1997 ARRL International DX Contest CW Results

The sunspots might be at a minimum, but not the fun and enjoyment of the contest.—KK4SM

he 1997 running of the CW side of the ARRL International DX Contest went off once again with nary a sunspot in sight! While the low bands were hopping just about everywhere, the little Energizer Bunny that propels the high bands seemed to have really run out of juice. Not unexpectedly, the all-band categories, multiop categories, and the low bands again favored the East Coast of the US for domestic entrants. The single bands 40 through 10 meters were the domain of the rest of the country.

Activity was relatively high with respect to the sunspots; more than one operator mentioned the scarcity of semi-open frequencies for CQing—especially on 20 and 40 meters. The name of the game for serious competitors in this contest, whether they be domestic or DX, is to call CQ as much as is productive. The need to CQ places obvious demands on the operator to find and use CQ frequencies. Bands with limited space, such as 40 meters, can often be packed with 80 to 100 stateside stations all calling CQ from 7.0005 up to 7.040 MHz. Of course there will be DX stations sandwiched in there also, and the skilled operator has to learn to find and identify those signals while they are mixed in with the often louder stateside signals.

Time of day is also important to contesters when choosing CQ frequencies. Contesters on the East Coast find it relatively easy and productive to CQ on 40 meters in midafternoon, when they alone have propagation to Europe and the rest of the country is still on the higher bands waiting for dusk. On the West Coast, operators find it beneficial to CQ on 40 meters long after daybreak on the East Coast and in the Midwest to run Asian stations in far less ORM than earlier in the night. Midwest stations find it easier to work South Americans in the afternoon and break pileups on African stations when the two coasts are working Europe and Asia. Contesting competitively requires knowing where to be and when to really maximize your station's abilities and the propagation of the moment.

For a DX station, the name of the game is run, run, run! Especially from the Caribbean, the idea is to find a band where competition from Europe is not overwhelming and just run the boys as fast as possible. From Europe or Asia, the choices for usable frequencies are easier to make—especially when conditions are poor—because only one or two bands may be usable at the same time. Good

QSO rates are often found higher up in the band, away from the hordes of W/VEs doing their best to establish and use running frequencies. Intuitive stateside contesters know that it is wise to tune through the upper portions of the bands often to catch the weaker, low power DX stations that may be rare multipliers, who have to stay high in the band to attract attention.

The 1997 contest once again saw a multitude of excellent DX operations and expedi-



Carl, P49V, and company really did a bang-up job. Their multi-sintle transmitter netted a second place world finish.

Top Ten

QRP, CW	gle Operator,		Low Power, CW					
AA2U	363,156	K8PO	1,476,618					
K3PH	228,957	K2SG	1,244,04					
N1TM	182,880	KN4T	1,019,64					
K2PS	157,356	(N4RN,op)					
N1AFC	156,492	WS1E	774,09					
KG5U	119,601	W2TZ	759,68					
K9OM	94,122	NA2U	710,42					
AA1CA	90,774	K1VUT	558,88					
N1CWR	89,667	W6JTI	558,73					
N4IJ	89,088	N8AA	543,03					
		K1VW	530,56					
DX Single QRP, CW	Operator,	DX Single (Low Power						
6YØA	1,047,960	HP2/N6NT	3,078,855					

(K3DI,op) C6A/N4RP 1.228.920 ZX2X 6 (PY2OU,op) VP2V/K1DW P4/K2LE 1,208,400 1,066,257 629,472 I3BBK HP1AC , 125,304 LU8HSO 623,700 597,645 76.806 LU1EWL GØTDX 75,258 KR8V/C6A 564,921 T94YT 47,628 41,595 F5PRH 560,358 DL3KVR 38,136 32,754 32,046 ON6TJ PU2MHB 401,547 JAGUBK

tions that truly make the contest a great event for all of us. And that works both ways, for certain. The guys who operate from the Caribbean and Central and South America know that they are going to have a blast running W/VEs as fast as they can for most of the weekend! This year we thank the boys at 6Y4A, K3DI at 6YØA, N6NT down in Panama, V51Z, VP2V/K1DW, N4RP/C6A, P4/K2LE, KR8V/C6A, the JP brothers PJ5JP and VP5JP, V47KP, P4ØW, ZD8Z, VP2EV, VP5/WJ2O, KH6RS, HV4NAC, DZ5L, ZF2NE, KG4ML, V26CW and V26NA, WP2Z, HH2AW, ZF2NE, TI7/ N4MO, PJ9C, P49V, V31TP, PYØFF, J75T, T9DX, XE2L, XA5T, and the many others who made the effort and accepted the expense of traveling to give us lots of QSOs and multipliers! Bravo! The list gets longer each year as more and more people get hooked on experiencing the thrill from the other side.

