

# 1998 ARRL International DX Contest CW Results

It was a great way to spend a weekend—working DX with 5 W!—K8OUA

**A**fter the last few years of writing about the dearth of sunspots and poor conditions, the 1998 running of the CW version of the ARRL International DX Contest has provided some actual high-band propagation about which to write! Stations around the world commented on the great improvement of the 15-meter band. Other operators were even more pleased to once again hear old friends across the world who had seemingly disappeared with the sunspots.

Activity was high and scores improved over those from 1997. For those of you who are about to experience your first sweeps through the sunspot maximum, start preparing your stations to really take advantage of 10, 15, and 20! And you might want to revisit your strategy for running stations. The general rule of thumb for a station entering one of the all-band categories is to run on the highest band open to a major population area. So, when sunrise rolls around you will find yourself with a terrific problem—which band to run on? Effectively there will be little time to spend on 20 meters (even though 20 will be wide open!), and while 15 may be the “money” band, if 10 meters opens that may be the place to go. If you have the ability and desire to use another radio simultaneously with your running radio (to find multipliers on other bands, scout another band for propagation, etc) great propagation conditions can be even more fun. Keep in mind that often three bands (and possibly four) may be open to the same area at the same time!

There were some great scores and great battles in the 1998 CW contest. How do you recognize a great score? When you read the contest results and look to the score listings, do you find your score and compare it to the other local competitors and then stop reading? If so, you have a lot more to gain by “looking further into the story!” Besides the enjoyment of understanding how great scores are achieved, you can learn much from the score listings including: which stations have favorite bands or modes; discovering that there really is a huge amount of activity from South America if you know where and when to look; finding that there were no entries from your region on a particular band; or maybe discovering that you too could be very successful on a DXpedition with only a vertical antenna from the Caribbean!

Great scores are those that make top score

boxes from an area that has generally worse propagation than the rest of the world—ie, a station located near the Arctic Circle, North Dakota, or the Far East. Of course, a great score does not have to make a top scores box to be “great.” A low-power station that beats a high-power station, a station that works a tremendous number of multipliers despite bad conditions, stations that used small antennas or emergency power and still turned in a superb effort, are all examples of “great scores.” Some of the best scores come from the battles between stations in the same category such as the multi-op categories. Scores that are close together usually indicate terrific competition! Evidence of that can be found in the USA’s multi-two category battle this year!

Starting with the QRP battles, 1998 saw K3PH take the domestic title with a score approaching 500,000! He finished ahead of N7IR who knocked out 397 kilopoints from out west. Both of these scores handily beat

the top score from 1997 and are a great indication of improving conditions. AJ2U jumped on the QRP bus in Bermuda operating VP9ID to a 1.7 million-point victory from the DX side! He far outdistanced the ever-present HP1AC, GØTDX and I3BBK.

KN4T knocked out over 1595 QSOs in the barefoot category for a first place win! Walt’s Florida location probably helped him extend the band openings on 10 and 15 and beat the stiff competition from W2TZ, K1VUT and VO1MP. Farther west, K5RX came in with just under a million points and a seventh-place finish from Texas. The DX side enjoyed lots of low power activity, but it was KE2VB operating WP2Z who took the crown and the record with a 3.3-million point effort that included over 3740 QSOs! K3DI jumped out of the QRP category this year and took second place from VP2EEI. The “Wisconsin guy,” WI9WI placed third with his effort from C6AJZ. The Bahamas proves

## Top Ten

W/VE Single Operator, QRP, CW	W/VE Single Operator, Low Power, CW	DX Single Operator, QRP, CW	DX Single Operator, Low Power, CW
K3PH	468,468	KN4T	1,602,975
N7IR	397,992	W2TZ	1,356,282
N1TM	362,490	K1VUT	1,242,000
W8LVN	322,623	VO1MP	1,223,508
W4KY	210,000	N8AA	1,148,292
N1CWR	192,192	NA2U	1,091,718
W8QZA/6	185,277	K5RX	993,300
AA1CA	175,422	K4RO	925,704
W3ZZ	170,016	W04O	910,800
KD2TT	161,355	WT1O	890,781



Dan, K1TO, and Ron, WD4AHZ, are busy running stations at K4OJ's multi-multi station in SFL.



John, W1BIH, and Jack, W1WEF, celebrate their victory as the first place multioperator single transmitter world winners at PJ9C.

every year to be a great place to operate the ARRL DX Contests. It is easy to get to, warm and radio friendly, and in 1998 there were no fewer than five active C6A stations on the bands! There were also a couple of other terrific low-power scores from places that aren't quite as close as the Bahamas: 9XØA produced a megapoint from Rwanda and VK5GN came out with over 700,000 points from far away South Australia. Operating the ARRL DX Contest from VK5 made Martin really maximize his band openings!

The guys with the kilowatts put on another show this year. W1KM won a repeat victory in '98, but only by 32,000 points over K1ZM! Both of these scores and those from KQ2M and N6BV/1 beat W1KM's 3.16-million point winner from 1997. W9RE came in 7th from Indiana, and N6IG placed W6AX into the number 10 slot from California with over 2 million points. The DX side was won handily by W2SC who once again avoided operating the contest from Kansas, instead taking on the challenge from sunny 8P9JG. Tom almost made it to 6000 QSOs. Following Tom were FM5DN, YV5A (OHØXX), LT1F (LU5CW), and NH7A (N6HR). These guys gave us all lots of multipliers in 1998! The European champion for 1998 is F6FGZ.

The single operator assisted category saw KI1G place K1NG in the winner's circle again this year, followed closely by K3WW, and eight more W2s and W3s! Obviously the East Coast PacketCluster network works okay! Both K1NG and K3WW beat W1KM's score and provided solid evidence of the advantage of packet DX spotting assistance.

The single bands were a mixed bag in 1998. The low bands did not perform anywhere near 1997's level, but still great scores abound. W4ZV found 71 countries to win 160 meters from the US, while EA8ZS put his big signal well into North America to win 160 from the DX side. SP7GIQ nearly caught 'ZS with a fine 30,000 score!

Eighty meters saw Rob, W1MK, nearly repeat his score from last year at 274k! K8MK came in second at 173k, and going west, K9DX was third, and K5MR came in at number 5. Way out west, K6SE piled-up 27k from California. The DX side of 80 meters found ON4WW keying OT8T to 121,000 and a win over DF9ZP. In the great score category, KL7RA finished just out of the top 10 with a 32k score from Alaska!

On 40 meters AD6DO abandoned his old KC6CNV call sign, and put up 283,000 points for a terrific winning score over last year's winner, N7DD. One of the C6 stations, C6A/K4PG, produced 227k to win for the DX side. 9A5Y (9A3LG operating) pulled in 2nd worldwide. Interestingly, Europe was a great place to be in 1998 for making the top score boxes. On 160 meters European stations took spots 2 through 10, on 80 they took spots 1 through 10, on 40 they took spots 2 through 10, and on 20 meters, again, Europeans finished number 2 through number 10!

Twenty meters was a battle of zeroes in the US, as WØUA at WØUN took the number one slot over that other "Wisconsin guy" (the

#### W/VE Single Operator, High Power, CW

Call Sign	Score	160	80	40	20	15	10
W1KM	3,742,200	124/51	559/69	788/78	1040/89	599/80	40/29
K1ZM	3,709,221	104/52	312/67	910/83	820/88	827/89	50/30
KQ2M	3,457,458	85/49	510/69	796/76	821/90	723/79	43/24
N6BV/1	3,219,990	80/46	291/62	787/80	1139/82	643/74	25/18
N2LT	3,005,775	75/38	267/54	620/74	815/85	935/94	33/20
K3ZO	2,852,700	72/40	225/57	617/69	880/87	715/84	61/33
W9RE	2,372,931	60/38	140/53	341/70	638/81	941/91	59/30
W4PA	2,290,554	37/27	170/53	525/73	905/88	564/83	25/19
K1ZR (at KB1SO)	2,185,440	39/29	203/55	660/71	1010/84	388/63	20/12
W6AX (N6IG,op)	2,053,716	14/12	106/43	535/70	643/85	742/81	86/31

#### W/VE 160

#### W/VE 80

#### W/VE 40

#### W/VE 20

#### W/VE 15

#### W/VE 10

W4ZV	42,600	W1MK	274,860	AD6DO	283,692	WØUN	495,495	K5TR	343,200	K4JYO	11,931
W2VO	20,955	K8MK	173,826	N7DD	196,416	(WØUA,op)	(at W5KFT)	W9GIL	11,070	W5ZO	9,804
K4TEA	16,692	K9DX	132,720	N2PP	188,964	NSØZ	397,188	WW4RR	313,020	KC5OBG	7,695
WF2W	15,120	VE1JF	118,188	K4VX	186,186	(W9Wl,op)	(N4ZZ op)	W7USA	5,580	A1C2	5,568
K3OSX	8,322	K5MR	77,760	(K9BGL,op)	WS1M	277,560	N5NJ	298,758	K1DII	3,519	
VE3OSZ	7,638	VE3DO	67,776	AA7A	137,124	K1DKX	275,616	W1RFQ	1,425	N3CZB	12
W4SVO	7,104	N2GC	60,450	N2FY	56,283	K2BA	220,806	N4VZ	263,025		
W8WEJ	3,219	K3JGJ	60,102	WB8WZY	33,930	K7ZA	209,250	W9WI	218,160		
		W1UK	53,856	N8PR	27,048	W9OF	183,456	(ES2RR,op)			
		W4HM	27,720	W4NTI	22,344	W5FO	166,320	K9QVB	170,748		
				W3KT	20,736	K7ZZ	149,202	W4SO	158,004		
						K9CAN	111,024	N7BZ	155,034		
								N4IR	136,290		
								W6BSY	121,626		

