA3EPN	37,023
WE3C	35,880	KQ3V	88,008	JH1AEP	22,032	S54DL	29,505
W9LT	33,852	W4PZV (WA4SVO,op)	78,447	OK1AEZ	18,048	S53O	25,398
K1WGM	21,672	WB2ABD	67,440				
K3JGJ	17,136	W9LT/8	57,159	40		Call Sign	Score
K1VWL	15,756	W5WMU (W0MJ,op)	43,044	9Y4VU	305,064	FM5DN	193,638
W4NL	12,012	K9BGL	26,649	VP5B (K9IMM,op)	277,530	CR3R (CT3BX,op)	179,550
W7HR	7,695	KO1F	24,327	LR0DX (LW9EUJ,op)	224,613	VK3EW	149,796
W4JKC	3,312	K1VWL	21,033	YV1OB	206,910	OK1DIX	61,992
NØBSH	3,306	K2IBW	14,076	I2UIY	196,647	OM9W	52,029
				OK1ALW	132,129	IK5EKB	50,148
40		40		9A3IQ	131,040	EA5BY	48,132
Call Sign	Score	Call Sign	Score	4N1A (4N1DX,ops)	129,690	OK1AEZ	42,336
K8PO	322,500	KC7EM	178,308	IY0A (I0HCJ,op)	126,150	PT7WA	41,328
KB0G	315,222	WØUN (KØGU,op)	149,202	HZ1AB	112,788	SP6YAQ	34,428
WØUN (WØUA,op)	291,924	K8PO	119,592				
KVØQ	259,281	W3GH	112,728	20		Call Sign	Score
W5WMU	240,366	W5KFT	83,025	TU2MA	201,144	ZF2ND	676,260
WZ3Q	236,376	KW8N	82,476	LU1CX	161,955	OH6RM	357,120
W2UP	202,572	W1PH	74,460	OH6NIO	161,955	OH6NIO	310,860
WA4CTA	196,686	K6GX	51,708	OH8LQ	147,498	IT9VDQ	310,680
AA7NX	194,886	KD9ST	48,837	G4CNY	146,328	LZ5W	290,904
K9UWA	174,300	KQ4GC	25,920	9A7A	141,636	IB4M (I4ABF,op)	273,060
				OH6NIO	141,069	S59WA	254,187
20		20		UA1ZO	115,083	9A7A (9A3ER,op)	247,860
Call Sign	Score	Call Sign	Score	RZ9UA	111,210	RZ9UA	233,463
W3USS (K8OQL,op)	156,768	KS1L	718,428	DL8WAA	103,785	S56M (S57AL,op)	224,541
KC0D	108,885	W6CCP	304,722	DL1VJ	90,423		
WAØRJY	97,713	K6KM (WM2C,op)	251,076	15		Call Sign	Score
NØAX	95,760	K9ES (WD6GTP,op)	218,736	Call Sign	Score	HC1HC	591,273
KA6A	94,800	W3USS (K8OQL,op)	194,400	N6OP/NP2	330,840	HC1OT	584,820
WT5U	88,638	N6JKQ	190,971	LR73A (LU6BEG,op)	291,276	TG9AJR	339,435
N7LOX	85,008	N7RO	173,145	VP2E/N4MO	169,008	LU6ETB	301,860
N7RO	84,000	K2QMF	165,528	PY2NQ	144,324	XE2DV	246,015
W9OF	75,330	KN6M/5	157,590	F5NBX	130,203	4M5A (WA8RYW,op)	243,600
K9CHN	71,841	K7RI (AA7FT,op)	132,192	S50K	110,121	G4BUO	232,560
				EA2IA	91,740	S50K	220,761
15		15		VK2AYD	86,112	F5NBX	185,310
Call Sign	Score	Call Sign	Score	JA7FTR	85,221	I4LEC	180,405
N4CT	147,465	K1UO	511,746	9A5Y (9A3LG,op)	82,485		
WB4TDH	132,345	K1RU	419,958	10		Call Sign	Score
K9QVB	114,048	K3ZJ/8	368,625	Call Sign	Score	ZP0Y (ZP5JCY,op)	637,200
W6BSY	76,782	VE9ST	288,600	V7A (V73C,op)	138,312	V29NR	548,700
KØGU	74,571	WA7FAB	214,467	V29AD (YT1AD,op)	123,975	VP2VF	457,425
K8JM	69,972	W6BSY	201,372	LU6EBY	95,418	V7A (V73C,op)	445,032
N15M	60,918	N3HBX	200,445	LW2EZU	66,450	CX7BF	408,693
WØGIL	59,535	K7NO	196,344	LU1FNH	50,619	LU2QC	389,367
K2MFY	51,504	N4MO	190,284	VK4XA	40,764	YV5MRR	347,760
AA7KF	35,100	NE9U	147,519	JH1HGC	6,681	CE6JOE	324,162
				JA1NLX	3,003	CX8AT	260,304
10		10		JA1AAI	1,122	PY2PD	257,868
Call Sign	Score	Call Sign	Score	JA1VHV	336		
WS1M	16,992	KE5FI	71,832				
NW6S	14,280	WA7NIY	42,075				
WA1FCN	7,659	NW6S	41,922				
KQ1V	5,643	W4NL	34,104				
VE3MX	5,130	KJ6GQ	29,520				
N6EE	3,444	VE1DX	27,216				
KY5N	1,767	W6ISQ	26,085				
WD9EXD	1,008	K6LEB	25,725				
KL7FAP/W8	336	NW7Q/O	23,226				
WA3EEE	108	WS1M	20,874				

exams, so there wasn't any time for a real entry (DL2OBF). 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 (F6IIIE). 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 (G3RSR). 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 (OZ7IQ). 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 (GWØPUP). 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 (PAØKDM). 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! (UU5J). 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 (GØNYD). 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 YBØASI 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-WWII 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 KRØY 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
Unlimited Category				
Frankford Radio Club	133,558,035	158	N2LT	N2LT
Yankee Clipper Contest Club	85,940,406	110	K5ZD	K5ZD
Medium Category				
Potomac Valley Radio Club	34,539,150	47	K3ZO	K3ZO
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	W0JUN (K0GU,op)
Kentucky Contest Group	4,054,917	10	K4LTA	K4LTA
Western Washington DX Club	3,801,498	30	W7IIT	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	WA4ACTA	K0RNZ
Southeastern DX Club	1,968,483	10	AB4RU	AB4RU
Schenectady ARA	1,670,514	6	K2SIG	WA7EOV
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	WW6D	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	WC7S	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
Local Category				
River City Contesters	5,370,441	10	—	—
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	WE3C	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	62,155	4	—	KN0L

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

W/VE Phone

QRP Phone contesting is definitely a bizarre experience, especially when you use dipoles at 30 feet (NM1Q). 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

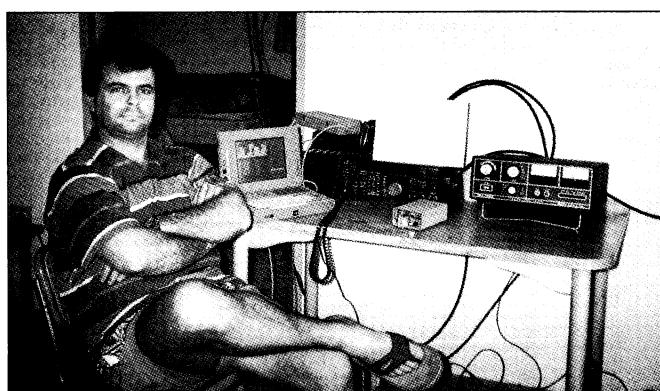


Bob, K4UEE, operated P40R for 4.7 million points, good enough for second place. If you look close, you can see that he posted goals for himself for each band, an effective technique.



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

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 (W1ENZ). 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 (W61XP). 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	Winner	Donor
W/VE Combined Score	K5ZD	National Contest Journal
W/VE QRP Combined Score	AA2U	Dr Marvin Tanaka, KH6MM
W/VE 40 Meters Combined Score	K8PO	Advanced Electronic Applications, in memory of Jim Rafferty, N6RJ
W/VE Under-18 Combined Score	KA1NCN	Connecticut DX Assn, Father Moran, 9N1MM, Memorial
World Combined Score	PJ9JT (W1BIH,op)	Mike Manato, K3UOC
Japan Combined Score	JH7DNO	JAT7WME, JE7RJS, JH7AFR
Western Japan Combined	JH4NMT	5U7M
Great Lakes Division CW	K8GL	Livonia Amateur Radio Club, MI
Great Lakes Division Phone	N6WLX/8	Livonia Amateur Radio Club, MI
Hudson Division CW	N2LT	Order of Boiled Owls of NY, W2AO Memorial
Japan All-Band CW	JA0OQN	Akita DX Assn
Japan All-Band Phone	JH5FXP	JH7YJF
Japan Low-Power All Band CW	JH0KHR	Western Washington DX Club
Poland Phone	SP5GRM	Stan Wisniewski, FO5IW
Seventh Call Area All-Band CW	W2VJN	Willamette Valley DX Club
Seventh Call Area All-Band Phone	NB7N	Willamette Valley DX Club
Single Operator Under-18 CW	AC4AWO	Virginia Greene, WB1AVA
Single Operator Under-18 Phone	KA1NCN	Virginia Greene, WB1AVA
Multioperator		
Position	Winner	Donor
Caribbean Multisingle CW	P49V	The YASME Foundation
Multi-Multi Combined World	JA1YDU	W2PV Memorial—Schenectady ARA

Multioperator

Position Caribbean Multisingle CW
Winner P49V
Donor The YASME Foundation
Multi-Multi Combined World JA1YDII 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 Perkasie, 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 $\frac{1}{4}$ 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 W/VE and DX scores, single-operator scores are listed first, followed by single-operator assisted, multioperator single-transmitter, multioperator two-transmitter, and multioperator unlimited. W/VE single operator scores are broken down by call sign area, ARRL Section and Canadian provinces. W/VE single operator assisted and multioperator single-transmitter scores are broken down by call area. W/VE 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-meter single-band scores. Each line score contains the following information: Call sign, score, QSOs, multipliers, power output used (A = 5 W or less; B = 6 to 150 W; C = more than 150 W). Single band entries are indicated 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.