The other side also includes many operators who make it a point year after year to get on and hand out their own multipliers—both garden variety and semi-rare. Without them, the extra Caribbean and Central American multipliers wouldn't be the topping on the cake that they are now.

We also thank our many plaque and award sponsors for unselfishly providing some extra incentive for putting in great efforts in the contest.

In short, a lot of people put a lot of time and effort into contesting, and we need and appreciate every one of them.

And now-to the contest results! On the QRP front we are witnessing one of the great dynasties, in the form of AA2U-who has won his sixth consecutive QRP title! Perseverance and cunning operating have made AA2U the man to beat. Not that others aren't trying! KG5U, K9OM, and W8QZA/6 were representing those areas west this year. K3DI traveled with his portable gear down to Jamaica to win the QRP world title, operating from 6YØA. He has been successful from several places in the Caribbean in this category. Another guy who has shown real improvement is I3BBK, who has gone from sixth place QRP in 1995 to fourth in 1996, and up to third in the world in 1997! The only natural spot for him in 1998 is second! Where will K3DI be in 1998?

The low power crown for the domestic side was K8PO, who established a large lead over comers K2SG and KN4T. Once again W6JTI led the west with his eighth place finish over-



Ahmed, HZ1HZ, taking a well-deserved break. He took first place high power from Saudi Arabia.

all in the highly competitive barefoot class.

On the DX side, one of the more impressive scores worldwide was put together by Bruce, HP2/N6NT. Bruce combined a work trip with the contest (if one considers riding a yacht from the Gulf of Mexico through the Panama Canal to California "work"!). Lots of portable contest experience helped Bruce; he only used an R5 vertical and a trap dipole to set the highest low power score ever! The key, according to Bruce, is to find a spot right on the ocean for the vertical. A vertical at or in the ocean performs much better than if it were placed several hundred feet inland-or anywhere over land, for that matter. He drove all through Panama two days before the contest trying to find an operating location that was right on the beach. He eventually found the place, even though the accommodations were rather "third-worldish." A lucky break provided him with some local youngsters who helped find a mast and then helped with installation! 3705 QSOs later, Bruce had the 100 W record! See more of his story in the September/October NCJ.

The high-power all-band category was hotly contested, as usual. W1KM is starting his own streak, with a repeat of his victory from last year! Greg did a great job by increasing his score over 340k. Tom, W2SC,

sat in K5ZD's favorite chair to make almost 3000 QSOs en route to another second place finish for the Uxbridge "Z'Eve of Destruction" ZD station. Tom recently moved to the heart of the Black Hole in Kansas and returned home to where he knew how good it was! Out in stormy Texas, Dave, K5GN, decided to put the W5KU station through its paces, and led the west with very nearly as many multipliers as were worked from the East Coast. K5GN has done a great job, year after year, competing in the national arena, and he is one great CW operator.

W2GD cruised to a first place finish from the DX side using his sunny P4ØW location. After so many years of operating from P4, John still has that competitive edge to push him over the top. But shame on you, John, for ribbing HP2/N6NT on the air about having that wonderful steak dinner before the contest while Bruce was feasting on cold pork and beans straight out of the can from his Field Day site in Panama!

N6TJ at ZD8Z has really produced some big scores in the last few years, and his second place finish will add to Jim's award pile. Maybe Ascension Island is one of those great untapped radio locations that has now been "tapped!"

The European battle for all-band honors found a couple of the biggest signals from the British Isles, G4BUO and GW3YDX, settling in at first and second place. These guys provide a lot of multipliers for the W/VE crowd on the low bands!

