

# Results, 1991 ARRL International DX Contest

I found that an attitude of helpful cooperation and fun makes every QSO enjoyable!—*Scotty Martin, W7SW/10*

By Billy Lunt, KR1R and Warren C. Stankiewicz, NF1J  
Contest Manager Assistant Contest Manager

**W**hat a difference a year can make! This year's DX Contests gave us a ride near the top of the sunspot roller coaster we'll not soon forget. Conditions on all bands were about the best anybody can remember. This year's CW contest was like night and day, compared to last year.

You sure can't beat the number of phenomenal scores turned in across the country and around the world. Ever since the contest was trimmed from 96 hours to 48 hours in 1979, scores have continued to skyrocket. Conditions appeared to be far above average, even on the low bands. Fred Laun, K3ZO, remarks, "Conditions the second night on 80 and 160 during the CW contest were as good as I've heard in a long time."

## Into the Record Books

Single-operator all-band winners set records. Bob Shohet, KQ2M, piloted KM1H to the tune of four million points on CW. He says, "I did more band hopping this year than in previous years. That helped me to catch more openings than I usually do. In fact, when I heard the Midwest start to come through on a given band, I usually switched bands." Jeff Steinman, KR0Y, operating WM5G, used the advantage of propagation to edge Bob out and win the all-band phone competition. He notes, "I was able to work Europeans on 20 meters at night when they were inaudible on the East Coast." That, and his ability to work JAs on 10-meter phone (traditionally difficult in New England), made the difference between first and second. Both ops commented that their rates were lower than last year, but there were far more multipliers to be worked, especially from the Caribbean, than in previous contests.

Computerized contesting made its mark this year. Of the W/VE stations that submitted logs, 52.7% used a computer, and the majority of scores greater than 500k posted by W/VE operators were made with some form of computerized logging. The single-operator assisted category saw WB2Q top last year's CW score by more than 1.2 million points to set a new record of 3.9 million. John Dorr, K1AR, easily cruised to the

top of the phone competition, although his score was down slightly from last year. Last year's four DX single-assisted entries tripled to 12; the "bug" is spreading overseas.

Another innovation is the trend among the top operators toward using two radios, one to work stations and another to hunt for multipliers. Nearly everyone we spoke with who finished in the top 10 in the single-operator classes used two radios. Although the technique of running two radios while

having only one transmitted signal may seem difficult, it pays off in the end.

## Low Power Does the Job

On the other hand, you don't have to be a "big gun" to have fun in this contest. As Tim Marek, NC7K, says, "It's amazing what's possible with only 100 watts!" Van Hodgden, WCSD, says he "never thought 100 watts and a vertical could work so well." Bill Fisher, KM9P, came away tops

## Top Ten

### W/VE CW

Call	Score	160	80	40	20	15	10
KM1H (KQ2M,op)	4,001,790	37/27	210/50	492/69	764/79	805/88	1002/90
K1TO	3,666,222	35/25	203/43	414/64	1162/90	801/72	724/72
K3TUP (K5ZD,op)	3,632,820	41/25	126/49	465/66	997/81	754/81	787/80
W1KM	3,174,504	41/28	375/51	428/59	888/73	478/64	822/74
K0RF (W0UA,op)	3,047,154	8/7	99/33	415/52	908/84	665/82	919/79
K3LR	2,938,464	25/21	96/45	515/70	760/75	690/75	650/72
K3OO	2,903,016	33/25	211/49	307/53	774/69	611/67	847/81
K8CC	2,831,808	17/15	82/42	398/63	748/70	726/75	781/78
K3ZO	2,805,264	41/25	258/57	449/63	648/70	527/77	653/71
N2LT	2,752,470	40/28	114/52	328/58	733/69	614/72	741/78

### W/VE Phone

Call	Score	160	80	40	20	15	10
WM5G (KR0Y,op)	4,628,835	2/2	33/27	136/63	1013/113	844/113	1519/117
KM1H (KQ2M,op)	3,933,372	0/0	56/39	143/62	772/105	845/113	1212/114
K3OO	3,701,859	20/14	97/43	112/54	811/98	815/100	1162/100
KC1F	3,608,010	10/10	83/41	85/56	1017/106	559/101	1144/101
W9RE	3,332,220	3/3	46/37	87/59	665/92	833/104	1178/100
K3LR	3,084,957	6/6	44/30	143/53	737/92	667/100	1102/100
K8PO	2,893,650	19/14	94/43	117/52	509/80	580/90	1206/103
K3ZO	2,862,750	3/3	54/28	168/52	608/76	595/89	1322/99
W2RQ	2,733,084	0/0	59/34	117/51	665/94	709/106	899/87
K0RF (W0UA,op)	2,721,510	6/6	41/24	139/55	566/75	738/76	1259/94

### DX CW

Call	Score	160	80	40	20	15	10
HK0/N3JT	4,721,040	304/48	516/56	817/57	638/57	1031/57	1434/57
VP2VM (K5NA,op)	4,190,976	283/44	504/56	574/53	980/57	814/55	1217/56
PJ2J (W1WEF,op)	3,911,355	282/44	353/48	542/53	722/57	1079/56	1161/57
EABRCT (OH0XX,op)	3,332,310	55/24	265/38	377/47	830/55	1023/56	1460/57
CT2A	3,277,155	68/21	416/50	555/57	857/57	809/55	998/55
4U1TU (N6TR,op)	2,922,150	64/17	480/41	560/51	675/55	895/57	868/54
OK1ALW	2,716,464	60/18	289/40	563/50	778/56	788/55	851/53
J6LTA	2,576,286	110/30	342/46	481/47	616/53	790/52	739/51
OZ1LO	2,433,900	110/24	156/29	443/50	775/54	717/53	849/56
RQ9W (YL2AG,op)	2,365,926	10/8	157/28	357/45	1029/57	850/57	739/56

### DX Phone

Call	Score	160	80	40	20	15	10
EABRCT (OH0XX,op)	4,237,824	32/12	85/26	259/41	500/54	1758/57	3062/58
WR6R/KH6	3,447,360	11/6	81/36	509/52	598/57	667/57	2454/58
VP2VM/K5NA	3,399,792	1/1	281/49	616/55	493/56	956/56	1789/57
RQ9W (UO2-087-116,op)	3,302,352	0/0	16/12	258/40	1595/59	1344/58	1732/59
OK1ALW	3,057,210	0/0	136/27	293/41	882/53	933/56	2111/57
OH2BH (OH6LM,op)	3,008,286	0/0	32/14	221/40	1558/58	960/57	1666/57
WL7E	2,904,036	31/11	152/42	396/52	293/54	927/55	1773/57
EA9IE	2,815,059	0/0	178/33	322/50	634/54	787/54	1878/56
GM0ECO	2,743,200	1/1	139/27	412/45	774/55	1399/57	1085/55
W2HPF/KH6	2,543,136	0/0	96/26	215/40	564/56	1099/57	1618/57

### W/VE Single Operator Assisted

#### CW

Call	Score	160	80	40	20	15	10
WB2Q	3,976,344	79/41	167/61	563/79	843/88	509/85	791/95
K3WW	3,940,650	51/39	182/62	573/75	856/92	677/96	580/86
AA1K	3,333,960	60/38	203/56	411/69	696/79	646/92	630/86
N2NT	2,977,020	46/33	229/60	388/72	520/92	586/97	466/90
K3IPK	2,957,184	41/30	180/59	416/72	771/86	504/83	504/78
WB3JRU	2,721,231	38/32	144/51	487/69	533/84	509/90	496/85
W2GD	2,708,868	42/33	118/54	339/70	435/84	522/101	615/94
W3XU	2,654,268	0/0	175/52	294/59	748/88	541/87	614/87
N2MM	2,555,448	49/34	113/50	369/64	596/75	496/86	550/83
K1IU	2,412,030	36/31	90/49	443/60	469/70	533/79	602/81

#### Phone

Call	Score	160	80	40	20	15	10
K1AR	3,547,290	21/14	76/47	157/70	709/114	694/124	781/116
K3WW	3,127,554	24/19	73/55	116/67	612/105	569/122	787/110
K3IPK	2,688,042	12/11	61/45	117/62	662/109	504/110	653/109
WB3KXK	2,678,775	4/4	50/38	97/60	311/86	544/113	1095/124
KA5W (KS1G,op)	2,470,104	1/1	25/19	166/54	669/93	581/102	742/108
W2GD	2,315,640	20/18	75/50	95/65	317/97	368/111	803/119
WB2P	2,304,159	15/12	45/37	98/56	337/103	527/116	681/127
K1IU	2,246,688	16/16	56/50	73/63	311/94	406/112	752/129
KK9V	2,147,769	2/2	46/32	72/46	434/76	444/106	901/115
K1VR	2,133,054	24/18	74/42	101/54	384/92	424/103	694/109

### Top DX Single Operator, Assisted

#### CW

Call	Score	160	80	40	20	15	10
H18A (JA5DQH,op)	3,718,728	175/36	504/54	667/56	663/54	845/55	1119/57
HG3DXC (HA4XT,op)	1,934,640	0/0	156/28	659/50	643/57	359/49	870/56
YU3EA	797,688	31/18	40/17	176/35	455/54	312/49	217/43

#### Phone

Call	Score	160	80	40	20	15	10
H18A (JA5DQH,op)	3,983,175	21/11	293/44	536/54	742/56	1132/58	2001/58
I6FLD	1,719,144	2/1	21/11	195/37	1041/56	504/54	889/57
JE7WBI/1	778,464	0/0	0/0	19/10	242/48	232/45	1139/56

on low-power CW. He reports, "Having 20 meters open both nights made the difference. In fact, the only way I can be competitive from here is when 20 meters opens at night." Tom Owens, K7RI, used his proximity to Japan and the Pacific to climb to the top of the low-power phone standings. In fact, 41% of his 2183 contacts were with Japanese stations. Both he and Bill set low-power records.

Then, there are those for whom less

power is more fun: QRP operators. Stan Hill, W3EWL, finished number eight overall QRP in the CW contest and claims, "QRP was great fun! The linear amplifier will stay in mothballs for a while!" Fred Groner, W2TZ, claimed top honors on CW and Jim Eppright, K5RX, won a close victory in the phone contest. Top-10 CW finisher Bill Houghton, W4HBK, describes QRP contesting best: "This was my first contest in the QRP class. I was amazed at

how easy it was to make QSOs. By using a hunt-and-pounce technique and avoiding weak signals and pileups I was able to maintain a respectable 30-QSO-an-hour rate. The overall effect was a relaxing and enjoyable contest, and I highly recommend it for anyone tired of the stress of high-power-class operating."

If the thought of a full 48-hour effort seems daunting, why not try a single-band effort? Single banding allows you to concentrate on a smaller scale and gives you a chance to sleep when the propagation fades. For those who don't have big antenna systems, single banding is a good way to participate and still compete. If you like operating at night, a single-band effort on 160, 80 or 40 meters might prove enjoyable. If you prefer to sleep in, a 15- or 10-meter entry might be right up your alley. Single banding is not without excitement, either. Dave Patton, WO0G, the top 40-meter phone op, reports, "VQ9CQ's long-path CQ Sunday morning sounded lost and lonely, but it was exciting enough to justify the entire weekend!"

### Big Guns

The multioperator, unlimited class was again dominated by the crew at W3LPL. If you've ever wondered what it takes to score more than 10 million points in the DX Contest, a look at the massive antenna farm detailed in the sidebar will give you an idea. Frank Donovan, W3LPL, asserts, "Even though cold weather froze the top 40-meter antenna towards Europe during the CW contest, it didn't seem to make a difference." Steve, W3BGN, and his group swept both modes in the multisingle category, setting scoring records in the process. The three-man K1AR crew used K1EA's station to set a multi-two CW record. John notes, "Multi-two is the best game in town!" and adds that it was the

### Top W/VE Single-Band Scores—CW

160		80		40		20		15		10	
W1NG	14,766	W1FV	170,586	K1ZM	401,472	W1RR	483,891	K4VX/Ø		WM5G (KRØY,op)	
K5UR	10,965	K7EG	93,507	NQ2D	353,664	KE3Q	365,400	(WØG,op)	478,332		423,000
K4TEA	10,707	W4BQF	59,280	K5GW	259,515	K7ABV	160,137	WØZV	405,717	K4XS (WC4E,op)	405,999
AD1G	9,576	KS1L	55,980	NJ2L	234,930	KA7T	151,110	K1RM	393,000		NSØZ (W9WI,op)
K3BSY	9,126	WE3C	53,184	W6XX	220,158	W8TWA	137,376	WN4KKN/6	389,367		391,395
VE3DO	7,437	KØØU	47,580	KVØQ	187,368	WA5OYU	103,305	VE7SZ (WA6VEF,op)			352,170
W2FCR	7,215	WA4SVO	41,478	K1WGM	169,875	WF5E	101,556		375,900	N4ZZ	307,530
W3PN	4,872	K6NA	35,475	AA9A	160,776	K1BV	100,170	K6LL	375,768	K1TN	286,254
W89Z	4,680	W4OCU	34,980	K1IK	142,989	AA6KX	76,650	W6YA	339,057	W8WA	246,240
W2BN	3,645	K3JGJ	30,294	W2UP	140,166	W8UMR	59,220	N7RO	253,344	N6TU	226,296
								N4CT	229,047	KCØD	191,400
								N4IR	183,201	AB1A	188,232
										VE6WQ	

### Top W/VE Single-Band Scores—Phone

160		80		40		20		15		10	
K1ZM	8,190	K8UR/1	66,960	WØØG	117,096	KS1L	496,248	W7WA	808,860	N1GLG	710,640
WW2Y	4,374	KA1XN	57,456	W89Z	106,677	K4VX (K1ØEZ,op)		W5WMU	578,340	K4XS	684,255
W2FCR	1,296	AD1G	32,190	KM6B	98,580		359,730	K9UWA	459,369	N4ZZ	592,200
W2BN	663	WA4SVO	21,771	N4ZC	67,488	KV4P	292,041	ND1X	418,608	K3ZJ/8	576,198
KØCS	36	N3HHE	17,100	KE3Q	48,174	KK9A	274,701	N4MO	352,245	A17B	562,590
		KQ3V	9,243	KD9ST	42,903	KC8FT	228,351	W1WEF	337,554	KW8N	554,580
		WA2AOG	7,560	KB1HC	38,130	WØRRY	209,193	WM4Z	317,961	K7QQ	546,708
		KMØJ (K6UKX,op)		K5KT/6	36,093	W8TWA	191,982	NX1P	311,850	K5MA	541,650
			6,528	KN1M	26,274	WF5E	128,010	WJ2D	286,110	N6TU	529,758
		WB7EWC	5,544	K8DJC	22,860	KK9L	120,321	WA2UUK	237,429	K9MDO	516,186
		KE5FI	1,782			K7ABV	114,057				

### Top DX Single-Band Scores—CW

160		80		40		20		15		10	
VP2EXX	50,895	CU2AK	111,456	IO4IKW	172,200	YT1BB	253,680	9Y4VU	294,462	N6OP/NP2	325,584
YT2E	18,966	CT3FT	76,653	G3FXB	170,856	YL2DX	246,924	OH4NRC	284,366	G4BWP	256,842
OK3TMW	11,700	4N1A (YU1YV,op)		YT7A	167,751	TJ1CW	212,220	ZD8LII	255,303	4N2V (YT2ER,op)	
OE5KE	10,152		63,315	LZ1V (LZ3FM,op)		RB5SJ	207,234	FF6KBF (F6HSV,op)		4N2E (YU2CT,op)	218,709
OK2BQU	8,970	SP3FHV	57,564		135,912	YT3T (YU3BQ,op)			225,720	YZ1U (YU1XA,op)	211,527
OL7BTG	4,959	G3LNS	54,288	SN5W (SP5JTF,op)		UA0SAU	151,470	7L1GVE (JA0JCJ,op)			206,640
YU3HA	3,942	XE1NV1P	51,714	YU7AV	118,965	UZ6HWA		JA7BJS	198,360	IK2EGL	195,795
LZ2JE	3,825	TE4T (TI4SU,op)		EA4KR	111,456	(UA6HRZ,op)		UB5WE	191,688	HA0NAR	180,063
UB3JX	2,040		51,300	N7DF/NH2	103,734		140,448	OH6NIO	187,758	YU7GMN	
IV3PRK	1,170	Y33VL	47,400	Y37XJ	94,668	DL4RX	126,000	DL0IU (DL4AAE,op)		(YT7DW,op)	171,171
		I3VHO	42,408	OE2VEL	90,600	YU2SD	121,128	YU2SD	187,587	UA0ZDA	167,994
		OK2FD	34,170			UM8DX	115,248	C6A/N4MO	181,272	YU3KW	165,990