#### DX Single Operator, High Power, CW

#### Call Sign

#### Score

#### 160

#### 80

#### 40

#### 20

#### 15

#### 10

8P9JG (W2SC,op)	5,822,952	269/46	598/57	1198/57	1262/57	1161/56	1376/58
FM5DN	4,275,876	192/37	504/55	893/56	1043/58	1085/59	751/54
YV5A (OHØXX,op)	3,659,880	0/0	352/54	558/55	1100/57	1125/57	1222/57
LT1F (LUSCW,op)	3,534,732	5/5	154/41	807/54	813/57	1007/58	1483/60
NH7A (N6HR,op)	3,172,104	155/42	287/49	842/57	472/54	954/57	679/53
V47KP (W2OX,op)	2,582,139	161/38	296/43	463/48	502/53	891/57	686/48
OA4SS	2,323,785	0/0	194/42	340/52	679/57	759/57	951/57
F6FGZ	2,060,658	147/35	382/43	784/52	933/55	628/54	0/0
OK1RF	2,046,120	122/30	365/43	838/53	829/56	736/54	0/0
S58A	1,883,007	99/29	230/36	821/56	759/56	631/53	43/13

#### DX 160

#### DX 80

#### DX 40

#### DX 20

#### DX 15

#### DX 10

EA8ZS	36,036	OT8T	121,476	C6A/K4PG	226,722	ZF2NE	350,784	FM5CD	326,388	LU3HIP	202,440	
SP7GIQ	30,987	(ON4WW,op)	9A5Y	207,081	(W5ASP,op)	PYØZFO	317,715	PYØFF	145,200	CX9B7	76,845	
S5ØU	28,128	DF9ZP	92,355	(9A3LG,op)	SP2FAX	244,260	(W9VA,op)	LU9APM	48,096	T1/N4MO	235,809	
S57M	22,134	(K8ZB,op)	S52AW	198,012	OH8LQ	228,420	T1/N4MO	H2CSL	217,500	PJ5JP	39,216	
I3VHO	18,228	OM5DX	80,511	S53M	196,896	S50K	190,878	L5OFC	178,350	VK4XA	32,967	
HAØDU	15,072	YU1EXY	79,821	(S51TA,op)	EA7KW	188,442	OM3NA	181,431	OT8A	159,390	CX9BAG	16,920
OK1AEZ	10,584	OM3PA	66,264	HB5H	187,920	YU1ZZ	174,522	(ON5UM,op)	9A1CAL	252		
YU7AU	10,212	DL5YM	65,898	(HB9FAP,op)	YT7A	175,566	DLØDAN	160,215	PY2XE	136,950	(9A3JI,op)	48
F6CWA	7,209	YZ9A	57,933	(YU1NW,op)	OT8T	159,318	LA8W	144,420	C6A/N4BP	127,200	ZV2VT	
YZ4IZ	7,062	ON4AKL	51,786	OM5M	146,172	(LA4DCA,op)	OK1FPG	141,288	CO8LY	122,907	JAØRYN/7	42
		S53X	41,769	(DL2CC,op)								
		YU1KR	39,975	(OM2RA,op)								

original Wisconsin guy we must add!), W9WI, who operated NSØZ in Missouri. W9WI is one of the best CW operators in the US, and has quietly compiled nice scores year after year. One can say the exact same thing about WØUA too! Look at these two zero-district scores and understand that you are seeing great scores! W9WI has also won the KC DX Club's CW copying competition at the Dayton Hamvention several times, so obviously that competition truly reveals the best! Other high finishers in the copying competition year after year include K3ZO and K5ZD. Look for their scores very high up in the standings too! From the DX side, Joe, W5ASP, played 20 meters from his favorite ZF2NE spot. Joe repeats his win from 1997 while beating another fine number 2 score from Poland—SP2FAX!

The big story from 1998 was the improvement in conditions and scores on 15 meters. In the early stages of the sunspot cycle up-swing, stations in the southern areas of the US, and in fact, anywhere south and/or near the equator really do well on 15 and 10 meters. K5TR put W5KFT's station to good use in winning the US with a 343 kilopoint score over N4ZZ using his funny looking WW4RR club call at 313k. Last

year's winning 15 meter score from the US was 61,000 points! FM5CD beat W9VA who was operating at PYØZFO for the top honors on 15 from the DX side. To win from Europe ON5UM keyed OT8A to 159k on 15, so the good conditions were enjoyed everywhere!

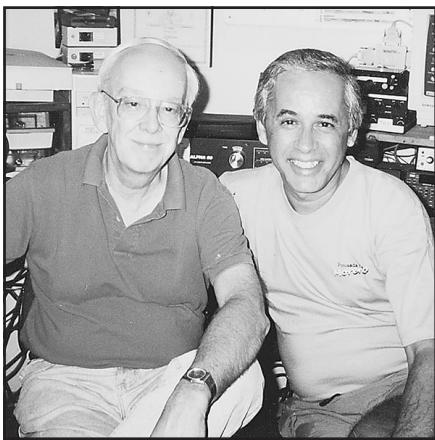
Ten meters just wasn't quite there yet for the US and Canadian stations. K4JYO put together enough QSOs for 11,000 points, which was about 10 times better than 1997! LU3HIP had a much better time on 10 amassing 202,000 points and beating the competition of PYØFF.

The always-competitive multioperator categories provided a lot of fireworks in 1998. The K5ZD station and operators pulled in with a 4 megapoint score and first place domestically in the Multi-single class just ahead of W3BGN and N2RM. From the ABC islands once again this year came the fight for world honors. PJ9C, with W1BIH and W1WEF at the controls beat P49V and V31TP in a 1-2-3 finish that mirrored 1997. Can this finish order happen again next year? Multi-single in Europe is also very popular and TM9C pulled out all the stops to win from the old continent.

Multi-two saw the best competition in 1998. A mere 351,000 points separated the domestic winner, K1AR, from number four,



Cam, HP1AC, tried QRP and finished in second-place single-operator world QRP.



Bill, PY0ZFO (W9VA, operating), and Andre, PY0FF, get together before the contest in Andre's shack.

K1CA. But much closer than that was the distance between first and second as N2NU and crew came up only 10,000 points behind K1AR! Obviously these are great efforts all the way around, and the camaraderie and competition, must have made this contest one to remember. N3RS was sandwiched into third place, but still only 177,000 out of first. A few more QSOs here and there by any of these stations could have made big differences. Keep that thought in mind next year when you have to leave the radio for a bathroom break! From the Caribbean, KP3P piled-up 7.3 million points to win the world in multi-two. As a sign of things to come these guys made over 1100 QSOs on 10 meters! The 6E2L group again finished second followed by a nice effort from Hawaii's KH7R at 5.5 million, and K8CC/C6A at 5.2 million. The European champion of multi-two was G4BUO.

W3LPL again won the battle of the giants nearing 9.4 million points in the multi-multi category. Not far behind were K3LR and K1KI. Both 'LR and 'KI moved up from their 5th and 4th place finishes in 1997—nice job guys! LPL wins M/M for the 4th straight year, and 15th year in a row in either first or second place! The V26B station found itself the "King of the Caribbean" for 1998 with a nearly 10 million-point score that out-

## Top Ten

### W/VE Single Operator Assisted, CW

Call Sign	Score	160	80	40	20	15	10
K1NG (KI1G,op)	4,145,376	107/56	314/74	774/93	1020/99	687/93	76/49
K3WW	4,034,070	116/58	289/79	839/92	982/100	760/88	29/29
W2GD	3,367,602	92/59	277/72	649/87	821/97	581/97	58/41
K2NG	3,186,366	90/59	292/78	583/90	626/95	640/92	63/49
N2MM	2,736,648	85/48	215/63	640/80	842/92	475/87	35/28
N3AD	2,708,820	83/44	368/73	513/82	756/88	463/82	52/35
K2WK	2,395,176	93/55	200/67	398/81	796/97	339/83	57/41
AA3B	2,182,002	45/36	310/61	503/73	631/79	485/79	52/31
K3NZ	2,091,000	63/51	177/68	270/81	633/95	425/90	72/40
N3RR	1,955,892	70/45	71/48	357/77	612/95	499/88	67/36

### W/VE Multioperator Single Transmitter, CW

Call Sign	Score	160	80	40	20	15	10
K5ZD	4,123,434	134/52	328/76	839/82	1048/99	774/93	44/32
W3BGN	4,099,590	130/56	345/77	813/86	1006/98	666/89	70/45
N2RM	3,520,860	72/35	294/66	683/88	853/94	859/94	67/38
W4WA	2,859,291	79/48	201/72	504/90	752/95	591/92	54/40
K1VR	2,761,344	69/46	429/69	800/86	783/82	289/77	27/24

### W/VE Multioperator Two Transmitter, CW

Call Sign	Score	160	80	40	20	15	10
K1AR	6,937,098	87/52	610/86	1278/103	1730/112	859/101	70/45
N2NU	6,926,310	147/60	680/90	965/96	1443/107	1199/105	93/52
N3RS	6,759,654	135/58	572/84	1266/98	1328/110	1061/109	91/47
K1CA	6,585,600	105/50	823/90	862/94	1597/111	1012/101	81/44
K8AZ	5,707,065	89/49	427/81	913/97	1449/108	999/105	78/41

### W/VE Multioperator Unlimited Transmitter, CW

Call Sign	Score	160	80	40	20	15	10
W3LPL	9,435,786	271/74	967/94	1304/106	1675/122	1206/113	134/57
K3LR	9,006,480	218/69	801/96	1234/108	1755/119	1226/111	127/57
K1KI	8,802,990	222/65	904/90	1280/102	1742/117	1246/107	101/53
K1RX	5,821,920	194/58	605/83	747/87	1637/106	768/99	92/47
K4OJ	5,088,006	74/43	220/66	769/96	1132/98	1364/106	112/53