The single-operator assisted category requires the op to mold together CQing with multiplier hunting in such a way as to "not damage" the final score. This year KI1G did this in fine fashion, producing a score that is unusual in that it beat W1KM in the unassisted class. Past results have shown this to be an extraordinary achievement. K3WW wasn't far off the pace either, building a second place score that would have been third without packet. From the DX side, KH6RS used the assistance to find those elusive east coast stations and won the category for the world. But we bet that KH6RS needed "assistance" to help stay awake through some of the worst



Sean, V26NA (KX9X), made 1726 QSOshe really kept those fingers hopping.

conditions!

The single bands played much the same as last year. In the US, the East Coast dominates 160 and 80 meters, the West makes 40 a winning proposition, and the Midwest comes in first on 20. The South takes the high bands of 15 and 10.

The top-band battleground saw three of the US's biggest guns finish 1-2-3: K1ZM, W4ZV and WB9Z. If you have been living in the IQ4A cave all these years, you might not have noticed all the new call signs in the US. This contest was one of the first ones for many contesters to try out their new call signs. If you're not sure who's who any more, once again, check out the September/October NCJ.

From the DX side, a couple of "9 boys" went to tropical V2, and NM9H put V26CW into first place on 160 with 662 QSOs! And while close proximity to NA will win the low bands, EI6BT finished third on the band with an excellent 435 QSOs and 47 multipliers from Ireland.

Can you imagine making over 1000 QSOs on 80 meters? W1MK does this regularly, and 1997 was no exception, as Rob blew away the competition from Pennsylva-

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 Ro (Delta, Roand Southeaster)	oke and	(Central and	Central Region (Central and Great Lakes Divisions; Ontario Section)			Midwest Region (Dakota, Midwest, Rocky Mountain and West Gulf Divisions; Manitoba and Saskatchewan Sections)			(Pacific, Northwestern and Southwestern Divisions; Alberta, British Columbia and NWT/Yukon Sections)			
AA2U K3PH N1TM K2PS N1AFC	363,156 228,957 182,880 157,356 156,492	A A A A	N1CWR N4IJ N4ROA W4DEC	89,667 89,088 59,328 34,263	A A A	K9OM N9LMU K8OUA NM9C	94,122 39,897 37,701 15,687	A A A	KG5U NØUR K5OI	119,601 8,601 2,457	A A A	W8QZA/6 N6AZR WA6TLA N7IR K7GS	57,681 29,346 25,344 20,904 15,840	A A A A
K8PO K2SG WS1E W2TZ NA2U	1,476,618 1,244,040 774,090 759,684 710,424	B B B B	KE2WB KN4T (N4RN,op) WD4AHZ WO4O K5KLA	11,607 1,019,640 515,508 416,070 352,089	A B B B	WD9IAB N8AA VE3KP N9CO W8KX K9MMS	3,861 543,030 297,000 229,824 221,352 212,652	A B B B B B B	WD5K NN5T KØRI KIØW WØHSC	393,918 122,988 121,656 113,400 108,576	B B B B	W6JTI W7YAQ K6WV AA7KF WN6K WN3K	558,732 349,149 214,080 195,000 170,235 170,235	B B B B B
W1KM K5ZD (W2SC,op) N2NT W2RQ KQ2M	3,159,189 3,109,509 2,804,976 2,767,065 2,708,475	CCCC	W4PLL KT3Y K4AB N4AF W9LT WC4E	233,142 2,069,793 1,260,840 1,223,100 1,073,814 1,058,169	ВССССС	W9RE K9AN K9MA K9USA N4XM	1,769,916 771,144 759,303 438,381 298,044	CCCCC	(KBØO,op) K5GN N2IC/Ø W5UN K5YA K4VX	1,761,924 1,698,144 1,137,090 1,117,695 870,267	CCCCC	WC6H (NU6S,op) W2VJN/7 KC7V K7BG N7TT	860,247 823,200 781,140 773,721 718,620	CCCC

