

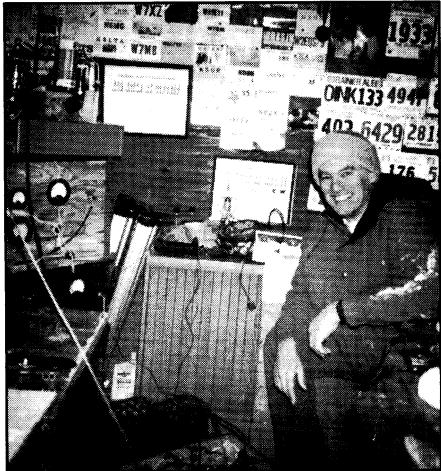
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CW Results, 1996 ARRL International DX Contest

Watch for the Phone results next month in October QST.

Ham radio and geography go hand in hand. In the ARRL International DX contest this year, where you were had everything to do with how you placed! Basically—and this is nothing new—if you were in the US or Canada, the closer you were to Europe, the higher your score was. If you were DX, the closer you were to the US and Canada, the higher your score! Of course, then one must consider distance from the auroral zone and other geomagnetic activity in order to find optimal locations for the ARRL DX contests.

But the contest is about more than making high scores. It is about learning and experiencing different aspects of this hobby. And just as contesting is a niche within Amateur Radio, there are subareas within contesting! I can identify five major subareas: (1) Operating—getting the most out of your equipment and antennas, and experiencing the joys of communication. (2) Competition—the sheer thrill of trying to best your closest competitors. (3) Travel and Adventure—why not combine a contest with a DXpedition? (4) Friends—multi-operator contest weekends can be among the most satisfying times for hams to work together and have fun. (5) DXing—before, during, and after the event. DX contests always draw heavy activity from lots of rare and interesting places, and all those DXpeditions have to get on and test those antennas before the contest! Some people really prefer one or two of the above activities. Others like them all. So, regardless of conditions, you can have a blast in the ARRL DX Contest.



Now here's a "real shack." Mike, W7DRA, operated Single Band 80 from WWA.

Operating and Competition

The 1996 ARRL CW DX contest, held last February, is a terrific example of low-sunspot contesting! Practically no sunspots caused virtually no openings on 10 meters, and then at night the MUF dropped below 7 MHz, making 80 and 160 meters the top performers! There's no doubt the high power contest winners—Greg, W1KM, and Tree, N6TR, at TI1C—had a blast as they cruised to the end buoyed with great low-band scores. The 1996 contest was one of those where all that work maximizing the 80 and 160-meter signals paid off. And W1KM and TI1C have world-renowned signals on 80. Gus, VO1MP, enjoyed taking the Number One spot in the US and Canada on low power, while Paul, WX9E, donned his swim trunks and put FS5PL on for a terrific low-power all-band DX score. Paul recorded an excellent 206-QSO first hour for his best-ever, enroute to over 3800 QSOs with 100 W. Tired of a low QSO rate from the Midwest? Head to the Caribbean, where you don't need an amplifier to win! Our QRP winners, AA2U and ZF2OP (K3DI), respectively, had to really battle for their wins over KA1CZF and N1AFC in the US, and KP4DDB and PY2OU overseas. Tom, K5IID, placed well from West Virginia.

The Top Band of 160 meters found K1ZM with a monster single-band score from the US,

followed by WB9Z, and a flurry of European activity was led by winner SP5GRM on the DX side. In a repeat of 1995, W1MK ran away with 80-meter honors and was again followed by WE3C. The 40-meter band has always provided a place where stations in the Western US can be very competitive. That was true again in 1996, with a terrific score and victory by Chuck, NJ6D, operating from N7DD. Chuck ran past W5WMU, KC7EM and N6MU. On the DX side, PY0FF enjoyed his great southerly station location to handily surpass John, ON4UN, who lamented his decision to operate 40 instead of 80 this year!

So from the US and Canada, in 1996 it looks as if the East Coast rules 160 and 80, and the West Coast dominated 40. How about the Midwest? Well, the Midwest had a decent chance on 20. K8GL, N4ZZ and three Illinois stations—K9KU, N4OGW/9, and K9QVB—all made the top six behind the huge 448k score of K1RM.

From the DX side, 20 is the band to run the US and Canada! Joe, W5ASP, went a bit southeast of home and won the band, operating from ZF2NE. EA7KW brought home second place with a great score from Europe. Twenty was open for long periods in 1996, but the aurora and weak signal quality made the band less productive than normal.

The 15 and 10-meter bands were both marginal. Karl, K9BGL, put in the time and enjoyed his up-and-coming superstation to win 15 in the US, while HC2SL enjoyed his equatorial spot to win for the world. HC2SL has always been such a joy to work on CW for

Top Ten

W/VE Single Operator, QRP, CW

AA2U	266,490	VO1MP	1,066,896
KA1CZF	109,224	W2UP	870,240
N1AFC	106,272	KF2ET	869,868
K5IID	103,950	W2TZ	857,466
N7IR	74,052	AC1O/4	851,760
N1CWR	62,208	N4ZR	573,120
N5NMX	43,146	WA2SRQ	542,445
N9LMU	42,453	WA9QOA	456,504
K2JT	31,746	N8AA	427,770
W3TS	30,222	W6JTI	421,008

Top Ten

DX Single Operator, QRP, CW

ZF2OP (K3DI,op)	470,925	FS5PL (WX9E,op)	3,066,228
KP4DDB	467,784	P40R (K4UEE,op)	2,758,860
PY2OU	419,166	KP4VA (KP4TK,op)	2,358,048
I3BBK	70,848	V47NZ (NOBSH,op)	1,991,409
YU1EA	57,600	HK0/K1WGM	1,320,174
F6OIE	55,350	P4/K2LE	789,450
G0TDX	43,365	HK0TCN (W7TSQ,op)	655,866
WP4JXD	30,927	PJ5JP	420,750
UX2WN	24,786	LU1EWL	413,100
JA6UBK	22,842	VP9MZ	358,020



Twelve-year-old Laura, AD4PU, operated Single Operator Assisted from her NC shack.

W/VE Region Leaders

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

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)		
AA2U	266,490	A	K5IID	103,950	A	N9LMU	42,453	A	N5NMX	43,146	A	N7IR	74,052	A
KA1CZF	109,224	A	N1CWR	62,208	A	N8AXA	5,031	A	KC5RAS	17,028	A	W8QZA/6	28,182	A
N1AFC	106,272	A	KV8Z	27,612	A	N9RIT	4,428	A	KI0G	10,692	A	N6AZR	27,027	A
K2JT	31,746	A	KN4QS	14,514	A	WD9IAB	2,349	A	AB5OU	4,284	A	AA6EQ	10,488	A
W3TS	30,222	A	KE2WB	3,570	A	AA8RR	297	A	WA0RPI	1,872	A	N7JXS	7,437	A
VO1MP	1,066,896	B	AC1O/4	851,760	B	N8AA	427,770	B	W0UO	403,209	B	W6JTI	421,008	B
W2UP	870,240	B	N4ZR	573,120	B	VA3DX	363,204	B	AA0SQ	117,120	B	W7YAQ	235,161	B
KF2ET	869,868	B	WD4AHZ	335,400	B	K9JCA	217,080	B	W7HS	107,280	B	KJ6HO	220,248	B
W2TZ	857,466	B	WR3O	329,427	B	KO9Y	210,456	B	K0OAM	99,360	B	KC6CNV	214,896	B
WA2SRQ	542,445	B	N8VV	216,972	B	K9MMS	139,650	B	VESSF	86,832	B	K6ATV	133,632	B
W1KM	2,824,638	C	KT3Y	2,090,172	C	W9RE	1,605,915	C	N2IC/0	1,269,696	C	NN7L	486,000	C
N6BV	2,439,315	C	K4PQL	1,558,746	C	K9MA	793,854	C	K5MR	1,088,550	C	WA7FAB	407,520	C
N2LT	2,374,506	C	W4XJ	1,059,870	C	WB9IIQ	606,060	C	W5UN	1,058,145	C	W6YA	357,984	C
W2SC	2,313,552	C	W3VT	594,612	C	VE3KP	409,728	C	NB6U	924,984	C	W6TKF	309,120	C
NX1H	2,294,100	C	WA6KUI	537,075	C	N4XM	406,608	C	WB5VZL	773,490	C	NW6S	277,950	C

The Suffering Midwesterner Goes East!

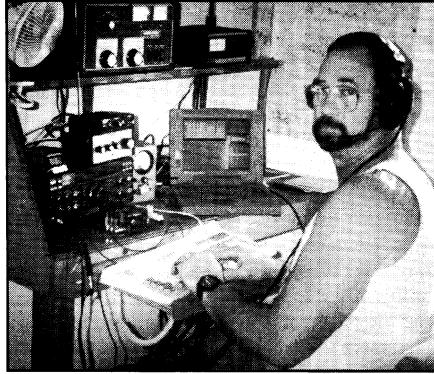
I have never operated the ARRL DX contest from east of Chicago. After lots of years of being beaten by East Coast stations (and occasionally western and southern stations too!) I finally found a great reason and chance to try the ARRL DX CW test "W1 style"!

After being nominated by my club, The Society of Midwest Contesters, as a team leader in the World Radiosport Team Championship (WRTC), I selected Randy, K5ZD/1, as my partner for the competition. While I have known Randy for many years, we had never actually *operated* together. We felt that it might be a good opportunity to help our effort at San Francisco for the WRTC if we operated a contest together first—to learn each other's styles and habits. The first and only chance we had was the ARRL DX CW Contest in February. I bought a ticket to Providence with the only real objective being that of practicing for WRTC. Randy has a nice two-tower station in exurban Boston, and I knew we could do well in the contest, in addition to the fun of camaraderie and planning for WRTC.