N2BA	1,749,600	1800	324 C	K4UVT	30,660	140	73 B	South Texas	AA7FL	161,820	372	145 C	KB9DMV	18,711	99	63 B						
K2SIG	695,256	982	236 C	W4BX	18,360	90	68 B	KF5AA	310,344	536	193 B	NG9L	18,600	100	62 B							
N1CC/2	562,887	849	221 C	WZ4F	706,095	923	255 C	K5GN	1,786,560	1861	320 C	K9OSA	1,197	21	19 B							
K12M	12,750	85	50 C 160	N4NTI	137,448	276	166 C	WB5VZL	751,180	1044	240 C	KG7DK	40,887	177	77 C							
WX2N	14,700	98	50 B 20	WQ5L	114,240	272	140 C	K5DX	156,843	333	157 C	N6PZ	37,620	165	76 C							
NYC-Long Island				N4KG	52,416	168	104 C	W5NR	1,008	21	16 C	A7ANX	194,886	802	81 C 40							
KE2SX	8,142	59	46 B	Georgia	31,464	138	76 A	N5NMX	1,035	23	15 B 80	AA7AK	7,740	86	30 B 40							
KC6ETY (N/T)	4,416	46	32 B	WA4IR	274,950	470	195 B	WT5U	88,638	374	79 C 20	K7OVM	17,664	128	46 B 20							
N2MBM	4,107	37	37 B	K4BAI	196,308	399	164 B	West Texas	AA7KF	35,100	260	45 B 15	W9GXR	20,043	311	51 C 40						
K2LE	1,401,075	1437	325 C	K4EZ	99,603	217	153 B	N2ZM	3,060	34	30 B	K9CHN	71,841	311	77 C 20							
KA2HJM	465,117	787	197 C	KN4OV	56,100	170	110 B	6	KA7FEF	3,774	74	17 B 15	W9GIL	59,535	245	81 C 15						
WB2KPH	23,664	116	68 C	K4OGG	21,708	108	67 B	East Bay	Utah	Ø												
WB2AMU	1,728	32	18 B 80	AC4PQ	19,899	99	67 B	K4PZ	274,600	808	275 C	W7HS	120,060	345	116 B							
K2MFY	51,504	232	74 B 15	N4CXF	10,293	73	47 B	K5ED	52,290	210	83 B	KE7NS	91,530	339	90 B							
Northern New Jersey				AB4RU	666,600	808	275 C	K4AZC	24,150	161	50 B	K6XO/7	114,921	339	113 C							
AA2U	384,848	578	222 A	K4ZTL	14,664	94	52 C	K6BOCO	21,786	382	67 C 15	Colorado	99BOL	74,088	252	98 B						
KE2ZZ	250,260	388	215 B	K4TEA	2,208	32	23 C 160	W6BSY	76,782	382	67 C 15	AA0PB	5,565	53	35 B							
N2INN	56,304	184	102 B	KB8O	315,222	882	107 C 40	K5ED	10,650	71	50 B	KJ0G	157,950	405	130 C							
AA2NR	44,361	159	93 B	K4PIC	26,895	163	55 C 15	N2ZM	3,060	34	30 B	K0CS	390	13	10 C 160							
K2KJM	20,700	100	69 B	Kentucky	6	Western Washington																
N2MZB	10,296	86	50 B	WB4CFV	16,200	90	60 B	K6OY	214,656	416	172 B	K7PG	12,915	105	41 A							
K2LT	2,374,521	2116	374 C	W4KY	176,472	344	171 C	K6GL	55,080	216	85 B	K7NPN	25,536	133	64 B							
WA2VVA	606,357	757	287 C	N4XM	172,914	358	161 C	W6NN	37,179	153	81 B	N6HR	186,120	470	132 C							
WA2ASM	457,545	849	235 C	AB4RX	22,680	140	54 C 40	N6JKQ	34,776	168	69 B	W7IT	126,390	383	110 C							
K2KPK	435,458	648	224 C	WA4QMQ	20,592	132	52 B 15	W6FA	13,248	92	48 B	K7GE	39,060	186	70 C							
WA2DQT	87,753	250	117 C	W6TCZ	3,060	5	2 B	N6TCZ	3,060	5	2 B	KR7G	33,327	161	69 C							
K2VW	59,400	200	99 C	KF6HI	108,075	275	131 C	W7EN	41,292	222	62 B 20	W7EN	41,292	222	62 B 20							
WA2ASQ	17,442	114	51 B 40	N6MI	44,268	217	68 C	A7ARN	36,000	200	60 B 20	Kansas	Kansas	36,000	200							
W5NTW	14,190	110	43 B 15	N4JO	1,006	21	16 A	W7KWA	34,713	203	57 B 20	W1OR	12,789	87	49 C							
Southern New Jersey				K7GM	1,111,647	1207	307 B	W7AVNI	13,908	122	38 B 20	W0RT	9,594	82	39 C 160							
N2PLB	178,227	369	161 B	K4A1KH	56,943	171	111 B	W7QON	13,572	116	39 B 20	KC0EI	1,581	31	17 C 80							
N2OO	18,816	98	64 B	K14HN	21,087	99	71 B	N6AX	95,760	399	80 B 20	Wyoming	WA8RPI	12,402	78	53 A						
AE2N	13,005	85	51 B	K4PQL	1,673,595	1771	315 C	W6MF	25,200	120	70 C	W8ML	104,625	279	125 C							
WA2VSQ	10,944	64	57 B	W1IHN	501,960	712	235 C	KU6T	21,900	146	50 C 20	KE0UJ	52,716	191	92 C							
W2EA	2,016	32	21 B	K4RZ	247,170	535	154 C	W6HRT	2,268	36	21 B	N0AFW	28,914	158	61 B 40							
W2UJL	1,449	23	21 C	AD4MQ	192,783	359	179 C	8	Michigan	1,092,444	1543	236 C	Missouri	WAQOI	52,470	165	106 B					
N2MR	184,260	370	166 C	W8BBMV	13,500	75	60 C	N6AW	104,084	271	128 C	WAQCL	3,744	39	32 B							
N2FY	161,823	323	167 C	N4UH	540	15	12 C 160	W6HAL	66,960	310	72 C	KA0P	3,045	35	29 B							
AA2GQ	130,356	306	142 C	W2Q3	236,376	804	98 C 40	K7YEJ	51,810	314	55 C 40	AA0NB	2,916	36	27 B							
K3UJ/A	1,449	23	21 C 160	Northern Florida	6	Western Washington																
K3CJG	17,136	119	48 B 80	K4UTE	61,533	159	129 B	K6LEB	10,146	89	38 C 40	N5BZB	117,600	280	140 C							
W2PAU	10,707	63	43 C 40	KN4Y	41,919	157	89 B	W6AF6T	2,646	42	21 B 15	K8OD	21,939	103	71 C							
Western New York				South Carolina	7	Wyoming																
W2TZ	875,874	1545	277 B	W3VT	862,524	988	291 C	N6NFM	144,672	362	137 B	W8VNU	18,414	99	62 B							
WF2L	107,748	246	146 B	K4C5B	148,296	334	148 C	K8QLK	90,972	278	133 B	W8WVU	16,320	85	64 B							
W2FR	76,593	211	121 B	W4JKC	3,312	46	24 B 80	W6NPK	30,810	122	103 C	AA8AV	16,320	85	64 B							
KF2BL	44,361	159	93 B	W4YDD	2,520	35	24 C 80	K6LEB	24,686	147	56 B	W8BBUQ	15,561	91	57 B							
N2PEB	40,920	155	88 B	Southern Florida	8	Minnesota																
WB2JFP	35,511	133	88 B	K5OTI/4	28,644	135	62 C 20	N6AN	16,704	116	48 B	N8QAA	9,447	67	47 B							
K2A2OT	22,422	101	74 B	W8TDH	132,345	119	85 B 15	W6PZ	1,024	372	94 C	K8GL	1,011,900	1106	305 C							
W2HFF	911,318	1142	266 C	WD4AHZ	478,548	756	214 C	N6IP	2,553	37	23 A	W8TWA	179,685	363	165 C							
WA2ABN	112,896	256	147 C	W4ASVQ	1,764	26	21 C 160	W6K6N	70,296	269	80 B	W8RC	10,863	71	51 C							
W2QIP	111,366	269	138 C	W4EQE	2,730	35	26 B 40	W6UM	107,865	235	153 C	W8UVZ	672	16	14 C 160							
K2MP	404,460	642	210 B	W4QOG	32,640	56	80 C	N2UN/6	104,895	333	105 C	K8JMJ	69,972	343	68 C 15							
KB3M	190,503	347	183 B	W4WCTA	120,012	44	45 C 80	N6HK	35,478	219	54 C 20	Ohio	N8A8	256,500	450	190 B						
KB3TS	169,280	330	171 B	W4WCTB	5,200	55	32 B	Santa Clara Valley	9	Missouri												
W3CJ	83,250	222	125 B	K4ALTA	63,959	175	194 C	W6JTI	431,034	722	199 B	VE4ABO	3,192	38	28 A							
N3EJ	705,900	905	260 C	K4ARRU	323,010	555	194 C	WW6D	49,020	190	88 B	VE2EE	67,872	202	112 B							
W3UW	53,865	171	105 B	K4MM	241,200	402	200 C	N6YEY	31,536	144	173 B	VE2GHI	9,585	71	45 B							
N3FQ	38,577	167	77 B	W3FTG	112,320	260	144 C	W6BIP	139,464	298	156 C	VE2FFE	8,832	64	46 B							
NY3Y	17,472	91	64 B	K4BAM	91,476	255	121 C	W6WPK	90,288	228	132 B	VE2BLX	2,376	33	24 B							
WB3AAL	7,200	60	40 B	N3JT	40,602	202	67 C	W6REC	128,139	353	121 C	K8NYY	23,184	112	69 B							
K3CQ	61,105	55	37 B	N6MW	79,734	194	137 B	K6F6D	45,771	209	73 C	VE5GC	8,678	42	116 C							
WT3P	4,455	45	33 B	W4ZYL	34,611	139	83 C	W6D8AHR	2,948	108	77 B	VE3DNN	2,232	51	17 B 15							
N3CZB	528	11	11 B	K4NMD	63,525	175	99 B	W6WNE	61,275	215	95 B	VE3KPB	91,875	245	125 B							
K3TEJ	705,900	905	260 C	W4K4R	323,010	555	194 C	N6JMM	58,941	333	59 B	VE3WZ	90,000	240	125 B							
W3UJM	517,608	728	237 C	K4MM	241,200	402	200 C	W6WPK	96,336	223	144 B	VA3TEE	45,000	150	100 B							
W3GK	348,996	508	229 C	W4WCTA	196,686	566	80 C	W6LNQ	60,858	207	98 B	VE3TEE	28,080	117	88 B							
K2DOX	254,190	458	185 C	W4WCTB	174,070	435	174 B	W6WCA	42,300	150	94 B	VE3DSN	2,232	31	24 B							
W3KVV	215,385	415	173 C	N3OS	40,628	273	131 B	W6D8AHR	24,948	108	77											