### DX Single Operator Assisted, CW

Call Sign	Score	160	80	40	20	15	10
DK3GI	1,585,950	45/16	367/46	554/47	826/56	633/53	0/0
S50R	759,186	0/0	0/0	684/54	617/55	353/45	0/0
IK0HBN	589,536	6/5	179/32	270/39	336/52	307/47	6/3
PA3EOB	558,714	34/13	321/39	104/26	270/47	373/44	0/0
JH4NMT	473,148	4/4	83/19	218/40	298/44	407/48	1/1

### DX Multioperator Single Transmitter, CW

Call Sign	Score	160	80	40	20	15	10
PJ9C	5,802,870	254/49	658/54	1114/58	1228/57	949/59	1571/58
P49V	5,480,640	288/44	497/55	1141/58	1217/58	1115/58	1278/57
V31TP	4,783,608	159/39	421/50	1092/57	1055/58	1372/56	947/56
T15N	4,537,128	137/39	543/54	1032/57	1084/56	996/56	994/54
XA5T	4,033,260						

### DX Multioperator Two Transmitter, CW

Call Sign	Score	160	80	40	20	15	10
KP3P	7,375,830	264/52	875/58	1534/58	1585/57	1771/58	1181/58
6E2L	6,861,657	358/52	933/56	1617/60	1268/58	1693/58	918/53
KH7R	5,575,344	282/51	611/53	1099/57	1035/56	1743/58	896/53
K8CC/C6A	5,282,760	462/55	815/57	1282/58	1237/57	1082/57	442/47
G4BUO	2,719,317	243/36	686/55	630/50	1146/58	819/55	3/3

### DX Multioperator Unlimited Transmitter, CW

Call Sign	Score	160	80	40	20	15	10
V26B	9,781,728	724/58	930/59	1938/57	1767/59	2165/60	1739/59
VP5FXB	8,146,149	783/57	1224/60	1766/58	1767/58	1901/58	522/50
9A1A	3,419,469	322/39	703/53	1164/57	1218/58	843/54	19/6
JA1YFG	1,670,493	31/15	231/42	589/53	761/56	782/52	59/9
UU5J	1,143,882	35/16	289/43	526/48	611/56	381/44	0/0

distanced the G3FXB memorial operation of VP5FXB. 9A1A again won European honors, and JA1YFG pulled in fourth from far away Japan.

### SOAPBOX

#### W/VE CW

Great Contest! The conditions were slow but steady and allowed me to finish the contest this year (N6RV). Bad QRN at the end of the contest resulted from a deadly tornado outbreak 100 miles north, four hours after the contest ended. A little too close for comfort (KN4T). Still no Europe on 10 meters. Maybe next year (N7LOX). This is the first time in 30 years that I didn't have an amp in the shack. I had a ball operating low power and I still managed to beat last year's score when I had an amp (W5CWQ). It was fun to have 15 meters back again! The low bands were hopping the first night (K9MMSS)! The QRP fun continues (W9UR)! Wow! What a difference a year makes. It was nice to hear all those European signals on 15 meters (WA7BNM). We had excellent propagation here the first two days. However, I should have stayed in bed on Sunday (K5WO). Nice to find a frequency and run it for a change. Highlight of the contest was running Europe Sun-

day morning, great conditions (KA1CLX). Rain static became bad Saturday evening. When the thunderstorms started rolling in, I decided to pull the plug for a few hours (N6ZZ). All was going well until a powerful El Nino storm blew through. I struggled to operate dodging lightning strikes and trying to hear through rain static (W5UN). Great conditions on all band entrants. Could not believe the DX that answered (W3DA)! The rates were great! Had 149 QSOs in a 60-minute period on Saturday morning. Conditions are getting better (NJ2L)! JA opening at the end of the contest really livened things up (K4OGG)! Sure was nice to have good band conditions for QRP. My best ever QRP effort on 80 and 40 meters (K2JT). Signals from Europe combined with usual USA, overloaded my receiver on 40 meters; had to use Beverage antennas to receive (AA4S). Single band effort on 10 meters was not a very good idea. Thank goodness for science fiction books and automatic keys (K4JYO). Great experience to work the contest from this side of the Atlantic (ES2RR). My first DX contest with a Yagi, they really do work (N0UR)! Eighty meters was superb for hunt and pounce, as DX stations seemed to be every 2 kHz (N4UH). Greatly enjoyed the contest in spite of QRN generated by El Nino fueled storms (W4HM). My antenna was a ground plane in my second floor bedroom! Thanks to all

**W/VE Region Leaders**

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

**CW**

Northeast Region (New England, Hudson and Atlantic Divisions; Maritime and Quebec Sections)		Southeast Region (Delta, Roanoke and Southeastern Divisions)		Central Region (Central and Great Lakes Divisions; Ontario Section)		Midwest Region (Dakota, Midwest, Rocky Mountain and West Gulf Divisions; Manitoba and Saskatchewan Sections)		West Coast Region (Pacific, Northwestern and Southwestern Divisions; Alberta, British Columbia and NWT/Yukon Sections)	
K3PH	468,468 A	N1CWR	192,192 A	W8LVN	322,623 A	N0UR	151,380 A	N7IR	397,992 A
N1TM	362,490 A	WA8WV	137,475 A	W4KY	210,000 A	K10G	17,919 A	W8QZA/6	185,277 A
AA1CA	175,422 A	K4GEL	37,584 A	K8OUA	112,608 A	N5XJ	12,012 A	WA6TLA	76,719 A
W3ZZ	170,016 A	KE4W	363 A	W9UR	35,955 A	K1EQA	3,564 A	NQ7X	55,176 A
KD2TT	161,355 A			K8UCL	16,380 A	K10II	1,116 A	N6AZR	50,760 A
W2TZ	1,356,282 B	KN4T	1,602,975 B	N8AA	1,148,292 B	K5RX	993,300 B	W6JTI	805,734 B
K1VUT	1,242,000 B	K4RO	925,704 B	N8BQJ	738,978 B	WD5K	788,310 B	K7ED (WA0RJY)	608,940 B
VO1MP	1,223,508 B	WO4O	910,800 B	WB8YJF	681,615 B	K5WO	365,310 B	K7FR	548,580 B
NA2U	1,091,718 B	K5KLA	784,464 B	W09S	648,024 B	K5QF	354,432 B	KG7XC	432,066 B
WT1O	890,781 B	K1KY	737,481 B	K9OM	614,421 B	N5HRG	302,328 B	K6WV	378,972 B
W1KM	3,742,200 C	W4PA	2,290,554 C	W9RE	2,372,931 C	W5UN	1,743,048 C	W6AX (N6IG,op)	2,053,716 C
K1ZM	3,709,221 C	WC4E	1,862,712 C	N9AG (at N8NR)	1,554,021 C	K5YA	1,702,557 C	K6NA	1,528,623 C
KQ2M	3,457,458 C	N4ZR	1,707,300 C	K9MA	1,355,328 C	N6ZZ	1,582,056 C	W2VJN/7	1,289,790 C
N6BV/1	3,219,990 C	K0EJ	1,562,652 C	KT8X	1,283,337 C	K5NA	1,499,736 C	K7BG	1,174,068 C
N2LT	3,005,775 C	W9LT	1,305,546 C	K9BG	1,245,270 C	K5YAA	1,180,170 C	N6RV	1,058,583 C

those great DX stations that had the patience to pull my call out of QRM (AA8AT). First time ever in the Multi-two category. We had a great time (N4TO). I was pleasantly surprised at how many multipliers I worked barefoot on 10 meters with an inverted V and barefoot on 160 meters (KQ2M). My first time QRP, and the most amazing thing to me is that you can actually make through some big pile-ups with 5 W (W4KY). I was happy to see the ARRL Executive Vice President K1ZZ operating in the contest and was gratified that he took time out to work me for zero points (K5YP). Best conditions I've heard on 15 meters since the last sun spot cycle. It was lots of fun to be able to run JAs (WW4RR). I was surprised to do better on 15 meters than 20 meters (W0TM). I decided to do an all-out effort. I was surprised at what I could do with a modest station (K6PUD). This contest was lots of fun! You can run a lot with low power, so it's mostly a S&P game, except during prime openings (K4RO). It was nice to hear so many calls on 20 and 15 meters, which I haven't heard in several years. Welcome back friends (N0AX)! Great contest! I did better than I've ever done before, still with only dipoles and verticals (N6NR)! I haven't operated this contest for several years (no antennas). Friday I dug an old 14AVQ vertical out and stuck it in the backyard. Hooked the barefoot TS-930 to it hoping to make a few contacts. 400 QSOs later I'm hooked again (N5AW)! I hadn't been on 15 meters in a while and it was nice to find a variety of good DX on the band (KD7H). The band conditions were better than anything I've ever played in before (K1KY)! I'm 17 years old and a relatively new contesteer, but I'm learning fast. Thanks to all those who pulled me out to give me a new country or band-country (AA8UP).