I very nearly did not make it to Providence! A huge snowstorm was blanketing New England, and my flight from Chicago was the last one allowed to land. The flight was delayed, and the normally 45-minute drive to Randy's shack would take at least an hour. We arrived at the shack about four minutes before the contest started. Randy sat me on 40 meters and said here is the keyer, computer, antenna switch, and rotator—go at it! That was my introduction to East Coast operating! But—wow!—what a difference. The 1000 miles I had traveled made the European signals sound like the W1s I was so used to hearing at home! And I could hear stations I had never heard before—smaller stations, deeper into Europe, and there are *lots* of them!

But I didn't hear the Asian and Pacific stations as well as I did from the Midwest. Randy's antennas are optimized for Europe, and when over 90% of a weekend's contacts are with Europe, this is good! I was truly amazed at the DX that would answer CQs on the low bands. And even more flabbergasted with how easy it was to work Europeans on 40 meters at 2:30 PM, Eastern Time! I had heard this happening from my Midwest locations, but never realized just *how* great it was!

It turned out that KC1XX and his crew beat us, but we had a great time and lots of fun—especially with the competition. The one thing I was worried about was that I may come home with a defeatist attitude, or, as I was warned by Randy "You may be ruined forever!" But I think it made me better. I look forward to each contact from home now more than ever, because I know it is more difficult! And I can't wait for the day when thousands of BY stations are on the air!—Dave Patton, WX3N



Joe, K8JP, pounds out another QSO for his fifth-place Single Operator win from VP5JP.

New Jersey. Their lowest numbers were 2 contacts with Manitoba; 3 with Washington, DC, 5 with North Dakota, and 6 each with South Dakota and Wyoming.

The multiop two-transmitter class in the US has been a battleground for some *big* stations and *big* efforts. In 1996 the N2RM station joined the fray (usually multi-transmitter) after a snowstorm caused travel delays in reaching the station. The N2RM station is located in the woods without some of the usual amenities (like a bathroom or running water!) and, unfortunately for the RM crew, an oversight in planning found the boys without the usual portable toilet! Nevertheless, they put together nearly 5M points only to be beaten by a great crew of operators in Massachusetts who had the added advantage of a toilet at K1AR/K1EA.

From Africa, TU5A held forth for easy QSOs and a welcome mult to win the DX side in Multi-two. And the multitransmitter class from overseas saw the fine station of Mr 160 meters—Jack Wheeler, KH6CC—win the world! AA6KX (and W6CYX), who operated from CC says "[Jack's] QTH is at about the 2000-foot level on the northeast side of Mauna Kea (total height almost 14,000 feet) on the Big Island. From his tower you look straight down the slope of the volcano to the ocean, and then it's a straight shot off to the US." KH6CC doesn't have commercial power and relies on a 16-kW generator. The station uses a homebrew amp with pre-WW II tubes. Great job!

all of us for many years. On 10, LU7DW led the all-Argentine top four, and W6KVF found enough QSOs to win the band from Stateside.

Multioperator efforts bring out the camaraderie that hams are famous for—sort of like bringing the tower-raising party inside!

Although the single operator, assisted category isn't exactly multiop, one must rely on others for those juicy DX spots! Only your real friends would give you a tip that PY0TI was on 20 meters with five minutes left in the contest! KI1G at K1NG took advantage of great spotting in the Northeast US to win over K3WW, while LU6BEG piloted LU4FM to the packet peak from Argentina.

Probably the most competitive class in

contesting is the multioperator single transmitter class, and 1996 was no exception. In the US a fired-up Matt, Stu and Krassy at the KC1XX superstation beat K5ZD/1 (see the sidebar). From the DX side, a nice battle ensued between South Americans PJ9C and P49V—with Curacao beating Aruba in the end—but not by much!

Other nice efforts where friends got together and handed out the mults were to be found at North American stations VP2EN and V31EV, and the Mexican standoff between XE2KB and XE2EBE. VP2EN reports making 506 California QSOs, followed by 279 with Pennsylvania, 255 with New York, 209 with Texas, 195 with Illinois, and 191 with

Nearly all stations entering the ARRL DX Contest in the Multioperator Multitransmitter class are world-class super-stations. In 1996, W3LPL, K1KI and K3LR *repeated* their 1-2-3 finish of 1995—a trio of amazing feats! Each of these operations has seasoned crews of old and new friends who band together in pursuit of that awesome weekend of operation that they will talk about for years.

DXing

Contest DXing is a blast. In 1996, KC7V reported working five HS stations! We had the battle of HKØ, with W7TSQ and K1WGM being easy QSOs for all of us. TA2BK lit up 160 and 80 meters, as did 4K8F, TF3DX/1, VK5GN and 5X4F. Those are some pretty nice catches! Other call signs you may have heard include A92Q, 7Q7EH, 9R1A, 9U/F5FHI, FR/DL1DA, OX3REB and Z2/DL5AWI. And many of the DXpeditioners were on before, during, and after the contest, including VP2EWW, 6Y5XX, VP5JP, V47NZ, TO5A, EA8EA, V31JZ, FS5PL and many others. Thanks for giving us the mult and the many fills for our nine-band DXCC!

For adventure, Tree, N6TR, told us about his trip to TIIC: "I thought I had left the floods and mudslides behind me, but they were even worse in Costa Rica! Normally, I would have arrived at the station a couple of hours after landing at the airport (a one-hour drive). Instead the road was closed with 17 mudslides! So I slept in town and the next day we took the long path. It ended up taking about eight hours and I had some of my first four-wheeling experiences! We found bypasses around other slides by using mountain dirt (read: mud) roads. One of them took 1 1/4 hours. We got a good look at one slide—a wall of mud at least 20 feet high all the way across the road."

Next year will see a welcome upswing in solar activity! See how many of the contest niches you can fill! Look for the results of the 1996 ARRL International DX contest phone portion next month.

SOAPBOX

W/VE

I had a great time, even considering the band conditions (KI4RO). It was great to work BY5XX on two bands (KE9EX). I sure missed 15! I had to work twice as hard as last year just to stay at the same score (KJ9C). You could make QSOs on 80 during

W/VE Single Operator, High Power, CW

Call Sign	Score	160	80	40	20	15	10
W1KM	2,824,638	135/47	560/71	838/75	1152/84	118/54	4/3
N6BV	2,439,315	91/44	294/58	748/76	1319/91	107/46	6/2
N2LT	2,374,506	71/38	302/62	645/75	1384/94	85/47	2/2
W2SC	2,313,552	82/43	321/66	751/76	1195/79	101/47	6/3
NX1H	2,294,100	60/34	343/65	713/74	1374/86	57/39	2/2
K3ZO	2,269,890	54/31	404/71	742/73	1088/84	103/50	11/5
KT3Y	2,090,172	63/34	339/66	683/75	1120/80	128/41	5/2
AA1K	1,781,532	65/32	229/55	554/70	1152/81	83/45	1/1
W9RE	1,605,915	40/26	224/59	388/65	1168/94	85/37	0/0
K4PQL	1,558,746	35/25	233/50	551/75	888/84	162/44	0/0

W/VE 160

Call Sign	Score	160	W/VE 40	W/VE 15
K1ZM	57,267	N7DD (N6D,op)	279,864	K9BGL 23,556
WB9Z	23,373	W5WMU	249,210	KR4DL 21,948
K1IK	23,040	KC7EM	245,763	A12C 18,126
W2VO	17,289	N6MU	188,838	N4BP 13,500
AA8U	11,115	W3GH	185,913	WA1FCN 12,420
K4TEA	10,578	K6LEB	113,955	K9OM 11,880
N8EA	9,288	W9LT	93,960	W9GIL 11,592
N6SS	5,670	K5KT/6	84,219	W4JKC 10,584
K2FL	4,212	N9JCL	48,678	WA9BOW 8,400
VE3OSZ	3,168	W4NTI	48,441	WB5UDX 5,568

W/VE 80

Call Sign	Score	W/VE 80	W/VE 20	W/VE 10
W1MK	214,485	K1RM	448,050	W6KFV 744
WE3C	142,911	K8GL	335,160	KE5FI 675
K3RR	117,648	N4ZZ	315,861	KB6JOX 225
K9DX	111,888	K9KU	245,376	K1DII 135
WA4SVO	41,220	N4OGW	238,920	K8CH 45
K3JGJ	39,420	K9QVB	237,405	KC5ALW 45
K1VWL	34,161	N7TT	209,352	WA3EEE 30
W9XT	26,712	WB9HRO	179,265	WB5CRG 24
K8OQL	25,704	K7JYE	135,300	WD8PNL 3
KD1SG	24,939	W9OF	120,228	VE3HX 3

DX Single Operator, High Power, CW

Call Sign	Score	160	80	40	20	15	10
T11C (N6TR,op)	4,658,634	301/50	615/55	1227/57	1527/59	1382/55	159/22
TO5A (YT6A,op)	3,351,846	288/50	488/51	931/60	1299/59	1013/58	0/0
VP2EWW (AA7VB,op)	3,112,200	302/53	641/58	826/59	837/58	1034/57	0/0
EA8EA (OH2MM,op)	2,978,940	152/40	578/54	982/55	1207/56	871/57	0/0
VP5JP	2,857,428	331/47	447/51	747/54	1301/58	507/53	118/13
4G8UO	1,347,429	204/34	390/43	394/43	1173/56	96/23	0/0
OK1RF	1,332,114	91/23	365/42	717/45	910/56	171/31	0/0
IR2W (I2VXJ,op)	1,321,515	11/10	216/37	837/53	918/57	277/38	0/0
OA4SS	1,308,540	0/0	161/42	471/52	498/52	645/55	155/25
SN2B (SP8ENR,op)	1,164,546	127/28	329/39	482/47	1133/57	16/15	0/0