### Top DX Single-Band Scores—Phone

160		80		40		20		15		10	
CT1AOZ	3,648	YV1EQW	89,700	IO4VEQ	150,660	YT1BB	460,488	FM/F6HMQ	557,256	CT1BOP	583,965
CU2AF	1,980	HABJV	19,872	PA3EPN	117,936	IU4K (I4ABF,op)		9Y4VU	535,050	4N2V	449,460
IV3PRK	891	EASAEAN	14,994	CT1DVV	91,884		435,708	HC1HC	492,651	GW8GT (GW0MAW,op)	
OK1DWW	27	YU2CQA	11,160	K6GSS/KH6	91,266	YU3HR	364,743	GW4BLE	395,676		411,768
		EA7LM	10,701	TG9AJR	90,234	HC1OT	324,558	HA8IE	366,444	PQ2DX	395,676
		JA1YDU (JH0NZN,op)		LZ1V (LZ3ZZ,op)		IK5JAN	252,909	IK2DUU	346,617	G4QJH	385,329
			7,308		77,760	KP4FP	217,170	OH6EI	313,614	PP5JD	378,252
		UB4QYA	5,106	OK3KFF (OK3TPG,op)		JH1NBN	183,141	G4CNY	309,510	OK3CBU	357,480
		EA1CON	4,422		65,475	JA0JHA	167,640	F1LBL	290,280	OZ1BTE	354,648
		DL1BJL	3,240	YU4CC	57,915	OH3OJ	156,123	4M5Y (YV5LAS,op)		YZ1U (YU1XA,op)	348,000
		YU3QI	2,856	HJ4QIM	57,477	JH1HGC	150,024		285,905	DF8WS	346,956
				YU7GMN (YT7DW,op)							
					46,242						

only way he'd ever multiop, having operated multi-single many times. The K2TR group did as well on phone, setting another record and retaining its crown from last year—it is no wonder the team's known as "The Kings of Multi-Two."

For many, the attraction of the contest is the chance to work DX. For DX operators, the high levels of operator skill and courtesy attract their interest. As Eugenio Vega, EA4DAS, declares, "It's great to work the US operators—they're all good ops!" GM3ZAS chimes in, "The courtesy and patience of the US ops was again commendable." Igor Zeldin, UB5LCV praises, "The Americans are still fine operators and it was a pleasure to work all of them!"

Jim Talens, N3JT, again operated CW /HKØ from San Andres and took top single-operator honors this year. He reports that the local TVI complaints were delivered via rocks thrown onto the roof of the shack. He also notes that European signals were the loudest he could remember, at times running 40 dB over S9. Richard King, K5NA, who operated from VP2VM, finished second, but had severe antenna problems when his balanced feeders caught fire. As he puts it, "That PVC burns real well!" He also notes that after 10 meters closed to

Europe, his QSO rates went up dramatically and he was then able to run stations on different bands for several hours. Olli Rissanen, OHØXX, operated both modes from EA8RCT, finishing first on phone and winning the world-combined plaque.

### Club Activity

The ARRL-Affiliated Club program proved popular again, garnering 955 entrants. This program gives everyone a chance to win recognition among their local peers. Any League-affiliated club with three or more entries can take part and win certificates for their top single ops in both modes of the contest. Clubs that win their classes also get personalized gavels.

This year's unlimited competition was, plain and simple, a runaway. The Frankford Radio Club tightened its iron grip on the unlimited class this year, weighing in with almost 200 million points from 155 entries. This year's medium and local categories show new winners, with the North Coast Contesters and the Central Virginia Contest Club coming away with gavels for their efforts. The North Coast Contesters' achievement is more impressive when you consider that the club is only two years old. Tim Duffy, K3LR, explains, "It was a

maximum effort on the entire club's part. We went through a lot getting the word out to people, not only through our newsletter, but also via personal messages to members on our PacketCluster. Our club's contest coordinator, Scott Jones, WB3KKX, did a good job of fostering an air of team spirit among our members." Perhaps these ideas might work for your club, too.

### Outstanding Achievements

We'd be remiss if we didn't mention the efforts of some special plaque winners this year. The winner of the Novice/Technician CW plaque, Don Burkett, KC4TIR, remarks, "Being a Novice, I didn't plan to enter the 'machine gun' part of the contest, but I worked hard for every point." Kudos also to John Evanson, WJ1U, who swept the three plaques in the under-18 categories.

The Contest Branch received 3991 logs this year; 922 W/VE CW, 1006 DX CW, 1055 W/VE phone, 778 DX phone and 230 checklogs. There were 124 DXCC countries represented by logs. This year's log checking turned up a number of people who claimed East Germany as a multiplier this year—not so! Only countries on the active DXCC list count as multipliers. It's also worth noting that Y88VO in the CW con-

### W/VE Low-Power Top 10 (less than 150 W)

CW	Score	Phone	Score
Call	Score	Call	Score
KM9P	1,826,181	K7RI	1,716,075
W1PH	1,631,817	W1PH	1,544,751
W5XZ	1,010,709	W2TZ	1,050,840
K9QVB	1,008,267	WD5COV/B	830,532
KC4ZV	995,280	K3RR	811,512
K9ALP	960,096	N5AW	667,920
N5AW	895,272	NM3E	651,456
WD4AHZ	892,047	WA2EOV	634,011
K2SIG	848,640	K9MK/5	621,600
KV8Q	833,598	W3UJ	600,495

### W/VE QRP Top 10 (less than 5 W)

CW	Score	Phone	Score
Call	Score	Call	Score
W2TZ	753,066	K5RX	653,780
N4KG	685,482	N4KG	628,056
K5RX	659,178	AA2U	623,082
W0UO	589,344	W3EWL	529,842
KN1M	579,852	K3WS	362,880
K1CGJ	529,179	AA5GY	296,448
W4HBK	502,944	KD8JN	282,063
W3EWL	496,701	W0KEA	269,505
N0AX	475,416	K5IID	253,080
N7IR	399,672	N4VYZ	181,032

### Top DX QRP Scores (less than 5 W)

CW	Score	Phone	Score
Call	Score	Call	Score
YU2TY	380,016	TG9GI	264,825
F15X		I5OYY	202,014
(FB1MUX,op)	247,779	JA2JSF	131,670
SP4GFG	224,316	OH5NHI	115,560
Y25NA	215,832	JE7DOT	95,880
NH6T	174,336	IK3EDK	84,372
OZ3PE	171,810	IK0PK	82,992
LA2HFA	168,732	JA8LLL	76,167
HA7YS	161,280	HA7YS	62,640
JR1IOS	151,898	SP4GFG	27,806
Y26JD	106,272		

## Top W/VE Multioperator Scores

### CW

#### Single Transmitter

Call	Score	160	80	40	20	15	10
W3BGN	3,710,520	82/39	179/61	404/68	808/85	639/97	699/90
K1VR	3,385,584	40/29	150/53	629/80	772/80	562/85	613/81
K1NG	2,999,352	21/17	184/51	497/69	772/75	609/81	576/83
K2WI	2,928,849	97/41	219/61	449/67	561/74	532/83	529/83
K2SX/1	2,742,120	28/20	128/47	494/61	756/78	571/74	562/80

#### Two Transmitters

K1AR	8,283,348	65/40	439/66	920/87	1370/107	1289/106	1268/110
N3RS	7,145,100	71/41	343/65	681/84	1364/105	1092/110	1119/105
K8AZ	6,114,051	42/30	169/62	597/83	1279/103	1203/95	1037/98
WD8LLD	2,861,430	42/27	93/46	358/60	887/83	648/81	502/80
W1FEA	2,653,296	3/3	64/24	541/65	751/75	619/85	670/82

#### Unlimited

W3LPL	10,377,045	121/46	598/72	1124/94	1704/115	1323/113	1385/113
K1ST	9,939,822	75/41	620/67	1100/94	1870/110	1475/111	1159/103
N2RM	9,834,594	135/47	605/74	1113/89	1793/116	1095/107	1341/106
KY1H	7,538,400	64/38	371/60	1035/82	1600/99	1124/104	1041/97
W0AIH/9	5,614,368	33/28	133/57	780/82	759/104	1186/103	1125/94

### PHONE

#### Single Transmitter

Call	Score	160	80	40	20	15	10
W3BGN	4,788,248	20/17	107/50	166/63	956/108	854/118	1154/132
N2RM	4,505,814	13/10	84/45	170/59	894/108	824/110	1273/129
K1RU	4,237,038	11/9	68/46	145/64	712/111	830/130	1093/134
W3XU	3,445,848	0/0	43/37	76/44	1017/115	558/107	1015/121
K1KI	3,434,340	24/17	79/47	129/58	683/100	779/115	822/118

#### Two Transmitters

K2TR	7,254,405	30/23	153/57	189/68	1082/126	1532/138	1371/143
N3RS	7,159,530	26/20	124/57	294/77	1013/122	1448/136	1434/138
K59K	6,658,950	8/7	61/42	281/79	1211/123	1530/134	1219/130
KQ2O	4,343,976	13/13	64/44	125/59	812/106	866/119	1214/127
N3BB	3,948,594	1/1	29/22	322/62	724/97	1113/117	1077/104

#### Unlimited

W3LPL	11,619,981	43/30	232/67	429/86	1688/146	1902/150	1825/154
KY1H	9,657,606	58/36	200/63	406/86	1488/141	1583/146	1508/142
K8CC	6,780,972	15/14	149/55	384/79	1224/122	1254/123	1346/124
W4MYA	6,124,608	1/1	105/49	308/81	1262/123	1104/117	1336/125
K1ST	5,229,000	43/25	205/60	167/63	1219/121	660/103	1206/126

## Top DX Multioperator Scores

### CW

#### Single Transmitter

Call	Score	160	80	40	20	15	10
XE2FU	4,060,656	321/53	566/54	639/53	704/55	853/55	1089/56
XE2MX	3,937,734	199/46	395/55	550/56	787/57	991/56	1092/57
HG1S	3,552,822	42/14	341/39	712/55	1072/54	1278/55	1146/56
FS1N	3,243,828	129/27	416/45	494/52	910/57	879/57	875/54
V31A	3,152,688	186/43	370/50	568/50	683/55	614/56	991/54

#### Two Transmitters

J8YBY	2,374,392	6/3	153/32	367/50	611/56	998/57	981/56
RZ6LYL	2,358,396	32/11	112/20	537/51	1075/58	696/55	838/56
DL4MCF	2,167,704	47/17	180/32	630/52	589/55	578/53	713/55
LZ5M	2,163,000	15/9	95/21	519/48	679/56	739/55	908/55
LZ1KDP	1,545,906	0/0	0/0	180/36	1125/59	621/56	625/51

#### Unlimited

YT2R	3,768,849	220/29	337/38	874/56	1071/56	884/54	961/56
KL7RA	3,348,936	1/1	71/12	632/56	966/57	1350/57	1612/58
YT2B	2,851,446	80/18	223/32	529/47	1132/57	698/54	952/55
JE2YRD	2,458,368	4/3	197/33	505/51	772/58	904/57	819/54
RB8M	1,916,673	0/0	81/25	495/50	725/56	846/58	504/52

### PHONE

#### Single Transmitter

Call	Score	160	80	40	20	15	10
8P9X	7,133,400	53/19	356/53	701/56	1314/57	1754/57	3748/58
PJ8B	7,040,553	44/18	359/53	649/56	1404/57	1601/57	3792/58
TW1C	5,210,370	65/16	327/37	650/53	1500/57	1698/57	2030/57
K1DQV/KP2	4,807,320	43/16	235/41	490/53	848/56	1221/57	2886/57
6D2X	4,528,935	19/16	276/47	832/57	534/54	1208/56	2428/55

#### Two Transmitters

XE2FU	7,871,175	116/41	651/56	695/56	1290/57	1856/57	3465/58
HG5A	4,309,920	0/0	172/26	387/43	1963/57	2187/57	1557/57
RZ6LYL	2,924,544	1/1	40/18	384/45	1518/58	1131/59	1058/57
I4EWH	2,706,858	0/0	46/18	125/90	1342/56	1393/56	1252/57
8J8WUS	2,338,806	0/0	79/23	128/24	673/54	1062/55	1701/58

#### Unlimited

I3MAU	6,092,406	20/10	318/35	700/51	2055/57	2176/57	2337/57
YT2R	3,745,992	27/13	261/28	373/43	1544/57	1351/57	1360/58
JE2YRD	3,173,904	0/0	126/30	329/46	948/57	1072/57	1791/58
ZV4B	1,553,064	0/0	0/0	2/1	280/49	1255/57	1639/56
RB8M	1,357,398	0/0	39/17	129/26	637/55	1373/56	216/35

test was in Berlin, not Antarctica, and CT2A was in Portugal, not the Azores.

A tip of the Contest Branch hat goes to the people who submitted their logs on computer diskettes this year. It greatly reduced our processing time. We also thank Tammy-Beth Zimmerman, KA1WWP, for her help in preparing these results.

Next year's CW contest is February 15-16 and the phone contest is March 7-8—don't miss 'em!