2	N2MM	1,564,362	1398	373 C	WY0J	140,505	323	145 C	NC0P (+N0s JL,SM,WA0FLS,WD0GVY, WO0V,W0R0)	JG1RDV	3,024	56	18 B	9A2WV	40,920	341	40 B	15			
	W2GD	1,546,230	1295	398 C	K0UQK	32,840	128	85 C	1,058,208	JL1MWI	2,622	46	19 B	Portugal	90,252	327	92 B				
	K2BU	1,157,487	1093	353 C	KR0I	23,760	110	72 C	1,058,208	J3ATB	2,580	43	20 B	CT1YH	90,250	327	92 B				
	K2NJ	939,906	1034	303 C	VE																
	NR2H	938,061	939	333 C	VE3EJ	1,865,376	1524	408 C	N2RM (+K2AEV,KR2J,KZ2S,N2s AA, NCC,ME,NT,W2s GMA,RQ,K3UA,NQ4)	JG1LRD	2,400	50	16 B	CT4DX	9,720	108	30 B	80			
	NF2L	890,190	945	314 C	VE5HF	183,768	403	152 C	6,016,032	J7M2JTT	2,115	47	15 B	Federal Republic of Germany	Federal Republic of Germany						
	K2ONP	768,840	860	298 C	VE5SF	44,055	165	89 B	W3PL (+KHF2,A13M,K3s NA,SO, KF3P,N3GB,WR3E,W4BQF,K07V)	JG8TQ	1,728	36	16 B	DL6ZLG	2,430	45	18 A				
	W1GD	696,000	800	290 C	VE5ZTH	37,050	130	95 B	5,853,164	JH1PKY	1,443	37	13 B	DLCAT (DL1NCT,op)	169,960	512	110 B				
	K2NV	684,618	943	242 C	KW0QQA																
	K2F0	547,200	760	240 B	Multiprovider																
	K2T2	386,254	647	199 C	Single Transmitter																
	N2NU	370,557	591	209 C	1	1															
	K2AZ	359,784	526	228 C	AD1C (+KC1XX,N1QQO)	2,900,502	2313	418 C	K1KI (K1s CC,TO,W1D,AA2Z, K5FU,V-N6BV)	JH1WNO	840	28	10 B	DJ5GG	109,800	366	100 B				
	AB2E	285,912	446	234 C	K1DG (+W2Z1R)	2,839,247	2183	403 C	5,328,708	J4HNF	1,134	37	13 B	DJ1TH	57,981	251	77 B				
	WA2WYR	242,352	406	198 C	KB1H (+K1YR,PZ1M)	1,455,762	1507	322 C	5,328,708	J4HIX	1,110	37	10 B	DJ7XA	54,750	250	73 B				
	K2PS	216,987	479	151 C	K1KP (+W1A1S)	1,415,190	1465	322 C	JH1NXU	J4WFQ	84	7	4 B	DL7VBM	38,613	211	61 B				
	NA2M	181,440	315	192 C	K1TP (+W1A1S)	1,415,190	1465	322 C	JH1NU	J4WQJ	859,895	1549	185 C	DL4BQE	37,149	203	61 B				
	N2AIF	180,621	329	183 C	K1WP (+W1A1S)	1,415,190	1465	322 C	JH1NU	J4WQJ	859,895	1549	185 C	DJ7FP	35,154	186	63 B				
	WJ2W	161,802	303	178 C	K1WT (+W1A1S)	1,415,190	1465	322 C	JH1NU	J4WQJ	859,895	1549	185 C	DL2OBF	31,476	172	61 B				
	WB2WG	150,801	301	167 C	K1WTW (+N1HEO,W1A1TE,W1B1ELA, WQ1NT,W1T1R)	1,415,190	1465	322 C	JH1NU	J4WQJ	859,895	1549	185 C	DL1DTL	17,424	121	48 B				
	K2SB	50,100	167	100 C	3																
	2																				
	K3PW	2,703,834	2177	414 C	K2OMF (+AA2FB,KA2AEV)	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DJ7KZT	7,140	70	34 B				
	N3AD	1,866,834	1629	382 C	K3P1K	1,734,342	1597	362 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL2HWW	5,760	80	24 B				
	A4AB	1,199,394	1197	334 C	K3T2Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL2DFF	3,828	58	22 B				
	NR3Q	1,084,776	1174	308 C	K3T3Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL2MEW	565,308	1149	164 B				
	N3R3	996,156	938	354 C	K3T4Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL6RAI	217,800	605	120 C				
	W3FV	888,688	1001	296 C	K3T5Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL6UCC	120,684	356	113 C				
	WU3M	873,264	904	322 C	K3T6Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL5JQ	70,080	320	73 C				
	W3OV	654,075	765	285 C	K3T7Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DJ8KFD	50,160	418	40 C	80			
	K3SA	649,728	768	282 C	K3T8Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DJ2OY	17,100	90	30 C	80			
	W3MM	590,319	613	312 C	K3T9Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL9AWI	9,831	113	29 C	80			
	K3DI	(WD4IEH,op)			K3T10Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL2OY	17,100	90	30 C	80			
	3																				
	W3HVO	457,200	635	240 C	K3T11Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL2OY	17,100	90	30 C	80			
	K3ND	414,141	533	259 C	K3T12Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL2OY	17,100	90	30 C	80			
	NE3F	378,729	507	249 C	K3T13Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL2OY	17,100	90	30 C	80			
	N3AM	308,652	578	178 C	K3T14Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL2OY	17,100	90	30 C	80			
	K3CP	284,310	405	234 C	K3T15Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL2OY	17,100	90	30 C	80			
	N8CQ/3	281,502	401	234 C	K3T16Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL2OY	17,100	90	30 C	80			
	WR3L	216,675	321	225 B	K3T17Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL2OY	17,100	90	30 C	80			
	K3I1	200,340	315	212 C	K3T18Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL2OY	17,100	90	30 C	80			
	K3ATO	188,916	346	182 C	K3T19Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL2OY	17,100	90	30 C	80			
	K3BXH	165,240	380	153 C	K3T20Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL2OY	17,100	90	30 C	80			
	N3ADL	116,421	257	151 C	K3T21Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL2OY	17,100	90	30 C	80			
	NR3WY	102,000	272	125 C	K3T22Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL2OY	17,100	90	30 C	80			
	NY3C	69,084	202	114 B	K3T23Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL2OY	17,100	90	30 C	80			
	W6FJ8Y	15,903	93	57 B	K3T24Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL2OY	17,100	90	30 C	80			
	K6MA	3,600	60	20 B	K3T25Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL2OY	17,100	90	30 C	80			
	N6KI	612	17	12 C	K3T26Q	2,159,076	1153	364 C	K3L3R (+W3Y3Q,W3R3G,W3C8X,N8V, N18L,WABVY)	JH4NMT	419,400	932	150 C	DL2OY	17,100	90	30 C	80			
	4																				
	K3IV7	577,530	837	230 C	K4VX	(+K9BGL,KD9Q,N9JF, W9WI,NS0Z)	1,546,620	1490	346 C	J4HNF	10,824	88	41 C	K4WPE	11,400	152	25 B	15			
	KTCV7	379,924	694	182 C	W0OP	(+N2IC,JKS,MNS,RX,XM,NX1H)	1,546,620	1490	346 C	J4HNF	10,824	88	41 C	K4WPE	11,400	152	25 B	15			
	WA7UTM	151,898	367	136 C	K4T1R	(+N2IC,JKS,MNS,RX,XM,NX1H)	1,546,620	1490	346 C	J4HNF	10,824	88	41 C	K4WPE	11,400	152	25 B	15			
	K7KA	55,332	212	87 B	K4T2R	(+N2IC,JKS,MNS,RX,XM,NX1H)	1,546,620	1490	346 C	J4HNF	10,824	88	41 C	K4WPE	11,400	152	25 B	15			
	NE9Z7T	25,338	103	82 C	K4T3R	(+N2IC,JKS,MNS,RX,XM,NX1H)	1,546,620	1490	346 C	J4HNF	10,824	88	41 C	K4WPE	11,400	152	25 B	15			
	W6BXWH	16,218	102	53 C	K4T4R	(+AC2W0,W0AFLY)	182,910	335	182 C	J4HNF	10,824	88	41 C	K4WPE	11,400	152	25 B	15			
	N7AM	480	16	10 C	K4T5R	(+AC2W0,W0AFLY)	182,910	335	182 C	J4HNF	10,824	88	41 C	K4WPE	11,400	152	25 B	15			
	5																				
	K5HDU	36,801	141	87 C	K4T6R	(+AA9G,KA0B,KA0C,KA0D)	21,168	112	63 B	J4HNF	10,824	88	41 C	K4WPE	11,400	152	25 B	15			
	6																				
	N6IG	1,005,216	1184	283 C	K4T7R	(+AA9G,KA0B,KA0C,KA0D)	21,168	112	63 B	J4HNF	10,824	88	41 C	K4WPE	11,400	152	25 B				