DX 160

Call Sign	Score	DX 40	DX 15
SP5GRM	23,835	PY0FF	HC2SL 265,002
9A2TW	16,368	ON4UN	LU7FJ 214,776
I3VHO	14,767	HG1P (HA1TJ,op)	PY1KN 83,268
OY1CT	11,424	S53R	YV4ABK 33,927
9A4D	9,828	9A3IQ	XE1/JA1QXY 32,832
JE0MUV	8,019	YT7A (YU7GO,op)	EA2IA 22,686
HA8BE	5,589	SP7GIQ	HG1G (HA1DAE,op) 22,080
XE2MX	5,292	LZ5W (LZ5DB,op)	F5GHP 15,606
JA7NI	5,148	E8ACN	CM8TW 14,880
WP4IIW	4,896	XE2DV	YV7QP 14,787

DX 80

Call Sign	Score	DX 20	DX 10
9A3A/4U	186,648	ZF2NE (W5ASP,op)	LU7DW 13,776
EA1AK/EA8	140,562	EA7KW	LU1FNH 13,590
S50U	105,693	N4MO/HR6	LU2DW 2,475
4N1A (4N1DXX,op)	90,663	GM3POI	LU8AQE 189
T93M	86,112	O1BLQ	
DL1AO	70,065	G10KOW	
YU7JX	64,242	RW1ZA	
S57M	62,370	4N0AV (YU7AV,op)	
S51IX	57,684	OH0MYF (OH6YF,op)	
9A1HDE	56,088	9A7A (9A4RX,op)	

DX 40

Call Sign	Score	South America	Potomac Valley Radio Club
W1KM	Frankford Radio Club	Steve Franke, WB9IIQ, and John Brosnahan, WØUN	
K1ZM	George Schultz, WØUA; KØZZ Memorial	Dean Straw, N6BV	
W1MK	Thomas Rylander, SM3DMP	Fred Race, AL7JO; DL1FF Memorial	
N7DD (N6D,op)	Northern Arizona DX Assn	Jim Knutson, KDØAV	
K1RM	QSLs by W4MPY	Thomas P. Gannon, W3YX, Memorial Bencher Inc	
K9BGL	Carl Luetzelschwab, K9LA	Ft Wayne DX Assn	
W6KFV	Green River Valley ARS	Dr Jerry Griffin, W8MEP	
VO1MP	Dauberville DX Assn	Willamette Valley DX Club	
AA2U	Tod Olson, KØTO		
K1NG (K1G,op)	Richard Hallman, K13V		

Call Sign	Score	Multioperator, Single Transmitter	
World	PJ9C	John Brosnahan, WØUN	
Asia	JA7YAA	Western Washington DX Club	
Europe	TM1C	The Radio Place	
North America	VP2EN	Steve Morris, K7LXC, and Up the Tower	
Oceania	VK5GN	Gary Stilwell, K16T, and Glenn Stilwell, WR6O	

Call Sign	Score	Multioperator, Two Transmitters	
World	TU5A	ARRL	
Europe	IQ4A	Jim George, N3BB	

Call Sign	Score	Multioperator, Unlimited	
World	KH6CC	H Stephen Miller, NØSM	
Asia	JA1YDU	Hajime Kato, JO1RUR/2, KHØG	
Europe	9A1A	Texas DX Society	

the late afternoon both days, but conditions were not optimal (WB2AMU). I couldn't even muster a token QSO on 10! (KK4SM). I had to scrounge for the QSOs on 20, and fight for the mulls on the low bands (WR3O). It's hard to do well from the West Coast when there's no JA run on 15! (KG6LF). I only heard seven countries (VE6BMX). There's only one sunspot left, and it's getting tired! (N3UMA). I was a little disappointed I couldn't make a QSO on 160 or 10, but I had a great time on the other bands. Twenty was awesome! (KB3AFT). I had a good run going to JA the last hour—when my XYL informed me that the car was on fire. At least something was hot this weekend (AA7BG). While this was a learning experience, I had fun! (WAGKUI). It was really nice to hear good signals coming out of Europe (N2MZH). Senior Night Basketball + (3 milkings × 80 cows) + flu = lousy score (N9JF). Who said the bands were dead during the low part of the sunspot cycle? (WA8AHK). Conditions weren't bad at all for the bottom of the cycle and from the Black Hole (K9MA). I needed a bigger antenna for 15 on Saturday—I couldn't hear *any* of the European spots (K2SX). It was kind of fun to operate part time and just run stations (KQ2M). I look at this as a training period for when the sunspots return! (KC7EM). This is the best contest format of all, and I had plenty of time for the family Saturday afternoon and Sunday morning (K0OAM). I had good, solid European and JA openings, but I didn't hear any South Americans (WB9HRO). It was a challenge to run barefoot on 20, 15 and 10 (W6YA). This was my first CW contest ever, and I was turned on at the end (W6EEN). Maybe there should be a single-op "hindered" class—anyone with a two-year-old should know what I mean (KN6DQ). I went high power for the first time in years, and it made a big difference. The JAs on 160 were as loud as I've ever heard (K5RX). I didn't hear even the multi-multi's on 10 (KB4GID). I didn't use packet this year, and my multipliers increased! (KM0L). The Sunday opening to JA was as much fun as I've had in years (ND8L). We thought propagation last year was bad, but this time it was worse (W6GO). If it wasn't for our JA friends, it would have been tough on the West Coast (W6TKF). It was embarrassing to work two HK0 stations and no HK (K8GL). I wish there was some way to do something with the neighbor's electric fence besides testing the noise blower! (K1NG). As far as 10 meters is concerned, what goes down must come up! (VE3HX). I love to listen to the big guns! (WA2ASQ). Running QRP was definitely a challenge with the marginal band conditions (AA3GM). This may be a miserable score to the rest of you, but I'm thrilled! (N3BDA). I'm 15, and this is my idea of a weekend date! (N9RIT). I wish I had worked more European stations, but QRP still amazes me (AB5OU). I wish my code speed at the end of one contest would hold up until the beginning of the next one (K9OSH). Bring back the sunspots! (K9KU). Slogging it out on 40 and 80 with 5 W and wires is really tough! (K5IID). Having 15 meters generally dead beyond the countries that feature rum punch was certainly a factor (N1QY). We had a nice 20-meter opening Sunday morning (AI7B). It didn't take a lot of experience to recognize that 15 was dreadful (N4ZR). There wasn't any European sunrise opening on 40, what with the MUF so low (K3ZO). It was nice to hear UA stations on 20 (WD9GGY). I sure hope this is the bottom! (N2PEB). I couldn't believe how much DX I could work on 80 with an inverted V (KB8PK). I don't remember any time during the past 50 years that the conditions were this bad! (W3VT). 160 seemed slower this year (N4UH).

DX

It was an eye-opener to listen on a Beverage for the first time. We had an unexpected 21-MHz opening Sunday afternoon (DK0SU). Conditions seemed to be very good on 160, but 40 meters was very difficult again (EI7M). There was a nice long-path opening on 40 that lasted over an hour (VK3APN). I tried to operate from 3DA0, but the historic floods made me stay home (ZS6CAX). It was hard to make QSOs with 15 and 10 meters dead (UR5FCM). I was impressed with the signal strengths on 40 and by how early the band opened (SO5TW). I could only find one short Es opening on 10 late Saturday afternoon. It felt like the PA, NJ and FL QSO Parties combined (VP2EN). It doesn't take big antennas to make a lot of QSOs—the three most important things are location, location, *location!* (PJ9C). I worked the contest with my left arm in a cast! (N4MO/HR6). We really enjoyed ourselves, despite the low sunspots and the fact that 10 meters never really opened (V31EV). It was a thrill to make a DXpedition in the middle of

Top Five

DX Single Operator Assisted, CW

Call Sign	Score	160	80	40	20	15	10
LU4FM (LU6BEG,op)	1,912,590	83/34	598/52	646/54	1105/59	258/38	0/0
ZZ2E (PY2EX,op)	1,016,724	0/0	92/34	350/45	425/48	827/54	62/12
IK0HBN	563,220	5/4	144/30	644/48	347/44	120/23	0/0
OK1AU	104,121	1/1	8/6	27/12	467/50	0/0	0/0
EA7DPU	99,144	0/0	0/0	0/0	612/54	0/0	0/0

Top Five

DX Multioperator Single Transmitter, CW

Call Sign	Score	160	80	40	20	15	10
PJ9C	4,402,065	411/53	757/56	1165/57	1422/57	1427/58	3/2
P49V	4,282,152	307/49	643/57	1173/59	1515/59	1384/58	4/2
VP2EN	3,572,634	226/50	442/52	1091/56	1321/58	1121/56	37/9
V31EV	3,520,656	262/45	530/52	1050/53	1318/56	992/57	100/13
XE2KB	2,971,710	136/41	655/54	1055/54	1322/58	531/52	11/8

Top Five

DX Multioperator Two Transmitter, CW

Call Sign	Score	160	80	40	20	15	10
TU5A	2,301,048	8/6	329/46	1362/57	1190/59	662/48	0/0
IQ4A	2,202,144	107/27	464/47	1013/53	1328/59	336/40	0/0
DL4RDJ	1,418,916	39/16	355/38	915/50	961/58	168/32	0/0
DL5AXX	1,411,263	50/14	600/51	755/49	1045/57	39/18	0/0
OZ5W	690,015	105/26	375/42	65/24	901/56	19/9	0/0