## SOAPBOX

### W/VE CW

This was fun! I had quite an advantage to be the only station active from Nevada (NC7K). This contest gets more fun every year! Who would've dreamed that this many QSOs were possible? With 48-hour scores nowadays that exceed the 96-hour efforts of the last sunspot peak, what's in store for the next peak? (K1TO). I had 16 enjoyable hours of search-and-pounce with a dipole at 25 feet and verticals on the garage roof. I'll have a tower, beam and higher score next year! (KR1B). I worked 50 stations in two hours driving on the New York State Thruway—it was the most fun I've had driving in a long time (KZ1L). This was my first contest using a computer—I'm spoiled for life! (WA2ASM). The propagation gods smiled on us this year! (N8LM). I lost my antenna the day before the contest in 50-mi/h winds. I put up a new antenna two hours before the contest in 40-mi/h winds, 90 feet up in a tree (WA4SVO). My QRO rig was in the shop, so I had no choice but to operate QRP, and was I surprised. I worked 40 countries with less than 5 watts, many on the first call (KB5ILS). Tortilla chips should be eaten only while sending! (WC5D). The loud QRM from the 2-year-old in my lap was worse than any pileup! (N6KN). It's amazing how many countries can be worked using QRP and a small antenna system. I think this speaks well of the excellent DX operators at the other end who are able to pick up even the faintest of signals (K7JYE). I need a new set of ears! My biggest thrill was when 9L1US called me! XF4T was a surprise also! (K7ABV). It was a challenge working the contest with a broken antenna rotator. The wind often blew it 90° between my call and the exchange, making for frustrated and puzzled DX ops. I appreciate their patience and good ears! (W7YAO). Instead of using monobanders, I used a 10-meter Yagi, a 40-meter dipole and two screaming kids. The kids were the most effective radiators of energy (KQ7L). It was an excellent contest. Many thanks to the QRP stations who called in. Without their efforts, scores would be much lower! (K8GL). I received my call sign on April 23, 1940, and still enjoy getting into the fray of a contest or DX pileup (W8URM). I had a good, short opening on 80 meters, which surprised me at this point in the sunspot cycle (K8NMG). My rotator froze in the cold weather; it didn't matter, because my beam is omnidirectional (W9LYA). It was great fun! (NJ9C). Conditions seemed quite good, especially on 40 meters (W9HE). I planned to be on the air for an hour or so, but conditions were so good that I ended up spending the whole day in the shack. My wife still won't talk to me! (WA8RPI). If you include the ARRL 10-Meter Contest, I went 1233 QSOs without a KH6 multiplier! NH6T finally came through with his big 5 watts to save the day (WB0RTK). This was my first DX contest and I thoroughly enjoyed it. Operating QRP, the QSOs were few and brief, but each was always a thrill (VE2JBF). I had surgery Wednesday, February 14, so I couldn't give the contest my full effort. My wife thought I was crazy! (VE3NNT). I especially enjoyed duping TJ1CW! I also had fun being called by VS6WO, 9V1YC and BV2A within seven minutes of each other! Conditions were outstanding (KT1O). This was my first ARRL DX CW Contest and it was a thrill to get through the pileup to work 4S7WP! After tangling with the big guns, I feel as though there should be a special class for lower-power stations that operate between tall buildings in major cities like Manhattan! (WM2D). This was the first time I used a PacketCluster. My hat's off to those who developed it. (K4PB). This was my first contest from my home. As soon as it was over, I wanted a chance to use what I learned and start again (WA1U). Operating at Texas Instruments was frustrating on 80 and 160 meters—imagine a billion computers and plasma-RF etchers QRMing us at the same time! Our secret weapon for next year will have to be low-noise 80- and 160-meter

### Overall Division Leaders

CW	Division	Phone
K3TUP (K5ZD,op)	3,632,820 Atlantic	K3OO 3,701,859
W9RE	2,737,788 Central	W9RE 3,332,220
NZ0R	783,864 Dakota	NZ0R 596,304
W4XJ	1,630,368 Delta	N4TG 1,358,280
K8CC	2,831,808 Great Lakes	K8MJZ 1,399,296
N2LT	2,752,470 Hudson	W2RQ 2,733,084
K6SCM	1,131,582 Midwest	W0JLC 362,544
KM1H (KQ2M,op)	4,001,790 New England	KM1H (KQ2M,op) 3,933,372
NN7L	1,634,724 Northwestern	K7RI 1,716,075
N6TV	1,694,628 Pacific	N6TIB 1,404,360
K0RF (W0UA,op)	3,047,154 Rocky Mountain	K0RF (W0UA,op) 2,721,510
K4PQL	2,369,412 Roanoke	N4UH 888,648
KM9P	1,826,181 Southeastern	N6AR 958,716
K6XT (K16ZH,op)	1,188,600 Southwestern	K6XT (K16ZH,op) 1,321,137
AD5Q	1,595,880 West Gulf	WM5G (KR0Y,op) 4,828,835
VE3KP	889,200 Canada	VO1MP 1,513,902

### QRP Division Leaders (less than 5 W)

CW	Division	Phone
W2TZ	753,066 Atlantic	W3EWL 529,842
WB9HRO	148,200 Central	N9IYI 5,022
WA0RPI	19,734 Dakota	—
—	— Delta	AA5GY 296,448
—	— Great Lakes	KD8JN 282,063
AA2U	332,310 Hudson	AA2U 623,082
—	— Midwest	—
KN1M	579,852 New England	N1AFC 89,889
N0AX	475,416 Northwestern	W7PQE 69,708
W6JTI	325,740 Pacific	W6CPE 156
W0UO	589,344 Rocky Mountain	W0KEA 269,505
WA9FWO	94,284 Roanoke	—
N4KG	685,482 Southeastern	N4KG 628,056
N7IR	399,672 Southwestern	W8QZA 94,335
K5RX	659,178 West Gulf	K5RX 653,760
VE6GK	11,040 Canada	VE6SH 37,884

### Low-Power Division Leaders (less than 150 W)

CW	Division	Phone
W3UJ	732,450 Atlantic	W2TZ 1,050,840
K9QVB	1,008,267 Central	WB9IQI 412,827
KE0UI	132,894 Dakota	AC0W 542,511
NA4K	701,100 Delta	K5KLA 437,532
K9ALP	960,096 Great Lakes	K8ZNZ 303,537
K2SIG	848,640 Hudson	WA2EOV 634,011
WA0QOI	226,287 Midwest	W0F 282,150
W1PH	1,631,817 New England	W1PH 1,544,751
K7WA	773,718 Northwestern	K7RI 1,716,075
N07K	699,300 Pacific	N6JM 310,080
K9GWA	407,340 Rocky Mountain	WD5COV0 830,532
N4YDU	744,690 Roanoke	KM4YY 502,164
KM9P	1,826,181 Southeastern	WA4EMU 121,158
W6MVW	432,837 Southwestern	N6ADK 340,200
W5XZ	1,010,709 West Gulf	N5AW 667,920
VE3BZR	319,125 Canada	VE3MSN 368,946



World-renowned contester Jack Schuster, W1WEF, put PJ2J on the air from Curacao.

loops. It's great having the ARRL DX Contest as a club function (K5OJI). It's hard to find a dozen CW operators to man a 48-hour contest, but we did it this time! Our score isn't great, but the important thing is that we got more contest experience and had fun (VE6AO). Conditions were great for this contest. I just wish I could find more stations from South America and Africa on 10 meters! (K2MFY). This was my first real try at QRP operating. I had a good time, but it was hard! (WA2ASQ). I had a ball. At first, all I wanted to do was see how my new beam would do in the heavy QRM, and give out a few points. The next thing I knew, I was contesting. I'll be back next year, better prepared and with no household chores to do (KA2RFT). I worked ZD8DX as my first QSO and a new country, and thus knew at the outset this could be the start of something big. I wasn't disappointed with what was a great whirlwind-worked DX tour through the last QSO!

(W3ERN). This was a part-time effort with low power, but it was fun in spite of being under the weather (W3AZ).

#### DX CW

There was a snowstorm during the contest and my antenna broke (JH7DNO). My thanks to the stations who picked up my 50-watt signal (JR4PMX). Conditions on 15 meters looked much better than last year! (J12KKY). This was my first time in an ARRL contest. Conditions were great, but on the second day there was a huge drop in my QSO rate (CT2A). Conditions were nice from 160-10 meters! (DL1YD). I worked all of the continental US! (DL0IU). I'm looking forward to hearing you in the next one! (DL1HBT). It was a pleasure to take part in the ARRL CW DX Contest for the first time. I chose the 15-meter single-band category, as my antenna works best on 21 MHz. Propagation was

excellent this weekend (DL3ECK). The conditions were excellent. It was a pleasure to take part in the contest. I'm looking forward to the next one (DJ7MG). I'm 74 years old, and for me, every year it seems the QSOs are more rapid and difficult (EA4BV). Conditions were mostly excellent and the contacts were most plentiful on 28 MHz, although the "big guns" could be heard around the clock on 14 MHz (EI9FK). My apologies to the stations I missed. There was a time when I was clobbered by many signals (GM3ZAS). I found out that an attitude of helpful cooperation and fun makes every QSO enjoyable! (W7SW/10). This was my first ARRL contest and it was fantastic! The propagation was good during local sunset with the West Coast. I'll see you next year! (IK1NDB). I enjoyed this contest. I'll see you next time! (IK3QAR). It's nice to hear so many new call signs on 160 meters, in addition to the regular stations. I was glad to give "top band"

### DX Continental Leaders

CW	Africa	Asia	Europe	North America	Oceania	South America
Single Operator						
All Band	EA8RCT (OH0XX,op)	JA8RWU	CT2A	HK0/N3JT	ZL3GQ	PJ2J (W1WEF,op)
160	—	JA7NI	YT2E	VP2EXX	—	—
80	CT3FT	JF1YRK (JA9VDA,op)	CU2AK	XE1/NV1P	—	PP8WHL
40	—	7J1AAI (K8HVT,op)	IO4IKW	—	N7DF/KH2	—
20	TJ1CW	UA0SAU	YT1BB	WP4IIV	VK4TT	YV7QP
15	ZD8LII	7L1GVE (JA0JCJ,op)	OH4NRC	C6A/N4MO	KH6XT	9Y4VU
10	7Q7JA	UA0ZDA	G4BWP	N6OP/NP2	VK4XA	PY4OY
Assisted	—	JA0YAK(JI7OED,op)	HG3DXC (HA4XT,op)	H18A (JA5QH,op)	—	—
Multioperator						
Single Transmitter	—	JL1ZCG	HG1S	XE2FU	—	—
Two Transmitter	—	JA8YBY	RZ6LYL	—	—	—
Unlimited	—	JE2YRD	YT2R	KL7RA	—	—
Phone						
Single Operator						
All Band	EA8RCT(OH0XX,op)	JA7DNO	RQ9W (UQ2-087-116,op)	VP2V/VE5RA	WR6R/KH6	HK3JJH
160	—	—	CT1AOZ	—	—	—
80	—	JA1YDU (JH0NZN,op)	HA8JV	—	—	YV1EQW
40	—	JA7UMTK	IO4VEQ	TG9AJR	K6GSS/KH6	HJ4OIM
20	CN8ST	JH1NBN	YT1BB	KP4FP	VK6HG	HC1OT
15	EA8ALY	UW9CD	GW4BLE	FM/F8HMQ	N7DF/KH2	9Y4VU
10	TR0D	JA8NFV	CT1BOP	WP4WD	AH6IM	PQ2DX
Assisted	—	JE7WBI/1	I6FLD	H18A (JA5DQH,op)	—	—
Multioperator						
Single Xmtr	VQ9CQ	UZ0QWA	TW1C	8P9X	ZL2NX	PJ0B
Two Xmtr	CT3M	8J8WUS	HG5A	XE2FU	—	—
Unlimited	—	JE2YRD	I3MAU	—	—	ZV4B

## Lifestyles of the Big Guns and Loud Signals: The W3LPL Antenna Farm

For those of you unfamiliar with the W3LPL super station owned by Frank Donovan of Glenwood, Maryland, here's a capsule description of the station and antenna system, famed in story and song. As more than one person has put it, you may never have anything like this, but it sure is nice to dream.

Each band has two complete stations: one for hunting multipliers and one for working stations, or "running," as it's called. The radio gear is a collection of Drake C-lines and Kenwood TS-830/930/940s. Both stations on each band tie into a kilowatt amplifier for each band. All the amplifiers are fed by a single power supply (a huge one, I might add). Each station comes equipped with "LPL filters," passive L-C filters designed to eliminate RF intermod and cochannel interference. Each station also has a computer linked to all the other stations and to the local PacketCluster, for use with the CT software program.

The antenna farm includes a number of 200-foot towers, visible for quite some distance. The antennas were built from surplus aluminum and other scrap material.

The 160-meter antennas include a full-size delta loop; a full-size dipole at 170 feet; an elevated 1/4-wave vertical (with four radials) and several Beverage antennas for listening on 160 and 80 meters. The 80-meter antenna complement has a full-size 2-element quad aimed at Europe and three fixed dipoles at 100, 170 and 180 feet, aimed in various directions. The 40-meter system is a pair of 3-element monobanders, one at 100 feet and another at 190 feet. The 20-meter antennas include a 5-element beam at 195 feet and 5-over-5 at 50 and 100 feet. 15-meter ops have a 6-element beam at 195 feet and 5-over-5 at 50 and 100 feet to work with. Last but not least, 10 meters is covered by 7 elements at 195 feet, 3 elements at 50 feet and (brace yourself) 6-over-6-over-6-over-6 at 40, 80, 120 and 160 feet. Donovan himself isn't quite sure he has all the phasing worked out.

Don't think that it's the equipment alone, however, that makes the winning score. Donovan is quick to point out that the major factor in winning is the crew of good operators he's been able to assemble for the major contests.



The W3LPL ops pose after their multioperator, unlimited victory in the 1991 ARRL DX Phone Contest. Back row (l-r): Glen Tracey, KC3EK; John Pescatore, WB2EKK; Don Daso, WA8MAZ; Tyler Stewart, KF3P; Frank Donovan, W3LPL; and Jim Trennepohl, K3SO. Seated (l-r): Jay Gerarden, KD9J; George Baltz, N3GB; Ed Bruns, W3EKT; and Bernie McClenny Jr, WB3JRU.

to Austria (OE5KE). I was especially surprised by the 10-meter band. I worked most stations from the West Coast easily with short calls. This was good contesting with simple low-powered gear (OK1DKR). I'll see you next year for a serious effort! (ON4AMT). The conditions were simply great. I never thought 20 meters could contain so many signals at one time. And what a remarkable experience to listen over the band at the finish of the contest. All of a sudden, conditions seemed to be "natural" again (OZ4UN). This year, conditions were just fantastic! Loud signals on all the bands. On Sunday evening, it was possible to switch from 10 directly to 80 meters and continue to work W/VE stations! I'll see you next year (PAØERA). This was my first contest! Am I the only one who doesn't use a computer for logging and sends in handwritten results? (SK6WW). This was a nice contest (SP6BAA). It was a fantastic contest, with good propagation on 7 MHz, and good activity

(SP6SO). This was my first time in this contest. Even while operating under less-than-ideal conditions, it was still a lot of fun. I hope to be on for some of the SSB weekend next month and make more hams happy QSOing DU1. It's a nice feeling when they send their thanks for a new one (KG6UH/DU1). My thanks to the nice stations that could copy my weak 2-watt signal with a whip antenna from Guam Island (WJ6L/NH2). I'm looking forward to next year! (Y21RM). It was a nice contest with good propagation (OH3OJ). The conditions were great on 21 MHz, and there was no aurora. This doesn't happen that often around here; she's a well-known guest! (OH4NRC). It was a nice contest! It was great, with a lot of US call signs on wide-open bands. Our motto was, "Call America and Smile!" We'll see you in next year's contest (UA2FZ). This was our first contest without our teacher's assistance. We hope to see you again! (YL1WS). This is my 1469th contest

and 31st ARRL CW DX Contest since 1958 (YU7SF).