**DX CW**

Very nice contest (ON7CC). EU CQ contesters filled the entire 160-meter band, so it was very difficult to hear US CQ contesters (OZ7NB). Incredibly contest! At times I found myself in big pile-ups (IK4ZHH). It's so much fun having contacts with the USA (OH1UP). The sunspots are here again (OH2YL)! This contest was lots of fun! Fifteen meters was wide open (G4KHM). There were big signals on the band, but we couldn't get to the West Coast. We heard Arizona and California, but weren't able to work them. However, I enjoyed myself and that's what really counts (ON4AKL). It was great working the US on 40 and 80 meters and also some new states on 20 and 15 meters (LA8ZJA). The conditions to W6/W7 were beautiful, the first day (OK1FPG)! Another great weekend! See you all next year maybe on 10 meters (GW3SYL). I was pleased with the few 80 meter QSOs I was able to grab on my R7, which is a really poor performer on that band (HO3A). Thanks to all who heard and called my peanut whistle (TI7/N4MO). Working 40 meters barefoot was tough, but it was a lot of fun too (IL3/IK2MRZ)! As usual an enjoyable contest. With more sunspots all the signals rolling in from NA is a lot of fun (DL4AAE). It was obvious that 15 meters was open and playing well. However, there wasn't nearly as much activity on 20 meters as there has been in the past (W5ASP). Very good propagation on 80 meters (RA6LW). Well, the sunspots are coming back, but they're still unpredictable. As usual 15 and 40 meters provided the bread and butter for me (VK5GN). Despite wire antennas, computer problems and low antenna heights I enjoyed the contest (XE2/W5WMU). Fifteen meters was alive, next year I bet it'll be 10 meters! Greater fun to come, see you in 1999 (F6FGZ)! Much better

propagation than last year, but it is tough to compete with the west Europeans in this contest (OK1RF). I entered the contest as 160 meters single band and worked with only 100 W. It was very exciting! I could hear many USA stations, but few people transmit "CQ contest" (JE1SPY). I again found the North American operators to be both patient and courteous (GM3ZAS). My wife only allowed me five hours in the contest. I will make a better arrangement for next year (SM5CIL). I enjoyed the contest; I was able to make a lot of calls on 50 meters with only a fishing rod and whip antenna (JA1MXY). Great conditions; my first call was answered with just 5 W (K3TW)! Many thanks for the contest, unfortunately there were rather bad conditions, at times (SM5ALJ). Very nice propagations and a nice weekend. I was able to work all stations with simple antennas. I worked my first 50 QSOs with an amplifier and all others with only 100 W, without a problem (S57AW). Conditions weren't bad, however I was unable to work a lot of East Coast stations (JA6SHL). As usual a fine contest, but low frequency conditions weren't too good. I was only able to reach as far west as Nebraska on the top band (SM6CPY). Fifteen meters has always been my favorite band. This time around it was fantastic (DL4FN)! Propagation to USA reasonably good for my 100 W and vertical. However, I didn't hear any US on 10 meters (G6QQ). My best effort in ARRL CW! What 100 W can do is unbelievable (EW1NY)! Conditions were nice and to our surprise we made QSOs even on 160 meters. However, 80 meters could have been better (OH5NQ). Had a lot of fun working the contest, even with low power and dipole antennas (DL8ZAW). Tiny contesteer, but big fun (F6CAV)! Enjoyable contest and good propagation on 15 meters, this year (G3RSD).

**W/VE Plaque Winners—CW**

Single Operator	Winner	Donor
All Band	W1KM	Frankford Radio Club
3.5 MHz	W1MK	Thomas Rylander, SM3DMP
7 MHz	AD6DO	Northern Arizona DX Assn
14 MHz	W0UN (W0UA,op)	QSLs By W4MPY
21 MHz	K5TR (at W5KFT)	Carl Luetzelschwab, K9LA
28 MHz	K4JYP	Green River Valley, IL ARS
Low Power	KN4T	Dauberville DX Assn
QRP	K3PH	Tod Olson, K0TO
Assisted	K1NG (KI1G,op)	Richard Hallman, N7TR
<b>Multioperator</b>		
Single Transmitter	K5ZD	Northern Illinois DX Assn
Two Transmitter	K1AR	Order of Boiled Owls of NY, W2AO Memorial
Unlimited	W3LPL	Alpha/Power, Inc.

**DX Plaque Winners—CW**

Single Operator	Winner	Donor
World	8P9JG (W2SC,op)	North Jersey DX Assn
Africa	9X0A	Byron P. Peebles, Jr, NZ3O
Asia	JH5XP	Alamo DX Amigos
Europe	F6FGZ	Jerry Griffin, K6MD
North America	FM5DN	Potomac Valley Radio Club
Oceania	NH7A (N6HR,op)	Steve Franke, K9AN and John Brosnahan, W0UN
1.8 MHz	EA8ZS	Fred Race, W8FR, DL1FF, Memorial
3.5 MHz	OT8T (ON4WW,op)	Jim Knutson, KD0AV
7 MHz	C6A/K4PG	Thomas P. Gannon, W3YX, Memorial
28 MHz	LU3HIP	Ft Wayne DX Assn
Low Power	WP2Z (KE2VB,op)	Jim Stevens, K4MA
QRP	VP9ID (AJ2U,op)	Jerry Griffin, K6MD
Assisted	DK3GI	Willamette Valley DX Club
<b>Multioperator, Single Transmitter</b>		
World	PJ9C	John Brosnahan, W0UN
Asia	JA7YAA	Yankee Clipper Contest Club
Europe	HG1S	The Radio Place
<b>Multioperator, Two Transmitters</b>		
World	KP3P	Tom De Meis, K2TD, Memorial, Frankford Radio Club
Europe	G4BUO	Jim George, N3BB
Oceania	KH7R	Oklahoma Comm Center and AH9B
<b>Multioperator, Unlimited</b>		
World	V26B	H Stephen Miller, N0SM
Asia	JA1YFG	Hajime Kato, JO1RUR/2, KH0G
Europe	9A1A	Texas DX Society
North America	VP5FXB	Alpha/Power, Inc.

## Scores

Scores are listed by DXCC Countries and ARRL/RAC Sections. Within each country or section, scores are listed in descending order, by power categories, followed by multioperators. Line scores list call sign, score, QSOs, multipliers, reported hours of operation, power (A = QRP, B = Low Power, C = High Power, D = Multioperator), and band. Division leaders are listed in **bold**.