Top Five

DX Multioperator Unlimited Transmitter, CW

Call Sign	Score	160	80	40	20	15	10
KH6CC	2,830,200	321/50	400/51	852/52	1122/55	812/53	53/4
9A1A	2,534,994	264/39	692/45	1124/52	1225/59	353/36	0/0
RW2F	972,792	175/29	364/38	266/43	1014/58	13/9	0/0
JA1YDU	701,319	31/16	320/42	489/42	620/50	29/7	0/0
EM2I	588,672	14/9	176/31	611/52	541/52	2/2	0/0

Top Ten

W/VE Single Operator Assisted, CW

Call Sign	Score	160	80	40	20	15	10
K1NG (KI1G,op)	2,811,816	109/53	268/72	708/92	1146/92	154/79	6/4
K3WW	2,638,020	93/50	311/74	559/83	1220/103	94/69	7/6
W2GD	2,214,072	86/51	179/65	550/84	1000/103	108/72	9/7
N2MM	1,705,536	58/40	226/61	515/79	819/87	109/61	1/1
K1XM	1,646,286	86/48	127/56	526/76	785/88	114/62	5/4
K2WK	1,597,860	68/41	235/63	396/69	832/91	80/64	3/2
N3AD	1,512,060	69/37	141/57	469/75	791/93	107/55	3/2
AA3B	1,384,368	30/26	117/50	475/73	799/94	97/54	10/5
K2SX/1	1,371,750	57/32	137/57	398/67	844/83	107/54	7/2
K2PS	1,138,500	51/30	116/53	251/64	729/89	112/59	6/3

Top Five

W/VE Multioperator Single Transmitter, CW

Call Sign	Score	160	80	40	20	15	10
KC1XX	3,673,800	118/52	584/81	721/83	1545/100	168/72	4/2
K5ZD	3,500,640	154/54	409/77	837/87	1439/100	148/69	5/3
W3BGN	2,899,632	123/51	311/74	647/87	1295/103	119/67	9/4
N4RJ	2,439,738	70/43	266/68	696/84	1038/89	205/71	3/2
N4AR	1,679,766	86/48	149/64	333/75	974/97	100/56	0/0

Top Five

W/VE Multioperator Two Transmitter, CW

Call Sign	Score	160	80	40	20	15	10
K1AR	5,095,977	172/56	675/84	1185/94	1637/112	245/82	9/5
N2RM	4,934,799	177/56	759/89	907/94	1639/113	256/82	9/5
N3RS	4,427,232	124/51	566/81	813/94	1709/115	223/80	13/7
K1ZZ	3,250,170	116/50	264/65	830/83	1398/102	196/80	10/5
K8AZ	3,049,524	69/37	307/69	641/90	1449/105	190/73	12/7

Top Five

W/VE Multioperator Unlimited Transmitter, CW

Call Sign	Score	160	80	40	20	15	10
W3LPL	5,927,628	164/54	809/89	1120/105	1732/125	298/92	28/11
K1KI	5,749,080	278/64	829/90	1113/101	1697/115	231/84	18/6
K3LR	4,618,593	103/46	618/82	891/105	1629/119	233/80	17/8
W4MYA	3,406,152	103/50	316/70	668/92	1424/111	245/78	20/8
KY3N	2,642,769	128/52	202/63	733/95	992/100	186/75	12/6

snow and cold weather (OH6YF). We had a big aurora the first night, so I decided that there wasn't anything to do the next night (LY5W). The QRM from Europe was unbelievable. It was tough trying to find a clear frequency (LZ1KPP). The first day was great; the second day left a lot to be desired (FSPL). TGFF—Thank God for forty (VK5GN). It

was difficult without a beam, but it was a lot of fun to work so many excellent operators (DK3WW). I was happy to see the good opening on 15! (IR2W). It was tough going for QRP! (OH2YL). I had S9+ line noise on 160. My apologies to everyone I could hear calling, but couldn't copy (OY1CT). I missed the guys in (FSPL). TGFF—Thank God for forty (VK5GN). It

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, hours of operation, power (A = QRP, B = Low Power, C = High Power), and band. Division and continental leaders are listed in bold.

W/VE	N2MR	260,598	514	169	C	KN4QV	160,920	360	149	B	AB5LX	38,988	171	76	23	B		
Single Operator	K2FL	4,212	52	27	C	160	K4OGG	105,276	283	124	B	WK5K	29,631	119	83	B		
1	K3JGJ	39,420	219	60	C	80	N8LM	90,174	266	113	18	B	WA5MUF	10,074	73	46	B	
	WA3RHW	4,611	53	29	B	20	KB4GID	401,907	641	209	C	NN5T	2,520	30	28	B		
Connecticut	Western New York						K4PI	233,442	393	198	C	K5MR	1,088,550	1475	246	35	C	
KA1CZF	109,224	296	123	A			W2TZ	857,466	1206	237	34	B	K5RX	632,016	912	231	25	C
K5FU/V1	78,987	233	113	B			WF2L	158,415	295	179	B	W5CQW	133,980	308	145	C		
AA1CB	3,627	39	31	10	B		WA2ABN	144,552	317	152	B	N5IM	62,415	285	73	B	20	
KQ2M	1,242,216	1704	243	C			WB2WPM	107,778	253	142	B	KC5ALW	45	5	3	B	10	
K1IN	38,556	153	84	C			W2OMV	98,058	277	118	B							
WV1C	18,117	99	61	C			N2PEB	80,712	236	114	21	B						
K1VWL	34,161	193	59	C	80		AA2DT	64,092	218	98	B							
AB1U	14,964	116	43	B	80		KM2L	60,444	219	92	B							
K1RM	448,050	1450	103	C	20		K2CF	53,133	199	89	B							
K1EF1	71,100	300	79	C	20		W2EZ	48,132	191	84	B							
WV1D	16,200	120	45	B	20		KW2J	46,248	164	94	B							
WA1FCN	12,420	90	46	B	15		K5MA	207,060	595	116	C							
K1DII	135	9	5	B	10		W2QIP	150,849	333	151	C							
K8CH	45	5	3	C	10		WB2YQH	74,025	233	105	C							
Eastern Massachusetts							KB2MRZ	28,032	128	73	B							
N1QY	241,623	471	171	B			WB2JF	27,675	123	75	B							
AD8V	236,748	436	181	B			WA2VSJ	27,000	120	75	B							
WT1O	201,228	409	164	B			WF2V	22,425	115	65	B							
KA1CLV	106,920	270	132	B			AA2VX	22,176	112	66	B							
W1VIV	61,401	211	97	B			KA2CDJ	7,728	56	46	B							
K8JLF	57,408	184	104	7	B		W3VT	416,835	785	177	28	C						
WU1F	22,356	108	69	8	B		K5MA	29,304	132	74	C							
WA1TTE	13,572	87	52	B			W2VO	22,260	66	70	C							
W1KM	2,824,638	2819	334	C			W2FR	17,289	113	51	C	160						
KA1DWX	450,780	683	220	27	C		WA2BQI	13,464	102	44	6	C						
W1PL	226,590	415	182	C			KB2NU	6,426	53	34	B	40						
N1QMM	55,746	163	114	C			W4JMK	4,140	46	30	B	40						
N1DS	47,376	168	94	C														
N1EDM	32,292	138	78	C														
WS1H	5,940	60	33	C														
K1ZM	57,267	303	63	C	160													
W1MK	214,485	905	79	C	80													
K1MC	3,510	45	26	10	B	40												
Maine																		
N1AFC	106,272	328	108	A														
W1APU	14,994	98	51	B														
New Hampshire																		
AA1HJ	359,613	701	171	B														
K1PTF	221,256	439	168	B														
N6BV	2,439,315	2565	317	C														
NX1H	2,294,100	2549	300	C														
WA3ECT	418,584	856	163	C														
Rhode Island																		
W1WFZ	170,100	378	150	B														
WA1HYN	158,880	331	160	10	B													
AA1IF	140,751	401	117	B														
N1RJF	15,222	86	59	B														
K1VSJ	12,528	72	58	B														
K2MN	1,653	29	19	B														
W1RFQ	20,139	137	49	B	20													
Vermont																		
AA1PB	1,638	26	21	5	A													
NW1S	81,624	358	76	B														
W3SOH	26,460	126	70	B														
K1CLN	14,364	76	63	B														
K1K	23,040	160	48	C	160													
KD1SG	24,939	163	51	B	80													
Western Massachusetts																		
W2SC	2,313,552	2456	314	C														
WE1B	4,050	45	30	B	15													
2																		
Eastern New York																		
W2QYA	2,958	34	29	A														
KD2IX	663	17	13	A														
K2UF	150,639	337	149	B														
NJ1F	41,850	150	93	B														
K2RI	28,296	131	72	B														
W2XL	468,015	761	205	C														
KF2O	20,250	125	54	C	80													
N2NFG	6,696	62	36	B	80													
WX2N	2,850	38	25	B	15													
NYC—Long Island																		
KF2ET	869,868	993	292	B														
N2LSK	34,830	135	86	10	B													
KG2BI	18,513	121	51	41	B													
N2MBM	14,580	90	54	C														
W6TER	8,580	65	44	B														
WB2TPS	102,438	271	126	C														
W2KPA	6,549	59	37	C														
N2KA	798	19	14	2	C	160												
WB2AMU	2,646	42	21	B	80													
NB2V	19,728	137	48	C	40													
K2MFY	32,400	200	54	B	20													
Northern New Jersey																		
AA2U	266,490	470	189	A														
K2JT	31,746	143	74	10	A													
WA2RSQ	542,445	841	215	B														
WA0QOA	456,504	827	184	B														
KB2OWO	59,136	224	88	B														
N2INN	49,680	180	92	B														
W2LRO	19,530	93	70	B														
N2LT	2,374,506	2489	318	C														
WA2ASM	477,333	747	213	C														
WA2VYA	358,704	564	212	C														
K2DM	261,576	519	168	C														
K2NJ	231,000	500	154	C														
AA2SZ	40,512	211	64	B	40			</td										