## W/VE Phone

Boy, I had fun! (W4YDD). It sure helps when you're mobile in Vermont—I had 50 QSOs in one hour! (WØMHK/1). This was my first DX contest and I enjoyed it very much. Perhaps next year I'll do better (N2CKD). This is a great contest (KD3GC). The best part of all was when EA7EYZ let 150YY have the frequency to see if I could get a new QRP multiplier—that's what this contest is about! (WA4HSN). I had a really good time! I worked the contest for only 14 hours and more than doubled last year's score. I tuned the amplifier into a grounded antenna switch late Saturday, but survived. I'll see you next year! (AB4WD). The Europe antenna must be working—I contacted a PA3 running 5 milliwatts (W4PRO). On Sunday, conditions on 10 meters were so good that the band was full from 28.3 all the way to 28.9. I've never heard this band so full (W5ZR). I shattered my goal of 100k and worked five new countries, including 5Z4BI. Thanks for a fun weekend (K15GX). Diet Coke and raisin bread are great contest foods! (WA5POK). Good solar flux levels made 10 meters the band for this contest again. A brief 50-MHz VP8 opening near 1800Z Sunday made for a slight diversion! (WA51YX). I appreciate the efforts of the DX stations that worked to dig my signal out of the noise and stayed with it until they had completely copied my call sign (WA7BNM). My highlight was finding TF1MM calling CQ, but my lowlight was not being able to work him before the *PacketCluster* alerted the big guns (N6YKL). Conditions were great for QRP operating. My biggest kick was to work 9J2FR before the pileup got too big! (VE2AEJ/3). I enjoyed the time I had for the contest. I'll have a tower shunt-loaded for low bands next year. It was a thrill to work big stations in major pileups with 5 watts! (VE6GK). Since I'd only been on the air for just over two months, this was my first contest. I enjoyed it and logged several new countries. I was pleased at how helpful and polite most operators were, even in the face of huge pileups. I'm looking forward to next year! (KB7LZW). This was a great contest. 10 meters is a blast and there was great propagation. The highlights for me included working four new countries, including SV calling me for an Idaho QSO for his WAS, and five contacts with OZ after being a ham for a year and not having a single QSO with that country. Could LX or HBØ be far behind? (KE7UH). Working Europeans on 40 meters turns into wishful thinking when running barefoot from Montana (KC7UO). A windstorm dropped a 75-foot fir tree on our power lines making me QRT for much of the contest. I'll be back next year (N7MMQ). This was my first serious effort in a contest. I watched the temperature drop from 58° to 24° in 45 minutes, and then the ice came! (K8MJZ). Contests are fun and I'm surprised what one can do with 100 watts and a decent antenna. I'm beginning to recognize that a log kept on a computer during the contest is necessary to get a good contest score (W8URM). This was my first contest entry in more than 20 years as a ham (WA8ZZA). I had a great time operating mobile, it was more fun than operating from home! (KF8K). There were strange conditions to Europe from here. My high beam was dramatically better than the low beam all day Sunday (KW8N). I picked up 11 new countries during the contest. I had fun keying the mike, but these are the toughest pileups to break through (N8LSS). I was tuning the lower end of the 10-meter phone band and just about fell out of my chair when I came across TY2LS calling "CQ contest" with no one coming back to him! Now, if I'd just remembered to ask for his QSL info (WK3B). VQ9CQ's long-path signal on 40 Sunday morning sounded lost and lonely, but it was exciting enough to justify the entire weekend! (WØØG). Conditions on 10 meters were awesome. This was the most fun I've ever had! (N9ITX). It's interesting to see that 100 watts and a simple wire antenna still works! I'll see you in 1992—with improvements (WB9IQI). 40-meter single band from the Midwest is tough with 100 watts and a vertical, but I might try it again in 1992! (N19C). I didn't hear much on 80 meters, but my thanks to the DX stations that showed up on other bands. It was great fun (WD5COV/Ø). There were fantastic signals from all parts of the world (W4ETO/Ø). This was my first contest, and once I started on 10, I never tuned off the band! (KAØRNY). I'm still amazed at what 100 watts can do when you're motivated! (NØ7K). We had a great time, even though we had to climb the tower during a snowstorm (VE7ON). I worked everybody wrong path, not long path. My beam got

## WVE Plaque Winners

CW		
Single Operator		
Category	Winner	Donor
All Band	KM1H (KQ2M,op)	Frankford RC
1.8 MHz	W1NG	Gordon F. Durk, KA1DWX
3.5 MHz	W1FV	Dayton ARA
7 MHz	K1ZM	Northern Arizona DX Association
14 MHz	W1RR	QSLs By W4MPY
21 MHz	K4VX/0 (W09G,op)	Carl Luetzelschwab, K9LA
28 MHz	WMSG (KR0Y,op)	W5MYA
Low Power QRP	KM9P	Dauberville DX Association
Assisted	W2TZ	Tod Olson, K0TO
	WB2Q	Billy Lunt, KR1R
Multioperator		
Category	Winner	Donor
Single Xmtr	W3BGN	Northern Illinois DX Association
Two Xmtr	K1AR	Kenwood USA Corp
Unlimited	W3LPL	ETO Inc/ALPHA

Phone		
Single Operator		
Category	Winner	Donor
All Band	WMSG (KR0Y,op)	Frankford RC
1.8 MHz	K1ZM	Butch Greve, W9EWC, Memorial
3.5 MHz	K8UR/1	Lance Johnson Engineering, K0CS
7 MHz	W09G	David Thompson, K4JRB
14 MHz	KS1L	Dayton ARA
21 MHz	W7WA	Kenwood USA Corp
28 MHz	N1GLG	Border City RC, Windsor, Ontario
Low Power QRP	K7RI	Dauberville DX Association
Assisted	K5RX	Michigan QRP Club
	K1AR	Corona Norco ARC
Multioperator		
Category	Winner	Donor
Single Xmtr	W3BGN	Kenwood USA Corp
Two Xmtr	K2TR	Kenwood USA Corp
Unlimited	W3LPL	Western New York DX Association, W2RR

## DX Plaque Winners

CW		
Single Operator		
Category	Winner	Donor
World	HK0/N3JT	North Jersey DX Association
Africa	EABRCT (OH0XX,op)	Byron P Peebles Jr, NZ30
Asia	JABRWU	Alamo DX Amigos
Europe	CT2A	Clarke V. Greene, K1JX
N America	VP2VM (K5NA,op)	Potomac Valley RC W4KFC Memorial
Oceania	ZL3GQ	Robert J. Halprin, K1XA
S America	PJ2J (W1WEF,op)	W6NMA Memorial Award
1.8 MHz	VP2EXX	Fred Race, AL7JO, in memory of W1BB
3.5 MHz	CU2AK	Mad River RC
7 MHz	IO4IKW	Gordon F. Durk, KA1DWX
14 MHz	YT1BB	Bencher Inc
21 MHz	9Y4VU	Southern New England DX Association
28 MHz	N6OP/NP2	ZP6XDW (N4PW)
QRP	YU2TY	Dr Jerry Griffin, W8MEP
Assisted	H18A (JA5DQH,op)	Willamette Valley DX Club

### Multioperator, Single Transmitter

Category	Winner	Donor
World	XE2FU	John Brosnahan, W0UN
Asia	JL1ZCG	Kenwood USA Corp
Europe	HG1S	The Radio Place
N America	XE2MX	Kenwood USA Corp

### Multioperator, Two Transmitters

Category	Winner	Donor
World	JABYBY	Kenwood Employees ARC, W6DJY
Europe	RZ6LYL	Kenwood USA Corp

### Multioperator, Unlimited

Category	Winner	Donor
World	YT2R	H Stephen Miller, N0SM
Africa	JE2YRD	Kenwood Employees ARC, W6DJY
Europe	YT2B	Texas DX Society
N America	KL7RA	ETO Inc/ALPHA

## Phone

### Single Operator

Category	Winner	Donor
World	EABRCT (OH0XX,op)	North Jersey DX Association
Africa	EA9IE	Kenwood USA Corp
Asia	JH7DNO	Acadiana DX Association
Europe	RQ9W (UQ2087-116,op)	Dr Jerry Griffin, W8MEP
N America	VP2/VESRA	Chod Harris, VP2ML
Oceania	WR6R/KH6	N7AVK—Commemorating a top SK op: W7IYW
S America	HK3JJH	Kenwood USA Corp
1.8 MHz	CT1A0Z	Fred Race, AL7JO, in memory of ZL2BT
3.5 MHz	YV1EQW	Kenwood USA Corp
7 MHz	IO4NEQ	Central Arizona DX Association
14 MHz	YT1BB	Don Wallace, W6AM, Memorial, Central California DX Club
21 MHz	9Y4VU	LIDXA, in memory of W2NCL
28 MHz	CT1BOP	Long Island Mobile ARC
QRP	TG9GI	Dr Jerry Griffin, W8MEP
Assisted	H18A (JA5DQH,op)	Willamette Valley DX Club

### Multioperator, Single Transmitter

Category	Winner	Donor
World	8P9X	Carl Cook, A16V
Africa	VQ9CQ	Kenwood USA Corp
Asia	UZ0QWA	Kenwood USA Corp
Europe	TW1C	Kenwood Employees ARC, W6DJY
N America	K1DQV/KP2	Nick G. Lash, K9KLR
Oceania	ZL2NX	
S America	PJ0B	Kenwood USA Corp

### Multioperator, Two Transmitters

Category	Winner	Donor
World	XE2FU	Kenwood USA Corp
Africa	CT3M	Stanley Cohen, W8QDQ
Asia	8J8WUS	Kenwood USA Corp
Europe	HG5A	The Middletons: Joy, KB4OMW, and Tom, WB4CKY

### Multioperator, Unlimited

Category	Winner	Donor
World	I3MAU	Wayne Yoshida, KH6WZ
Asia	JE2YRD	Kenwood USA Corp
Europe	YT2R	Doug Robbins, KY2O
S America	ZV4B	Kenwood Employees ARC, W6DJY

## Affiliated Club Program

Unlimited Category	Score	Entries	CW Winner	Phone Winner
Frankford Radio Club	196,271,595	155	K300	K300
Yankee Clipper Contest Club	164,901,939	130	KM1H (KQ2M,op)	KM1H (KQ2M,op)
Potomac Valley Radio Club	55,592,922	60	K3ZO	K3ZO

## Medium Category

North Coast Contesters	Score	Entries	CW Winner	Phone Winner
Mad River Radio Club	39,559,260	20	K3TUP (K5ZD,op)	K3LR
Northern California DX Club	31,189,005	29	K8CC	K8MJZ
Society of Midwest Contesters	22,586,784	46	N6TV	W6BSY
North Texas Contest Club	17,201,697	38	WX9U	K9CAN
Minnesota Wireless Assn	15,561,741	16	N5AW	WM5G (KR0Y,op)
Texas DX Society	13,185,789	9	KF0GV	AC0W
Northern California Contest Club	13,044,663	9	NZ5I	KE5FI
Southern California Contest Club	12,319,335	23	N07K	N6TIB
Hoosier Contest Club	10,282,722	14	N6AV	N6AA
Rochester (New York) DX Association	9,849,369	14	W9RE	KB9ABI
Western Washington DX Club	7,124,847	23	W2HPF	W2TZ
Dixie DXers Contest Club	6,532,488	23	NN7L	W7WA
Western New York DX Association	6,491,640	6	N8LM	K4BAI
Murphy's Marauders	6,063,150	25	W2FXA	WA2MBM
San Diego DX Club	5,884,257	14	WJ1U	WJ1U
Southern California DX Club	5,751,402	12	K6XT (K16ZH,op)	K6XT (K16ZH,op)
Mile-Hi DX Association	4,767,936	19	W6MFC	K6SVL
Long Island DX Association	4,507,422	12	N2IC/0	K1ER/0
Mississippi Valley DX/Contest Club	3,065,190	9	K2MFY	K2MFY
Albany ARA	2,654,898	9	WC9Y	WV9Q
Southeastern DX Club	2,604,222	12	K2SIG	WA2EOV
Kansas City DX Club	2,353,689	7	KM8P	N4VYZ
Salt City DX Association	2,342,391	11	KM0L	W4JLC
Dauberville DX Association	2,330,727	5	K2KIR	KB2DE
Grand Mesa Contesters	2,274,466	11	NM3E	NM3E
South Jersey Radio Association	2,176,518	9	N8ZA	N8ZA
Willamette Valley DX Club	2,163,786	20	WA2VYA	W2PAU
Eastern Iowa DX Association	2,121,606	6	A17B	A17B
Redwood Empire DX Association	1,828,551	11	KE0Y	KZ0C
Metro DX Club	1,128,174	7	WA6CTA	W6PM
West Park Radiops	981,033	9	W9LNQ	K9MDO
Southern Peninsula ARK	566,424	14	W8IDM	W8MEM
Western Illinois ARC	374,793	3	—	W4PRO (WB8HD)
	279,333	3	NM9C	NM9C

## Local Category

Central Virginia Contest Club	Score	Entries	Winner	Phone
Overlook Mountain ARC	11,608,290	4	—	K4WHN
River City Contesters	11,138,589	9	W2XL	NX2X
Rubber Circle Contest Club	5,953,767	7	KV6H	KV6H
New Mexico Big River Contest Club	5,208,372	4	K7WA	K7LXC
Boiled Owls of New York	5,138,937	3	K5TA	—
Maui ARC	4,694,058	4	K2LE	—
Carolina DX Association	3,637,530	3	KH6XT	WR6R/KH6
Lincoln ARC	3,138,348	7	N4ZC	N4UH
Falmouth ARA	3,081,030	5	K6SCM	—
Northern Ohio DX Association	3,064,236	3	K5MA/1	K5MA/1
Central Arizona DX Association	2,014,029	5	—	K8YSE
Central Florida DX Association	1,809,120	5	N7IR	KB7TQ
Arrowhead Amateur Club	1,670,220	3	N6AR	N6AR
Woodbridge Wireless	1,487,538	3	W0RXL	W0RXL
Alamo DX Amigos	1,331,271	7	K4ARRU	KA4RRU
Columbus (Ohio) ARA	1,244,949	9	W5VGX	K15GF
Sterling Park ARC	1,238,544	5	K9ALP	W8NPF
Grumman ARC	880,428	6	W4RW	W4LMJ
Schenectady ARA	777,852	4	—	NN2C
Houston Echo Society	649,581	4	WT2F	WT2F
Naked Chicken Contest Club	310,260	5	—	W5UQM
	220,986	7	NT0Z	KJ4KB

loose from the rotator, and ice and high winds kept me off the tower (VE3ZD). Who said miracles never happen? 8P9X asked for "any VE4s" and there I was (VA4AMC). I had a great time! It was a treat to work TY2LS for a new one! (WM2D). My antenna rotator locked up Friday night. I had to put my beam on a 12-foot pole for the duration, and I still had fun (KB5JJB).

## DX Phone

There were good conditions and I made nearly 1500 QSOs. Thanks to the stations that contacted me. I hope to see you again next year, from Niger (JH4NMT). I worked only half of the contest. My last QSO was at 2214 UTC Saturday because I had no power (CS7N). This was a nice ARRL SSB DX

**Special Plaques**

**Single Operator**

Category	Winner	Donor
WVE Combined Score	KM1H (KQ2M,op)	National Contest Journal
WVE Low-Power Combined Score	W1PH	Rochester, New York, DX Assn
WVE Novice/Tech Combined Score	KC4TIR	Stan Star, KY4Q
WVE Under-18 Combined Score	WJ1U	Connecticut DX Association
World Combined Score	E8ARCT (OH0XX,op)	Mike Manafio, K3UOC, 4M4A, P46S
World 3.5 MHz Combined Score	DL1BJL	DL7AEY and KA1XN
Europe Combined Score	OK1ALW	Chris Williams, KG6AR
Japan Combined Score	JA8RWU	JA7WME, JE7RJS, JG7SVZ and JH7AFR
Western Japan Combined	JR3NZC	WD2M
Atlantic Division CW	K3TUP (K5ZD,op)	K2NY Memorial—Salt City DX Association
Great Lakes Division CW	K8CC	Livonia Amateur Radio Club, Livonia, Michigan
Great Lakes Division Phone	K8MJZ	Livonia Amateur Radio Club, Livonia, Michigan
Hudson Division CW	N2LT	W2AO Memorial—Order of Boiled Owls
Japan All-Band CW	JH7WKQ	Akita DX Association
Japan All-Band Phone	JA8RWU	Communication Ham Club, JH7YJF
Japan Low-Power All-Band CW	JA5BSQ	Western Washington DX Club
Poland Phone	SP1DTG	Stan Wisniewski, FO5IW
Seventh Call Area All-Band CW	NN7L	Willamette Valley DX Club
Seventh Call Area All-Band Phone	K7RI	Willamette Valley DX Club
Single Operator Under-18 CW	WJ1U	Virginia A Greene, WB1AVA
Single Operator Under-18 Phone	WJ1U	Virginia A Greene, WB1AVA
USSR All-Band CW	RQ9W (YL2AG,op)	Warren Stankiewicz, NF1J
USSR All-Band Phone	RQ9W (UQ2-067-116,op)	Warren Stankiewicz, NF1J
WVE Novice/Technician, CW	KC4TIR	North Coast Contesters
WVE Novice/Technician, Phone	KB9ABI	North Coast Contesters

**Multioperator**

**Category Winner Donor**

Caribbean Multi-Single CW	J37J	The YASME Foundation
Caribbean Multi-Single Phone	8P9X	W5MYA
Multi-Multi Combined World	YT2R	W2PV Memorial—Schenectady ARA

Contest. I'll see you next year! I'm only 14 years old! (Y24AO). This was my first step in the contest arena, but I had fun, especially on 10 meters. It became a pleasure to work stations on that band when it was open (Y65IN). This was my best score in this SSB contest. The conditions Saturday were okay, but the conditions Sunday were better, with a long opening in the evening (F1JDG). The band conditions were excellent this year, even later in the night up to 2200 UTC (F6FTB). I was pleased to work 35 states and provinces on 10 meters with a Ten-Tec Argonaut 515 and 5 watts, but I couldn't make myself heard on 15 and 20 meters (G4MET). I might not keep up with "the big boys," but it was fun, although I must try to get a babysitter for the junior ops next year! (G4LJR). This was my first time in a contest. In my regard, this is one of the best and most interesting. The professionalism of the American stations and the way they operate is quite good (IK8NIM). I enjoyed the contest, but where has DC been? (OE1PPC). I wonder why there were no VE8s? Somebody should tell them that contests are big fun! (OH3IR). The propagation was nice. We've heard a lot of US stations, but unfortunately nobody needs us, UZ4. Please call us another time in the next contest (UZ4FWD). This was my first ARRL contest. I had fun and I'll be back in 1992 (OY9JD). I only had a chance to participate Sunday afternoon after coming home from skiing (OZ5EV). It was a pleasure working so many US hams on 40 meters. I'll see you again next year (PA3EPN). I was licensed in 1938 and I'm still finding it thrilling to participate in this contest! (PA0YN). This was my first contest entry ever! In spite of three or four power outages, having to chase a stray dog out of the yard and having a long call sign, it was a fun contest! But where were all the Canadians on 15 meters? (HI8/KA9FNL). I was surprised with people in pileups. When I asked for needed states only, no one except in desired states called me. This was a nice contest! (WP4WO). This is my second contest and I've only been licensed for a year and three months. If only more US stations could be persuaded to occasionally turn their beams south! (ZF1IQ). This portion of the contest was much worse for me, as a power line just 100 feet away managed to wipe out reception during most of the prime-time periods. It was frustrating to hear my neighbors four blocks away making QSOs left and right, and not being able to hear anything but them and QRN! (DU1/KG6UH). My IBM PC went out and I had to burglarize my office at 2 AM to get a replacement! (NH2/N7DF). This is the first time I worked this contest. I liked it, even though I had problems with propagation, other powerful stations, the log and a Saturday job. I'll see you next year! (HK4OTF). Most of the ZL2NX/ZM2K CQ WW crew came along to try out our new site and our first entry in the ARRL DX Phone Contest! We had fun in 19 hours of operation and a great barbecue Saturday night! (ZL2MF).