HA8FM	354,006	831	142 C	OM3TWR	38,499	313	41 C 40	US9Q (US9QA,op)	88,377	331	89 C	Mariana Islands	F3EIG,JH3FQF,JI3ERV,JR7OMD,ops									
HA1KRR	293,346	758	129 C	OM5R (OM3TG,op)	33,768	268	42 C 40	UR5ON	43,263	209	69 C	KK8WW/KH8	165 11 5 B 80									
HA5BSW	20,280	169	40 B 40	OM3WST	2,064	43	16 C 40	UT3EW	42,630	203	70 C	KH2/KD4RCC	3 1 1 B 20									
HA3LI	13,950	155	30 B 40	OM3TUM	1,512	28	18 B 40	UR7IYU	6,480	72	30 C	Hawaii	KH6/N3KEG									
HA6OL	2,028	52	13 B 40	OM6W	16,680	139	40 B 20	UT6UT	6,864	88	26 C 80	KH6/N3KEG	502,686 963 174 B									
HA8VK	52,272	363	48 C 20	OM3CFT	1,089	33	11 B 20	UY5ZZ	600	20	10 B 80	KH6/N3KEG	F3EIG,JH3FQF,JI3ERV,JR7OMD,ops									
HG1IW (HA1WD,op)	38,682	307	42 C 15	Belgium																		
HA6NW	21,525	205	35 C 15	ON7CC	13,860	105	44 A	UX4CW	9,135	105	29 C 40	VS6BG (+VS6WA)	808,635 1457 185 C									
HA6KNX	7,371	91	27 C 15	ON5EU	3,120	52	20 A	UT5UGR	2,601	51	17 C 40	JA1ZLO (JF1KML,IF3TBL,JG4DN,ops)	690,696 1272 181 C									
Liechtenstein				ON4XG	90,024	341	88 B	UY2ZZ	1,209	31	13 B 40	JA8BYB (JO1DFG,JP1OOY,JG8WFE,JJ8FC,JI8RS,DHA,WJS,ops)	JG8WFE,JJ8FC,JI8RS,DHA,WJS,ops									
HB9AFH	19,305	143	45 A	ON4KF	36,099	191	63 B	UT7LA	1,116	31	12 C 40	RA0L (RU0LJL,UA0LS,UA0S,-103-454,-107-698,ops)	232,560 680 114 C									
HB9AGA	81,312	308	88 C	ON4KRO	3,843	61	21 B	UY0ZG	1,116	31	12 C 40	V7A (V73C,op)	36,639 207 59 C									
HB9BCK	65,706	233	94 C	ON4UN	68,508	519	44 C 80	UT8IM	336	16	7 B 40	JA9YBA (JR9QNJ,JR0SLG,ops)	2,196 61 12 C									
HB9BDC	68,724	498	46 C 40	ON5WL	5,760	80	24 B 20	UR5WA	53,808	472	38 B 15	Australia	VK2AKP 352,182 743 158 B									
HB9FAP	65,403	507	43 C 40	ON6CW	42,090	305	46 B 20	UT1IA	16,038	162	33 C 15	VK2FFY (WB2FFY,op)	VK2FFY (WB2FFY,op)									
HB9DX	30,858	278	37 C 15	ON6TJ	4,440	74	20 B 40	UY2ZA	5,037	73	23 B 15	VK2APK 352,182 743 158 B										
Italy				ON4APA	7,614	94	27 B 15	UR3PDM	1,188	33	12 B 15	VK2FFY (WB2FFY,op)	VK2FFY (WB2FFY,op)									
IK0CNA	21,708	134	54 A	Denmark																		
I0KHP	17,415	129	45 A	OZ1JLX	18,876	121	52 B	EW1EA	33,216	173	64 C	Europe	TM5G (F5s DE,FMI,GTR,F6s BKP,IRF,ops)									
IK2UEX	4,500	75	20 A	OZ7JQ	16,200	120	45 B	EW2AA	27,270	202	45 C 20	TM5G (F5s DE,FMI,GTR,F6s BKP,IRF,ops)	1,755,369 2533 231 C									
IK1RAC	1,728	32	18 A	OZ8RO	162,108	474	114 C	EW3EW	20,241	173	39 C 20	EI7M (EI3DP,EA4BZ,EA6B,TB,HB,EI9HC,ops)	EI7M (EI3DP,EA4BZ,EA6B,TB,HB,EI9HC,ops)									
IK1GNC	61,146	237	88 B	OZ2RH	18,954	117	54 C	Belarus														
IK4SDS	31,860	177	60 B	OZ5PA	4,290	55	26 C	EW0EA	3,216	173	64 C	VK5AI	106,506 366 97 B									
IK3SCB	27,048	161	56 B	OZ6PI	1,350	30	15 B 40	EW2AA	27,270	202	45 C 20	VK4EET	12,474 99 42 C									
IK6PTJ	25,080	152	55 B	OZ4UN	35,910	266	45 C 20	EW3EW	20,241	173	39 C 20	VK6HG	29,232 232 42 B 40									
IK2NVE	16,272	113	48 B	OZ7GF	1,872	52	12 B 20	Latvia														
I3MGN	11,760	98	40 B	OZ8AE	729	27	9 B 15	YL0A (YL2KL,op)	108,252	388	93 C	VK6VZ	5,022 62 27 B 40									
IK4SBR	10,413	89	39 B	Netherlands												Indonesia						
I3BBK	10,353	119	29 B	OZ0ADT	24,393	173	47 A	YL0A (YL2KL,op)	108,252	388	93 C	YC3UEM	2,601 51 17 B									
IK1RQO	7,998	86	31 B	OZ3EUS	12,852	102	42 A	YL2KO	8,004	116	23 C 15	YB0AIS (AA4U,op)	79,059 361 73 C 40									
I0ZUT	214,170	605	118 C	OZ0PA	240	10	8 A	YL2TF	3,510	65	18 A 15	YB2BKJ	702 26 9 B 40									
IK2AHB	95,040	352	90 C	OZ3ELD	48,600	225	72 B	Romania														
IK0TUG	27,966	158	59 C	OZ3GK	30,576	182	56 B	YO8KAN/P	30,780	180	57 B	YB2BKJ	1,020,825 1745 195 C									
IK2IKW	2,052	38	18 C	OZ4LOU	15,756	101	52 B	YO8PKB	16,200	120	45 B	GB5DX (NW1Z,VE5ZX,ops)	1,098,162 2166 169 C									
I3JBS	3,900	65	20 C 160	OZ2CHM	12,480	104	40 B	YO8FR	10,032	88	38 B	DL0IU (DL2HBX,DL4AAE,ops)	1,018,125 1875 181 C									
I2VUY	196,647	1111	59 C 40	OZ0CLN	346,695	797	145 C	YO2ARV	2,400	50	16 B 40	DL3NB	52,140 110 158 C									
IY0A (I0HCJ,op)	126,150	841	50 C 40	OZ3BN	1,221	37	11 B 40	YO4NF	31,104	288	36 B 15	DF0RR (DL75,AKC,ALM,PV,VOA,ops)	DF0RR (DL75,AKC,ALM,PV,VOA,ops)									
IK4WNI	41,400	300	46 B 20	OZ2REH	16,524	153	36 B 15	Yugoslavia														
IK3HUG	17,544	172	34 B 20	OZ3AFF	1,440	40	12 B 15	YU7KM	22,935	139	55 B	YU7UN	62,328 424 49 C 40									
IK0BNH	13,464	132	34 B 40	Slovenia												New Zealand						
I2JIN	9,135	105	29 C 20	OZ5EA	166,212	513	108 C	YU7DQ	15,972	121	44 B 80	ZL2AGY	636,480 1088 195 B									
I5OQV	3,990	70	19 B 20	OZ5F	1,716	276	42 C 80	ZL3K/9MA	347,919	811	143 B	DL3NB	45,150 301 50 B 40									
IT9AF	73,401	569	43 C 15	OZ5GW	34,776	75	35 B	LU1CX	161,955	915	59 B 20	OM3RKA (OM3s CPC,TDP,THR,TTZ,ops)	499,944 1126 148 C									
I1VEJ	55,341	429	43 C 15	OZ5I	25,602	251	34 C 80	LU1W	10,395	99	35 B 20	OM2I (OM3s CAV,CTA,TSQ,TXM,TXW,ops)	1,062,393 2047 1142 142 C									
IK0SHF	32,160	268	40 B 15	OZ5J	3,657	53	23 C 80	Albania														
IK5TSS	29,610	210	40 B 15	OZ5K	819	21	13 C 80	ZA/OK2PSZ	9,984	128	26 C 40	CE3BFZ	6,789 73 31 C									
IK5TBK	10,044	108	31 B 15	OZ5LQ	57,645	47	45 C 40	North America														
IK2UCK	6,156	76	27 B 15	OZ5SW	37,296	296	42 C 40	YU7AV (YU7AV,op)	1,715,838 2363	242 A	Barbados											
IK3SBA	6,003	87	23 C 15	OZ5MEU	760	20	13 B	YU7UN	62,328	424	49 C 40	PB9DX (VA3DX,op)	291,276 1674 58 C 15									
Sardinia														Albania								
I50OMH	105,570	414	85 B	OZ5MCD	14,364	24	11 A	YU7DU	27,360	228	40 B	CE3BFZ	6,789 73 31 C									
I50GSR	13,386	97	46 B	OZ5BCD	34,974	201	58 B	Dominican Republic														
Norway				OZ5MDS	3,474	201	58 B	HIBLC	3,276	52	21 B 40	LU2BRG	7,920 80 33 B 80									
LA2HFA	20,790	154	45 A	OZ5CDF	3,225	43	25 B 20	HP3DX	1,437,318	1857	258 B	LR0DX (LW9EUJ,LU9EUJ,LU9EUJ,LU9EUJ,ops)	224,613 1269 59 C 40									
LA1YE	32,490	190	57 B	OZ5MCS	5,776	218	79 C	HP3DX	1,437,318	1857	258 B	LU1EAR	15,810 345 34 B 15									
LA4EJ	3,432	44	26 B	OZ5MVC	7,875	75	35 B	HP3DX	1,437,318	1857	258 B	LU6EBY	9,518 558 57 B 10									
LA2O	101,529	389	87 C	OZ5TGG	5,976	83	24 B	HP3DX	1,437,318	1857	258 B	LU2EZU	68,450 443 50 B 10									
LA5MT	17,289	113	51 C	OZ5WXG	3,384	47	24 B	HP1AC	18,720	156	40 A 15	LU1FNH	50,619 359 47 A 10									
LA1PH	5,049	51	33 C	OZ5MSX	2,676	44	18 B	North America														
LA6PB	2,106	39	18 C	OZ5CER	1,995	35	19 B 20	HP1AC	18,720	156	40 A 15	LU1FNU	222,720 640 116 C									
Lithuania				OZ5MDP	14,364	33	36 C 20	HP1AC	18,720	156	40 A 15	LU1FNU	222,720 640 116 C									
LY3BS	3,720	62	20 C 80	OZ5PCF	151,696	303	26 C 20	HP1AC	18,720	156	40 A 15	LU1FNU	222,720 640 116 C									
LY1DS	7,440	80	31 C 40	OZ5PGL	3,678	227	73 C 20	HP1AC	18,720	156	40 A 15	LU1FNU	222,720 640 116 C									
LY2BKT	3,024	56	18 C 20	OZ5PL	1,680	28	20 C	HP1AC	18,720	156	40 A 15	LU1FNU	222,720 640 116 C									
LY2CX	690	23	10 B 15	OZ5PQ	3,234	49	22 C 40	HP1AC	18,720	156	40 A 15	LU1FNU	222,720 640 116 C									
Bulgaria				OZ5PQ	3,235	43	25 B 20	HP1AC	18,720	156	40 A 15	LU1FNU	222,720 640 116 C									
I2ZKRU	63,180	468	45 C 15	OZ5PRL	4,158	61	17 B 20	HP1AC	18,720	156	40 A 15	LU1FNU	222,720 640 116 C									
I2Z5R (I2ZYQ,op)	43,440	362	40 C 15	OZ5PST	5,011	151	29 C 20	HP1AC	18,720	156	40 A 15	LU1FNU	222,720 640 116 C									
Austria				OZ5PFT	50,151	67	22 C 20	HP1AC	18,720	156	40 A 15	LU1FNU	222,720 640 116 C									