W7YS	52,020	204	85	B	A99CG	106,920	264	135	13	B	K1BG	203,373	383	177	C
AB7II	23,040	120	64	9	B	W9RE	1,605,915	1905	281	C	N1OPZ	158,436	326	162	C
W2HTX	11,178	81	46	B	A9A9X	9,120	80	38	B	WA1KSY	141,854	333	142	C	
AA4Q	3,600	48	25	B	K9VQK	810	18	15	B	AA1KL	103,500	375	92	B	
N6SS	5,670	70	27	C	WB9OLA	1,449	23	21	B	WB2DND	102,900	245	140	C	
N7DD (NJ6D,op)	279,864	1014	92	C	Wisconsin					K1VV	34,848	121	96	C	
W7AYY	40,542	233	58	C	160					AA1HF	16,560	92	60	B	
Eastern Washington					N9LNU	42,453	159	89	A	N1NQD	12,288	64	64	C	
W7LGG	147,312	341	144	C	WD9IAB	2,349	29	27	10	A	WV1M	1,587	23	23	C
Idaho					W9MSE	23,391	113	69	9	B		2			
W7QDM	33,654	158	71	C	K9QYC	18,444	106	58	44	B	W2GD	2,214,072	1932	382	C
Montana					N9EZ	14,994	98	51	B	N2MM	1,705,536	1728	329	C	
AA7BG	215,604	452	159	C	K9AFXO	8,379	57	49	B	K2WK	1,597,860	1614	330	C	
KC7UP	47,784	181	88	C	K9MA	793,854	1098	241	40	C	K2PS	1,138,500	1265	300	C
K7ABV	4,524	58	26	C	W9PQ	299,694	502	199	C	K2NV	868,928	1082	268	C	
Nevada					W9XR	34,572	134	85	25	C	K2ONP	745,413	1031	241	C
AA8CY	6,075	81	25	C	W9XT	26,712	159	56	80	KY2J	744,720	856	290	C	
Oregon					W9GXR	15,594	113	46	C	W1GD	625,632	784	266	C	
W7YAQ	235,161	493	159	B	N9JCL	48,678	266	61	C	K2QMF	563,160	722	260	19	
W7WHY	19,992	119	56	B	WB9HRO	179,265	703	85	C	N1CC	528,432	872	202	22	
WA7FAB	407,520	849	160	C	N9GBB	8,280	69	40	B	N2CQ	226,614	358	211	C	
A17B	202,272	602	112	C	W9GIL	11,592	92	42	C	K2OWE	211,923	423	167	C	
AA7FL	144,585	405	119	C	KA9JBD (N/T)	6	2	1	B	N2UN	203,940	412	165	C	
KC7EM	245,763	987	83	C	40				K2SB	192,510	345	186	C		
AA7KF	61,608	302	68	B	WB2WYR	186,094	284	148	C	N2AIF	189,000	375	168	C	
Utah					WB2RAJ	85,956	247	116	C	WB2R	52,614	158	111	C	
W7HS	107,280	298	120	B	W9LQ	84	7	4	B	KD2NT	51,300	180	95	C	
Western Washington					W9LQ	17,784	114	52	B	N2FF	38,760	136	95	C	
W7QN	62,001	249	83	B	W9LQ	5,247	53	33	B	WA2ZGO	26,400	100	88	B	
W7RGL	13,734	109	42	B	W9LQ	84	7	4	B	N2VW	2,958	34	29	C	
WB9ZPK	10,920	91	40	B	Iowa				K3WW	2,638,020	2284	385	C		
W7VIH	8,040	67	40	B	K9OAM	10,692	108	33	A	N3AD	1,512,060	1580	319	C	
W7GSW	48,462	197	82	C	WB9KF	1,269,696	1556	272	C	A3B	1,384,368	1528	302	C	
W7DRA	1,353	41	11	C	W3GRW	170,892	404	141	C	N3NQ	1,100,814	1283	286	C	
N7EPD	10,005	115	29	B	KJ0G	116,265	337	115	C	W3MM	1,026,432	1056	324	C	
N7TT	209,352	793	88	C	WB9LQ	91,998	269	114	C	N3RR	980,766	1058	309	C	
8					K9KGS	2,700	36	25	10	B	K3SA	650,724	1028	211	23
Michigan					WB9WE	187,872	412	152	14	C	K3NZ	598,545	705	283	C
K8QLK	97,464	262	124	B	WB9WIE	172,872	412	152	14	C	W3OY	582,978	803	242	C
NE8I	84,960	236	120	19	WB9LQ	63,765	195	109	B	K3KO	575,100	852	225	C	
K8UUB	64,554	203	106	7	B	WB9LQ	106	106	106	B	W3HQ	568,962	866	219	C
K8LJG	54,000	200	90	11	C	WB9LQ	63,772	181	124	C	K3ND	568,128	704	269	C
W8WVU	47,709	171	93	C	WB9LQ	106	106	106	B	K3OO	401,931	629	213	C	
WB8BQU	22,050	105	70	20	B	WB9LQ	63,772	181	124	C	K3II	338,637	457	247	C
AC8W	5,040	48	35	7	B	WB9LQ	106	106	106	B	K3ATO	326,346	499	218	31
KD8LU	3,393	39	29	6	B	WB9LQ	106	106	106	B	N3KU	277,887	439	211	C
KT8Y	61,152	208	98	C	WB9LQ	106	106	106	B	N3AM	249,705	537	155	C	
K8ODW	9,933	77	43	C	WB9LQ	106	106	106	B	WT3P	202,404	404	167	B	
K4FW	4,356	44	33	C	WB9LQ	106	106	106	B	N3MKZ	180,090	290	207	C	
WX8S	3,162	34	31	C	WB9LQ	106	106	106	B	W3FG	138,150	307	150	25	
AA8U	11,115	95	39	C	WB9LQ	106	106	106	B	WT3Q	131,826	254	173	C	
N8EA	9,288	86	36	C	WB9LQ	106	106	106	B	K1HTV	113,460	305	124	B	
K8GL	335,160	1176	95	C	WB9LQ	106	106	106	B	NB3I	109,593	297	123	10	
Ohio					WB9LQ	106	106	106	B	N3FDL	105,094	232	151	C	
N8AXA	5,031	43	39	A	WB9LQ	106	106	106	B	WB3L	84,420	335	84	B	
AA8RR	297	11	9	A	WB9LQ	106	106	106	B	WB9LQ	84,420	335	84	B	
N8AA	42,770	679	210	31	B	WB9LQ	106	106	106	B	WB9LQ	84,420	335	84	B
ND8L	123,816	268	154	14	B	WB9LQ	106	106	106	B	WB9LQ	84,420	335	84	B
WB8UP	91,266	287	106	B	WB9LQ	106	106	106	B	WB9LQ	84,420	335	84	B	
NW8F	45,150	175	86	B	WB9LQ	106	106	106	B	WB9LQ	84,420	335	84	B	
KB8ZPE	42,600	142	100	B	WB9LQ	106	106	106	B	WB9LQ	84,420	335	84	B	
KB8FLY	39,732	154	86	B	WB9LQ	106	106	106	B	WB9LQ	84,420	335	84	B	
W8GOC	38,958	151	86	B	WB9LQ	106	106	106	B	WB9LQ	84,420	335	84	B	
AA8SM	31,050	138	75	B	WB9LQ	106	106	106	B	WB9LQ	84,420	335	84	B	
W8IDM	25,536	112	76	6	B	WB9LQ	106	106	106	B	WB9LQ	84,420	335	84	B
WA8AHK	24,408	113	72	B	WB9LQ	106	106	106	B	WB9LQ	84,420	335	84	B	
KF8TM	236,649	413	191	C	WB9LQ	106	106	106	B	WB9LQ	84,420	335	84	B	
W8RSW	181,872	421	144	C	WB9LQ	106	106	106	B	WB9LQ	84,420	335	84	B	
W8NPF	49,404	179	92	C	WB9LQ	106	106	106	B	WB9LQ	84,420	335	84	B	
W8PN	37,128	136	91	8	C	WB9LQ	106	106	106	B	WB9LQ	84,420	335	84	B
W8IQ	6,825	65	35	C	WB9LQ	106	106	106	B	WB9LQ	84,420	335	84	B	
WA8RCN	27,000	150	60	B	WB9LQ	106	106	106	B	WB9LQ	84,420	335	84	B	
WT8P	37,410	215	58	B	WB9LQ	106	106	106	B	WB9LQ	84,420	335	84	B	
K8MR	33,825	205	55	C	WB9LQ	106	106	106	B	WB9LQ	84,420	335	84	B	
KL7FAP/W8	682	21	14	B	WB9LQ	106	106	106	B	WB9LQ	84,420	335	84	B	
9					Quebec					K4ZZ	1,128,195	1233	305	48	
Illinois					CF2AWR (VE2AWR,op)	84,912	244	116	B	AB4RU	442,467	633	233	C	
K95ID	103,950	275	126	48	A	VE2AYU	452,049	871	173	C	W3GOI	231,264	584	132	C
KV8S	27,612	118	78	A	VE2FFE	11,808	82	48	C	K3SWL	220,896	354	208	C	
N4ZR	57,120	960	199	B	VE2XAR	23,490	135	58	B	KN4ZT	165,186	342	161	B	
K8UC	167,178	374	149	B	VA3DX	363,204	531	228	B	K2UFT	90,171	233	129	C	
K3JT	301,275	515	195	C	VE3BZR	93,024	272	114	B	WB4PJW	43,992	156	94	C	
K9KGW	59,616	207	96	C	VA3NR	249,556	244	128	B	AE4KU	10,085	85	67	B	
K8KFJ	40,584	152	89	C	VE3LPE	29,952	128	78	B	NQ4K	15,309	81	63	B	
K8QOL	25,704	168	51	C	VE3WZ	29,250	125	78	B	AD4NQ	8,085	55	49	C	
W9LT	12,096	173	47	B	VA3OSZ	3,168	44	24	B	AD4PU	4,773	43	37	C	
K3ZN/V8	5,208	56	31	B	VA3SWG	1,980	30	22	B	WB9LQ	444,048	638	232	C	
9					WB9LQ	3	1	1	C	WB9LQ	226,300	130	68	C	
Saskatchewan					WB9LQ	106	106	106	B	WB9LQ	226,300	130	68	C	
VE5SF					WB9LQ	106	106	106	B	WB9LQ	226,300	130	68	C	
Alberta					WB9LQ	106	106	106	B	WB9LQ	226,300	130	68	C	
CF6BF (VE6BF,op)					WB9LQ	106	106	106	B	WB9LQ	226,300	130</			