<b>CW</b>	WA2YYA	840,213	943	297	C	<b>4</b>	KM5G	1,038,528	1202	288	48	C	N6YEU	158,235	385	137	B	
<b>W/VE</b>	W2EN	836,352	1056	264	C		WA5SOG	32,025	175	61	C	20	K6UM	104,775	375	127	B	
<b>Single Operator</b>	WA2C	601,431	899	223	C	<b>Alabama</b>	KC5BG	7,695	95	27	B	10	K6VNC	142,848	372	128	C	
<b>1</b>	N7UN	299,034	449	222	C	K3IE	333,333	481	231	B			W6WB	78,084	241	108	C	
<b>Connecticut</b>	W2UDT	170,400	400	142	C	KK4SM	271,440	435	208	B			W6BIP	6,615	49	45	C	
N1TM	101,097	239	141	C	KT4DY	103,944	244	142	B			<b>San Joaquin Valley</b>						
K1NO (KF5UV,op)	9,963	81	41	B	WA4YNG	87,453	237	123	24	B		NK6F	60,180	236	85	18	B	
689,760	958	240	B	K4NVJ	2,349	29	27	4	B		KI6PG	2,205	35	21	6	B		
W0MHK/1	476,256	656	242	C	K4JYQ	11,931	97	41	30	C	10	KN6YD	648	18	12	B		
K1EFL	217,512	424	171	B	<b>Northern New York</b>							K5AM	12,222	97	42	C	80	
AJ1X	20,988	106	66	B	K4OGG	663,549	841	263	B			W5JRP	10,179	87	39	20	C	
N1MHV	11,700	75	52	B	N8LM	201,600	384	175	40	B		<b>New Mexico</b>						
WA1GNN	6,786	58	39	B	W1RR	382,236	601	212	C			KR5X	993,300	1075	308	36	B	
KQ2M	3,457,458	2978	387	C	K2MK	26,418	119	74	B			WD5K	788,310	922	285			
N8WXQ	90,684	229	132	46	WB2KOH	20,502	102	67	21	B		K5WQ	365,310	594	205	33	B	
KG1D	35,568	152	78	C	WA2VQV	19,776	103	64	B			N5AW	246,075	425	193			
K1JN	27,255	115	79	C	K2JF	11,760	70	56	B			NN5T	232,944	422	184			
KE1AU	5,781	47	41	C	N2MR	414,036	651	212	C			K5KJ	4,650	62	25	3	B	
W1UK	53,856	272	66	C	N2FX	171,708	349	164	C			N6ZZ	1,582,056	1533	344	40	C	
K1DII	3,519	51	23	C	KC2TA	152,805	305	167	C			K5MR	77,760	363	72	48	C	
<b>Eastern Massachusetts</b>					WA2JFP	35,490	130	91	B			W5SSQ	1,275	25	17	B	80	
K1VUT	1,242,000	1380	300	48	W2BE	27,945	115	81	C			K6FO	78,588	236	111	C		
WT10	89,781	1129	263	B	K3JG	60,102	318	63	C			K6RN	41,184	208	66	C	15	
W1ZZ	524,628	767	228	B	KD2P	270	10	9	B			N5FO	166,320	616	90			
K1HT	391,248	627	208	15	<b>Western New York</b>							N5NJ (at KM5R)						
W1VIV	188,604	403	156	18	W2QIP	131,328	304	144	A			298,758	986	101	C	15		
N3KCJ	82,125	219	125	C	<b>W2TZ</b>	1,356,282	1497	302	38	C		K5MU	121,212	444	91	B	15	
WU1F	70,299	202	116	6	WB2DVF	388,518	586	221	36	B		<b>Oklahoma</b>						
N1HOG	26,325	117	75	B	KM2L	278,397	491	189	B			A5AHV	16,815	95	59	8	B	
K1TW	5,781	47	41	C	WA2EYA	236,880	470	168	18	B		K5YAA	180,170	1395	282	C		
KE1HM	3,192	38	28	B	K2CS	199,800	370	180	24	B		N5OK	654,126	901	242			
W1KM	3,742,200	3150	396	C	WA2YSJ	152,100	325	156	B			K5YP	56,304	184	102	C		
K1ZM	3,709,221	303	409	C	AA2VX	72,417	239	101	B			K2BA	220,806	846	87	C	20	
W1GU	125,455	293	145	C	W2BK (K2k,op.)							<b>South Texas</b>						
K1HT	391,248	627	208	15	W2BM	1,843,446	1802	341	C			N5XJ	12,012	77	52	A		
N1DS	89,604	212	125	C	NJ2L	1,456,560	1734	280	C			K45KL	129,213	293	147	B		
K2LP	73,320	188	130	C	K2NV	1,261,977	1327	317	C			N5XT	123,525	305	135	B		
KQ1F	23,643	111	71	C	N2WK	556,080	662	280	27	C		W5MNN	113,544	249	152	13	B	
W1MK	566,166	743	254	C	KW2J	527,571	803	219	22	C		K5LJ	95,499	243	131	20	B	
WS1M	277,560	1028	90	C	K2FU	512,892	654	266	C			W5UN	1,743,048	1686	344	C		
<b>Maine</b>					N2CU	506,880	704	240	C			K5Y	1,702,557	1873	303	C		
N1AFC	6,138	66	31	A	WA2ABN	371,544	548	226	C			N5NA	1,499,736	1582	316	38	C	
N1WL	23,532	106	74	B	W2YQH	304,704	529	192	C			K5CWR	84,912	232	122	C		
KA1IS	309,915	485	213	C	W2EZ	196,308	399	164	C			W5BWA	22,815	117	65	8	C	
KR1B	48,861	183	89	C	<b>District of Columbia</b>							N5NR	5,967	51	39	C		
<b>New Hampshire</b>					W20MW	162,336	356	152	C			K5TR (at WKFT)						
AA1CA	175,422	346	169	A	W2OP	34,710	130	89	C			343,200	1100	104	C	15		
K1PTF	569,250	759	250	B	W2FR	28,800	160	60	14	C		K0BCN	8,436	76	37	C	15	
N1SNB	292,950	525	186	B	W3DQ	3,744	39	32	B			<b>South Carolina</b>						
N1MS	176,295	365	161	B	W2AY	1,866,726	1863	334	29	C		K5QF	354,432	568	208	B		
AA1KL	92,022	313	98	B	W3DT	3,744	39	32	B			N5HRG	302,328	456	221	B		
AA1QD	70,200	225	104	B	W3V	821,106	957	286	33	C		N6ND	270,900	516	175	20	C	
WA1T	49,446	201	82	B	W4MEL	27,690	130	71	C			K5ZC	112,464	246	88	8	C	
N6BV/1	3,219,998	2965	362	C	N2FY	56,283	257	73	C			N5ZM	5,751	71	27	18	B	
K1ZR (at KB1S0)					<b>Delaware</b>							N5O	9,804	86	38	C	10	
2,185,440	2320	314	C	W3DA	425,508	601	236	C			<b>Southern Florida</b>							
KC1F	1,850,130	2022	305	28	NY3C	67,035	205	109	B			K4T	343,200	1100	104	C	15	
K2TE	1,658,403	1789	309	C	W3DA	425,508	601	236	C			K4U	343,200	1100	104	C	15	
K1BV	331,344	708	156	C	W3DQ	3,744	39	32	B			N5PSE	226,083	403	187	B		
N1TX	57,750	250	77	19	C	W3V	3,744	39	32	B			K4AP	1,602,975	1595	335	42	B
<b>Rhode Island</b>					W3EWM	128,240	320	174	C			N5AJ	210,330	410	171	B		
K1VSJ	563,940	780	241	B	W3BEN	129,054	274	157	C			K4KU	97,857	249	131	B		
K1ZE	217,485	405	179	B	W3RJ	80,520	244	110	C			N5PK	185,385	185	72	B		
AB1BX	31,242	127	82	B	WQ3E	36,942	131	94	C			K4ZT	44,175	105	95	18	B	
N9LYE	30,972	116	89	B	N3RU	25,359	107	79	C			W4EQE	13,029	101	43	B		
K2MN	7,938	63	43	B	W3ZJ	21,900	100	73	C			K4LQ	454,230	618	245	12	C	
W1WFZ	354,795	545	217	C	K3N3Z	91,113	251	121	B			K4MF	440,568	633	232	C		
W1RFQ	1,425	25	19	B	K3PY	48,180	148	110	B			W4QUM	14,808	274	164	C		
Vermont					W3R3Y	20,874	98	71	B			W4UVM	30,076	163	63	C		
W3SOH	145,320	346	140	B	K3PP	6,732	51	44	B			W4EV6	30,076	163	63	C		
K1KU	124,488	312	133	B	K3PH	468,468	676	231	A			N6RV	1,058,583	1373	257	C		
W1ZK	103,560	820	286	C	WA4RBS	1,866,726	1863	334	29	C			K6KSE	26,910	195	46	13	C
N1HFS	307,911	517	197	C	W3TJ	1,866,726	1863	334	29	C			N6IC	265,005	403	195	C	
W1SRG (KE4GI, N1XYR,ops)	61,479	207	99	B	W3DAD	29,184	208	126	B			K6CEO	16,611	113	49	B	20	
K1DKX	275,616	1044	88	C	W3N3X	5,280	539	198	C			W4SO	158,004	627	84	C	15	
<b>2</b>					W3EZH	50,388	247	68	B			K6FO	1,562,652	1638	318	38	C	
<b>Eastern New York</b>					WE3C	1,914	29	22	B			W4OOG	52,200	150	116	C		
W2QYA	2,673	33	27	A	W3CZB	12	2	1	B			WW4R (NAZ2 op.)						
K2UF	334,815	505	221	B	W3UP	5,247	33	A				N4IR	136,290	590	77	C	15	
W2ENY	176,745	357	165	B	W3DF	356,400	540	220	B			<b>Virginia</b>						
K2RI	45,144	152	99	B	W3CP	245,310	424	185	C			K4GEL	37,584	174	72	A		
K2XA	1,537,416	1572	326	C	W3UJ	20,182	702	247	B</td									