OE3JOS	45,066	203	74 C	OZ5PGR	6,231	67	31 C 20	HP1AC	18,720	156	40 A 15	LU1FNU	222,720 640 116 C									
OE9SLH	17,472	104	56 C	OZ5PQH	3,366	51	22 C 20	HP1AC	18,720	156	40 A 15	LU1FNU	222,720 640 116 C									
Aland Islands				OZ5PQI	147	7	7 B 80	HP1AC	18													

RU1A (RV1AW,RW1AC,UA1s ALZ,ARW, UA1s -169-946,-169-2475,ops)	2	W8IJ 12 2 2B 20	K5OTI/4 18,444 116 53 C 20	WA6URY 19,320 161 40 C
546,048 1152 158 C		N3PFF (N/T) 3 1 1 B 10	W4YWA 108 6 6 C 20	W6OK 24,939 163 51 C 20
OZ5WQ (+OZ3CW)			W1AYR 12,900 100 43 C 15	KN6DV 140,940 540 87 C 15
131,100 437 100 C			W2SDB/4 405 15 9 B 15	KU6T 33,660 187 60 B 15
OH3AT (OH3s DC,FS,NBj,ops)			WD4OAY (N/T) 7,917 91 29 B 10	KC6WYX 10,395 105 33 B 10
4,959 57 29 B			KD4ODA 2,214 41 18 B 10	
North America			KE4JMY (N/T) 627 19 11 B 10	
6D2X (WN4KKN,K5TSQ,N5RZ, W5VX,ops)				
8,011,644 7652 349 C				
Unlimited				
Asia				
JA1YDU (JF1CFQ,JO1BMV,JP1JFG, JI2UYK,JFTFK,JIHBNZ,ops)				
1,092,618 1803 202 C				
JA1YFG (JO1BRW,JS3AXP,JI3OLZ, ops)				
33,450 223 50 C				
Europe				
9A1A (9A2s AW,CT,EU,HO,HV,KM, MP,OG,RA,SD,9A3GW,K4UX,ops)				
2,369,484 3237 244 C				
UT2IZZ (UT2s IA,ID,II,IM,OZ,ops)				
237,405 595 133 C				
W/VE Phone Single Operator				
1				
Connecticut				
KA1CZF- 156,843 333 157 A				
NN1Q 20,724 157 44 A				
NN1K 18,000 100 60 A				
K1YXG 67,848 257 88 B				
AA1CB 26,499 121 73 B				
W11CF 13,350 89 50 B				
K1TN 5,658 46 41 B				
N2LTK 5,508 51 36 B				
WE6G 61,326 827 246 C				
WV1C 189,585 383 165 C				
KA1DSQ 29,601 143 69 C				
K5FUUV/1 19,596 92 71 C				
N4XR 507 13 13 C				
K1VWL 21,033 123 57 B 80				
AK1N 23,718 134 59 C 40				
K1ZZ 11,223 87 43 C 40				
K5L 718,428 1748 137 C 20				
KB1GW 35,979 179 67 B 20				
K1RU 419,958 1111 126 C 15				
K1DII 2,601 51 17 B 10				
WA1VRD 1,800 40 15 C 10				
NIQVE (N/T) 254 11 8 B 10				
Eastern Massachusetts				
KZL 32,109 139 77 A				
NY1L 153,788 361 142 B				
K8JLF 180,500 300 145 B				
W1MK 102,990 245 140 B				
N1HKV 79,560 260 102 B				
KC1SQ 67,672 202 112 B				
W1GOU 68,708 204 108 B				
K1CWD 15,150 101 56 B				
WA2SCA 14,022 82 57 B				
W1K 4,320 45 32 B				
N1FY 3,240 45 24 B				
W1KRS 292,455 485 201 C				
W1FM 235,188 417 188 C				
KB1KM 202,797 333 203 C				
A13E 143,370 295 162 C				
W1FJ 109,326 274 133 C				
KD1GG 88,800 200 148 C				
WS1H 21,840 130 56 C				
K8PO 119,592 453 88 C 40				
K1KJT 32,076 198 54 C 20				
W1KO 20,034 159 42 C 20				
KA1WHL 92,910 326 95 B 15				
WS1M 20,874 142 49 C 10				
Maine				
KC1YF 150,255 371 135 B				
N1KNH 9,108 66 46 B				
KD1OG 1,566 29 18 B				
KO1F 24,327 159 51 C 80				
K1JB 129,396 526 82 C 20				
KD1SG 20,352 128 53 C 20				
K1UO 511,746 1273 134 C 15				
New Hampshire	3			
WS1A 729,618 878 277 B				
KD1ON 74,472 214 116 B				
AE1D 20,904 104 67 B				
N6BV 3,180,384 2592 409 C				
W1LQQ 65,649 277 79 C				
W1PH 74,460 292 85 C 40				
W2QL 49,200 205 80 B 15				
KA1SVV 2,001 29 23 A 15				
Rhode Island				
AA1GV 51,480 165 104 B				
K2MN 11,025 75 49 B				
W11 2,958 34 29 B				
N1PUW 4,650 50 31 C				
WA1MKS 8,316 66 42 C 20				
K1VSJ 13,230 98 45 B 15				
Vermont				
W3SOH 35,100 150 78 B				
KA1LDS 27,027 117 77 B				
K1CLN 184,392 394 156 C				
Western Massachusetts				
AA1EY 263,697 433 203 B				
WA1EQU 47,793 179 89 B				
WW1A 41,076 163 84 B				
KG1S 35,076 148 79 B				
K1AR 4,046,805 3045 443 C				
K5ZD 3,669,534 2838 431 C				
N1JAC 6,120 60 34 C 20				
Eastern New York				
WA2EOV 444,048 638 232 B				
W2KHQ 195,390 390 167 B				
K2RI 81,720 227 120 B				
K2XA 963,240 920 349 C				
K1ZM 130,410 483 90 C 80				
KB2EU 31,062 167 62 B 20				
WX2N 20,349 133 51 B 20				
NYC-Long Island				
W2BZH 37,200 200 62 B				
N2MBM 11,907 63 63 B				
W2YG 6,039 61 33 C 40				
WB2AMU 1,710 30 19 B 40				
K2QMF 165,528 484 114 B 20				
WB2CUZ 10,032 88 38 B 20				
WA2SYN 97,428 353 92 C 15				
K2MFY 80,040 290 92 C 15				
K5ZG 17,595 115 51 B 15				
WA2OVG 5,250 50 35 B 15				
W2KZE 11,988 108 37 B 10				
KC6ETY (N/T) 10,944 96 38 B 10				
Western New Jersey				
AA2U 424,800 600 236 A				
K2SG 1,008,714 1022 329 B				
K2DNT 334,650 485 230 B				
K3FNW 294,066 527 186 B				
K2E2ZU 208,938 359 194 B				
WA2ZGO 194,256 284 228 B				
N2INN 182,628 356 171 B				
K2RZO 9,165 65 47 B				
N2LT 2,295,408 1972 388 C				
K2DM 1,517,796 1596 317 C				
A1A7QZ/2 97,875 225 145 C				
WA2UDT 85,089 251 113 C				
WA2ASM 67,080 215 104 C				
N2LDU (N/T) 6,210 69 30 B 10				
WA2ASQ 5,040 56 30 B 10				
Southern New Jersey				
W2FGY 100,620 258 130 B				
KF2BQ 42,987 161 89 B				
N2OZ 32,619 131 83 B				
NC1A 33,284 126 88 C				
N3AHF 9,768 74 44 C 80				
N2VYU 2,904 44 22 C 20				
W2NNU 11,352 86 44 B 15				
W2OZU 10,655 74 48 B				
K2AYKN 8,316 66 42 B				
WA2VSQ 16,320 85 64 B				
W2DRA 10,655 74 48 B				
W2ZRA 16,320 85 64 B				
K2VPS 178,050 335 170 C				
K2FX 178,050 335 170 C				
K2VQJ 182,180 340 159 C				
N2PKN 100,080 278 120 C				
N2PLE 89,280 248 120 C				
N2AWC 6,669 57 38 C				
WA2YSW 12 2 2 B 40				
A2AQE 720 20 12 B 20				
K2RZN 462 14 11 B 20				
K2DAE 216 9 8 B				
AA2GQ 749,340 905 276 C				
N2MR 366,127 567 227 C				
K2VX 170,850 335 170 C				
N2LQ 13,104 91 48 B				
W2DFA 255,576 463 184 C				
K2SE 153,306 334 153 C				
W2ZP 142,242 302 157 C				
WR2V 129,648 296 146 C				
K2BDE 123,576 271 152 C				
W2QIP 101,772 257 132 C				
WA2ABN 87,000 232 125 C				
W2OMV 56,454 194 97 C				
WB2ABD 67,440 261 80 C 80				
WB2MMW 56,283 257 73 B 20				
W2IMO 12,600 100 42 C 20				
District of Columbia				
W3USS (K8QOL,op)	194,400 648 100 C 20			
Delaware				
W3NX 171,312 344 166 C				
WN3K 10,701 87 41 B 20				
Eastern Pennsylvania				
NM3E 542,568 611 296 B				
K3KFD 441,936 594 248 B				
WT3P 243,645 439 185 B				
N3MLV 186,069 367 169 B				
WB3AAL 108,855 295 123 B				
WA3AQL 108,855 295 123 B				
WA3AQL 60,000 200 100 B				
K3QIR 58,092 188 103 B				
W3QIR 25,545 131 65 B				
K3NL 18,762 106 59 B				
K3ATLE 13,833 87 53 B				
WA3YTI 4,752 48 33 B				
W3SSS 1,980 30 22 B				
W3BGN 2,268,041 1993 379 C				
W3BGN 199,148 336 148 C				
K2DOX 848,715 959 295 C				
W3GK 379,674 534 237 C				
K3TEJ 356,094 542 219 C				
W3AQL 356,094 542 219 C				
WA3AQL 340,902 531 214 C				
WT3H 149,184 336 148 C				
K2DOX 146,700 326 150 C				
KL7HJR/3 146,700 326 150 C				
W3P 22,000 327 137 C				
W3AP 25,200 120 70 B				
W3AZD 12,420 92 45 B				
WN4K 11,094 86 43 B				
K1FIR 5,460 52 35 B				
W4K4F 2,808 36 26 B				
W4NOO 2,436 29 28 B				
K8UNP 982,194 1046 313 C				
AC4IV 131,209 308 142 C				
W1ENZ 7,199 233 103 C				
KC6VWI/W4 25,347 19 71 C				
W4PZV (WA4SVQ,op)	19,847 331 79 C 80			
W4PZV (WA4SVQ,op)	78,447 331 79 C 80			
K9ES (WD6GTP,op)	218,736 784 93 C 20			
W3EZH 18,444 116 53 B 20				
Maryland-DC				
W3UJ 366,474 593 206 B				
N3QVD 61,953 193 107 B				
WA0CLR 14,112 84 34 B				
K3ZC 3,219 83 109 B				
W3FV 3,036 44 33 B				
W3QV 3,036 44 33 B				
K3ZO 2,058,402 1968 7,917 91 29 B 10				
W4YWA 108 6 6 C 20				
W1AYR 12,900 100 43 C 15				
W2SDB/4 405 15 9 B 15				
WD4OAY (N/T) 7,917 91 29 B 10				
KD4ODA 2,214 41 18 B 10				
KE4JMY (N/T) 627 19 11 B 10				
Tennessee				
N1CWR 63,648 208 102 A				
KI4KR 37,944 136 93 B				
W4AY (WA4ZUZ,op)	32,190 88 34 B			
AC4ZD 21,546 114 63 B				
AD4CJ 17,346 98 59 B				
K4LTA 714,840 851 280 C				
W4OGG 44,919 1				