KY1H (+K1MBO,W1MJ,WA1s QGC,ZAM,WM1K, K2WR 2,248,050 2141 350 C	JA0DWY 70,380 460 51 C 20	Moldova	LA9DFA 15,846 139 38 C LA5LJA 216 9 8 B 80
W0AIH (+AA9s D,OC,N9CKC,KD0XX,N0AXL) 1,454,469 1501 323 C	JA1YNE 35,880 260 46 C 20	ER3DX 5,325 71 25 B	LA4EJ 1,344 28 16 B 40
AA2FB (+ops) 991,440 1377 240 33 C	JA1MSQ 24,570 210 39 C 20	ER1OA 30,525 185 55 C	LA6PB 216 12 6 C 40
DX	JA1YJY 15,903 171 31 C 20	Belarus	LA7AK 4,968 72 23 C 20
Single Operator	JA1HP 10,080 112 30 C 20	EU1AZ 230,010 697 110 C	Lithuania
Africa	JA1AYU 7,644 98 26 C 20	EU4EU 2,760 46 20 C	LY2BTA 41,553 243 57 B
Nigeria	JA5APU 7,059 94 25 C 20	EW3LB 1,170 30 13 C 160	LY3BAD 957 29 11 B
5N3/SP3XAR 35,424 288 41 B 20	JH1EPJ 6,489 103 21 C 20	EU3FT 6,480 120 18 C 20	LY1DS 190,992 692 92 C
Zaire	JE1LFX 5,400 100 18 C 20	EW8DX 9,900 110 30 C 40	LY4AA 1,368 38 12 C 160
9R1A (PA3DZN,op) 429,570 1110 129 C	JA1QN 4,818 73 22 C 20	EW3EO 5,292 63 28 C 20	LY5W (LY1DR,op) 2,268 54 14 C 80
Burundi	JA3AVO 4,500 75 20 C 20	EW6BL 3,420 57 20 B 20	LY2BM 82,056 526 52 C 20
9U/F5FHI 292,644 739 132 B	JA9HVF 2,961 50 27 C 20	EW6WR 1,170 26 15 B 20	LY2OX 33,600 280 40 C 20
Canary Islands	JA9KUG 609 29 7 B 20	France	LY2KA 25,389 217 39 C 20
EA6EA (OH2MM,op) 2,978,940 3790 262 C	JG3WCZ 288 16 6 B 20	F6OIE 55,350 246 75 A	LY3BA 18,513 187 33 B 20
EA1AK/EA8 140,562 822 57 C 80	JA7FTR 1,881 57 11 C 15	F5NQL 5,916 58 34 C	LY3BY 7,410 95 26 B 20
EA6CN 131,040 840 52 B 40	JI2UNR 54 6 3 B 15	F5PRH 185,250 475 130 B	LY3CW 3,720 62 20 B 20
South Africa	JR8OBG 51 17 1 B 15	F5PIQ 81,144 322 84 B	
ZS6AJS 97,194 334 97 B	Asiatic Russia	F5JBR 71,100 300 79 B	
ZS6/G3SGQ 11,468 98 39 B	UA0FBD 10,695 155 23 C	F5RBG 63,549 307 69 B	
ZS6CAK 85,995 585 49 C 40	UA9ORS/0 1,806 43 14 C	F5ROL 38,916 188 69 B	
Hong Kong	RAW9M 2,730 91 10 C 80	F5AKL 38,556 204 63 B	
Vietnam	UA0LCZ 1,485 45 11 C 40	F6FTB 35,055 205 57 B	
3W5FM 4,437 87 17 C	UA0CHW 29,760 248 40 C 20	F5PHW 33,108 178 62 B	
Israel	UA0ZAM 12,354 142 29 C 20	F5NYK 10,374 91 38 B	
4Z4TA 12,321 111 37 B	Croatia	F5JNT 7,719 83 31 B	
4X1VF 11,100 100 37 C	9A5I 77,958 366 71 B	F6FGZ 1,147,704 1972 194 C	
South Korea	9A4RU 19,656 126 52 B	F6HWU 165,330 501 110 C	
HL5AP 2,376 44 18 B	9A4D 9,828 126 26 B 160	F6BEE 146,124 396 123 5 C	
Japan	9A4RC 1,764 42 14 C 80	F5RAB 47,925 226 71 C	
JA6UBK 22,842 162 47 A	9A4IQ 147,672 879 56 C 40	F8EP 10,530 130 27 13 C	
JA8SQ 17,901 153 39 A	9A3UF 23,484 206 38 B 20	TM5X (F5MUX,op)	
JU1YNO 17,220 140 41 A	Portugal	158,730 962 55 C 20	
JH1HRJ 15,120 126 40 A	CT4DX 6,804 84 27 B 40	F5NBX 156,240 930 56 C 20	
JE1PMQ 5,757 16 25 A	DJ3XK 15,048 132 38 A	FB1IPH 34,020 270 42 A 20	
JN2QCV/9 191,478 659 97 B	DJ3LR 3,102 47 22 A	F5TCN 9,900 100 33 B	
JH4UYB 168,156 686 82 B	DK7ZH 16,368 176 31 10 C 160	F6E0V 9,579 103 31 B	
JA2BY 91,014 394 77 B	DL5WS 50,055 235 71 B	F5AM 5,175 75 23 C 20	
JA6SRB 19,803 61 41 B	DJ7XA 41,013 217 63 B	F5GHP 15,806 153 34 C 15	
JQ3UDL 19,608 172 38 11 B	DL7ANR 40,320 224 60 B	England	
JF3IUC 19,350 150 43 B	DL6AXI 40,194 203 66 B	G0TDX 43,365 245 59 A	
JA9DDF/2 12,204 113 36 B	DL3DRN 32,661 191 57 B	G3ESF 77,520 323 80 B	
JA1AB 10,920 104 35 B	DL6KVA 30,972 178 58 B	G3RSR 38,232 216 59 B	
JA7KBR/1 7,998 86 31 12 B	DL5SVB 22,776 146 52 B	G3JKY 25,428 163 52 B	
JA2AXB 7,878 101 26 B	DL3JMK 16,380 140 39 B	G4FDC 23,850 160 53 B	
JG3WDN 5,658 82 23 B	DK7FP 15,750 150 35 B	G4ZME 11,448 106 36 B	
JA2MZ 4,380 73 20 B	DJ8UL 13,824 128 36 11 B	G4OTY 9,588 94 34 C	
JK1IJT 4,020 67 20 B	DL3QV 10,767 97 37 B	G4BUO 1,347,429 2257 199 C	
JM1KNU 4,020 67 20 B	DJ6DO 5,964 71 28 B	G3TXF 5,829 67 29 C	
JK1EOG 4,020 67 20 B	DL6DVU 5,481 63 29 B	G2OT 37,392 304 41 B 40	
JE3UHV/1 3,078 57 18 B	DL1DWT 864 24 12 B	G5MY 10,695 115 31 B	
JN2OYN 2,793 49 19 B	DJ1NCT 383,097 893 143 C	G3IGW 26,691 217 41 C 20	
7N3SDR 2,301 59 13 B	DL22AE 223,300 650 114 C	G6LII 21,960 183 40 B	
7J1ABD (WA6YU,op) 2,295 51 15 B	DJ1JF 5,073 80 19 B	G2HLU 14,553 147 33 C 20	
JI3MVO 1,692 47 12 B	DL1JF 180,873 609 99 C	G3HJF 9,486 102 31 C 20	