K4FW/8	9,720	81	40	C	80
K8V/T	2,964	38	26	3C	80
W8WVU	18,468	114	54	B	20
WA8OLD	1,710	30	19	B	15
<b>Ohio</b>					
K8QUA	112,608	276	136	47 A	
K8UCL	16,380	91	60	23 A	
<b>N8AA</b>	1,148,292	1146	334	B	
WB8YJF	738,978	899	274	B	
AA8UP	681,615	935	243	B	
AF8P	143,100	300	159	26 B	
K8ME	140,706	277	126	B	
W8AZA	93,330	255	122	15 B	
WB8IDM	91,476	231	132	B	
NG3Q	57,024	216	88	17 B	
WB8GOC	35,784	142	84	B	
N8WS	30,420	130	78	B	
WB8NPF	24,426	118	69	B	
AF8C	17,484	94	62	10 B	
K8VS	969	19	17	6 B	
<b>N9AG</b> (at N8NR)	1,554,021	1451	357	C	
W8JGU	435,336	776	187	C	
WB8RSW	335,625	575	205	C	
WP8WN	155,142	306	169	12 C	
WB8KH	7,260	55	44	C	
K8MK	173,826	666	87	33 C	80
WA8RCN	13,860	105	44	16 C	80
WB8ZWWY	33,930	174	65	20 B	40
W4NTI	22,344	133	56	C	40
KB8NTY	32,757	179	61	5 B	20
AA8PJ	14,352	92	52	28 A	20
K8KM	75,696	332	76	B	15
WT8P	35,226	206	57	B	15
<b>West Virginia</b>					
WA8WV	137,475	325	141	A	
K5ID	400,620	607	220	47 B	
KGBGW	197,505	399	165	48 B	
N4ZR	1,707,300	1897	300	C	
W9L	1,305,546	1441	302	34 C	
K3JT	695,826	899	258	C	
K2UOP/B	184,260	370	166	C	
WB8WEJ	3,219	37	29	C	160
WB8UMR	51,840	240	72	B	20
N8II	100,125	445	75	C	15
<b>9</b>					
<b>Illinois</b>					
WB8LVN	322,623	569	189	A	
<b>W09S</b>	648,024	806	268	B	
K9OM	614,421	879	233	48 B	
N9JF	574,200	696	275	B	
K9MMS	363,528	594	204	24 B	
K9JE	146,916	318	154	B	
K9JO	93,150	225	138	B	
W9SZ	84,645	209	135	B	
W9MY	35,028	139	84	B	
K9PPW	32,100	107	100	B	
K9KM	31,248	124	84	B	
WD9ISG	20,790	110	63	B	
AA9UO	19,260	107	60	B	
KE9EX	13,051	75	58	B	
KB9HAY	7,839	67	39	B	
AA9NF	5,673	61	31	B	
N9DT	507	13	13	B	
K9BG	1,245,270	1339	310	C	
W9IL	368,880	580	212	C	
NM9C	287,760	440	218	27 C	
K9UQN	115,260	340	113	C	
K9DX	132,720	553	80	C	80
W9OF	183,456	637	96	C	
W9IW (ES2RR,op)	218,160	808	90	C	15
K9QVB	170,748	612	93	C	15
<b>Indiana</b>					
W9UR	35,955	141	85	39 A	
K9JC	490,758	622	263	30 B	
K7CK	62,832	176	119	B	
K9IG	31,416	136	77	3 B	
K9JW	13,920	80	58	5 B	
K9FT	13,617	89	51	12 B	
<b>W9RE</b>	2,372,931	2179	363	C	
W9KTP	158,355	345	153	C	
N9TU	68,208	196	116	C	
KE9GM	36,270	195	62	27 B	20
WT9U	21,756	148	49	B	15
N9LJX	19,488	112	58	B	15
<b>Wisconsin</b>					
AF8J	10,920	65	56	A	
AF9DX	350,784	609	192	B	
N9XX	229,779	363	211	B	
W9WUU	144,612	309	156	B	
AA9RR	65,322	191	114	20 B	
N9CIQ	45,903	150	102	B	
W9DYG	40,095	165	81	B	
K9MA	1,355,328	1448	312	C	
W9HR	49,770	158	105	C	
W9RN	270	10	9	C	
W9GX	9,324	74	42	C	80
K9CAN	111,024	514	72	C	20
N9GBB	5,355	51	35	4 B	20
W9GIL	11,070	90	41	C	10
<b>0</b>					
<b>Colorado</b>					
K10G	17,919	181	33	A	
K1EQ	3,564	54	22	10 A	
K1II	1,116	31	12	5 A	
<b>K9RI</b>	227,799	429	177	48 B	
W0RSR	22,035	113	65	3 B	
K9FX	411,138	753	182	C	
W0RA	265,668	524	169	18 C	
W0UN (W9UA,op)	495,495	1573	105	C	20
KJG	91,200	380	80	C	15
<b>Iowa</b>					
W0AG	103,572	252	137	B	
AA0AI	36,540	116	105	B	20
<b>NR0X</b>	87,355	935	311	C	
W0NFL	51,480	156	110	C	
W0SF	5,247	53	33	C	80
WK0F	7,437	67	37	C	40
NE0P	270	10	9	B	40
W0OF	16,677	109	51	13 B	15
<b>2</b>					
<b>Kansas</b>					
K0BJ	148,800	310	160	B	
W0WPL	52,440	152	115	13 B	
W0YRN	20,790	99	70	C	
K0ZM	458,229	667	229	C	
KG0UA	201,450	425	158	C	
<b>Minnesota</b>					
N0UR	151,180	348	145	19 A	
KE0UI	122,850	315	130	B	
NF9K	1,173	23	17	B	
W0SA	339,375	625	181	C	
<b>Missouri</b>					
K2HT	47,121	139	113	B	
KA0P	26,199	123	71	C	
K0AD	56,760	172	110	6 C	
K0KGS	29,784	136	73	C	
K0CA	439,410	755	194	C	
KM0L	373,445	579	215	C	
KSM0	151,164	323	156	C	
K0MX	93,840	391	80	24 C	15
<b>Missouri</b>					
K2HT	47,121	139	113	B	
KA0P	26,199	123	71	C	
K0AD	56,760	172	110	6 C	
K0KGS	29,784	136	73	C	
K0CA	439,410	755	194	C	
KM0L	373,445	579	215	C	
KSM0	151,164	323	156	C	
K0MX	93,840	391	80	24 C	15
<b>Missouri</b>					
K4VX	(K9BGL,op)				
N0Z	(W9WI,op)				
3					
<b>Kansas</b>					
K3WW	4,034,070	3015	446	C	
N3AD	2,708,820	2235	404	C	
A3AB	2,182,002	2026	359	C	
K3SA	2,091,000	1640	425	C	
N3RR	1,955,892	1676	389	C	
W3EE	1,468,320	1288	380	C	
N3SA	1,391,412	1397	332	C	
W3OV	1,284,642	1334	321	C	
K3QO	1,178,064	1296	303	C	
K3NZ	1,093,440	1139	320	24 C	
N3RZ	1,055,892	1676	389	C	
W3EE	1,468,320	1288	380	C	
N3SA	1,391,412	1397	332	C	
W3OV	1,284,642	1334	321	C	
K3QO	1,178,064	1296	303	C	
K3NZ	1,093,440	1139	320	24 C	
N3RZ	1,055,892	1676	389	C	
W3EE	1,468,320	1288	380	C	
N3SA	1,391,412	1397	332	C	
W3OV	1,284,642	1334	321	C	
K3QO	1,178,064	1296	303	C	
K3NZ	1,093,440	1139	320	24 C	
N3RZ	1,055,892	1676	389	C	
W3EE	1,468,320	1288	380	C	
N3SA	1,391,412	1397	332	C	
W3OV	1,284,642	1334	321	C	
K3QO	1,178,064	1296	303	C	
K3NZ	1,093,440	1139	320	24 C	
N3RZ	1,055,892	1676	389	C	
W3EE	1,468,320	1288	380	C	
N3SA	1,391,412	1397	332	C	
W3OV	1,284,642	1334	321	C	
K3QO	1,178,064	1296	303	C	
K3NZ	1,093,440	1139	320	24 C	
N3RZ	1,055,892	1676	389	C	
W3EE	1,468,320	1288	380	C	
N3SA	1,391,412	1397	332	C	
W3OV	1,284,642	1334	321	C	
K3QO	1,178,064	1296	303	C	
K3NZ	1,093,440	1139	320	24 C	
N3RZ	1,055,892	1676	389	C	
W3EE	1,468,320	1288	380	C	
N3SA	1,391,412	1397	332	C	
W3OV	1,284,642	1334	321	C	
K3QO	1,178,064	1296	303	C	
K3NZ	1,093,440	1139	320	24 C	
N3RZ	1,055,892	1676	389	C	
W3EE	1,468,320	1288	380	C	
N3SA	1,391,412	1397	332	C	
W3OV	1,284,642	1334	321	C	
K3QO	1,178,064	1296	303	C	
K3NZ	1,093,440	1139	320	24 C	
N3RZ	1,055,892	1676	389	C	
W3EE	1,468,320	1288	380	C	
N3SA	1,391,412	1397	332	C	
W3OV	1,284,642	1334	321	C	
K3QO	1,178,064	1296	303	C	
K3NZ	1,093,440	1139	320	24 C	
N3RZ	1,055,892	1676	389	C	
W3EE	1,468,320	1288	380	C	
N3SA	1,391,412	1397	332	C	
W3OV	1,284,642	1334	321	C	
K3QO	1,178,064	1296	303	C	
K3NZ	1,093,440	1139	320	24 C	
N3RZ	1,055,892	1676	389	C	
W3EE	1,468,320	1288	380	C	
N3SA	1,391,412	1397	332	C	
W3OV	1,284,642	1334	321	C	
K3QO	1,178,064	1296	303	C	
K3NZ	1,093,440	1139	320	24 C	
N3RZ	1,055,892	1676	389	C	
W3EE	1,468,320	1288	380	C	
N3SA	1,391,412	1397	332	C	
W3OV	1,284,642	1334	321	C	
K3QO	1,178,064	1296	303	C	
K3NZ	1,093,440	1139	320	24 C	
N3RZ	1,055,892	1676	389</		