WB7AAK	1,125	25	15 B	KD6ST	48,837	223	73 C	40	Prince Edward Island	K3GA	201,600	336	200 C	WW1G (+WB1HBB)	
AA7NX	162,393	407	133 C	W9CH	17,400	116	50 C	40	VY2RCR	KD3TB	658,053	759	289 C	658,053	
WG7A	62,652	227	92 C	W9OF	95,304	361	88 C	20	VY2SS	K3IE	153,621	303	169 C	W1FY (AA1DC,K1AZE,K1As USL,ZLQ,	
KI7Y	36,639	177	69 C	WA9BOW	66,780	265	84 B	15	VY2SS	W3KV	143,640	315	152 C	KB1AGM,KC1YR,KD1BF,N1s DGC,	
AA7FL	35,568	152	76 C	N9LCR	60,420	271	76 B	15	Quebec	K3BXH	134,145	271	165 C	DGT,ECI,FXE,JKO,LOO,OJX,QJP,	
NEPZ	35,568	156	76 C	NE0P/9	1,377	27	17 B	15	VY2AWR	K3NZ	121,137	271	149 C	QMA,QWP, QYW,W1s EQW,NXC,	
KU7K	25,560	142	60 C	WF9V	312	13	8 B	15	VY2AYU	WA15	115,872	284	136 B	WA1s KUG, R, WR1P,N2RHV,	
KC7EM	178,308	762	78 C	40	N9TMU (N/T)	2,277	33	23 B	10	VY2EW	W2UP	110,856	248	149 C	W17/G4DZC,ops
WJ7R	2,574	66	13 B	90	N9HW (N/T)	1,938	34	19 B	10	VY2EW	W3UM	101,655	251	135 C	605,556
WA7FAB	214,467	737	97 C	15	WB9WJO (N/T)	900	20	15 B	10	VY2EW	K3OO	82,830	251	110 C	590
W7FP	124,440	488	85 C	15	WB9WJO (N/T)	900	20	15 B	10	VY2EW	W3HQ	72,954	193	126 C	226 B
KB7KLT (N/T)	9,240	88	35 B	10	Indiana	AA9IX	8,640	64	45 B	VY2EW	K3LA	55,014	173	106 C	NR1L (+KA1s QAS,ZE,N1FOW)
Utah	82,944	256	108 B	V9RE	2,396,676	2059	388 C	W9YSX	W8FJ	396,000	750	176 C	396,000		
WT7HS	12,276	93	44 C	18,090	134	45 B	10	N9QX	K3ND	29,232	112	87 C	N1HRA (-KA1s VMG,ZZR,KB1AAG,		
NT7Y	2,574	66	13 B	10	KB0C	15,120	105	48 C	40	W7ZLP	K3TLX	25,920	108	80 B	N9LYE) 346,986
Western Washington	922,551	1379	223 C	N9PGH (N/T)	13,560	113	40 B	10	VY2EW	K3KHN	23,868	117	68 C	521	
AA7RN	161,070	455	118 B	N8ZR/9	12	2	2 A	10	W9JOO	W1QK (+KA1SYG)	346,311	483	239 C	W1QK (+WA1UAR)	
AA7PM	116,604	316	123 B	W9PYH	1,200	25	16 C	15	W9P/9	W1BK (+WA1UAR)	19,575	87	75 C	19,575	
WW7Q	90,321	253	119 B	KB9BGV (N/T)	18,090	134	45 B	10	W9YBQ	2	K5NA (+KU2O,KY2J,N2MCI,JA9SSY)	2,446,986			
WA7VNI	67,032	266	84 B	N9PGH (N/T)	13,560	113	40 B	10	W9CVR	K4NFGA	1,998,756	1674	398 C	1,998,756	
NB7N	929,640	1220	254 C	N8ZR/9	12	2	2 A	10	W9CVR	K4AQ	86,688	224	129 B	KB2HZ (+NO2R,NJ2W,WA2VUY,	
WA7FOE	922,551	1379	223 C	W9GOC	17,400	253	80 C	W9GOC	K4TCV	54,000	180	100 B	KF5FK,W9NGA)		
WT7LP	278,460	595	156 C	W9GOC	5,400	50	36 B	20	W9GOC	N4RJ	965,007	927	347 C	965,007	
K7PNP	56,400	226	80 C	W9GOC	4,128	43	32 B	20	W9GOC	WU3A (+NS2K)	934,248	938	332 C	934,248	
N6HR	24,723	123	67 C	W9GOC	65,805	205	107 B	W9GOC	W2XL (+N2s GOS,MFZ)	767,835	755	339 C	767,835		
WT7HR	8,613	87	33 C	W9GOC	63,345	205	103 B	W9GOC	N2SS (W2GMA,K3GYS,ops)	505	150	90 B	505		
WB7EWC	8,613	87	33 C	W9GOC	42,642	138	103 B	W9GOC	WA2ETU (W2RKO,WB2YQQ)	751,701	757	331 C	751,701		
WT7HO	7,770	74	35 C	W9GOC	5,400	60	30 C	40	W9GOC	W5XD	501,255	705	237 C	501,255	
K7RI (AA7FT,op)	173,145	595	97 B	W9GOC	123,690	434	95 C	20	W9GOC	WA2UKP (+WA2JQK)	333,162	498	223 B	333,162	
N7LOX	132,192	544	81 B	W9GOC	89,070	254	505	159 C	W9GOC	N2LB2 (+WA1KKM)	321,360	520	206 C	321,360	
WA0RJY	118,320	493	80 B	W9GOC	114,264	276	138 C	W9GOC	KC2Q (+ops)	124,488	273	152 C	124,488		
W7ON	36,417	199	61 B	W9GOC	5,400	60	30 C	40	W9GOC	KE2PM (N2s PBU,PBV,QYN,QYP,	501,255	705	237 C	501,255	
W7VIH	1,800	40	15 B	W9GOC	123,690	434	95 C	20	W9GOC	SCM,VBM,ops)	41,328	164	84 C	41,328	
Wyoming	Ø	Ø	Ø	W9GOC	89,070	254	505	159 C	W9GOC	W6RCL	104,040	289	120 C	104,040	
AA7PM	150,588	356	141 B	W9GOC	60,960	254	80 C	20	W9GOC	N6KI	90,240	235	128 C	90,240	
N7MZW	61,812	204	101 B	W9GOC	147,519	443	111 C	15	W9GOC	W6RLLY/6	68,400	200	114 B	68,400	
WC7CS	59,292	183	108 B	W9GOC	94,863	307	103 C	15	W9GOC	W6TKW	55,860	196	95 C	55,860	
KB7TM	7,128	66	36 C	W9GOC	3,321	41	27 B	10	W9GOC	A8B8T	50,220	155	108 C	50,220	
NC7O	5,670	54	35 C	W9GOC	351	13	9 B	10	W9GOC	N6CCL	42,131	613	229 C	42,131	
Michigan	Ø	Ø	Ø	W9GOC	123,690	434	95 C	20	W9GOC	KC6X	394,320	620	212 C	394,320	
AA8AV	346,986	521	222 B	W9GOC	89,070	254	505	159 C	W9GOC	KM6YX	362,208	539	224 C	362,208	
WB8BUQ	128,760	296	145 B	W9GOC	114,264	276	138 C	W9GOC	W6SKP	123,690	434	95 C	123,690		
KG8AL	105,672	259	136 B	W9GOC	5,400	60	30 C	40	W9GOC	W6RCL	1,235,061	1341	307 C	1,235,061	
W7KF	38,097	153	83 B	W9GOC	10,212	74	46 B	W9GOC	N6K6	646,669	839	257 C	646,669		
AA8KV	36,693	151	81 B	W9GOC	108	6	6 B	W9GOC	W6RMM	486,243	667	243 C	486,243		
NBLQ	3,168	33	32 B	W9GOC	282,150	627	150 C	W9GOC	K1D1G (W1R,op)	2,761,632	2064	446 C	2,761,632		
KE8KQ	378,510	682	185 C	W9GOC	185,760	387	160 C	W9GOC	KC1F	1,890,000	1680	375 C	1,890,000		
NK8KS	144,840	340	142 C	W9GOC	181,350	403	150 C	W9GOC	K1IU	1,035,720	950	360 C	1,035,720		
W8RC	22,236	109	66 C	W9GOC	101,616	232	146 C	W9GOC	KC9Z	659,325	745	295 C	659,325		
W8TWA	108,813	437	83 C	20	W9GOC	15,138	87	58 C	W9GOC	K1TO	615,121	851	257 C	615,121	
K8JMM	4,455	55	27 C	15	W9GOC	714	17	14 C	W9GOC	K1HMO	618,694	857	314 C	618,694	
N8WOZ	7,740	86	36 C	10	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	K2TE	389,385	599	255 C	389,385
KB8OWE	5,265	65	27 B	10	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	K1FWF	370,413	458	269 C	370,413
Ohio	Ø	Ø	Ø	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	191,706	359	178 C	191,706	
NA8XA	1,254	22	19 A	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970	
WB8LWX	667,488	818	272 B	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970	
WB8G	54,600	182	100 B	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970	
W8YGR	45,339	127	119 B	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970	
WA8UNP	55,272	117	72 B	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970	
AF8C	23,718	118	67 B	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970	
W8DWM	14,840	80	61 B	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970	
N8OWI	13,968	97	48 B	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970	
KE8XX	4,080	40	33 B	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970	
WB8UPH	3,570	35	34 B	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970	
W8XT	1,188	22	18 B	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970	
WB8LTM	60,984	168	121 C	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970	
WB8ORV	55,212	214	86 C	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970	
K8J	21,186	107	66 C	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970	
WB8WV	16,896	88	64 C	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970	
WB8DPF/8	14,694	79	62 C	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970	
WB8RC	1,638	26	21 C	160	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970
WD9INF	810	18	15 C	160	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970
WB8K8N	82,474	348	79 C	40	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970
WB8ILH	12,540	95	44 C	40	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970
WB8JSU	32,220	179	60 C	20	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970
WB8QJ	2,071	30	23 A	20	W9UN (K9UO,op)	149,202	614	81 C	40	W9GOC	W6RMM	176,970	205	155 C	176,970
WB8QKJ (N/T)	11,124	103	36 B	10	W9UN (K9UO,op)	149,202	614	81 C	4						