J1RCB 1,680 40 14 B	DJ2DX 147,834 573 86 C	Northern Ireland	
JA1BRL 1,632 34 16 B	DL7VQG 131,064 508 86 C	GI0K0W 213,285 1205 59 B	
JF9PFD 1,599 41 13 B	DL8UCC 38,745 205 63 C	Scotland	
JF3NDW 1,536 32 16 B	DL2BWN 18,630 138 45 C	GM3XNJ 29,670 230 43 B	
JIA1AT 870 29 10 B	DL6AG 15,480 129 40 C	GM3POI 252,402 1426 59 C	
JH9WBY 351 13 9 B	DJ1IA 7,155 65 55 C	GM3CSF 15,540 140 37 B	
JH5FXP 656,103 136 157 C	DL1AO 70,085 519 45 C 80	GM3DZB 8,742 94 31 B	
JH7WKQ 447,180 1285 116 C	DJ5BGA 50,274 399 42 C 80	GM3ZAS 5,544 84 22 B	
JAD1D 436,392 1102 132 C	DJ2GGA 16,533 321 33 C 80	Wales	
JIA1JK 286,065 815 117 C	DJ2YE 3,420 60 19 B	GW0KZW 8,232 98 28 A	
JA7JHT 139,194 627 74 C	DL5AUJ 231 11 7 B	GW3JI 81,765 345 79 B	
JH2BCN 79,488 414 64 C	DL2DX 84 7 4 B	Hungary	
JA2SWF 26,664 202 44 C	DJ4CF 117,819 741 53 C 20	HA8KW 46,575 225 69 B	
JH7BMZ 19,008 132 48 C	DJ5IQ 75,300 502 50 C 20	HA7UW 10,767 97 37 B	
JL4HD1 13,794 121 38 C	DK3WW 23,562 187 42 C 20	HA1VE 51,546 242 71 C	
JA8QWO 9,768 88 37 C	DL1TH 15,642 158 33 B	HA8BE 5,589 81 23 C 160	
JA3ARM 4,116 49 28 C	DL8HCO 11,520 120 32 B	HA5MY 32,718 287 38 C	
JQ2QV 3,696 56 22 C	DL6UNF 9,072 112 27 B	HG1H (HA1DAC,op) 7,722 99 26 C	
JE9MUV 8,019 81 33 C 160	DF3SM 8,910 99 30 B	80 C 80	
JQ1N 5,148 78 22 C	DJ9LBI 8,484 101 28 B	OK1E 9,912 118 28 B	
7M3HLQ 1,482 38 13 C 160	DJ1IG 7,722 99 26 B	OK1JC 7,938 98 27 B	
JA1WYQ 351 13 9 C 160	DJ7H 5,753 93 27 B	OK2EQ 3,960 66 20 B	
JE1SPY 84 7 4 B 160	DL3BRA 3,960 55 24 B	HA0EQ 62,916 428 49 C	
JK1OPL 29,640 260 38 C 80	DL5ST 2,808 52 18 B	HA3RD 22,458 197 38 C	
7J1AAI (KH8VTF,op) 22,698 194 39 10 B 80	DL6AP 2,640 44 20 B	HG1G (HA1DAE,op) 22,080 230 32 C 15	
JH1GNU 10,530 130 27 C 80	DL8UVG 2,208 46 16 B	OK2UWY 20,604 202 34 C	
JH6BIF 3,060 68 15 C 80	DL1JPL 1,665 37 15 B	OK2PO 19,539 167 39 B	
JH9FIO 1,350 50 9 A 80	DL1DXA 1,485 33 15 A	OK1EV 18,090 201 30 B	
JR6BQD 165 11 5 B	Spain	HB9DEU 2,970 45 22 B	
JL3SB 72 8 3 C 80	EA4AMJ 118,482 403 98 B	HB9DBC 33,630 295 38 C	
JR7OMD/2 50,730 445 38 B	EA2BNU 82,236 308 89 B	HB9FAP 106,800 712 50 C	
JAS6SHL 49,536 384 43 C 40	EA7BB 79,476 358 74 B	HB9KC 23,688 188 42 C	
JIA1NTU 42,066 342 41 C 40	EA2BSN 73,425 275 89 B	HB9APJ 13,578 146 31 C	
J3OPA 8,382 127 22 B	EA5LA 41,208 202 68 B	Switzerland	
JA8UVM 6,600 100 22 B	EA3BOW 30,195 165 61 B	IT9ORA 27,054 167 54 B	
JR9NVB 6,018 118 17 B	EA7HDO 23,256 152 51 B	IK1RQ 23,715 155 51 B	
JM1LRQ 5,520 115 16 B	EA1AKB 18,522 126 49 B	IK0XBE 15,609 121 43 B	
JG3GWT 5,520 115 16 5 B	EA5OT 14,832 103 48 B	IK0DWJ 12,390 118 35 B	
JN3PJA 4,800 100 16 B	EA5ABH 9,372 71 44 B	IT9QJ 10,080 96 35 B	
JABCJY 2,574 66 13 B	EA4AKA 5,220 60 29 B	I1QZG 897 23 13 B	
JK2GTW 2,262 58 13 B	EA1AMM 4,611 53 29 B	I0LT 330 11 10 B	
JK1KGK 2,226 53 14 A 40	EA4KA 776,142 159 162 C	IK0YUM 252 12 7 B	
JA1XEM 1,911 49 13 C 40	EA2CLU 14,400 160 30 B	IR2W (I2VXJ,op) 1,321,515 2259 195 C	
JAS5PDS 1,848 56 11 B	EA7K 5,307 61 29 C	ISBBK 70,848 288 82 A	
JAB4JE 1,512 56 9 B	EA5FX 33,264 264 42 C	IK4WMB 51,870 190 91 B	
JA6TR 1,122 34 11 B	EA3AJW 170,814 581 98 C	IA6NOA 41,208 202 68 B	
JAA1A 1,080 45 8 A 40	EA2CLU 14,400 160 30 B	IT9ORA 27,054 167 54 B	
JH7CJM 837 31 9 B	EA7K 263,730 1490 59 C	IK2AHB 57,024 264 72 C	
JA2HFB 810 30 9 B	EA7FIU 21,924 203 36 B	I3VYK 20,496 122 56 C	
J4ZLZI 756 28 9 B	EA1BMA 4,950 66 25 B	IK0ADY 8,415 85 33 C	
J3FADF/1 744 31 8 A	EA4AUF 4,788 57 28 B	IK0VUZ 14,787 159 31 C	
JA1XPU 378 18 7 B	EA4AMC 4,392 61 24 B	IK1GPQ 8,148 97 28 C	
J4ZKPV 336 16 7 B	EA2IA 22,686 199 38 C	IK1TQV 16,434 166 33 C	
JE1XCZ 273 13 7 B	Balearic Islands	IK0UJM 15,096 148 34 B	
J4ZESR 132 11 4 A	EA6ZS 4,758 61 26 B	I0YOV 5,832 72 27 B	
JABYH (JO1DFG,op) 108,750 725 50 C 20	EA1J 154,344 472 109 C	IMGN 1,710 38 15 B	
JH4NMT 89,544 574 52 24 C 20	EA1J 154,344 472 109 C	IK3SCB 975 25 13 B	
J4TSSB 81,276 521 52 B	EI4HM 154,344 472 109 C	IT9GXF 243 9 9 C	
7K4QOK 76,650 511 50 C 20		Sardinia	
		IS0OMH 68,112 344 86 B	
		IS0GSR 118,755 435 91 C	
		IS0UWX 5,328 74 24 C	
		Norway	
		LA1YE 40,014 234 57 B	
		LA2O 135,108 561 81 C	
		LA8LA 26,718 146 61 C	