W/VE Single Operator, High Power, CW										
Call Sign	Score	160	80	40	20	15	10			
W1KM K5ZD (W2SC,op) N2NT W2RQ KQ2M N2LT N6BV K3ZO K13Y K2DM	3,159,189 3,109,509 2,804,976 2,767,065 2,708,475 2,631,888 2,491,299 2,417,364 2,069,793 1,855,050	125/51 101/46 83/45 72/41 54/34 61/38 49/32 49/31 67/36 31/22	506/73 453/65 400/64 297/72 643/75 256/59 325/62 5177/71 308/56 177/56	732/78 829/88 729/85 680/91 714/87 795/82 664/84 700/80 795/88 585/74	1290/92 1423/92 1329/87 1325/98 1146/84 1232/85 1363/86 1055/84 879/80 1137/89	239/65 145/58 175/61 179/57 136/53 262/70 169/58 161/56 227/42 143/55	9/4 2/2 2/2 2/2 2/2 2/2 5/2 1/1 5/2 1/1 2/2			
W/VE 160	1,000,000		E 40	000/	1101700		_, _			
WVE 160 K1ZM W4ZV WB9Z AA8U K4TEA K1IK VE3OSZ N1CGP W4JKC NX5M	56,280 44,823 25,488 20,988 17,316 16,950 4,320 3,132 2,808 2,700	N7E WØU W70 W5V W4F WS	DD JN (WØUA,o GG VMU PA IM 5DX (KN5H,o	327,456 243,882 241,947 230,175		W/VE 15 N5LT K5NA N4BP WA7BNM AI2C WA1FCN NN4S W9GIL W1CU NA2X	61,404 50,301 50,250 27,768 26,784 26,280 20,592 16,638 15,729 12,558			
W/VE 80			E 20			W/VE 10				
W1MK K3RR K3CR (KB3AFT,op) W1UK W4BQF K3JGJ K3SV K6GNX K9JF/7 K8ZD	275,670 193,344 184,260 119,928 111,987 50,688 50,250 46,020 45,144 43,263	N8II N4Z K9N W4F KZ5 K9B K5T K9C N6M W90 K7Z	Z W RRR D G R IVB IU (at N6NB) DF	552,420 320,463 274,104 263,529 241,680 221,352 205,200 173,550 145,512 121,980		W5AJ W6KFV W4YV K5LH K1DII VE3MX	1,632 1,209 1,014 480 30 3			

DX Single Ope	rator, High	Power	, CW					
Call Sign	Score	160	80	4	0 20	15	10	
P40W (W2GD,op) ZD8Z (N6TJ,op) VP2EV (K7BV,op) VP5/WJ2O VP5JP (K8JP,op) V47KP (W2OX,op) G4BUO GW3YDX IR2W F6FGZ	5,263,380 4,322,640 3,799,008 3,198,168 2,914,296 2,214,702 2,029,428 1,890,213 1,824,705 1,815,516	430/56 197/43 417/54 202/35 311/50 233/36 236/37 340/37 41/21 162/31	932/59 636/57 772/59 724/58 660/54 376/47 493/51 613/48 284/40 251/43	1084/55 948/5; 810/5; 1147/56 950/5; 556/5; 801/5; 665/46 853/55	7 1037/59 7 1275/59 6 1382/56 3 1249/56 3 980/55 3 1284/58 8 1049/55 5 1100/58	1545/59 1653/60 1122/58 675/52 637/51 893/52 153/29 184/33 551/41 331/34	127/32 177/34 1/1 2/1 2/2 0/0 0/0 0/0 0/0 0/0	
DX 160 V26CW (NM9H,op) WP2Z (KE2VB,op) EI6BT FM5BH S5ØU GWØGEI SP5GRM 9A2TW 9A3B S57M	109,230 86,355 61,335 57,450 33,411 31,110 23,562 14,760 12,876 10,725		DX 40 9Y4VU \$5ØA EA7KW LZ5W \$53M (\$51R HB9FAP HV4NAC (IØI D25L (PA3D) VK2APK HA9PP	J,op) HCJ,op) ZN,op)	370,080 218,367 216,975 207,144 176,568 167,562 157,743 148,050 138,834 138,264	DX 15 LU6ETB V26NA (I TI7/NAM LU5FIL LW6EFP LU3UI PP5BRV YY4GLD CO8LY G3TXF	0	342,942 300,324 270,864 212,046 136,800 128,370 108,192 86,580 81,006 59,787
DX 80 HH2AW (9A3A,op) OT7T (ON4UN,op) GIØKOW' SN3A (SP3HLM,op) GØIVZ TM6P DL1IAO OM5DX DK2OY YU1EXY LY3BS	222,666 182,616 176,814 146,832 141,750 131,175 124,578 120,999 101,250 94,500 73,980		DX 20 ZF2NE (W5A GW3WVG G3MXJ YU1ZZ IT9GSF IT9XUC S5ØR SP2FAX ZD8DEZ HA3O (HA3L	4	396,360 283,272 278,046 227,268 217,356 214,347 210,240 209,214 204,972 203,019	DX 10 LU8AQE PU2MRY LU2DW LU7DW		63,066 27,522 17,745 3,465

nia—K3RR and K3CR (KB3AFT)—who had huge scores of their own.