KK9G (+N5CEC,N9VEX) 78,372 311 84 C	Canary Islands EA8BQX 5,616 72 26 B EA8AFJ 1,783,368 2914 204 C ED8USA 1,425,276 2862 166 C EA8PP 63,342 414 51 C 80	JA1EJD 2,025 45 15 B 15 JE9MFJ 1,716 44 13 B 15 JJ1NUJ 1,170 30 13 B 15 7L1MFS 1,089 33 11 A 15 JJ1TYU 990 33 10 B 15 JA3GEO 810 27 10 B 15 JA0CJK 768 32 8 B 15 JJ2WHS 630 30 7 B 15 JA3JOT 576 32 6 B 15 JL6ATO 405 15 9 B 15 JK1JHB 180 12 5 B 15 JF2PXB 162 9 6 B 15 JA5FZI 150 10 5 B 15 JG1GCO 75 5 5 B 15 JM2BHI 72 6 4 B 15 JA3AVO 48 4 4 B 15 JL6IPK 48 8 2 A 15 JH1RMH 36 6 2 B 15 JA9XAT 18 3 2 B 15 JF1VBX/6 15 5 1 B 15 JO1MCC 9 3 1 A 15 JA1XPU 6 2 1 B 15 South Africa ZS6YA 459,096 1034 148 B ZS6/G3XTT 503,910 1018 165 C ZS6SA 353,190 965 122 C	Ireland EI9FK 210,000 625 112 B	LZ2FM 210 10 7 B 15
KC9IC (+N9HJU) 22,848 119 64 C	Asia 4X1VF 6,072 88 23 C 20	JA1EJD 2,025 45 15 B 15 JE9MFJ 1,716 44 13 B 15 JJ1NUJ 1,170 30 13 B 15 7L1MFS 1,089 33 11 A 15 JJ1TYU 990 33 10 B 15 JA3GEO 810 27 10 B 15 JA0CJK 768 32 8 B 15 JJ2WHS 630 30 7 B 15 JA3JOT 576 32 6 B 15 JL6ATO 405 15 9 B 15 JK1JHB 180 12 5 B 15 JF2PXB 162 9 6 B 15 JA5FZI 150 10 5 B 15 JG1GCO 75 5 5 B 15 JM2BHI 72 6 4 B 15 JA3AVO 48 4 4 B 15 JL6IPK 48 8 2 A 15 JH1RMH 36 6 2 B 15 JA9XAT 18 3 2 B 15 JF1VBX/6 15 5 1 B 15 JO1MCC 9 3 1 A 15 JA1XPU 6 2 1 B 15 South Korea HL5YI 702 26 9 B	France F5BEG 29,925 175 57 A F5PRH 63,729 291 73 B F2R0 55,470 215 86 B F2AR 31,758 158 67 B F8WE 12,840 107 40 B F5JBF 576 16 12 B 15 F6FGZ 1,433,916 2414 198 C F6FUN 28,851 163 59 C F6BVW 2,160 45 16 C 40 F5PYI 8,265 95 29 B 20 F5NBU 185,310 1065 58 C 15 F6DRP 8,484 101 28 B 15	Austria OE1KTS 15,264 106 48 B OE8KDK/1 14,178 139 34 B OE1PPC 146,280 480 106 C OE8SKO 44,496 309 48 C 20
KM0J (+AA5WQ,N5s CG,OK) 1,846,992 1912 322 C	Israel NCOP (+NOAMI,WAB0 ETC,FLS,GVY, WR0G) 1,228,788 1177 348 C	JA1EJD 2,025 45 15 B 15 JE9MFJ 1,716 44 13 B 15 JJ1NUJ 1,170 30 13 B 15 7L1MFS 1,089 33 11 A 15 JJ1TYU 990 33 10 B 15 JA3GEO 810 27 10 B 15 JA0CJK 768 32 8 B 15 JJ2WHS 630 30 7 B 15 JA3JOT 576 32 6 B 15 JL6ATO 405 15 9 B 15 JK1JHB 180 12 5 B 15 JF2PXB 162 9 6 B 15 JA5FZI 150 10 5 B 15 JG1GCO 75 5 5 B 15 JM2BHI 72 6 4 B 15 JA3AVO 48 4 4 B 15 JL6IPK 48 8 2 A 15 JH1RMH 36 6 2 B 15 JA9XAT 18 3 2 B 15 JF1VBX/6 15 5 1 B 15 JO1MCC 9 3 1 A 15 JA1XPU 6 2 1 B 15 Saudi Arabia HZ1AB (N4KT,op.) 12,672 96 44 C	Aland Islands OH0KDY 517,086 1249 138 C OH0NJ 1,575 35 15 C 15	
K0KE (KT0F,ND0V,WA3TLF,ops) 558,516 854 218 C	Japan VE3GB (VA3s CW,LM,VE3s ABG,GVM, IJM,MIX,NDA,OBQ,PZX,THR,URG,VSM, YTM,ops)	JA1EJD 2,025 45 15 B 15 JE9MFJ 1,716 44 13 B 15 JJ1NUJ 1,170 30 13 B 15 7L1MFS 1,089 33 11 A 15 JJ1TYU 990 33 10 B 15 JA3GEO 810 27 10 B 15 JA0CJK 768 32 8 B 15 JJ2WHS 630 30 7 B 15 JA3JOT 576 32 6 B 15 JL6ATO 405 15 9 B 15 JK1JHB 180 12 5 B 15 JF2PXB 162 9 6 B 15 JA5FZI 150 10 5 B 15 JG1GCO 75 5 5 B 15 JM2BHI 72 6 4 B 15 JA3AVO 48 4 4 B 15 JL6IPK 48 8 2 A 15 JH1RMH 36 6 2 B 15 JA9XAT 18 3 2 B 15 JF1VBX/6 15 5 1 B 15 JO1MCC 9 3 1 A 15 JA1XPU 6 2 1 B 15 Mongolia J1H1UJT 22,680 180 42 B	England G0NYD 12,321 111 37 A G6QQ 3,612 43 28 B G4OJH 697,698 1401 166 C G2OT 101,430 322 105 C G4UIF 79,596 402 66 C G4KKR 31,785 163 65 C G0NYL 22,896 144 53 C G3NLY 48,006 381 42 C 80 G4BUO 232,560 1292 60 C 15 G4IQM 24,816 188 44 B 15	Aland Islands OH0KDY 517,086 1249 138 C OH0NJ 1,575 35 15 C 15
KF0GV (+N0LIW) 543,912 692 262 C	Scandinavia N0MMA (+KB9GKV,KD9XK,AA0MQ,N0s LNO,YYY) 409,512 604 226 C	TA2ZI (W6POK,op.) 2,208 32 23 B	Finland OH2BVM 20,280 130 52 C OH3RB 75 5 5 C 80	
VE	Two Transmitter AD1C (+K1EA,KC1XX,KD1EA,KM3T) 5,344,038 3486 511 C	Turkey TA2ZI (W6POK,op.) 2,208 32 23 B	Northern Ireland GI0SAP 94,392 552 57 C 20	
N3RS (+N3s ED,RD)	K9S9K (+K9GS,N9AU,N9B9,WC9T1Y, WE9V) 1,109,184 2784 492 C	Wales GW0PUP 9,660 92 35 B 15	Scotland GM3BL 167,256 606 92 C	
4,126,470 2615 526 C	W6EEN (+K6XC,K6ASAR) 2,508,480 2686 312 C	Hungary HA4FB 4,824 67 24 B 20 HA6DX 151,368 952 53 B 15	Slovakia OM3YK 23,016 137 56 B	
2,274,885 2055 369 C	WX0B (+K51G,AA5s OR,QY,K15s JC, NE,NA5N,NM5M)	HA1WVJX 76,212 438 58 C UA9UDR 6,399 79 27 B 20 RX8JA 432 16 9 B 20	OM8A 313,872 1006 104 C	
1,910,700 1483 430 C	W0AIH (+A9D,N9KAU,WB9EEA, K2FV,N0A0XL)	Kazakhstan UB2O 168 8 7 C	OM9W 52,029 369 47 C 40	
WT3Q (+ABP2 K30X,NU3Y) 1,913,070 1483 430 C	J1H1UJT 22,680 180 42 B	Europe Former Yugoslav Republic of Macedonia Z31GB 17,628 113 52 B Z32KV 825 25 11 B Z32JA 103,924 721 48 C 15	OM3 (OM3WDX,op.) 184,788 1062 58 C 20	
K1K (K1JKS,N1OEC,NB1B,WB1AO, K2AJY,K8R2R)	J1RCB 2,352 56 14 B JA4DHN 2,091 41 17 B 7M2CAG 1,974 47 14 B JG1JWQ 1,811 49 13 B JR70MD/2 1,734 34 17 B J6TWTQ 1,665 37 15 B JA2GHP 1,620 54 10 B JG5OYU 1,365 95 13 B JG9LQ 1,320 40 11 B JA1GBL 1,050 35 10 B JA3MXP 1,026 38 9 B JE3JYH 900 30 10 B JH9WQX 658 26 11 B J1L1AG 693 21 11 B JA6BWH 624 26 8 B JA6CSP 360 12 10 B JK3UJR 252 14 6 B JA3WFQ 60 5 4 B	Croatia 9A3ZQ 9,690 95 34 C 9A7A (SA3ER,op.) 247,860 1377 60 C 20	Belgium OK1ALW 1,387,188 2486 186 C	
NE3F (+N3KZ,NT3V,NZ3G)	J1RCB 2,352 56 14 B JA4DHN 2,091 41 17 B 7M2CAG 1,974 47 14 B JG1JWQ 1,811 49 13 B JR70MD/2 1,734 34 17 B J6TWTQ 1,665 37 15 B JA2GHP 1,620 54 10 B JG5OYU 1,365 95 13 B JG9LQ 1,320 40 11 B JA1GBL 1,050 35 10 B JA3MXP 1,026 38 9 B JE3JYH 900 30 10 B JH9WQX 658 26 11 B J1L1AG 693 21 11 B JA6BWH 624 26 8 B JA6CSP 360 12 10 B JK3UJR 252 14 6 B JA3WFQ 60 5 4 B	Portugal CR88BW (CT1BWW,op.) CT1AVR 89,352 408 73 B CT1KT 201,201 737 91 C CT1BNW 3,860 81 20 B 20 CT4NC 2,835 45 21 B 20	Denmark OK2FD 422,004 1012 139 C	
N3OWG (+N3s IQD,JGX) 174,825 333 175 B	9A5W (9A3NW,op.) 147,345 893 55 C 15	Azores CU2AF 13,770 153 30 C 160	OK2ABU 504 21 8 C 80	
Unlimited	W3LPL (+K1HZ,KA1QD,KH2F,A13M,K3s RA,ZZ,KF3P,N3GB,W3EK,TWR3, NBI) 8,427,612 4651 604 C	Federal Republic of Germany JH7DNO 963,792 1746 184 C JA0QNJ 281,520 816 115 C JA1GBL 1,050 35 10 B JA3MXP 1,026 38 9 B JE3JYH 900 30 10 B JH9WQX 658 26 11 B J1L1AG 693 21 11 B JA6BWH 624 26 8 B JA6CSP 360 12 10 B JK3UJR 252 14 6 B JA3WFQ 60 5 4 B	OK1DIX 61,992 492 42 C 40	
N2R (K42AEV,KB2BF,KR2J,K22S, N2AA,N2BC,N2NT,W2GM,A2RQ, WM2H,NGH)	JH7DNO 963,792 1746 184 C JA0QNJ 281,520 816 115 C JA1GBL 1,050 35 10 B JA3MXP 1,026 38 9 B JE3JYH 900 30 10 B JH9WQX 658 26 11 B J1L1AG 693 21 11 B JA6BWH 624 26 8 B JA6CSP 360 12 10 B JK3UJR 252 14 6 B JA3WFQ 60 5 4 B	Portugal CR88BW (CT1BWW,op.) CT1AVR 89,352 408 73 B CT1KT 201,201 737 91 C CT1BNW 3,860 81 20 B 20 CT4NC 2,835 45 21 B 20	OK1AEZ 42,336 336 42 C 40	
W3LPL (+K1HZ,KA1QD,KH2F,A13M,K3s RA,ZZ,KF3P,N3GB,W3EK,TWR3, NBI) 8,427,612 4651 604 C	9A5W (9A3NW,op.) 147,345 893 55 C 15	Federal Republic of Germany JH7DNO 963,792 1746 184 C JA0QNJ 281,520 816 115 C JA1GBL 1,050 35 10 B JA3MXP 1,026 38 9 B JE3JYH 900 30 10 B JH9WQX 658 26 11 B J1L1AG 693 21 11 B JA6BWH 624 26 8 B JA6CSP 360 12 10 B JK3UJR 252 14 6 B JA3WFQ 60 5 4 B	OK1BLB 8,568 102 28 B 20	
K2B2U (+NF2L)	JG1JWQ 31,494 313 46 C JA3KIV 41,194 313 46 C JA9CCG 35,649 233 51 C JA0QNJ 8,370 93 30 C JA1GBL 9,750 130 25 C 80	Spain CU2AF 13,770 153 30 C 160	OK2PCL 13,986 126 37 B 15	
KY3N (+ops)	JG1JWQ 31,494 313 46 C JA3KIV 41,194 313 46 C JA9CCG 35,649 233 51 C JA0QNJ 8,370 93 30 C JA1GBL 9,750 130 25 C 80	Federal Republic of Germany JH7DNO 963,792 1746 184 C JA0QNJ 281,520 816 115 C JA1GBL 1,050 35 10 B JA3MXP 1,026 38 9 B JE3JYH 900 30 10 B JH9WQX 658 26 11 B J1L1AG 693 21 11 B JA6BWH 624 26 8 B JA6CSP 360 12 10 B JK3UJR 252 14 6 B JA3WFQ 60 5 4 B	OK2BJT 11,742 103 28 C	
W3MM (+WU3M)	JG1JWQ 31,494 313 46 C JA3KIV 41,194 313 46 C JA9CCG 35,649 233 51 C JA0QNJ 8,370 93 30 C JA1GBL 9,750 130 25 C 80	Portugal CR88BW (CT1BWW,op.) CT1AVR 89,352 408 73 B CT1KT 201,201 737 91 C CT1BNW 3,860 81 20 B 20 CT4NC 2,835 45 21 B 20	OK1TRE 130,272 756 45 C 80	
K2WI (+WV2Y)	JG1JWQ 31,494 313 46 C JA3KIV 41,194 313 46 C JA9CCG 35,649 233 51 C JA0QNJ 8,370 93 30 C JA1GBL 9,750 130 25 C 80	Portugal CR88BW (CT1BWW,op.) CT1AVR 89,352 408 73 B CT1KT 201,201 737 91 C CT1BNW 3,860 81 20 B 20 CT4NC 2,835 45 21 B 20	OK1TRE 130,272 756 45 C 80	
N2MM (+A2NS,WB2R)	JG1JWQ 31,494 313 46 C JA3KIV 41,194 313 46 C JA9CCG 35,649 233 51 C JA0QNJ 8,370 93 30 C JA1GBL 9,750 130 25 C 80	Portugal CR88BW (CT1BWW,op.) CT1AVR 89,352 408 73 B CT1KT 201,201 737 91 C CT1BNW 3,860 81 20 B 20 CT4NC 2,835 45 21 B 20	OK1TRE 130,272 756 45 C 80	
1,633,275 1281 425 C	JG1JWQ 31,494 313 46 C JA3KIV 41,194 313 46 C JA9CCG 35,649 233 51 C JA0QNJ 8,370 93 30 C JA1GBL 9,750 130 25 C 80	Portugal CR88BW (CT1BWW,op.) CT1AVR 89,352 408 73 B CT1KT 201,201 737 91 C CT1BNW 3,860 81 20 B 20 CT4NC 2,835 45 21 B 20	OK1TRE 130,272 756 45 C 80	
DX Phone	JH7QXJ 30,420 260 39 C 20	Spain JA3CWK 9,640 136 19 B JA6XJF 13,716 127 38 C 20 JA1GBZ 8,877 101 29 B 20 JA7TRXU 5,400 75 24 C 20 JA4XRN 3,195 55 19 B 20 JE0EHE 240 20 4 B 20 JA0GZ 144 12 4 B 20 JA1PMQ 3 1 1 A 20 JA7ATFR 153,504 984 52 C 15	Norway LA6GV 39,039 169 77 B LA2GCA 26,400 160 62 B LA2JR 10,560 88 40 B LA2AD 936 24 13 B LA1KQ 660 20 11 B LA9DFA 141,930 498 95 C LA4BN 15,600 100 52 C LA5JX 2,496 32 26 C LA1PHA 11,544 104 37 T 15	Sweden SM5CLE 2,040 34 20 A
Single Operator	JH7QXJ 30,420 260 39 C 20	Spain JA3CWK 9,640 136 19 B JA6XJF 13,716 127 38 C 20 JA1GBZ 8,877 101 29 B 20 JA7TRXU 5,400 75 24 C 20 JA4XRN 3,195 55 19 B 20 JE0EHE 240 20 4 B 20 JA0GZ 144 12 4 B 20 JA1PMQ 3 1 1 A 20 JA7ATFR 153,504 984 52 C 15	Sweden SM0BDS 29,880 166 60 B	
Africa	JH7QXJ 30,420 260 39 C 20	Spain JA3CWK 9,640 136 19 B JA6XJF 13,716 127 38 C 20 JA1GBZ 8,877 101 29 B 20 JA7TRXU 5,400 75 24 C 20 JA4XRN 3,195 55 19 B 20 JE0EHE 240 20 4 B 20 JA0GZ 144 12 4 B 20 JA1PMQ 3 1 1 A 20 JA7ATFR 153,504 984 52 C 15	Sweden SM7DXQ 7,968 83 32 B	
Lesotho	JH7QXJ 30,420 260 39 C 20	Spain JA3CWK 9,640 136 19 B JA6XJF 13,716 127 38 C 20 JA1GBZ 8,877 101 29 B 20 JA7TRXU 5,400 75 24 C 20 JA4XRN 3,195 55 19 B 20 JE0EHE 240 20 4 B 20 JA0GZ 144 12 4 B 20 JA1PMQ 3 1 1 A 20 JA7ATFR 153,504 984 52 C 15	Sweden SM0FM 4,500 50 30 B	
7P8EB 243,270 765 106 C	JH7QXJ 30,420 260 39 C 20	Spain JA3CWK 9,640 136 19 B JA6XJF 13,716 127 38 C 20 JA1GBZ 8,877 101 29 B 20 JA7TRXU 5,400 75 24 C 20 JA4XRN 3,195 55 19 B 20 JE0EHE 240 20 4 B 20 JA0GZ 144 12 4 B 20 JA1PMQ 3 1 1 A 20 JA7ATFR 153,504 984 52 C 15	Sweden SM7HSP 1,050 25 14 B	
Zambia	JH7QXJ 30,420 260 39 C 20	Spain JA3CWK 9,640 136 19 B JA6XJF 13,716 127 38 C 20 JA1GBZ 8,877 101 29 B 20 JA7TRXU 5,400 75 24 C 20 JA4XRN 3,195 55 19 B 20 JE0EHE 240 20 4 B 20 JA0GZ 144 12 4 B 20 JA1PMQ 3 1 1 A 20 JA7ATFR 153,504 984 52 C 15	Sweden SM6MVL 13,083 89 49 C	
9J2FR 120,528 771 56 B 15	JH7QXJ 30,420 260 39 C 20	Spain JA3CWK 9,640 136 19 B JA6XJF 13,716 127 38 C 20 JA1GBZ 8,877 101 29 B 20 JA7TRXU 5,400 75 24 C 20 JA4XRN 3,195 55 19 B 20 JE0EHE 240 20 4 B 20 JA0GZ 144 12 4 B 20 JA1PMQ 3 1 1 A 20 JA7ATFR 153,504 984 52 C 15	Sweden SM5AY 7,140 35 C 35 C	
Sierra Leone	JH7QXJ 30,420 260 39 C 20	Spain JA3CWK 9,640 136 19 B JA6XJF 13,716 127 38 C 20 JA1GBZ 8,877 101 29 B 20 JA7TRXU 5,400 75 24 C 20 JA4XRN 3,195 55 19 B 20 JE0EHE 240 20 4 B 20 JA0GZ 144 12 4 B 20 JA1PMQ 3 1 1 A 20 JA7ATFR 153,504 984 52 C 15	Sweden SM5ALJ 4,293 53 27 C	
9L1J 41,580 198 70 B	JH7QXJ 30,420 260 39 C 20	Spain JA3CWK 9,640 136 19 B JA6XJF 13,716 127 38 C 20 JA1GBZ 8,877 101 29 B 20 JA7TRXU 5,400 75 24 C 20 JA4XRN 3,195 55 19 B 20 JE0EHE 240 20 4 B 20 JA0GZ 144 12 4 B 20 JA1PMQ 3 1 1 A 20 JA7ATFR 153,504 984 52 C 15	Sweden 	