7L2OHM	5,400	72	25	A	JH6NBW	108	9	4	A	20	DK8RE	9,135	87	35	C	<b>Scotland</b>	LZ4TX	11,919	137	29	B	40
J46LAD	720	24	10	A	JH1TUX	99	11	3	B	20	DF5RF	6,336	64	33	C	GM3ZAS	41,607	201	69	B	20	
7K1CPT/1	540	20	9	A	J01VRL	68	4	30	B	20	DF9ZP (K8ZB.op)	92,355	655	47	C	GM8X	31,500	250	42	B	20	
<b>J4AUYB</b>	608,715	1215	167	B	<b>JATFTR</b>	121,176	792	51	C	15	DL5Y	65,898	523	42	C	GM3CFS	28,566	207	46	B	20	
J1L1ARF	300,852	732	137	B	J1SQC	79,716	511	52	B	15	DL7ALM	30,024	300	278	C	<b>Wales</b>	LZ1ABC	7,644	98	26	B	40
JE0UXR	284,382	777	122	B	JR8OGB	77,250	510	50	C	15	DL9KD	27,195	259	35	C	GW3SYL	153,264	412	124	B	20	
J2A2BY	253,485	655	129	B	J4ACSH	62,169	391	53	C	15	DL2RUG	3,240	60	18	C	GW3YDX	1,596,375	2365	225	C	20	
7L1ETP	227,592	654	116	B	J42IU	52,272	363	48	B	15	DL9GFB	2,106	39	18	C	<b>Hungary</b>	LZ2T2	2,280	40	19	B	20
J1V1VRD	210,240	584	120	B	JH0EPI	34,572	268	43	B	15	DL5AUJ	1,680	40	14	C	HA0HW	167,466	494	113	B	20	
JE2YHS	201,426	569	118	B	J7AMK	28,080	234	40	B	15	DL2JRM	480	16	10	B	HA7YS	89,100	330	90	B	20	
J2AXI	183,291	571	107	B	JR4GPA	20,055	191	35	B	15	DL8TWA	360	15	8	A	HA7PW	83,160	308	90	B	20	
JH8KYU/1	173,340	540	107	18	B	J1GOH	11,520	120	32	B	15	DL8DQ	92,400	560	55	C	HA8FW	57,375	255	75	B	20
JE1REU	169,200	564	100	B	J46BIF	8,505	105	27	C	15	DL2OY	47,334	343	46	C	HA0DD	45,288	204	74	B	20	
J1K1ASO	122,364	412	99	B	J1QZC	8,265	95	29	B	15	DL5KJ	15,912	156	34	C	HA0C	19,092	148	43	B	20	
J7TAJD/1	75,447	303	83	B	J1MW	4,140	60	23	B	15	DL7XR	8,700	100	29	B	HA0HP	12,960	96	45	C	20	
JO3YE/3	72,966	320	76	B	J46QDU	2,835	45	21	B	15	DL0DAN	160,215	971	55	C	HA8XZ	27,048	196	46	C	20	
J6HTYD	45,360	240	63	B	J1AAT	720	30	8	B	15	DL9FBS	100,152	642	52	C	HA3OJ	17,700	118	50	C	20	
J2AHUN/1	44,352	224	66	B	JR2TRC	648	27	8	B	15	DL8DQ	92,400	354	99	B	HA3UO	17,600	118	50	C	20	
J2AQJ	40,635	215	63	B	J48TEZ	480	20	8	B	15	DL8RS	13,899	113	41	C	HA0DU	15,072	157	32	C	20	
J41CP	38,979	213	61	B	J7EDZ	420	20	7	A	15	DL1DQY	2,040	40	17	A	HB0AR	31,860	236	45	B	20	
JE1ARQ	35,856	166	72	B	J1JRH	351	13	9	B	15	DL9SEV	47,094	334	47	C	HA8UH	7,440	80	31	C	20	
JP1SRG	34,452	174	66	B	J7THD	135	9	5	B	15	DL4AAE	30,303	259	39	B	HA3GJ	22,347	191	39	C	15	
J47SUR	32,391	183	59	B	<b>J40RYN/7</b>	42	7	2	26	B	10	DL6KL	21,735	207	35	B	HA4YG	7,350	98	25	C	15
JR9NVB	32,076	243	44	B							DL3BYE	1,008	28	12	B	HA3GQ	5,040	58	30	C	15	
J41AB	30,618	189	54	B	<b>Jordan</b>											OH3FAB	30,780	229	45	C	40	
J41AK1	29,904	178	56	B	JY9QJ	276,906	694	133	C		<b>Spain</b>					OH3GL	228,420	1269	60	C	20	
J41KU	28,561	170	56	B	<b>Asian Russia</b>						EC5ALP	2,970	45	22	A	OH4JFN	66,303	417	53	B	20	
J42KK	27,702	171	54	B	RU0LL	174,300	581	100	B		EAT7GTF	277,220	1404	185	B	HB0DAX	5,040	40	42	A	20	
J46SRB	25,926	149	58	B	RA0UX	29,694	202	49	B		EA4ET	319,275	825	129	B	OH9AYZ	1,728	36	16	B	20	
J44ABA	20,541	167	41	19	B	RA0FF	196,245	623	109	C		EA3AJW	250,848	624	134	B	HB0ARF	85,347	327	87	B	20
J11CUP	15,960	133	40	20	B	UA0DC	82,005	385	71	C		EA1BAE	105,138	354	99	B	HB9AAQ	5,475	73	25	C	20
J17VUR	15,120	120	42	B	UA9BT	10,062	86	39	C		EA2BDS	101,727	381	89	B	HB5H	187,920	1080	58	C	40	
J40BJY	14,964	116	43	B	UA9OS	4,617	57	27	C		EA1EZZ	53,592	406	44	B	<b>Switzerland</b>						
J47ASD	14,160	118	40	B	<b>R&amp;AFA</b>	798	38	7	C		EA1F5L	50,151	229	73	B	HB0DAX	5,040	40	42	A	20	
J2AMZ	12,168	104	39	B	RA0FN	16,626	163	34	B		EA4AAK	22,680	126	60	B	OH9AYZ	1,728	36	16	B	20	
JN7QJA	11,712	122	32	B	UA0LCZ	4,104	76	18	C		EA1FB	18,876	121	52	B	HB0ARF	85,347	327	87	B	20	
J4BAJE	11,466	98	39	B	RA9KSX	63,336	406	52	C		EA5BS	16,335	121	45	B	HB9AAQ	5,475	73	25	C	20	
J41XUY	10,323	111	31	13	B	RA9CWW	(RA9CQK,op)					EA3BIM	15,312	116	44	B	HB5H	187,920	1080	58	C	40
JF1LAU	8,988	107	28	B							EA3EAB	54,870	295	62	B	<b>Italy</b>						
JH1KSB	8,835	95	31	B							EA5DCL	41,949	73	79	C	HB3KB	12,884	441	108	A	20	
J41AMX	7,644	98	26	B							EA5ZS	36,036	273	44	B	HB0TAX	22,110	124	55	B	20	
JR1LQK	6,240	65	32	B							EA7KWF	188,442	1102	57	C	HB0ANC	18,408	118	52	B	20	
J45GSG	5,616	72	26	B							EA5FID	67,905	503	45	B	HB0YV	13,938	101	46	B	20	
JH1PXY	5,532	71	26	B							EA3ALV	20,816	549	128	C	HB0ZU	127,031	402	102	B	20	
J41XPW	4,275	75	19	B							EA4KA	661,635	1035	169	B	IC2AHB	227,031	569	133	B	20	
J42FSM	3,906	42	31	B							EA4NQ	146,955	485	101	C	IC2HII	96,657	319	101	B	20	
JF7GDF/7	3,600	60	20	B							EA4FC	103,005	315	109	B	IC4AKH	81,168	304	89	B	20	
J1RCB	3,420	60	19	B							EA4WQ	15,280	143	42	B	IC4AVY	71,280	264	90	B	20	
J41MQS	3,243	210	7	B							EA5EUD	15,257	125	42	B	IC4FCA	42,624	192	74	B	20	
J41RWD	3,010	1080	146	29	C						EA5DCL	41,949	682	62	B	IC2AJ	20,054	134	52	B	20	
<b>JH5XP/1</b>	1,470	1798	217	C							EA8ZS	36,036	273	44	B	IC1AOU	20,196	132	51	B	20	
JH7XGN	988,632	1592	207	C							EA7KWF	188,442	1102	57	C	IC2BHE	11,352	86	44	B	20	
J41ELY	942,795	1533	205	C							EA5FID	67,905	503	45	B	IC1YEE	13,938	101	46	B	20	
JH7WKO	878,574	1618	181	C							EA3ALV	20,816	549	128	C	IC2UFY	2,046,120	2890	236	C	20	
JN7KRG	861,360	1480	194	C							EA4NQ	151,029	519	97	B	IC1ZD	343,266	743	154	C	20	
JH7DNO	856,518	1584	178	C							EA3ALV	3,900	123	39	C	IC2PDT	215,625	625	115	C	20	
JR5NZC	501,750	1149	164	B							EA4NQ	13,899	302	93	B	IC2OZ	10,692	132	27	C	20	
J41JKG	47,150	223	44	C							EA3ALV	10,050	250	52	C	IC1K	10,692	132	27	C	20	
J42AXB	47,326	339	78	C							EA4EKA	10,050	250	52	C	IC1KCF	131,565	895	49	C	40	
J43SSK	46,170	339	78	C							EA4NQ	10,050	250	52	C	IC2BVG	9,672	124	26	C	40	
J47NFG	44,361	279	53	C							EA4NQ	10,050	250	52	C	IC2SWD	5,220	58	30	B	40	
J42QVP	40,740	194	70	C							EA4NQ	10,050	250	52	C	IC1FPG	141,288	812	58	C	20	
J42VQF	27,864	174	54	C							EA4NQ	10,050	250	52	C	IC2ZU	27,037	27	27	C	20	
JF3NDW	23,244	149	52	C							EA4NQ	10,050	250	52	C	IC3KSE	2,583	41	21	B	20	
J71ABD	16,974	123	46	C							EA4NQ	10,050	250	52	C	IC1FC	22,176	224	33	C	20	
J42QXP	15,867	123	43	C							EA4NQ	10,050	250	52	C	IC2PMM	5,940	90	22	B	20	
J45AIQ	14,820	130	38	C							EA4NQ	10,050	250	52	C	IC1DTC	20,105	545	133	C	20	
J41LHD	14,022	114	41	C							EA4NQ	10,050	250	52	C							