WRTCer Ivo, 9A3A, working professionally and "contestingly" as HH2AW, worked everything from W/VE that moved on 80 to win the band. John, ON4UN, keyed OT7T from his superstation to win second place with a great score from Europe.

Forty meters saw a battle of some big western guns in the US. N7DD did the job with both multipliers and QSOs from Arizona to win, followed by the stacked Yagis keyed by WØUA at WØUN, and the stacked Yagis at W7GG way out in Oregon. A score of 300k is a great score on 40 meters from anywhere! I get the feeling that stacked Yagis on 40 meters are normal! In 10 years will stacked

Yagis on 80 meters be as normal?

From Trinidad, ever-popular Frank, 9Y4VU, found 60 multipliers and over 2000 QSOs to win the world on 40 meters. Tine, S5ØA, cleared the pile from Europe on 40 meters to take second place, despite heavy competition from EA7KW and LZ5W. On 20 meters from the US, N8II turned on his amplifier this year and put together a gigantic score from West Virginia. Then we keep moving further west to find second place at N4ZZ, third at K9NW and fourth at W4RRR.

From outside the US and Canada, 20 meters provides the most action on the bands. W5ASP packed up for his Caymans hideaway and won the world for the second straight year as ZF2NE. And the battle

between Wales and England continued on this band, with GW3WVG beating out G3MXJ for second place!

The Texans loaded up their guns on 15 meters, as N5LT slipped by K5NA for mastery of this band. Ernesto, LU6BEG, took his key over to LU6ETB to take the DX crown, with excellent signals that seemed to be audible all day long. KX9X took second place with his effort as V26NA.

Ten meters in this part of the cycle belongs to those who "stick it out." W5AJ found 34 QSOs to win from the US, while LU8AQE found Argentina perfect for 10 meters in 1997.

The multi-single class is always a popular one—especially when conditions aren't good enough to make all the operators complain that they "need to change bands now because they're all open at the same time—arrrgh!" Multi-single can be frustrating when two or three bands are wide open and the ops are champing at the bit to get their turn! In 1997 in the US, one needed a five-character call sign to place well, as evidenced by W3BGN's healthy win over the mountaintop Georgia station at K4AAA.

In the multi-two class in the US, one needed a five-character call sign, 200-foot towers, and a New England address to win! KC1XX did just that, by beating K1AR with a lead of five multipliers! It's hard to imagine multiop scores getting any closer than this. And it's not like K1AR loses too much, either.

The multi-single winners from further west were N8NR in the number 11 slot from Ohio, and W9SF in the number 12 slot from Wisconsin. Multi-two winners from out west were K8AZ at number 4 (somebody should write about what makes this station work so well!) and W8AV at number 9.

Multi-single from the DX side was just as competitive among the ABC Islands of South America as PJ9C beat out P49V for the top slot. A great score from TM1C at over 3 million points took top honors from Europe. TM1C has certainly proven to be one of the most workable European stations in the contest.

Multi-two from the DX side was quite a battle between 6Y4A and XE2L, with the multi-talented crew on the island pulling it out. 6Y4A's 7257 QSOs represents the high number for the contest and the second highest total *ever* in the multi-two class, behind 6D2X's 7652 QSOs in 1994. V51Z and KL7Y put in great efforts also in this class, finishing third and fourth, respectively—each with over 3000 QSOs.

The battle of the multi-multi giants found another five-character call sign winning in the US, as W3LPL narrowly defeated the "boys without a John" at N2RM. In the US, a premium is placed on short call signs, but this contest showed the power of five characters. Not too far west, K8CC was at number 8 and way out west was N6RO at number 10. Just a couple more years and things will be hopping on the bands for everyone on the planet.