SP5PGRM	61,884	382	54 C 15	KP2AD (AA9DW,op)	Ecuador	EA3FQV (+EA3ELS,GC7,EC3CIL,ops)		
SP7NPP	2,268	284	59 B 15	2,511,444	3788	221 B	HC1HC 591,273 3231 61 C 15	1,812,618 3006 201 C
SP3SLA	18,942	154	41 B 15	St Maarten	HC1OT 584,820 3249	60 C 15	IR2W (18E EOW,VXJ,K2s EGL,OHG,	1,516,644 2718 186 C
SP8NR	12,960	120	36 D 15	PJ8CW	866,520 1660	174 B	MZs,EGH,OPs)	DL0WW (DK3GI,DL5IAR,DL9FCV,ops)
SP7GAO	12,426	109	38 B 15	PJ8H (K3UOC,op)	35,028	278	42 C 160	1,481,004 188 189 C
SP8RVD	6,840	76	30 B 15				OH7AAC (OH4LTK,OH6LN1,OH7s KIR,	1,139,544 2499 152 C
SP2AHD	1,914	29	22 B 15				MHL,ops)	G0SDX (G3s LNS,MXH,XZ0,G0s CDO,
SP6SYF	540	18	10 B 15					REP,OZ7SM,ops)
Greece								1,133,070 2110 179 C
SV2BNF	82,560	320	86 B	TG9AJR	339,435	1985	57 B 15	I05A (Is5 JHW,NRS,YO,VGX,
SV2YC	2,604	31	28 B	TE5T (TI4SU,op)	870,945	1873	155 B	XFW,IK5s CRH,JAN,NAW,PWC,
Bosnia-Herzegovina				T12LO	10,752	128	28 B 15	Run,ops)
T94ON	1,320	40	11 C 80	Antigua & Barbuda				956,304 1832 174 C
T92X	1,209	31	13 B 80	V26AS (YT1AD,op)	7,175,064	7076	338 C	OE2XEL (OE2GEN,VEL,ops)
T91ELD	2,574	39	22 B 15	V29NR	548,700	3100	59 C 10	774,891 1443 179 C
European Russia				V31BW (WB5B,op)	381,510	942	135 B	PI4COM (PA3E ERC,EWP,GBO,ops)
R26LJ	240	10	8 C 40				720,252 1404 171 C	
RA3XO	3,477	61	19 C 20	St Kitts & Nevis				II2M (IK2s GHW,QCC,RGT,SFZ,
RA3WA	1,287	33	13 C 20	V47WK (AB4JI,op)	2,350,566	3306	237 C	SGC,ops)
AU6LAK	1,710	39	15 C 20	V44NK	555,504	1136	163 C	691,200 1440 160 B
UA1OZ	759	23	11 A 20	British Virgin Islands				OT4V (ON1s FAW,IH,NO2AH,ON4s
UA4LCQ	33,060	290	38 B 15	VP2VF	457,425	2675	57 C 10	ALL,AMM,AWK,AYM,ON6KZ,ops)
UA4AIY	1,782	33	18 B 15	VP2VN/1KIN 56,160	468	40 B 10	612,900 1353 151 C	
Ukraine				ZF2RT (WA0PUJ,op)	6,715,170	6545	342 C	I2ZZZ (I2ACC,IK2s OWX,WOS,VBW,ops)
US1DX	28,320	160	59 C	ZF2CF (KE8CF,op)	5,355,663	5527	323 C	587,250 1305 150 C
UT8IM	1,653	29	19 C				IK4HVR (14FL,IK4NOK,ops)	
UT5UT	7,056	112	21 C 80	Mexico				521,640 1288 135 C
USSQRW	1,485	33	15 B 40	XE1XOE	135,810	503	90 B	UT7W (UT7WZ,US-W,7-ops)
UT3EW	432	18	8 C 80	XE2AF	70,176	344	68 B	378,063 1078 119 C
UX4CW	11,180	124	30 C 40	XE2DV	246,015	1491	55 B 15	9A5D (9A2s FK,TL9A3E AM,VM,ops)
UT4UZ	117,351	663	59 C 20	Turks & Caicos Islands				321,564 844 127 C
UR5QUN	72,186	454	53 C 20	VP5E (WE3C,op)	2,350,566	3306	237 C	E3RKG (EA3BOW,BOX,DQ,
US9Q (US9QA,op)				V2P2N	45,600	190	80 A	EIO,ops)
UT5UQH	25,992	228	38 C 20	PY8AJD	554,226	1301	142 B	319,902 814 131 B
UX0HA	25,515	189	45 C 20	PT7CB	1,634,670	2215	245 C	4N7M (UY1AL,Y7TS NW,TY,ops)
UR5QBK	17,388	161	36 C 20	PT7WA	41,328	287	46 C 40	315,380 976 120 C
UT4PZ	3,078	54	19 B 20	PY1LI	114,048	704	54 C 20	RK1OWZ (UA1s OMZ,UX,UA1s
UT7LA	480	20	8 C 20	PY2APQ	96,513	607	53 C 20	113-244,113-619,ops)
UT5XF	396	12	11 B 20	PS8ET	29,526	259	38 C 20	161,875 625 97 C
UT4UYA	294	14	7 C 20	PS8PY	25,419	229	37 B 20	I2T (IK2IQR,IK3NLK,ops)
UR5WA	133,650	810	55 C 15	PW8EM	161,595	945	57 B 15	136,500 500 91 B
UR6F (UR0KF,op)				ZY2CP (PY2EMT,op)	38,502	279	46 B 15	OE5WXM (OE5s BTP,BMV,EVM,
UT5V	84,318	598	47 C 15	PV8ZDC	663	17	13 B 15	FVM,WHL,ops)
UR4LRQ	23,160	193	40 B 15	PY2FD	365,239	2007	59 C 80	45,900 225 68 B
UR5QMA	17,760	160	37 C 15	ZF2ND	676,260	3757	60 C 20	SM7AIO (+Y09FVU)
UX1VZ	13,880	140	33 B 15				32,364 186 58 B	
UR5ZHQ	4,125	55	25 B 15	Oceania				SK0HB (SM0s MLZ,SYP,THN,ops)
UR5ZMI	2,981	47	21 B 15	3D2LR (3D1LAB,op)	90,816	352	86 B	27,018 545 57 C
UT7IG	1,776	37	16 C 15	3D2LA (JP1LAB,op)	6,177	71	29 B 10	UR7IYU (U7s IGF,UK, UB5-073-4443,ops)
UT1ZZ	684	19	12 B 15				17,595 115 51 C	
UT7QF	432	16	9 A 15	Philippines				YU1FJK (YU1s YA,YY,ops)
Belarus				DUT4T	131,888	709	55 C 80	15,380 160 32 C
RC2AZ	TS1HQ	182	20 C 40	DUT5W	4,280	71	40 C 15	S7CE (S7CE QCY,ONZ,PNE,SDI,ops)
EW3EW	23,075	245	45 C 20	K6GSS/KH6	1,525,104	2136	236 B	13,260 114 36 C
Latvia				KH6GMP	783,992	1521	174 B	UR4PWC (UR5e-055-221,-055-222,
YL2GN	161,343	407	55 B	WH6DT	37,083	263	47 B	-055-223,ops)
YL1WW	473,804	1294	122 C	Hawaii				4,875 65 25 B
				KH6WHR	4,036,000	4966	325 C	SP6YFU (SP6s NVK,OPE,ops)
YL2KQ	19,305	143	45 C 15	NH6XW	34,272	272	42 C 40	936 26 12 B
YL2PJ	4,992	64	26 C 15	KH6FGB	168,790	1085	59 C 20	
YL2TF	6,723	65	27 A 15	AN6M	168,124	902	84 C 18	Fernando de Noronha
Romania				W1HCH	162,390	1166	85 C 10	PY0FM (PY5CC,op)
YO9HP	2,074	639	122 C	AH8A	1,913,142	3157	202 C	5,381,712 6744 266 C
Yugoslavia								Venezuela
YU7KMF	67	29 B						YU1FJK (YU1s YA,YY,ops)
YU7SF	4,265	49	29 C					15,380 160 32 C
407AV	20,832	217	32 C 80					S7CE (S7CE QCY,ONZ,PNE,SDI,ops)
YU1ANO (4N1DXQ,ops)	4,347	69	21 C 80					13,260 114 36 C
YZ1MB	510	17	10 C 80					UR4PWC (UR5e-055-221,-055-222,
YU1RA	3,450	46	25 B 20					-055-223,ops)
YU1FX	75	5	5 B 20					
YT7A (YU7GMN,op)	153,636	868	59 C 15					
North America								
Jamaica	6Y5/KS0T	331,776	864	128 B				
FM5DN	193,638	1094	59 C 40					
Haiti								
HH2PK	5,238,108	5508	317 C					
Dominican Republic								
H1OMA	1,271,700	2700	157 B					
H18LC	29,025	225	43 B 15					
Panama								
HP2CWb	755,877	1691	149 B					
WP4KTF/H2P								
	15,120	168	30 A 10					
Alaska								
WL7QS	2,193	43	17 B					
AL7MX	5,778	107	18 C 160					
KL7Y	63,648	416	51 C 80					
Virgin Islands								
KP2/KE2V	4,642,598	5607	276 B					
NP2I	3,257,115	4505	241 B					
South America								
Chile								
CE2EZE	647,361	1509	143 B					
CE6SAK	24,000	200	40 C 40					
CE3IRG	172,368	1008	57 B 15					
CE6JOE	324,162	1863	58 B 10					
CE3AF	79,866	522	51 B 10					
Uruguay								
CF7X	408,693	2309	59 B 10					
CF8AT	260,304	1496	58 B 10					
Europe								
Ecuador								
HC1HC	591,273	3231	61 C 15					
HC1OT	584,820	3249	60 C 15					
Argentina								
LT1N (LU2NI,op)								
	1,368,006	2747	166 B					
LU11CX	171,336	988	59 B 20					
LU6ETB	301,860	1677	60 C 15					
LU7FEU	94,860	620	51 B 15					
LU2OC	389,367	2277	57 B 10					
LU8HSO	172,854	1067	54 B 10					
LU6EJP	183,825	1075	57 C 10					
LUW1D	182,526	1049	55 B 10					
LUW1P	182,526	1049	55 B 10					
LUW1R	182,526	1049	55 B 10					
LUW1S	182,526	1049	55 B 10					
LUW1T	182,526	1049	55 B 10					
LUW1U	182,526	1049	55 B 10					
LUW1V	182,526	1049	55 B 10					
LUW1W	182,526	1049	55 B 10					
LUW1X	182,526	1049	55 B 10					
LUW1Y	182,526	1049	55 B 10					
LUW1Z	182,526	1049	55 B 10					
LUW1A	182,526	1049	55 B 10					
LUW1B	182,526	1049	55 B 10					
LUW1C	182,526	1049	55 B 10					
LUW1D	182,526	1049	55 B 10					
LUW1E	182,526	1049	55 B 10					
LUW1F	182,526	1049	55 B 10					
LUW1G	182,526	1049	55 B 10					
LUW1H	182,526	1049	55 B 10					
LUW1I	182,526	1049	55 B 10					
LUW1J	182,526	1049	55 B 10					
LUW1K	182,526	1049	55 B 10					
LUW1L	182,526	1049	55 B 10					
LUW1M	182,526	1049	55 B 10					
LUW1N	182,526	1049	55 B 10					
LUW1O	182,526	1049	55 B 10					
LUW1P	182,526	1049	55 B 10					
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LUW1A	182,526	1049	55 B 10					
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LUW1C	182,526	1049	55 B 10					
LUW1D	182,526	1049	55 B 10					
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LUW1H	182,526	1049	55 B 10					
LUW1I	182,526	1049	55 B 10					
LUW1J	182,526	1049	55 B 10					