Faroe Islands															
OY1CT	44,676	204	73	C	RW3GU	8,190	105	26	C	HO3A	388,440	780	166	B	
Denmark															
OZ8SW	73,164	268	91	B	UA3UCD	1,632	32	17	C	Honduras	VE3BW/HR6				
OZ5UR	37,152	172	72	B	RZ6LG	12,384	131	27	C	RA6LW	10,611	121	40		
OZ4F	32,232	158	68	B	UA3LID	11,997	129	31	C	RA3AF	16,138	42	13		
OZ8AE	175,320	487	120	C	RV6YB	16,200	135	40	C	RA1OKT	15,990	130	41		
OZ9RO	121,770	369	110	C	UA3LPF	6,630	85	26	C	RA4AO	5,928	76	26		
OZ7NB	15,756	101	52	C	UA4AAO	5,772	74	26	C	RA1OKT	15,990	130	41		
OZ1APA	513	19	9	B	RA6LRI	5,772	74	26	C	RA3LPF	6,630	85	26		
OZ4UN	31,548	239	44	C	RW1ZM	52,593	373	47	C	RA4AAO	5,928	76	26		
OZ6TL	9,000	100	30	B	RX6LRI	5,772	74	26	C	RA1OKT	15,990	130	41		
OZ7YL	6,240	80	26	C	RW1ZM	52,593	373	47	C	RA4AAO	5,928	76	26		
Netherlands															
PA0ADT	38,796	212	61	A	UR5XAJ	55,680	232	80	B	Puerto Rico	WP4JXD	52,272	242	72	
PA0AJR	61,383	259	79	14	UT5UN	37,584	216	58	B	WP4ALN	63,012	236	89	A	
PA0ELD	48,601	216	75	B	UW5TE	33,930	174	65	B	NP4FW	4,485	65	23	A	
PA0RBS	26,832	172	52	C	UT5PX	13,860	110	42	B	WP4KOE	2,952	41	24	B	
PA3GUA	25,598	158	54	B	UR5WII	12,753	109	39	C	UT4UZ	580,272	1232	157		
PA3GKT	23,328	144	54	B	UR4PWC	179,010	510	117	C	Pj5JP	39,216	304	43	B	
PA3DUS	18,048	128	47	B	UW5UO	192,720	584	110	C	St.Maarten	TIT/N4MO	235,809	1379	57	
PA3FZZ	14,061	109	43	B	UT1FA	136,068	391	116	C	Saba	V47KP	(W2OX,op)			
PA3BBP	6,435	65	33	C	UR5UW	132,435	405	109	C	St.Eustatius	2,582,139	2999	287	C	
PA0INA	1,092	28	13	B	UW5ZZ	5,832	81	24	C	Anguilla	VP2EEI	(K3DL,op)			
PA3DZN	1,730,703	2587	223	C	UT1ZZ	72,600	550	44	C	Multicarrier	2,422,452	3013	268	B	
PA0CLN	439,425	837	175	C	UY8IF	59,340	430	46	C	VP9ID	(AJ2U,op)				
PA0JED	44,472	218	68	C	UO6F	14,058	142	33	C	Bermuda	1,799,424	2343	256	A	
PA3FDO	21,780	132	55	C	UR4QKD	6,486	94	23	B	Mexico	XE2/W5WMU				
PA3DMH	3	1	1	B	UTQOA	5,340	89	20	C	St.Kitts & Nevis	XE1BEF	(414AC,op)			
Slovenia	559D	227	74	A	UW4JM	552	23	8	B	St.Costa Rica	597,312	1088	183	B	
S57DX	730,944	1296	188	B	UW5WF	117,768	701	56	B	St.Rican	145,200	440	110	B	
S58MC	266,040	739	120	C	US9Q	US9Q(Ap,op)	80,355	487	C	VE4YU/XE	VE1BEF	(414AC,op)			
S56A	92,400	308	100	B	UY5QO	38,640	280	46	C	Philippines	810,855	1461	185	C	
S57XX	64,701	273	79	B	UY5WAL	38,220	245	52	B	Hawaii	1,04,454	1691	198	C	
S51T	15,312	116	44	B	UY2ZG	30,510	226	45	C	WB6FZH/KH6	7M4AZB,JA4HHH,JO4UU,JR0XHLL,ops				
S59L	13,080	109	40	B	UY3HA	19,536	148	44	C	Mexico	943,191	1624	193	C	
S58A	1,883,007	2583	243	38	UY1UA	11,520	120	32	C	St.Kitts & Nevis	JA2JW,JA2LZ,JA2MCN,JA2NFB,JA2NFO,JA2PCP,JA2PKU,V				
S55R	775,698	1679	154	C	UY1XU	30,846	194	53	C	Costa Rica	1,04,454	1691	198	C	
S59AA	376,320	784	160	C	UY2KQ	30,574	129	30	C	Philippines	1,04,454	1691	198	C	
S55A	218,592	552	132	C	UY2ARV	11,610	129	30	B	Hawaii	1,04,454	1691	198	C	
S52GP	187,572	539	116	C	UY2AV	8,346	107	26	B	WB6FZH/KH6	7M4AZB,JA4HHH,JO4UU,JR0XHLL,ops				
S57AW	125,130	430	97	B	UY2BTB	10,426,608	217	203	C	Costa Rica	1,04,454	1691	198	C	
S56U	28,128	293	32	C	UY2BU	1,04,268,608	217	203	C	Philippines	1,04,454	1691	198	C	
S57M	22,134	217	34	C	UY2C	5,508,508	1132	173	C	Hawaii	1,04,454	1691	198	C	
S53X	41,769	357	39	C	UY2D	350,598	823	142	C	WB6FZH/KH6	7M4AZB,JA4HHH,JO4UU,JR0XHLL,ops				
S53F	8,712	121	24	B	UY2E	194,544	579	112	C	Costa Rica	1,04,454	1691	198	C	
S57II	75	5	5	C	UY2F	6,816	71	32	C	Philippines	1,04,454	1691	198	C	
S52AW	198,012	1138	80	C	UY2G	194,544	579	112	C	Hawaii	1,04,454	1691	198	C	
S53M (S51TA,op)	196,896	1172	56	C	UY2H	194,544	579	112	C	WB6FZH/KH6	7M4AZB,JA4HHH,JO4UU,JR0XHLL,ops				
S57J	80,262	546	49	B	UY2I	194,544	579	112	C	Costa Rica	1,04,454	1691	198	C	
S50K	190,878	1097	58	C	UY2J	194,544	579	112	C	Philippines	1,04,454	1691	198	C	
S51F	82,830	502	55	C	UY2K	194,544	579	112	C	Hawaii	1,04,454	1691	198	C	
S54AA	105,600	704	50	C	UY2L	194,544	579	112	C	WB6FZH/KH6	7M4AZB,JA4HHH,JO4UU,JR0XHLL,ops				
Sweden															
SM0BDS	78,933	317	83	B	YU1GN	16,983	111	51	A	Australia	VK5GN	736,020	1305	188	
SM4MX	53,655	245	73	B	YU7TY	149,040	432	115	B	St.Kitts & Nevis	N7ET/D7U	23,406	166	47	
SM7ATL	46,176	208	74	B	YU7YK	91,485	321	95	B	St.Eustatius	DU3NXE	39,648	236	56	
SM5CIL	27,666	174	53	B	YU1ZD	48,279	209	77	B	Indonesia	DU5KAI	185,856	512	121	
SM0NJO	8,442	67	42	B	YU7SF	24,624	152	54	B	South America	DU5KAPN	14,136	124	38	
SM2MDN	42,056	1032	136	C	YU1AD	1,402,464	2087	224	C	Uruguay	DU5KAPZ	1,296,565	2615	229	
SM6CPY	312,480	672	155	C	YU1BT	1,04,268,608	217	203	C	Argentina	DU5KAV	1,296,565	2615	229	
SM0JHF	170,163	511	111	C	YU1OL	758,508	1132	173	C	Ecuador	DU5KAV	1,296,565	2615	229	
SM3PZQ	120,240	501	80	C	YU1OJ	350,598	823	142	C	Australia	DU5KAV	1,296,565	2615	229	
SM4LJ	4,956	59	28	B	YU1T	214,464	518	125	C	St.Kitts & Nevis	DU5KAV	1,296,565	2615	229	
SM3DMP	55,950	373	50	C	YU1TA	194,250	518	125	C	Indonesia	DU5KAV	1,296,565	2615	229	
SM3ZQV	53,091	347	51	B	YU1TB	182,790	795	54	C	South America	DU5KAV	1,296,565	2615	229	
SM4BWW	1,365	35	13	B	YU1TC	133,093	873	47	C	Uruguay	DU5KAV	1,296,565	2615	229	
SM7BHM	12,150	135	30	B	YU1TD	106,134	722	49	C	Argentina	DU5KAV	1,296,565	2615	229	
SM0KV	5,589	81	23	C	YU1TAU	10,212	48	23	C	St.Kitts & Nevis	DU5KAV	1,296,565	2615	229	
Poland	SP5AGU	12,825	95	45	A	YU1EXY	7,062	107	22	B	South America	DU5KAV	1,296,565	2615	229
SP9BBH	254,820	685	124	B	YU1ZP	57,933	471	41	C	Uruguay	DU5KAV	1,296,565	2615	229	
SP6NIC	233,226	617	126	B	YU1ZQ	32,508	258	42	B	Argentina	DU5KAV	1,296,565	2615	229	
SP1AEN	159,507	479	111	B	YU1ZU	39,975	325	41	C	Uruguay	DU5KAV	1,296,565	2615	229	
SP6YGB	69,720	280	83	B	YU1CC	5,610	85	22	C	Argentina	DU5KAV	1,296,565	2615	229	
SP6DMJ	49,290	265	62	B	YU1TA	175,566	1009	58	C	Uruguay	DU5KAV	1,296,565	2615	229	
SP3FAR	47,400	200	79	C	YU1TB	166,896	976	57	C	Argentina	DU5KAV	1,296,565	2615	229	
SP6BEN	43,164	218	66	B	YU1TC	178,790	795	54	C	Uruguay	DU5KAV	1,296,565	2615	229	
SP3XRM	42,408	186	76	B	YU1TD	123,093	873	47	C	Argentina	DU5KAV	1,296,565	2615	229	
SP3KBM	31,185	165	63	B	YU1TE	101,464	394	52	B	Uruguay	DU5KAV	1,296,565	2615	229	
SP3MY	10,374	91	38	B	YU1TF	23,370	190	41	B	Argentina	DU5KAV	1,296,565	2615	229	
SO9QOM	1,995	35	19	B	YU1TG	38,007	309	41	C	Uruguay	DU5KAV	1,296,565	2615	229	
SP2AVE	124,740	378	110	C	YU1TH	32,508	258	42	B	Argentina	DU5KAV	1,296,565	2615	229	
SP4AGH	38,502	186	69	C	YU1TI	31,122	266	39	C	Uruguay	DU5KAV	1,296,565	2615	229	
SP1MHW	28,638	129	74	B	YU1TJ	31,122	266	39	C	Argentina	DU5KAV	1,296,565	2615	229	
SP7TQI	30,987	313	33	C	YU1TK	174,522	1003	58	C	Uruguay	DU5KAV	1,296,565	2615	229	
SP4JWR	7,920	132	20	C	YU1TL	174,522	1003	58	C	Argentina	DU5KAV	1,296,565	2615	229	
SP5ELA	6,003	87	23	C	YU1TM	106,134	722	49	C	Uruguay	DU5KAV	1,296,565	2615	229	
SP5SGH	1,632	34	16	C	YU1TN	41,646	394	52	B	Argentina	DU5KAV	1,296,565	2615	229	
SP4Z	21,888	192	38	C	YU1TO	109,074	686	53	C</						