Talk about streaks: In 1983 W3LPL finished fourth in multi-multi, then second in 1984, and first place from 1985 through the 1991 contest. In 1992 the now-legendary station finished second, first again in 1993, back

Top Ten							
W/VE Single Operato	or Assisted, CV Score	V 160	80	40	20	15	10
K1NG (KI1G,op)	3,325,560	107/55	350/78	710/104	1113/97	297/85	13/9
K3WW	2,851,110	82/51	359/79	660/95	1108/93	192/73	5/4
N2MM	2,156,952	47/35	227/62	582/92	1103/96	109/60	4/2 4/4
AA1K K2SX/1	1,966,920 1,907,490	77/51 40/34	147/67 173/61	206/79 478/85	1165/97 1087/92	173/72 112/59	8/4
W6GO (N6IG,op)	1,820,940	23/20	147/65	728/103	675/92	186/51	21/10
AA3B	1,704,990	35/32	310/68	502/80	812/86	100/52	6/4
NN4T W2UP	1,572,732 1,522,410	44/37 31/30	168/58 237/57	301/80 368/69	1077/88 845/88	60/46 154/64	9/7 2/2
K2BU	1,519,833	71/42	190/60	292/74	691/86	225/78	8/3
W/VE Multioperator	Single Transmi	tter, CW					
Call Sign	Score	160	80	40	20	15	10
W3BGN	3,448,650	86/55	471/79	793/98	1223/105	190/75	7/3
K4AAA K1AE	2,706,750 2,019,150	72/43 66/42	358/71 240/66	615/88 569/83	1139/93 864/88	206/69 176/68	16/11 8/3
K2NG	1,946,721	65/42	171/53	639/88	968/84	166/56	0/0
AA2FB	1,908,348	57/36	180/63	528/88	975/87	119/63	1/1
W/VE Multioperator							
Call Sign	Score	160	80	40	20	15	10
KC1XX K1AR	5,861,124 5,779,485	126/60 89/55	846/94 700/88	996/112 1150/112	1727/104 1803/113	438/92 395/93	15/9 6/4
K1ZZ	4,385,964	128/60	465/81	906/104	1436/104	328/88	15/9
K8AZ	3,842,028	55/37	524/85	753/106	1497/102	271/71	16/10
K4OJ	3,585,015	52/37	390/73	669/88	1440/103	429/89	15/9
W/VE Multioperator	Unlimited Tran	smitter, CW					
Call Sign	Score	160	80	40	20	15	10
W3LPL N2RM	7,246,491 7,071,102	260/68 221/73	1042/96 903/89	1151/119 1321/116	1740/119 1659/112	508/97 613/100	26/12 16/8
N3RS	6,413,784	172/62	801/93	1153/116	1841/113	397/98	17/6
K1KI	6,032,712	239/65	815/94	1106/112	1671/112	325/91	16/8
K3LR	5,948,700	168/64	751/94	979/123	1613/114	413/92	26/15
DX Single Operator	Assisted, CW						
Call Sign	Score	160	80	40	20	15	10
KH6RS	1,712,196	72/30	209/45	832/53	627/50	608/53	40/8
F5NBX ZZ2E (PY2EX,op)	1,125,450 964,404	1/1 0/0	272/39 13/10	480/47 294/45	909/57 650/54	388/39 804/58	0/0 45/11
DL1ASA	703,080	65/18	300/39	252/36	738/57	40/18	0/0
IKØHBN	564,480	1/1	162/38	351/42	559/53	103/26	0/0
IK5TSS	260,064	0/0	36/16	152/35	342/49	142/29	0/0
DX Multioperator Sir	-						
Call Sign	Score	160	80	40	20	15	10
PJ9C	5,602,896	525/57	886/59	1252/58	1300/60	1560/59	171/35
P49V V31TP	5,124,072 3,824,724	324/56 214/48	757/60 723/54	1303/60 1049/58	1349/59 1251/56	1437/59 1277/56	118/29 72/6
XA5T	3,512,781	241/48	741/58	1005/58	1546/58	626/53	8/6
PYØFF	3,489,360	92/28	557/53	874/54	1157/58	1577/59	83/16
DX Multioperator Tw							
Call Sign	Score	160	80	40	20	15	10
6Y4A XE2L	6,509,529 5,961,480	577/56 557/54	1311/60 1152/60	1849/60 1752/60	1943/59 1694/59	1549/59 1379/60	28/5 46/9
V51Z	2,699,580	78/26	487/54	902/57	945/56	970/51	79/16
KL7Y	2,299,770	250/48	672/54	622/53	1168/58	317/39	1/1
DL3OI JA2ZJW	1,927,284 493,725	78/22 15/6	804/53 154/35	941/53 401/45	1003/57 533/52	176/29 32/7	0/0 0/0
DX Multioperator Un	llimited Transm	itter. CW					
Call Sign	Score	160	80	40	20	15	10
KP3Z	5,055,492	276/54	961/59	1329/58	1538/60	1506/59	26/9
9A1A EA4ML	2,811,294	229/34 126/33	842/57 491/43	1136/55 930/54	1358/59 1227/57	389/32 331/40	0/0 0/0
4NØV	2,114,505 1,921,968	46/21	609/48	1062/59	1036/57	213/31	0/0
RW2F	1,335,780	223/35	499/49	582/52	825/58	43/11	0/0