**Scores**

The scores are listed by mode—CW and phone. For WVE and DX scores, single operators are listed first, followed by multioperator single-transmitter, multioperator two-transmitter, then multioperator unlimited. WVE single-operator scores are broken down by call sign area and ARRL Section. WVE single operated assisted and multisingle scores are broken down by call sign area only. WVE multiop two-transmitter and unlimited scores are grouped together in descending order by score. DX single-op and multiop scores are broken down by continent and country. Under each ARRL Section (and country for DX), single-op scores are listed in descending order by category. All-band scores are listed first, followed by 160, 80, 40, 20, 15 and 10-meter single-band scores. Each line score lists the following information: Call sign, score, QSOs, multipliers, power output used (A = 5 W or less; B = 6-150 W; C = more than 150 W). Single-band entries are indicated by 160, 80, 40, 20, 15 and 10.



**WVE CW Single Operator**

<b>1</b>				
<b>Connecticut</b>				
K1TO	3,666,222	3339	366	C
K1RU	2,637,666	2697	326	C
K1XA	2,324,052	2391	324	C
N4XR	1,163,988	1302	298	C
WJ1U	1,128,150	1635	230	C
KG1D	1,117,179	1449	257	C
K1WJL	800,100	1050	254	C
K1IN	797,778	1061	246	C
K1EBY	784,278	1122	233	B
WA1FCN	779,040	1082	240	B
K1YFR	762,300	1155	220	B
KR1S	396,288	688	192	A
KH4CP/1	197,658	417	158	A
KJ4KB	196,692	443	148	C
W1NCU	124,500	332	125	B
W1KCB	74,955	263	95	B
KA1CZF	42,750	150	95	A
NT0Z	37,928	147	86	C
KY1T	16,536	104	53	C

WA3VIL	8,241	67	41	C
W1NG	14,766	107	46	C 160
K5L	55,980	311	60	C 80
NJ2L	234,930	955	82	C 40
W1QK	9,396	108	29	C 40
K1BV	100,170	530	63	C 20
NF1J	27,612	177	52	C 20
K1RM	393,000	1310	100	C 15
K1TN	307,530	1206	85	C 10
K1SJJ	141,126	547	86	B 10
K1VWL	44,100	300	49	B 10

**Eastern Massachusetts**

W1KM	3,174,504	3032	349	C
K8PO	2,114,328	2381	296	C
K5MA/1	2,103,699	2171	323	C
K1TWF	1,135,332	1551	244	C
W1GIH	757,458	1079	234	C
KA1DWX	601,140	860	233	C
K1CGJ	529,179	791	223	A
NY1L	477,369	899	177	C
W1FM	167,670	414	135	C
WA1UAR	93,190	290	114	C
KQ1F	79,590	223	110	B
W1FV	170,586	729	78	C 80
K1IN	100,204	508	71	C 15
AB1A	191,400	725	88	C 10
WB2DND	30,102	173	58	C 10
KB2R	2,622	38	23	B 10

**Maine**

NY1E	864,702	1206	239	C
KM1M	579,852	826	234	A
N1AFC	284,487	589	161	A
KR1B	180,900	402	150	C
K1ZQC	81,699	241	113	B
AD1J	9,576	84	38	C 160
KA1SSU/T	15,066	162	31	B 10

**New Hampshire**

KM1H (KQ2M,op)	4,001,790	3310	403	C
W1PH	1,631,817	1749	311	B
WA3ECT	800,037	1071	249	C
K1PTF	398,931	689	193	B
K1NH	21,045	115	61	B
K1WGM	169,875	755	75	C 40
K1ULI	70,740	393	60	C 40
W1RR	483,891	1597	101	C 20
W1LQQ	54,234	262	69	C 20
WA1G	21,744	151	48	B 10

**Rhode Island**

K1VJSJ	10,296	88	39	B 20
K2SM	1,824	32	19	B 20
W1RFQ	28,896	172	56	C 15

**Vermont**

NW1S	259,965	545	159	B
WA1QGC	120,048	328	122	B
WA1GUV	95,121	271	117	B
K1IK	142,989	619	177	C 40
W3SOH	40,824	216	63	B 40

**Western Massachusetts**

W2SC	2,417,976	2343	344	C
AK1A	1,262,463	1487	283	C
KA1T	720,750	961	250	B
W1AUT	201,960	660	102	C
WB1AEL	23,364	132	59	C
NU1P	432	12	12	A

**2**

**Eastern New York**

K2XA	2,133,188	2339	304	C
W2XL	1,248,686	1476	282	C

K2SIG	848,640	1088	260	B
KF2O	445,830	770	193	C
N2DU	408,408	616	221	B
W12F	397,242	761	174	B
W2KHQ	165,996	348	159	B
K2DW	164,145	353	155	B
W2AWF	130,419	337	129	C
WM2U	76,230	231	110	B
NW2J	51,906	211	82	C
K2RI	47,922	163	98	B
NA2M	38,070	141	90	C
KB2HUN	33,696	144	78	B
W2QYA	32,340	154	70	A
AA2Y	28,566	138	69	A
KA2AQV	15,676	98	54	B
KD2X	2,346	34	23	B
K1XZM	401,472	1312	102	C 40
WX2N	23,562	154	51	B 20
KZ1L	4,134	53	26	B 20
KB2AUQ	33,750	225	50	C 15

**NYC-Long Island**

K2LE	1,432,728	1608	297	C
WB2TPS	325,416	596	182	C
KK2E	320,625	625	171	A
WA2VZQ	183,465	405	151	B
W2HLI	173,880	414	140	A
W2GKZ	44,370	170	87	B
K2KTT	31,347	129	81	B
WB2KPA	16,995	103	55	C
WB2DLA	14,100	100	47	B
WB2AMU	5,580	60	31	B 80
NQ2D	353,684	1228	96	C 40
KD2HE	24,393	173	47	B 15
K2MFY	131,070	514	85	B 10
KM2X	18,720	130	48	B 10

**Northern New Jersey**

N2LT	2,752,470	2570	357	C
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K2DM	2,057,526	2271	302	C
W1GD	1,058,400	1225	288	C
K2WK	886,200	1477	200	C
WA2YYA	627,882	922	227	B
WA8QQA	503,496	888	189	B
AA2U	332,310	583	190	A
WB2AOH	305,016	568	179	C
K2PH	286,104	524	182	B
WG3I	256,620	470	182	A
WA2ASM	245,178	514	159	B
W2HCA	204,060	380	179	B
KB2NY	137,484	342	134	C
NF2K	92,598	253	122	C
WA2C	81,267	263	103	B
W2WD	52,890	205	86	B
W2AOY	16,677	109	51	C
W2FCR	7,215	65	37	C 160
W2ZF	5,280	55	32	C 40
WA2ASQ	19,557	123	53	B 20
W9NTU	24,123	187	43	B 15

**Southern New Jersey**

K2PS	1,673,880	1885	296	C
WA2AXJ	428,358	658	217	C
K2FL	361,875	625	193	C
KD2I	356,562	639	186	A
K2SB	342,888	628	182	C
N2MR	335,232	576	194	C
N2FY	236,640	464	170	C
WB2PAU	229,548	407	188	C
K2JLA	201,894	418	161	C
W2EA	178,092	388	153	B
W5KI	140,859	333	141	C
K2SWZ	137,034	331	138	B
W2QSV	93,765	235	133	B
K2OSV	52,416	224	78	C
W2CN	33,462	143	78	C
AE2N	33,264	144	77	B
W3ELJ	5,544	56	33	B
W2BN	3,645	45	27	C 160

K3JGJ	30,294	198	51	C	80	K3MD	144,342	729	66	C	10	<b>5</b>	WB6VVS	27,450	183	50	B	10	KA7JBX	75,258	226	111	B
KC2TA	11,844	94	42	C	20	K3UA	5,040	84	20	C	10	<b>Arkansas</b>	<b>Santa Barbara</b>	KQ7I	73,695	289	85	B					
W2GTN	25,917	163	53	B	15							K7MMQ	33,775	151	75	C							
K2MK	149,625	665	75	C	10							KA7FEF	15,960	152	35	B							
K2LOO	2,294	38	21	B	10							K7OVW	2,604	62	14	B							
<b>Western New York</b>						<b>4</b>	<b>Alabama</b>																
W2HPF	1,606,551	1853	289	C			KCAZV	995,280	1276	260	B												
K2KIR	1,547,892	1767	292	C			N4KG	685,482	859	266	A												
WF2W	1,240,272	1566	264	C			KK4SM	362,970	654	185	B												
W2TZ	753,066	1173	214	A			AA4XM	68,289	221	103	B												
N2WK	623,115	915	227	B			K4KZE	43,200	240	60	B												
W2HG	483,417	771	209	C			K4NNQ	21,942	138	53	B												
WA2EYA	348,384	608	191	B																			
W2QIP	261,960	472	185	C			<b>Georgia</b>																
W2OMV	185,166	381	162	B			KM9P	1,826,181	2009	303	B												
KB2NU	174,000	400	145	B			N8LM	422,370	722	195	B												
K2LJ	105,315	295	119	C			K4EZ	249,300	554	150	C												
W2KKZ	87,975	255	115	C			AA4GA	168,264	369	152	B												
NQ2W	72,750	250	97	A			K4MJ	147,408	332	148	C												
K2CF	63,042	266	79	B			W4KYW	64,170	230	93	C												
W2FUJ	30,600	150	68	B			AB4RU	59,364	204	97	C												
WB2JFP	19,899	99	67	B			W4AOPV	11,607	73	53	B												
KB2SE	14,457	79	61	B			K4TEA	10,707	83	43	C												
WB2DVU	11,025	75	49	C			N4VYZ	540	15	12	C												
K2PPH	10,290	70	49	C			W4JKC	33,060	190	58	B												
AA2CQ	4,992	64	26	B																			
W2FR	24,864	148	56	C	80		<b>Kentucky</b>																
WA2AOG	17,940	130	46	C	80		NA4XM	859,512	1214	236	C												
KA2AJT	113,616	526	72	C	40		WB4FOT	441,870	715	206	C												
WB2YQH	151,848	684	74	C	15		N1WR	278,660	530	174	C												
KX2H	14,964	116	43	B	15		N4BOC	59,670	234	85	B												
W2FXA	169,575	665	85	C	10		KA4UJ	15,792	112	47	C	40											
WA2MBM	10,260	90	38	C	10		WD9GGY4	12,972	94	46	B	20											
W2RR	960	20	16	C	10																		
<b>3</b>							<b>North Carolina</b>																
<b>Delaware</b>							K4POL	2,368,412	2556	309	C												
K3WUW	442,929	773	191	C			NA4YDU	744,690	1030	241	B												
W3NX	394,464	587	224	C			NA4ZC	710,289	999	237	C												
N3NA	7,371	63	39	B	15		EA4Y	387,810	695	186	C												
NX3A	28,920	241	40	C	10		NA4QVM	97,416	264	123	C												
							KA4FOY	48,960	192	85	B												
							NA4UH	1,932	28	23	C	180											
							WA4SSI	53,625	275	85	B	15											
							WA4GGQ	32,391	183	59	C	15											
							<b>Northern Florida</b>																
							N6AR	710,370	877	270	C												
							WA4HBK	502,944	806	208	A												
							W4WKQ	178,018	386	152	C												
							W4VQ	1,134	21	18	C	180											
							K4XS (WC4E,op)	405,999	1367	99	C	10											
							<b>South Carolina</b>																
							W3VT	1,083,915	1295	279	C												
							WB3NL4	107,100	300	119	C												
							WA9FWO	94,284	291	108	A												
							W4ALPV	75,756	236	107	C												
							W4YDD	30,447	199	51	C												
							AB4YU	11,400	100	38	C	10											
							<b>Southern Florida</b>																
							K4MF	908,616	1156	262	C												
							W4DAHZ	892,047	1157	257	B												
							W5OG	168,264	369	152	C												
							KBUNP	111,228	299	124	C												
							W4DJNS	78,318	229	114	C												
							AB4RL	65,565	235	93	C												
							W4YN	62,985	221	95	B												
							W4OVU	23,978	108	74	C												
							WA4SVO	41,478	223	82	C	80											
							RC9CAN4	4,116	49	28	B	20											
							WB4TDH	168,264	738	78	B	10											
							KC4TIR (N/T)	3,828	58	22	B	10											
							<b>Tennessee</b>																
							W4XJ	1,630,368	1836	296	C												
							K4AMC	1,359,540	1743	280	C												
							NA4K	701,100	950	246	B												
							W4TYU	32,526	139	78	B												
							W4OCU	34,980	212	55	C	80											
							NA4CT	229,047	839	91	C	15											
							NA4IR	183,201	773	79	C	15											
							N8SZ (W9W,op)	391,395	1345	97	C	10											
							NA4ZZ	352,170	1290	91	C	10											
							K4UZ	114,642	579	66	C	10											
							<b>Virginia</b>																
							W9L7L4	793,125	1125	235	C												