OZ4OC	14,022	123	38	C	UR6FCM	294	14	7	B	80	XE1/VE4YU	7,569	87	29	B	20	G0IVZ (+G4DDU,op)	
OZ2RH	1,710	38	15	C	US50	84	7	4	B	80	XE1/JAQXY	32,832	304	36	C	15	1,129,383 1971 191 C	
OZ4UN	27,798	226	41	C	UT7LA	68,052	428	53	C	40	OL1A (OK1s CW,DF,DX,FF,NK,ops)						OL1A (OK1s CW,DF,DX,FF,NK,ops)	
OZ7YL	9,900	100	33	C	UT1ZZ	45,402	329	46	C	40	1,065,225 2029 175 C						1,065,225 2029 175 C	
OZ1BMA	8,100	100	27	B	US9QA	17,7ND	36,855	315	C	40	DK0SU (DL1s CW,SBR,DL4AE,DL9VS,ops)						DK0SU (DL1s CW,SBR,DL4AE,DL9VS,ops)	
OZ8SW	7,395	85	29	B	UT4UZ	26,136	242	36	C	40	888,132 1526 194 C						888,132 1526 194 C	
OZ6ZH	5,184	64	27	B	UT1FA	9,024	94	32	C	40	EA5BY (+EA5s BXT,CZ,EU,FID,KW,RS,SM)						EA5BY (+EA5s BXT,CZ,EU,FID,KW,RS,SM)	
Netherlands																		
PA0ADT	14,994	147	34	A	UT1PO	4,560	80	19	B	40	558,549 1359 137 C						558,549 1359 137 C	
PA3GNO	34,776	207	56	27	UT5GR	2,400	50	16	C	40	OM2I (OM1s II,KI,MW,RW,OM2KW,OM3s TA,WM,ops)						OM2I (OM1s II,KI,MW,RW,OM2KW,OM3s TA,WM,ops)	
PA3FMB	34,221	187	61	B	UT3QW	168,336	1002	56	C	20	535,821 1249 143 C						535,821 1249 143 C	
PA0CLN	280,713	683	137	C	UY5OQ	18,900	180	35	B	20	LA8G (LA4PHA,LA5IA,ops)						LA8G (LA4PHA,LA5IA,ops)	
PA6A (PA3DFT,op)	209,844	1206	58	C	UX5VK	10,800	120	30	C	20	483,747 1177 137 C						483,747 1177 137 C	
PA3EW	112,407	421	89	C	UX1JA	9,492	113	28	C	20	4U1IU (F5NYQ,DL2LSQ,WQ9S,ops)						4U1IU (F5NYQ,DL2LSQ,WQ9S,ops)	
PA3ERC	60,588	297	68	C	UR3PDM	7,728	92	28	B	20	388,601 1012 128 48 C						388,601 1012 128 48 C	
PA2REH	924	28	11	B	UT5UGR	7,272	101	24	C	20	EA4ET (+EA4AFA)						EA4ET (+EA4AFA)	
PA3BBP	16,275	155	35	B	UT3WW	5,760	80	24	A	20	301,473 817 123 B						301,473 817 123 B	
PA3DUS	9,576	114	28	B	US7IGF	5,727	83	23	B	20	OI8MDG (OH8s MDG,MIZ,ops)						OI8MDG (OH8s MDG,MIZ,ops)	
PA3BWD	7,200	80	30	B	UY3QW	3,696	56	22	C	20	243,270 901 90 C						243,270 901 90 C	
PA0YN	2,160	48	15	B	UT1IA	3,294	61	18	C	20	IR3X (I3JTE,IK3QAR,ops)						IR3X (I3JTE,IK3QAR,ops)	
PA0ASN	210	10	7	B	UR4QIC	1,968	41	16	B	20	233,730 795 98 C						233,730 795 98 C	
Slovenia																		
S59D	6,300	70	30	A	Latvia	17,157	133	43	C	80	W7L (UR4s LQA,LQI,LSB,LTX,UR8LA,ops)						W7L (UR4s LQA,LQI,LSB,LTX,UR8LA,ops)	
S57KM	6,720	80	28	B	YL2KO	9,750	125	26	C	80	LZ7G (LZ1s NK,WR,LZ9,CC,GA,ND,ops)						LZ7G (LZ1s NK,WR,LZ9,CC,GA,ND,ops)	
S59AA	125,538	427	98	C	YL2SM	568,980	1308	145	C	80	209,628 64 108 C						209,628 64 108 C	
S56A	118,575	465	85	C	Romania	1,530	34	15	A	20	IO2L (I2OKW,IK2s GHW,INY,NCF,NUV,PIG,QEI,YYG,ops)						IO2L (I2OKW,IK2s GHW,INY,NCF,NUV,PIG,QEI,YYG,ops)	
S53M	106,530	670	53	C	Y05OFW	30,492	242	42	B	20	180,612 592 87 C						180,612 592 87 C	
S58U	105,693	719	49	C	Y03AWC	3,762	57	22	B	20	UR4QWV (+Ops) 99,168 388 84 C						UR4QWV (+Ops) 99,168 388 84 C	
S57M	62,370	462	45	C	Y05CUQ	120,540	490	82	B	20	OL2A (OK2s HBY,PK2,PEM,ops)						OL2A (OK2s HBY,PK2,PEM,ops)	
S51X	57,684	437	44	C	Y03APJ	3,720	15	6	B	80	80,388 406 66 C						80,388 406 66 C	
S53R	155,925	945	55	C	Y02LIN	5,638	81	24	B	40	IY0TCI (I0KHP,IK2ONA,ops)						IY0TCI (I0KHP,IK2ONA,ops)	
S52SK	10,848	113	32	C	Y02ARV	4,698	58	27	C	20	61,254 249 82 B						61,254 249 82 B	
S57DX	154,413	903	57	C	Y03FRI	3,660	61	20	B	20	RK6AYN (RN6BP,RU6BP,RV6ARU,RW6ACM,UA6AH,ops)						RK6AYN (RN6BP,RU6BP,RV6ARU,RW6ACM,UA6AH,ops)	
S58WW	68,808	488	47	B	Y04DCF	1,764	42	14	A	20	55,890 270 69 C						55,890 270 69 C	
Sweden																		
SM0DZB	1,683	33	17	A	Yugoslavia	1,530	34	15	A	20	Indonesia						Indonesia	
SM0BDS	23,364	177	44	B	YU1EA	57,600	240	80	A	20	YB2UDH	4,860	108	15	B	40	YB2UDH	
SM0NJO	7,380	60	41	B	YU1GN	21,315	145	49	A	20	YC3UUQ	504	21	8	B	40	YC3UUQ	
SJ9WL (SM0DJZ,op)	153,000	600	85	C	YU1OW	120,540	490	82	B	20	Z2KMS (+L22CG)						Z2KMS (+L22CG)	
SM5ALJ	13,728	143	32	C	YT7TY	10,668	204	64	B	20	South Cook Islands						South Cook Islands	
SM4SX	9,660	115	28	B	4N1A (4N1DXX,op)	90,663	643	47	C	80	ZK1PYD (K8PYD,op)	6	2	1	C	20	ZK1PYD (K8PYD,op)	
SM5DUT	4,824	67	24	B	YT1AD	156,807	917	57	C	20	OK1OKE (OK1s DUT,VBA,ops)						OK1OKE (OK1s DUT,VBA,ops)	
SM5CLE	4,422	67	22	A	YT7UX	64,242	498	43	C	80	13,905 103 45 C						13,905 103 45 C	
SM7UYU	4,290	65	22	B	YT7YA (YU7GO,op)	139,707	817	57	C	40	UR4PWC (UT4PZ,US-P-272,-273,ops)						UR4PWC (UT4PZ,US-P-272,-273,ops)	
SM7CZC	1,710	38	15	A	YT0T (YU1UA,op)	99,078	674	49	C	40	13,440 140 32 C						13,440 140 32 C	
Poland																		
SP9BBH	68,145	295	77	B	YT0AV (YU7AV,op)	198,360	1140	58	C	20	North America						North America	
SP3MPG	48,600	216	75	B	YT1AD	156,807	917	57	C	20	VP2EN (AA4NC,IK1HNN,ops)						VP2EN (AA4NC,IK1HNN,ops)	
SP5GKN	33,835	227	35	C	YT1AAV	18,216	184	33	B	20	PJ9C (W1s BIH,WEF,ops)						PJ9C (W1s BIH,WEF,ops)	
SP5OAU	33,210	205	54	B	YT7SF	11,760	112	35	B	20	4,402,065 5185 283 C						4,402,065 5185 283 C	
SP6FZA	28,710	174	55	B	YT7AZ	5,850	75	26	B	20	P49V (AI6V,W6OAT,ops)						P49V (AI6V,W6OAT,ops)	
SP7BCA	21,855	155	47	B	4N1Z (YU1QL,op)	10,686	137	26	C	15	4,282,152 5026 284 C						4,282,152 5026 284 C	
SP5CGN	9,396	108	29	B	YT7KM	621	23	9	B	15	Multiooperator Two Transmitters						Multiooperator Two Transmitters	
SP1MHV	4,080	40	34	B	Z350GB	32,118	202	53	B	20	Africa						Africa	
SP7FOI	2,964	52	19	B	Z31GX	42,927	349	41	B	80	TU5A (G3SXW,G4FAM,K7GE,N7BG,WB7SRW,ops)						TU5A (G3SXW,G4FAM,K7GE,N7BG,WB7SRW,ops)	
SN2B (SP8ENR,op)	1,164,546	2087	186	C	Z32XX	16,368	176	31	B	40	P4/K2LE	789,450	1385	190	B	20	P4/K2LE	
SP6CTC	33,768	201	56	C	North America						Brazil						Brazil	
SP4GHL	19,980	148	45	C	Cuba	6,960	80	29	B	40	PY2OU	419,188	957	146	A	20	PY2OU	
SP5GRR	23,835	227	35	C	CM2LG	14,880	160	31	B	15	PP7CI	43,470	210	69	B	20	PP7CI	
SP2LNW	3,024	56	18	C	CM8TW	14,210	174	206	B	20	PY7QJ	3,780	42	30	B	20	PY7QJ	
SP5GHH	2,520	56	15	B	CM8TW	14,210	174	206	B	20	PCTCW	882	21	14	B	20	PCTCW	
SP2BUC	2,340	52	15	B	YT1AAV	12,216	184	33	B	20	PY1CAS	13,230	105	42	C	20	PY1CAS	
SP1JXJ	2,100	50	14	B	YT7AZ	11,760	112	35	B	20	PW2N (PY2NY,op)	1,998	37	18	B	40	PW2N (PY2NY,op)	
SP3PLR	1,800	40	15	B	YT0T (YU1UA,op)	3,351,846	4019	278	C	80	PY3STD	31,992	248	43	B	20	PY3STD	
SP7GIO	138,300	922	50	C	YT0AV (YU7AV,op)	278,952	788	118	B	20	PY2AW	19,266	169	38	B	20	PY2AW	
SP9YAQ	75,240	570	44	C	YT1AC	20,634	181	38	A	20	PY2PAH	2,457	39	21	B	20	PY2PAH	
SP9KRT	7,410	95	26	B	YT1VA	1,912,750	850	165	B	20	PY2EYE	1,170	30	13	C	20	PY2EYE	
SP6XRZ	139,158	859	54	C	YT7QN	655,866	1317	166	B	20	PY1KN	83,268	514	54	B	15	PY1KN	
SP2QCH	24,846	202	41	B	Panama	2,358,048	3388	232	36	B	20	Fernando de Noronha						Fernando de Noronha
SP1AEN	22,230	195	38	B	HP3XUG	4,896	68	24	C	160	PY0FF	274,284	1604	57	C	40	PY0FF	
SP6BAB	19,332	179	36	B	HP1AC	3,112,200	3640	285	C	80	South Sandwich Islands						South Sandwich Islands	
SP3VKO	11,310	130	29	B	YT1PO	186,648	1111	56	C	80	ZL0A (LZ2UU,op)	253,680	755	112	C	20	ZL0A (LZ2UU,op)	
SP3XR	8,439	97	29	B	YT1QY	26,208	224	39	C	80	Venezuela						Venezuela	
SP2JGK	8,352	96	29	B	YT1ZJ	1,020	20	17	2	A								