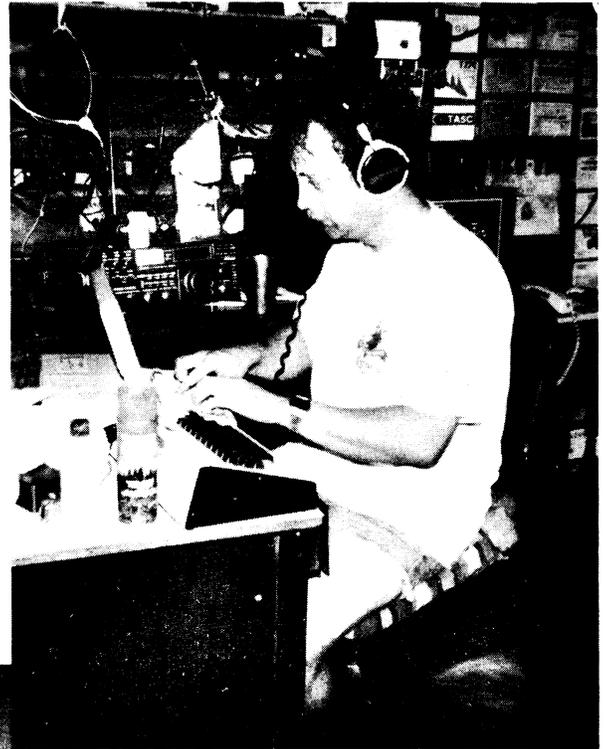


JAGBM	13,944	83	56	B	UA9FHB	47,385	351	45	B	40	DL8NAV	17,052	116	49	B	England	LA2EG	2,070	46	15	B	80					
JR2BNF/1	12,753	109	39	B	RA9FN	15,048	152	33	C	40	Y23UA	13,671	93	49	B	G3WPF	2,233,560	2659	280	C	LA6PB	1,620	45	12	C	40	
JATARW/1	10,578	86	41	C	UA9SAU	151,470	918	55	C	20	Y23HF	12,384	86	48	B	G3MXX	2,101,185	2643	265	C	LA7MFA	29,412	228	43	C	20	
JESMAY	9,102	74	41	C	UV5DO	19,782	157	42	B	20	Y48TL	9,860	85	38	A	G4BUO	1,960,848	2448	267	C	LA4ODA	16,450	150	41	B	10	
JR1TUJ	8,301	69	43	B	UA8TAA	71,136	494	48	B	15	DK6AX	9,450	75	42	A	G0MFO	1,312,656	1886	232	B	LA9HFA	15,984	148	36	B	10	
JR3EHD	7,875	75	35	B	UA9JB	55,082	399	46	B	15	DJ1FH	8,424	117	24	B	G2QT	542,016	941	192	B	LA1VL	13,098	118	37	B	10	
JE2MFE	5,618	72	23	B	UA9UBW	13,068	121	36	B	15	DK9EA	8,280	69	40	B	G4GIR	481,824	956	168	B	LA3BO	5,655	65	29	C	10	
J1BSGS	4,941	61	27	B	UA9XLR	741	19	13	B	15	Y23CM	6,018	59	34	B	G3NKS	414,414	759	182	B	Bulgaria						
J1YGY	3,750	50	25	B	UA9ZDA	167,984	1037	54	B	10	Y23BT	4,536	56	27	A	G3TFF	320,712	664	161	C	LZ1KP	274,023	597	153	B		
JASZJ	3,564	44	27	B	UA9ZAS	108,405	657	55	C	10	Y23KH	3,800	60	20	A	G4BK1	165,888	432	128	C	LZ1CW	78,474	319	82	B		
J1HPXY	2,638	43	22	B	UA9YNC	26,814	212	41	B	10	Y33VL	47,400	395	40	C	80	G3HJF	110,103	343	107	C	LZ1HX	36,504	156	78	B	
J43WFQ	2,052	36	19	B	UA9QA	17,028	172	33	B	10	DL4YA0	21,330	237	30	C	80	G4ZME	107,640	345	104	B	LZ3YJ	2,322	43	18	A	
JM1QZV	1,920	40	16	B	UA9XBE	4,380	73	20	B	10	DK5AD	12,528	144	29	C	80	G3KNU	64,881	267	81	A	LZ2JE	3,825	75	17	B	160
JA7NI	750	25	10	C	160						DL4FNP	3,648	64	19	B	80	G3LJK	58,905	187	105	B	LZ1V (LZ3FM,op)	135,912	809	56	C	40
JF1YRK (JA9VDA,op)	5,130	90	19	B	80						Y21CL	405	15	B	80	G0NAT	20,352	106	64	A	LZ1QO	6,474	83	26	C	40	
JR8XQJ	3,432	88	13	B	80						Y26FI	32,472	246	44	C	40	G3FXB	170,856	1017	56	C	40					
J11NUJ	1,872	52	12	B	80						DJ2YE	10,584	126	28	B	40	G5LP	48,972	371	44	C	40					
J11JUC	1,770	59	10	B	80						Y54TO	9,720	106	30	B	40	G3E5F	26,448	232	38	B	40					
J1S1JV	1,483	23	7	C	80						DL8WN	7,038	102	23	B	40	G4ZOB	26,160	218	40	B	40					
JELZPC	18	3	2	B	80						DL4RX	126,000	750	56	C	20	G0MTE	24,282	213	38	B	40					
J71AAI (K8HV,op)	49,650	331	50	B	40						DL1EAL	51,042	362	47	B	20	G4ADT	19,116	177	36	B	40					
JA9UMV	47,250	315	50	B	40						DJ5GJ	50,550	337	50	B	20	G4OTY	2,601	51	17	B	40					
JA6SHL	46,230	335	46	C	40						DL2SBY	29,040	220	44	B	20	G4BWP	256,842	1502	57	B	10					
JR4PMX/1	12,474	126	33	B	40						DF2KX	28,782	234	41	B	20	G4UZN	96,096	572	56	B	10					
JA7FFN	2,496	52	16	B	40						DL4TJ	9,858	106	31	C	20	Scotland										
J11AEB	1,998	37	18	B	40						Y23HN	1,089	33	11	A	20	GM3YTS	330,480	810	136	B						
J11NYV	1,620	36	15	B	40						DL9U (DL4AAE,op)	187,587	1097	57	C	15	GM3ZAS	96,813	347	93	B						
J13BFC	675	25	9	B	40						DL1HBT	101,412	626	54	C	15	GM3CFS	37,632	256	49	B						
JG4KEZ	480	20	8	B	40						DK3KD	81,900	525	52	C	15	Wales										
JE7JRD	420	20	7	B	40						DL1HCM	66,482	418	53	B	15	GW9GT	1,186,116	2038	194	C						
JA2KPV	225	15	5	B	40						DL3ECK	56,304	368	51	B	15	GW3JT	275,799	617	149	B						
JA9YAV	204	17	4	B	40						Y24KA	33,948	246	46	B	15	GW3WWN	125,292	788	53	B						
JATLE	96	8	4	B	40						Y27Y0	12,183	131	31	B	15	Hungary										
JF2LTH	36	6	2	B	40						Y37ZE	7,224	86	28	B	15	HA8HV	899,184	1441	208	C						
JA1YFG	112,728	671	56	B	20						Y21GO	4,480	60	26	B	15	HA8LM	595,386	1087	186	C						
JA8QNJ	71,280	440	54	C	20						DL6LAU	152,790	926	55	C	10	HA8LZ	235,107	519	151	B						
JM1NKT	30,222	219	46	B	20						DL1YAW	148,230	915	54	C	10	HA1AL	173,880	504	115	C						
JASIP	4,347	69	21	C	20						DL4UL	82,350	540	50	C	10	HA1YS	161,280	420	128	A						
J1A1WHG	3,168	48	22	B	20						DA1UM	75,972	487	52	B	10	HA8IR	81,498	289	94	B						
7L1GVE (JA8JCJ,op)	217,674	1251	58	B	15						DL2GBB	40,131	273	49	B	10	HA8XR	36,570	265	46	B	20					
JABJBS	198,360	1140	58	C	15						Y25OF	31,119	253	41	B	10	HA8LKE	80,652	517	52	C	15					
J12KKY	153,045	895	57	B	15						DL1EK	30,888	234	44	C	10	HA8GE	34,638	251	46	B	15					
JH7XGN	144,153	843	57	C	15						DL7YS	26,703	207	43	B	10	HA8NAR	180,063	1053	57	B	10					
JG3KVV	128,535	779	55	C	15						Y24A0	21,960	183	40	B	10	HG4P	110,400	736	50	C	10					
JH2BCN	108,576	696	52	C	15						Y38YE	12,000	125	32	B	10	HA1RW	54,537	371	49	B	10					
JA5YBF	106,596	658	54	C	15						Y3ZFZ	10,302	101	34	C	10	HA1TM	41,184	286	48	B	10					
JL1EDB	102,960	624	55	B	15						Y27Q0	9,903	97	33	B	10	HA3GJ	13,860	105	44	C	10					
JZ2WEN	91,392	544	56	B	15						DL1SFB	9,504	96	33	C	10	HA3JL	10,500	100	35	C	10					
JN1VOC	71,448	458	52	B	15						Y21HY	8,556	92	31	B	10	HA3GI	4,050	50	27	B	10					
J11VRO	56,400	376	50	B	15						Y26S0	6,030	67	30	B	10	HA3LI	2,640	40	22	B	10					
J1Y1AX (JF1KML,op)	52,020	340	51	B	15						Y24SH	5,580	62	30	B	10	HA3GQ	2,460	41	20	B	10					
JQ1NGT	37,812	274	46	B	15						Y27UM	4,452	53	28	B	10	Switzerland										
J11LAI	13,392	124	36	B	15						EA4DAS	1,568,088	2253	232	C		HE7AGA	500,055	901	185	C						
JG2IGY	8,352	96	29	B	15						EA3DWX	253,125	625	135	B		HB9DFY	139,482	378	123	C						
JATMWC	6,006	77	26	B	15						EA1JO	238,980	589	140	C		HB9CEJ	120,240	334	120	C						
JR1GMJ	2,835	45	21	B	15						EA3DDB	215,358	502	143	B		HE7AGH	76,884	298	86	B						
J11LNR	1,944	36	18	B	15						EA7GVR	108,888	349	104	B		HE7CSA	61,410	230	89	B						
JF8JLS	1,938	38	17	B	15						EA3GFA	101,857	289	101	B		HE7XY	20,286	138	49	B						
JG3BFE	1,023	31	11	B	15						EA3DFW	52,920	210	84	A		HB9AFH	20,235	95	71	A						
JA1XPU	972	36	9	B	15						EA7CA	40,365	195	89	B		HE7DDO (HB9DDO,op)	3,060	60	17	B						
JL1BZ	561	17	11	B	15						EA7AAV	35,292	173	68	A		HB9DX	66,600	444	50	C	10					
J1Y1XP (JH1UP,op)	156,465	915	57	B	10						EA4BV	26,775	105	85	B		Italy										
JM1LRQ	142,101	831	57	B	10						EA3DCM	25,440	160	53	B		IZSVA	900,900	1430	210	C						
JF2DQJ/1	137,928	821	56	B	10						EA2CR	20,679	113	61	A		IK0FW	614,133	1131	181	B						
JF1SEK	120,384	704	57	B	10						EA3ALV	1,782	33	18	B		IK2AMN	313,110	710	147	C						
JH1KFX	115,182	711	54	B	10						EA4KR	111,456	688	54	C	40	IK3GH	75,888	272	93	B						
JH7XMO	108,735	659	55	B	10						EA1YY	5,451	79	23	B	15	IK8HP	55,242	198	93	C						
JH2XGJ	98,658	609	54	B	10						EA3KT	7,200	96	25	B	15	IK1GPG	53,280	185	96	C						
JL1EUP	97,149	611	53	B	10						EA4DUL	4,758	61	26	B	15	IK0ADY	37,740	185	68	C						
JASABX	95,559	601	53	B	10						EA2IA	144,828	894	54	B	10	IK0CNA	31,785	163	65	B						
JAYSDS (J13GAB,op)	94,215	571																									





Handing out the Alaska multiplier on phone was this bunch at KL7RA. Shown (l-r) are: Randy Hesser, AL7MU; Lloyd Bell Jr, AL7CQ; Barbara Bell, NL7KB; Mark Nelson, AA6DX; Chris Porter, AL7KL; and Richard Strand, KL7RA.



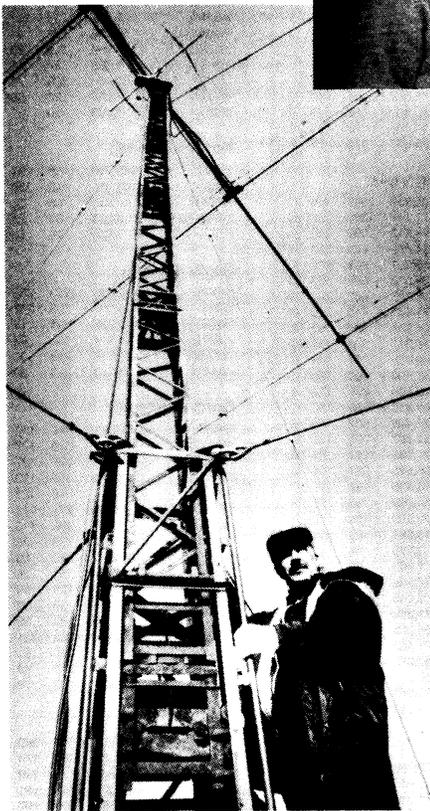
CW winner Jim Talens, HK0/N3JT, keeps his three most important operating aids close to his side: bug spray, Calamine lotion and a box of raisins.



Tadao, JH7DNO, won the plaque for Number One, single operator, Asia, on phone.



Paolo Peggi, I4ABF, and an unidentified second op, participated in the phone contest as IU4K.



Valery Baranovich, RA0FA, poses in front of his 4-element 40-meter monobander, which helped him sweep both modes of the contest from Asiatic RFSFR.

Russ Kleinman, WA5Y, and Dave Yockey, K8CMO, used this beachfront location in Belize to activate V31EN on CW.



Europe

Table listing European stations including HG1S (HA1s AH,DAC,DAE,SV,TJ), TW,ops, 3,552,822 4338 273 C, F5IN (+F5ARC), 3,243,828 3703 292 C, UZZFWA (UA2s FJ,FZ,ops), 3,010,224 3472 299 C, etc.

Two Transmitters

Table listing stations with two transmitters including JASYBY (JO1DF,JF8TM,JH8s PNE, WBR,JR8DA,ops), 2,374,392 3116 254 C, RZ6L YL (UA6L,UV6L,PL, UA6-150-1103,ops), 2,358,368 3132 251 C, etc.

New Hampshire

Table listing New Hampshire stations including KM1H (KQ2M,op), 3,803,372 3028 433 C, K1CF, 3,808,010 2896 415 C, etc.

WA2DVU

Table listing WA2DVU stations including KE2VX, 113,316 284 133 C, K2FL, 104,640 320 109 C, etc.

K3YDX

Table listing K3YDX stations including W3HVM, 58,968 182 106 C, W3WFO, 18,299 97 57 C, etc.

Asia

Table listing Asian stations including JE2YRD (JAEZD,JA7RH,JJA8SSY, JE1UK,JF1s COE,ECC,XJE,KZCZL, JP1DMX,JF7OM,JA9-10148,ops), 2,468,368 3201 256 C, etc.

North America

Table listing North American stations including YL7RA (+AA8DX,AL7s CQ,HC), 3,348,936 4632 241 C, etc.

Western Massachusetts

Table listing Western Massachusetts stations including AK1A, 1,854,780 1627 380 C, W1BYH, 402,300 450 298 C, etc.

Western New York

Table listing Western New York stations including WF2W, 1,252,080 1410 296 C, W2TZ, 1,050,840 1251 280 B, etc.

Western Pennsylvania

Table listing Western Pennsylvania stations including K3LR, 3,084,957 2699 381 C, K5ZD/3, 1,835,480 1854 330 C, etc.

W/VE Phone

Table listing W/VE Phone numbers including 1, 1,519,548 1822 278 C, K1HGY, 834,912 1248 223 C, etc.

Connecticut

Table listing Connecticut stations including W1JU, 1,519,548 1822 278 C, K1HGY, 834,912 1248 223 C, etc.

NYC-Long Island

Table listing NYC-Long Island stations including W2MOY, 247,923 489 189 C, KD2BW, 240,720 472 170 C, etc.

Delaware

Table listing Delaware stations including W3XJ, 412,368 568 242 C, W3JY, 258,500 500 173 B, etc.

Eastern Pennsylvania

Table listing Eastern Pennsylvania stations including K3OO, 3,701,859 3017 409 C, N3AD, 1,871,748 1982 318 C, etc.

Eastern Massachusetts

Table listing Eastern Massachusetts stations including KBPO, 2,893,650 2525 382 C, W1GHI, 1,475,952 1552 317 C, etc.

Northern New Jersey

Table listing Northern New Jersey stations including W2PQ, 2,733,084 2449 372 C, K2DM, 2,605,500 2250 386 C, etc.

Southern New Jersey

Table listing Southern New Jersey stations including K2PS, 1,401,435 1483 315 C, KB2BF, 728,642 1106 219 C, etc.

Maryland-DC

Table listing Maryland-DC stations including K3ZO, 2,982,750 2750 347 C, W3JU, 600,485 817 245 B, etc.

Tennessee

Table listing Tennessee stations including N4TG, 1,358,280 1617 280 C, K4AMC, 501,120 980 174 C, etc.

North America

Table listing North American stations including XE2FU (+XE2s AAM,GL,KB,AC5K, KSLZO,WSASP,ops), 4,080,656 4152 326 C, etc.

Maine

Table listing Maine stations including K59Z/1, 1,034,517 1363 263 C, W1XN, 316,071 609 173 C, etc.

Western New York

Table listing Western New York stations including W2PQ, 2,733,084 2449 372 C, K2DM, 2,605,500 2250 386 C, etc.

Delaware

Table listing Delaware stations including W3XJ, 412,368 568 242 C, W3JY, 258,500 500 173 B, etc.

Eastern Pennsylvania

Table listing Eastern Pennsylvania stations including K3OO, 3,701,859 3017 409 C, N3AD, 1,871,748 1982 318 C, etc.

<b>Virginia</b>	KAARRU 580,203 783 247 C	<b>Los Angeles</b>	W6AA 788,738 1027 256 C	KE7UH 104,517 553 63 B 10	W8IMF 9,648 67 48 C	K1ERW 21,312 111 64 B
KMAYY 502,164 754 222 B	W6ABN 116,700 389 100 B	K6RN 29,946 161 62 C 10	W6BFC 72,114 238 101 C	W8ILL 9,384 68 46 C	AABCY 16,830 102 55 C	AA0CY 16,830 102 55 C
AA4XU 430,137 801 179 C	KJ6BQ 65,100 217 100 C	W1HUE 19,170 142 45 B 10	W6MFC 72,114 238 101 C	W8JQC 8,064 64 42 A	WB6WJ 1,104 23 16 B	K9CS 36 4 3 C 160
N3JT 411,600 700 196 C	K6GAR 39,000 200 65 C	<b>Montana</b>	K6FA 26,130 134 65 C	N8HDC 2,958 34 29 B	K8GAS 78,810 370 71 C 15	K0XZ 376,992 1232 102 C 10
AA4LU 320,910 563 190 C	N6IC 6,899 57 39 C	KC7UD 331,020 613 180 B	K6B8 98,580 530 62 C 40	W8XT 48 4 4 B	K0BUH 116,100 450 86 C 10	
WALLJ 184,860 395 156 C	K6MB 98,580 530 62 C 40	KS7T 146,189 447 109 C	KS7N 141,642 387 122 B	K8DJC 22,860 127 60 C 40	<b>Iowa</b>	KZBC 325,484 568 191 C
W4MZF 166,950 371 150 C	KS7K 36,093 227 53 C 40	K7ABV 114,057 437 87 C 20	AA7BG 93,564 452 69 C 10	W8XN 297 11 9 B 20	KWCF 282,150 570 165 C	K8CT 245,904 436 188 C
W3FTG 154,548 319 182 C	W8OK 49,880 276 80 C 20	<b>Nevada</b>	K6OY 24,843 91 91 C 20	KWBN 554,580 1580 117 C 10	W8PPF 104,652 323 108 C	AD8H 42,930 159 90 B
AB4XQ 143,658 347 138 C	W8NF 70,755 285 89 C 15	WA7CWM 224,316 558 134 C	W8NF 70,755 285 89 C 15	W8JGU 166,176 577 96 B 10	W8BCB 35,520 148 80 C	K8GVG 53,480 297 60 B 10
W4IF 126,720 320 132 C	AIZ 21,300 142 50 C 15	K6B9 93,600 240 130 B	K6OY 24,843 91 91 C 20	W3HKK 144,936 549 88 C 10	<b>Kansas</b>	W8BYJT 220,818 494 149 B
K1KOB 103,155 299 115 C	K1DCB6 6,899 77 29 B 15	W8QZ 79,296 236 112 C	W8NF 70,755 285 89 C 15	K8NRC (N/T) 42,174 213 66 A 10	W8JNK 158,403 397 133 C	W8BSW 65,070 241 90 C
N4MM 91,314 267 114 C	K6SVL 367,401 1189 103 C 10	N5PLF 30,378 166 61 C	W8NF 70,755 285 89 C 15	NR8U 30,420 195 52 B 10	W8WPL 25,560 120 71 B	W8SPF 22,440 136 55 B
WB4UBD 1,638 26 21 B	W8RCL 82,530 383 70 C 10	<b>Oregon</b>	W8NF 70,755 285 89 C 15	K8YQL 19,458 138 47 C 10	W2RFPZ 11,520 80 48 B	N0BY 120 8 5 B
K4WHN 1,638 26 21 B	<b>Orange</b>	N7AVK 1,432,515 1949 245 C	W8NF 70,755 285 89 C 15	N8LSS 18,792 108 58 B 10	NO8Y 24,840 184 45 B 10	K8RNY 24,840 184 45 B 10
KJ4VG 21,306 134 53 C 40	N6AW 245,775 585 145 C	W57O 209,712 514 136 B	W8NF 70,755 285 89 C 15	K8LKH 1,488 31 16 B 10	W8BWM 1,080 20 18 C 10	
W4KMS 6,732 68 33 C 40	W8AL 148,800 400 124 C	AA7FL 69,471 249 93 B	W8NF 70,755 285 89 C 15	W8KTM 540 18 10 B 10	<b>West Virginia</b>	W8BYJT 220,818 494 149 B
KV4P 292,041 877 111 C 20	N6NK 114,965 111 45 B	W7MP 67,716 228 99 C	W8NF 70,755 285 89 C 15	K8CSF 770,310 951 270 C	W8JNK 158,403 397 133 C	W8BSW 65,070 241 90 C
N4MC 352,245 1021 115 C 15	N6YL 107,598 454 79 C 15	W6BV7 30,504 164 62 C	W8NF 70,755 285 89 C 15	K8WEJ 64,448 279 77 B 15	W8WPL 25,560 120 71 B	W8SPF 22,440 136 55 B
KB4TNP 25,200 150 56 C 15	N6FL 82,530 383 70 C 10	W7YQA 30,000 100 100 B	W8NF 70,755 285 89 C 15	K8ZJ8 578,198 1614 119 C 10	W2RFPZ 11,520 80 48 B	N0BY 120 8 5 B
W4PRO (WB8HDD) 353,430 1309 90 C 10	<b>Orange</b>	K7VIT 29,232 116 84 C	W8NF 70,755 285 89 C 15	<b>9</b>	NO8Y 24,840 184 45 B 10	W8BWM 1,080 20 18 C 10
W4VAN 53,487 283 63 C 10	N6AW 245,775 585 145 C	N7MMQ 11,826 73 54 C	W8NF 70,755 285 89 C 15	<b>Illinois</b>	W8BWM 1,080 20 18 C 10	
NO4K 36,855 195 63 C 10	W8AL 148,800 400 124 C	N7XI 4,950 55 30 B	W8NF 70,755 285 89 C 15	WX9U 461,376 864 178 C	<b>Minnesota</b>	AC0W 542,511 849 213 B
<b>5</b>	N6NK 114,965 111 45 B	W7ZR 104,256 543 64 C 20	W8NF 70,755 285 89 C 15	K8YMV 270,408 593 152 C	W8VBD 278,343 549 189 C	W8BF 122,610 335 122 C
<b>Arkansas</b>	N6YL 107,598 454 79 C 15	W6YK 2,592 36 24 A 15	W8NF 70,755 285 89 C 15	W89CR 264,330 534 165 B	W8WM 105,444 303 116 C	K8EUI 91,410 277 110 B
AASGY 296,448 512 193 A	N6FL 82,530 383 70 C 10	A17B 562,580 1645 114 C 10	W8NF 70,755 285 89 C 15	W89A 223,808 484 154 B	W8ZPP 90,900 300 101 B	W8LPL 35,904 178 68 C
WASSOG 85,995 273 105 C	<b>Santa Barbara</b>	W7FP 81,792 384 71 C 10	W8NF 70,755 285 89 C 15	W89E 179,304 482 124 B	W8RXL 300 10 10 C 80	W8ZHF 34,596 186 62 B 15
NS9AQ 28,830 155 62 B	W7CB 782,000 1270 200 C	<b>Utah</b>	W8NF 70,755 285 89 C 15	NM8C 134,589 377 119 C	W8ZHF 34,596 186 62 B 15	W8ZJ 21,525 175 61 B 10
W5KQU 13,608 84 54 B	W8UM 298,080 480 207 C	W7CFL 756,276 1178 214 C	W8NF 70,755 285 89 C 15	AD9K 132,678 377 117 B	W8ZJ 21,525 175 61 B 10	
W5VAD 4,059 41 33 B	W8FGV 128,873 333 127 B	W7HS 198,900 425 156 C	W8NF 70,755 285 89 C 15	W9CA 65,378 227 96 C	<b>Missouri</b>	W8ZJ 21,525 175 61 B 10
KDKSE 2,040 34 20 C 20	AA6EQ 97,953 317 103 B	K7PB 190,965 439 145 C	W8NF 70,755 285 89 C 15	W9KVF 51,000 170 100 C	W8J 262,500 500 175 C	K8HOF 214,278 503 142 B
AASBE 57,297 269 71 B 15	N6NMH 8,722 86 34 C	KE9NS 158,994 438 121 B	W8NF 70,755 285 89 C 15	KE9YR 44,118 171 86 C	W8PKO 127,512 308 138 C	K8L 65,100 217 100 C
W8EJ 29,070 170 57 B 15	W8OUL 6,003 69 29 C	K6YD 24,288 184 44 B	W8NF 70,755 285 89 C 15	N9KCS 39,840 166 80 B	K8CXB 61,275 215 95 B	K8R 2,070 30 23 B
K8MSN 8,208 72 38 C 10	N6HK 18,983 129 49 C 15	K6XO 135,054 549 82 C 10	W8NF 70,755 285 89 C 15	K8HDN 39,825 177 75 B	K8P (K8UOX,op) 6,528 64 34 C 80	K4VX (K8EZ,op) 359,730 1142 105 C 20
<b>Louisiana</b>	W8TKF 17,180 143 40 C 10	<b>Western Washington</b>	W8NF 70,755 285 89 C 15	W8LYA 26,499 121 73 C	W8ZJ 21,525 175 61 B 10	W8ZJ 21,525 175 61 B 10
K5KLA 437,532 722 202 B	<b>Santa Clara Valley</b>	K7RI 1,718,075 2175 283 B	W8NF 70,755 285 89 C 15	W8FEN 24,750 150 55 C	W8ZJ 21,525 175 61 B 10	
W5ZR 306,435 659 155 C	AA6GX 452,952 648 233 C	K7LXC 807,890 1235 218 C	W8NF 70,755 285 89 C 15	W8DDO 10,989 97 37 B	W8ZJ 21,525 175 61 B 10	
N5QML 150,780 359 140 B	W8ISQ 427,500 750 190 C	N7L 645,813 1071 201 C	W8NF 70,755 285 89 C 15	W89E 117,096 476 82 C 40	W8ZJ 21,525 175 61 B 10	
W5WU 578,340 1620 119 C 15	K8HNZ 310,821 779 133 C	W7QN 178,580 436 135 C	W8NF 70,755 285 89 C 15	W8Z 106,677 436 81 C 40	W8ZJ 21,525 175 61 B 10	
<b>Mississippi</b>	K8ITL 288,360 540 178 C	W8YUB 143,820 340 141 B	W8NF 70,755 285 89 C 15	KD8ST 42,903 227 63 C 40	W8ZJ 21,525 175 61 B 10	
WASOYU 475,365 737 215 C	N6NF 217,074 506 143 B	W7RTQ 104,822 329 106 C	W8NF 70,755 285 89 C 15	K8A9 10,665 79 45 C 40	W8ZJ 21,525 175 61 B 10	
AASMH 102,375 455 75 C 10	W8DBV 193,071 463 138 C	K7G 17,136 102 56 C	W8NF 70,755 285 89 C 15	K8G 120,321 461 87 C 20	W8ZJ 21,525 175 61 B 10	
<b>New Mexico</b>	AA6YV 138,012 371 124 B	W7BGO 15,255 113 45 B	W8NF 70,755 285 89 C 15	W8TIT 194,925 575 113 C 15	W8ZJ 21,525 175 61 B 10	
K5ID 253,080 555 152 A	K8MA 106,810 310 117 C	N7PTT 1,173 23 17 B	W8NF 70,755 285 89 C 15	W8NB 164,415 565 97 C 15	W8ZJ 21,525 175 61 B 10	
AA5PA 27,930 190 49 B 10	N6WLF 81,827 299 91 B	N1G7TZ 600 25 8 B	W8NF 70,755 285 89 C 15	N8AEJ 109,470 410 89 C 15	W8ZJ 21,525 175 61 B 10	
<b>North Texas</b>	K8HJ 72,900 300 81 C	W8TEW 5,544 77 24 C 80	W8NF 70,755 285 89 C 15	K89CJ 39,195 195 67 C 15	W8ZJ 21,525 175 61 B 10	
W5MG (K8Y,op) 4,628,835 3547 435 C	W8WJ 65,948 247 89 B	W7WA 808,860 2210 122 C 15	W8NF 70,755 285 89 C 15	K89D 17,250 125 46 B 15	W8ZJ 21,525 175 61 B 10	
N1SM 864,744 1052 274 C	W8HRK 57,120 238 90 C	N7R0 200,928 728 92 C 15	W8NF 70,755 285 89 C 15	K8MD 516,186 1422 121 C 10	W8ZJ 21,525 175 61 B 10	
K5RX 653,780 908 240 A	W8ZM 54,372 187 82 C	AA7FT 171,989 659 87 B 15	W8NF 70,755 285 89 C 15	W89Q 239,037 731 109 C 10	W8ZJ 21,525 175 61 B 10	
K9MK5 621,600 800 259 B	K8SD 6,030 67 30 C	K7QQ 546,708 1571 116 C 10	W8NF 70,755 285 89 C 15	N9ITX 234,255 805 97 C 10	W8ZJ 21,525 175 61 B 10	
K8SKY 222,066 507 146 C	W8YLL 5,049 51 33 C	N87N 307,500 1025 100 C 10	W8NF 70,755 285 89 C 15	K8MRU 35,712 192 62 C 10	W8ZJ 21,525 175 61 B 10	
W8SK 102,375 273 125 B	W8FNU 2,583 41 21 B	W7TSQ 121,125 475 85 B 10	W8NF 70,755 285 89 C 15	N9R0 12,240 102 40 B 10	W8ZJ 21,525 175 61 B 10	
NS1ET 78,936 253 104 B	AJ6V 1,328 26 17 C	W7VH 2,784 58 16 B 10	W8NF 70,755 285 89 C 15	W8LNU 10,200 100 34 B 10	W8ZJ 21,525 175 61 B 10	
AA5VB 25,230 145 58 B	K8CK 24,444 194 42 C 20	<b>Wyoming</b>	W8NF 70,755 285 89 C 15	N9KLN (N/T) 7,110 79 30 B 10	W8ZJ 21,525 175 61 B 10	
W8ZNC 15,624 83 56 C	K8CG 206,280 784 90 C 15	K7MM 648,108 1059 204 C	W8NF 70,755 285 89 C 15	N9ULH (N/T) 7,110 79 30 B 10	W8ZJ 21,525 175 61 B 10	
KF5OR 104,559 383 91 C 15	N8TU 529,758 1549 114 C 10	KD7RX 98,778 326 101 B	W8NF 70,755 285 89 C 15	N9UA (N/T) 6,930 77 30 B 10	W8ZJ 21,525 175 61 B 10	
NASO 8,100 75 36 B 10	K8GNG (N/T) 29,780 180 62 B 10	K8M 21,780 132 55 A	W8NF 70,755 285 89 C 15	<b>Indiana</b>	W8ZJ 21,525 175 61 B 10	
K8SHOG (N/T) 7,980 70 38 B 10	<b>San Diego</b>	NC7O 3,024 42 24 C	W8NF 70,755 285 89 C 15	W8RE 3,332,220 2812 395 C	W8ZJ 21,525 175 61 B 10	
<b>Oklahoma</b>	K8XT (K8GZ,op) 1,321,137 1503 293 C	<b>San Francisco</b>	W8NF 70,755 285 89 C 15	W8NSZ 550,914 1009 182 C	W8ZJ 21,525 175 61 B 10	
N5CG 757,890 1203 210 C	K8NA 384,580 685 192 C	K8NA 384,580 685 192 C	W8NF 70,755 285 89 C 15	K8BC 454,248 701 216 C	W8ZJ 21,525 175 61 B 10	
AA5WQ 201,600 448 150 B	W8ADK 340,200 630 180 B	W8ADK 340,200 630 180 B	W8NF 70,755 285 89 C 15	W8BIO 412,827 713 193 B	W8ZJ 21,525 175 61 B 10	
K15GX 201,132 453 148 C	W8QZA 94,335 331 95 A	W8QZA 94,335 331 95 A	W8NF 70,755 285 89 C 15	NJ9C 235,620 510 154 B	W8ZJ 21,525 175 61 B 10	
N5MBD 60,894 231 88 B	W8LUN 24,884 148 56 C	W8LUN 24,884 148 56 C	W8NF 70,755 285 89 C 15	KE9OI 122,148 348 117 C	W8ZJ 21,525 175 61 B 10	
W5UXR 3,024 36 28 B	AA6EE 6,417 69 31 B	AA6EE 6,417 69 31 B	W8NF 70,755 285 89 C 15	K9HCX 49,761 171 97 B	W8ZJ 21,525 175 61 B 10	
W8RY 206,193 677 103 C 20	W8UQF 166,926 647 86 B 10	W8UQF 166,926 647 86 B 10	W8NF 70,755 285 89 C 15	W8CQ 43,524 156 93 B	W8ZJ 21,525 175 61 B 10	
W8M4Z 317,961 1029 103 C 15	<b>San Joaquin Valley</b>	<b>San Joaquin Valley</b>	W8NF 70,755 285 89 C 15	AJ9C 18,081 123 49 B	W8ZJ 21,525 175 61 B 10	
<b>South Texas</b>	K8NA 384,580 685 192 C	K8NA 384,580 685 192 C	W8NF 70,755 285 89 C 15	N9IY 5,022 54 31 A	W8ZJ 21,525 175 61 B 10	
NSAW 667,890 880 253 B	W8ADK 340,200 630 180 B	W8ADK 340,200 630 180 B	W8NF 70,755 285 89 C 15	N9HZH 2,754 34 27 B	W8ZJ 21,525 175 61 B 10	
WASPOK 485,988 738 211 C	W8QZA 94,335 331 95 A	W8QZA 94,335 331 95 A	W8NF 70,755 285 89 C 15	K9UWA 459,369 1187 129 C 15	W8ZJ 21,525 175 61 B 10	
WASVX 305,739 633 181 B	K8EYZ 69,126 281 82 C	K8EYZ 69,126 281 82 C	W8NF 70,755 285 89 C 15	W8I 483,740 1310 118 C 10	W8ZJ 21,525 175 61 B 10	
K15GF 143,550 319 150 B	W8LUN 24,884 148 56 C	W8LUN 24,884 148 56 C	W8NF 70,755 285 89 C 15	W8O 483,740 1310 118 C 10	W8ZJ 21,525 175 61 B 10	
K5DB 105,000 350 100 B	AA6EE 6,417 69 31 B	AA6EE 6,417 69 31 B	W8NF 70,755 285 89 C 15	K89AB (N/T) 97,020 385 84 B 10	W8ZJ 21,525 175 61 B 10	
W5UQM 38,225 161 75 C	W8UQF 166,926 647 86 B 10	W8UQF 166,926 647 86 B 10</				





UB5CDX	2,601	51	17	C	40	AL7MK	38,610	286	45	C	10	LU8ESU	140,070	805	58	B	15	Y41CM (Y24AM,Y41s NM,QM,VM, YM,ops)	1,877,490	2721	230	C	<b>Europe</b>	HG5A (HA5s AWH,FM,FG,IW,MK,ML, UA,ops)	4,309,920	5986	240	C
UB5HEX	44,133	313	47	C	20	NL7TD	15,096	136	37	B	10	LU9FHF	170,894	981	58	C	10	DK8EE (DL4s MCF,MDO,MEH, DK8WL,ops)	1,813,221	3007	201	C	RZ6LYL (UV6LPL,UA6s 150-1103, 150-1403,ops)	2,924,544	4096	238	C	
RB5QW	29,610	210	47	C	20	<b>Puerto Rico</b>						<b>Peru</b>						OA4CRK	7,830	90	29	B	40	4EWH (+14s AVG,EAT,EML,IKW)	2,706,858	4158	217	C
UB4ULJ	25,155	195	43	B	15	KP4FP	217,170	1270	57	B	20	OA4ANR	208,496	1204	58	C	15	SK3IK (SM3s BDZ,CER,DMP,DJR,RAB, SGP,ops)	1,791,196	3126	191	C	<b>North America</b>	XE2FU (+XE2s AAM,AQ,GL,KN,AA5NK, K5LZO,KD5SP,KISER,N5OAO,NM5M, WB5s N,RUS,WAGL,W,ops)	7,871,175	8073	325	C
UT5UBN	14,553	147	33	B	15	WP4WD	225,060	1364	55	C	10	<b>Netherlands Antilles</b>						PJ9M (OH6RM,op)	679,470	3905	58	C	<b>Unlimited</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
UB5WE	314,296	1838	57	C	10	<b>Greenland</b>						PJ9JT	219,240	1260	58	C	15	LA1T (LA3BO,LA5UHA,LA9s PP, UX,ops)	1,321,173	2191	201	C	<b>Asia</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
UB5EQA	169,119	989	57	C	10	OX3ZM	113,454	382	99	B		<b>Brazil</b>						PZ7VB	256,128	667	128	C	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
UB5GOU	82,800	575	48	B	10	<b>St Maarten, Saba, St Eustatius</b>						PT7VL	21,924	174	42	C	20	RZ6AXO (RA6AX,UA6s AHS,YHF,YN, 1012919,UV6APO,ops)	1,013,985	1827	185	C	<b>Unlimited</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
UT4UZ	14,385	137	35	C	10	PJ8CW	203,136	736	92	B		PY1LI	21,924	174	42	C	20	UZ4PWW (RA4PO,UA4s PAH,-094-976, ops)	981,744	1806	181	C	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
<b>Byelorussia</b>						PJ7K2KTT	96,876	621	52	B	15	PQ2DX	395,676	2274	58	C	10	SK5WB (SM5s BCO,INC,NVZ,PPS,ops)	973,728	1932	168	C	<b>Asia</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
RC2AZ	1,133,616	1808	209	C		<b>Guatemala</b>						PT2JD	378,252	2212	57	B	10	UZ3MWD (UA3s MDV,-168-50,-168-85, -168-308,-168-405,ops)	808,182	1522	177	C	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
UC2AI	2,760	40	23	C	15	TG9GI	264,825	825	107	A		PT2TF	51,324	329	52	C	10	UZ4HWP (+ops)	432,012	1036	139	C	<b>Asia</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
UC2AB	60,417	411	49	B	10	TG9AJR	90,234	557	54	B	40	<b>Falkland Islands</b>						SK7BV (SM7s AIO,SEA,ops)	332,208	769	144	C	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
<b>Moldavia</b>						<b>British Virgin Islands</b>						<b>Venezuela</b>						HE7CXZ (HB9s ASM,BLQ,CXZ,SFD,STI, STL,ops)	306,195	685	149	C	<b>Asia</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
RO6/RB5FF	2,269,248	3392	223	C		VP2V/VE5RA	3,399,792	4136	274	B		YV1DRK	420,000	875	160	C		SP1PBW (+ops)	246,144	641	128	B	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
UO5OL	26,505	155	57	C		<b>Mexico</b>						YV1EQW	89,700	575	52	C	80	UZ3DWH (RA3DU,UA68GB,UV3DCX, UA3-192-902,ops)	491,454	1437	114	B	<b>Asia</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
<b>Lithuania</b>						XE1AVM	36,354	166	73	B		4M5Y (YV5LAS,op)	108,216	668	54	B	20	UZ4HWP (+ops)	432,012	1036	139	C	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
LY3BA	2,148,384	3197	224	C		XE1AA6RX	27,648	192	48	C	15	<b>Cayman Islands</b>						SK7BV (SM7s AIO,SEA,ops)	332,208	769	144	C	<b>Asia</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
LY2BNC	85,800	325	88	C		ZF2LY	94,572	444	71	B		ZF2LIQ	540	15	12	A		HE7CXZ (HB9s ASM,BLQ,CXZ,SFD,STI, STL,ops)	306,195	685	149	C	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
LY2PFP	8,613	99	29	B	20	<b>Oceania</b>						<b>Philippines</b>						SP1PBW (+ops)	246,144	641	128	B	<b>Asia</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
LY3PBG	5,772	74	26	A	15	KE9ADU3	643,560	1384	155	C		KE9ADU3	643,560	1384	155	C		UZ1OWZ (UA1s OMS,OZM,-113-244, -113-630,ops)	190,896	776	82	C	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
LY2BLA	3,402	63	18	B	15	KG6UJ/UDU1	29,928	172	58	C		<b>Guam</b>						UZ1TWC (UA1s TAN,TFG,-144-1088,ops)	105,825	415	85	C	<b>Asia</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
LY3BH	205,800	1225	56	C	10	N7DF/KH2	226,215	1371	55	C	15	KH2D	109,872	654	56	C	10	OK2KYC (+ops)	102,800	342	100	B	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
LY3BN	160,569	939	57	C	10	N8MMD/KH2 (N/T)	27,720	210	44	B	10	<b>Marshall Islands</b>						OK1OFM (OK1s DRQ,-19973,ops)	76,950	285	90	B	<b>Asia</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
<b>Latvia</b>						<b>Hawaiian Islands</b>						<b>Philippines</b>						SN3N (+ops)	31,246	168	82	C	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
RO9W (UQ2087116,op)	3,302,352	4828	228	C		WR6R/KH6	3,447,360	4320	266	C		KE9ADU3	643,560	1384	155	C		UZ3AXX (RA3DU,UA3s -170-126, -170-210,ops)	21,147	133	53	C	<b>Asia</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
YL1WC	146,682	843	58	C	20	W2HPF/KH6	2,543,136	3592	236	C		KG6UJ/UDU1	29,928	172	58	C		UB4IWB (RB5N,UB4ITU,ops)	4,524	52	29	C	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
YL2SM	79,254	518	51	B	15	KG6SS/KH6	91,266	574	53	C	40	<b>Papua New Guinea</b>						UB4IWB (RB5N,UB4ITU,ops)	4,524	52	29	C	<b>Asia</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
UQ2GTF	790	20	13	B	10	AH6IM	204,456	1217	56	B	10	P29DK	27,060	164	55	B		UZ3AXX (RA3DU,UA3s -170-126, -170-210,ops)	21,147	133	53	C	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
YL2LW	64,680	440	49	C	10	<b>Marshall Islands</b>						<b>Yugoslavia</b>						UB4IWB (RB5N,UB4ITU,ops)	4,524	52	29	C	<b>Asia</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
YL1BXT	3,024	56	18	B	10	V73BN	1,245,981	2221	187	C		YU2Y	818,055	1715	159	B		UZ3AXX (RA3DU,UA3s -170-126, -170-210,ops)	21,147	133	53	C	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
<b>Estonia</b>						<b>Australia</b>						YU2Y	818,055	1715	159	B		UZ3AXX (RA3DU,UA3s -170-126, -170-210,ops)	21,147	133	53	C	<b>Asia</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
ES1JUT1BY	573,765	1319	145	C	20	VK2AYK	146,568	394	124	B		YU2Y	818,055	1715	159	B		UZ3AXX (RA3DU,UA3s -170-126, -170-210,ops)	21,147	133	53	C	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
ES5RY	15,618	137	38	C	20	VK5GN	57,888	268	72	B		YU2Y	818,055	1715	159	B		UZ3AXX (RA3DU,UA3s -170-126, -170-210,ops)	21,147	133	53	C	<b>Asia</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
<b>Romania</b>						VK6HG	5,460	65	28	B	20	YU2Y	818,055	1715	159	B		UZ3AXX (RA3DU,UA3s -170-126, -170-210,ops)	21,147	133	53	C	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
Y05CTY	53,037	213	83	B		VK2APK	99,375	625	53	B	10	YU2Y	818,055	1715	159	B		UZ3AXX (RA3DU,UA3s -170-126, -170-210,ops)	21,147	133	53	C	<b>Asia</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
Y07ARY	23,532	148	53	B		VK2GAS	55,505	367	50	C	10	YU2Y	818,055	1715	159	B		UZ3AXX (RA3DU,UA3s -170-126, -170-210,ops)	21,147	133	53	C	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
Y09ALY	2,580	43	20	C		<b>Indonesia</b>						YU2Y	818,055	1715	159	B		UZ3AXX (RA3DU,UA3s -170-126, -170-210,ops)	21,147	133	53	C	<b>Asia</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
Y02LEA	1,131	29	13	B	80	YC3OSE	184,470	715	86	B		YU2Y	818,055	1715	159	B		UZ3AXX (RA3DU,UA3s -170-126, -170-210,ops)	21,147	133	53	C	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
Y09HT	63,759	401	53	C	20	YC2BKJ	10,974	118	31	B	15	<b>New Zealand</b>						UZ3AXX (RA3DU,UA3s -170-126, -170-210,ops)	21,147	133	53	C	<b>Asia</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
Y09AHX	5,148	78	22	C	20	<b>Chile</b>						ZL1IM	16,830	110	51	B		UZ3AXX (RA3DU,UA3s -170-126, -170-210,ops)	21,147	133	53	C	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
Y07VS	5,112	71	24	B	20	<b>Bolivia</b>						<b>South America</b>						UZ3AXX (RA3DU,UA3s -170-126, -170-210,ops)	21,147	133	53	C	<b>Asia</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
Y03ZR	405	15	9	B	20	CP1FF	33,003	193	57	C	10	<b>Chile</b>						UZ3AXX (RA3DU,UA3s -170-126, -170-210,ops)	21,147	133	53	C	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
Y08ROO	9,570	110	29	B	15	<b>Uruguay</b>						<b>Chile</b>						UZ3AXX (RA3DU,UA3s -170-126, -170-210,ops)	21,147	133	53	C	<b>Asia</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
Y03YC	7,425	99	25	B	15	CX8CG	274,413	943	97	B		<b>Chile</b>						UZ3AXX (RA3DU,UA3s -170-126, -170-210,ops)	21,147	133	53	C	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
Y07LFW	25,344	192	44	B	10	<b>French Guiana</b>						<b>Chile</b>						UZ3AXX (RA3DU,UA3s -170-126, -170-210,ops)	21,147	133	53	C	<b>Asia</b>	JE2YRD (JF2ECC,JF2CL,J3SERV, J77OMD,ops)	3,173,904	4266	248	C
Y05CBX	4,224	64	22	A	10	FY/N4QDX	78,030	306	85	C		<b>Chile</b>						UZ3AXX (RA3DU,UA3s -170-126, -170-210,ops)	21,147	133	53	C	<b>Europe</b>	IS3MAU (+ops)	6,092,406	7606	267	C
Y02BRL	3,024	48	21	A	10	<b>Ecuador</b>																						