to second in 1994, and now back again to a solid first place from 1995 through 1997—14 years first or second, with 11 wins. That is an awesome statistic, one that may never be equaled. Frank and his dedicated crews deserve congratulations and high-fives all around for this remarkable achievement. Just keeping a station on the air for 14 years is a terrific accomplishment.

Multi-multi from the DX side was an easy win for KP3Z and a battle within Europe—9A1A made nearly 4000 QSOs to beat the team at EA4ML. Special mention goes to the RW2F ops, who provided a rare multiplier in the multi-multi format.

Next year will the streaks continue? Will the sunspots return? (Will the sunspots ever

return?!) Who will be the first W9 to work Europe on 10 meters off the F layer? Who will be the first W8 to work Japan on 10 off the F layer? Heck, who will be the first to win a multiop category with a six-character call sign? Tune in next year to find out... A special thanks to Assistant Contest Manager Bev Hernandez, N1NAZ.

Errata

The score of KH6RS, operated by Hiller Raamat, N6HR, was 680 left out of the 1996 scopre listings. KH6RS's score was 1,078,680 points and should have won for Hawaii. We apologize for the omission and hope that Hiller will continue to give us the KH6 multiplier for many years to come!

SOAPBOX

W/VE

What a contest! I used a new 40 meter wire beam. It's hard to imagine what it would be like with rotatable beam antennas (KQ2M). UA9FGR called me on 80 meters. I had to take time off Saturday afternoon to repair the balun connection to the tribander's driven element-then thaw my fingers so I could feel the keyboard (WS1E). The contest was a lot of fun. Although conditions were fairly poor, I was pleased to find some decent multipliers on 15 meters. I was especially pleased to work D25L on 40 meters, my only new country during the contest (W1SA). Conditions were very good on 80 meters. Wow, it was fun to pick out some of the weaker stations and not have to deal with the normal static on 80 meters (WB2AMU). Great to hear ZS8IR on the band in the contest. I finally got him by calling below his frequency, and he stuck with me through the QRN at his QTH for a great QSO; an all-time new one for me! (AJ2U). Conditions poor, but I still enjoyed the contest. It was the first time in 12 years that I operated at home (W2ZZ). At age 72, I was still able to get in the contest (AE2N). The low bands were great, even for 100 W and wire antennas! (K2CS). Always great fun, even on a busy weekend (F6IIE). Conditions were outstanding on the low bands and incredibly bad on 10 and 15 meters! I didn't make a single QSO on 10 meters, but 20 meters seemed bottomless. I never expected to make 1100 QSOs there with just a four-element tribander (NJ2L). I was disappointed that so many DX stations only identified in a contest every 8 to 10 minutes and then at about 50 WPM! How about giving us all a break and identify, after each QSO, at the speed you are normally transmitting at (KK2M). I hope the sunspots make an appearance soon; over the first 40 kHz of 40 meters there was nothing but stateside stations calling CQ. As usual, however, it was fun breaking pileups with a modest setup (N2AU). Lots of fun due to good conditions and operators, even with low power, low sunspots, and wire antennas (N8NA). Great ears on ZD8Z; he managed to hear me to for a six-bander. It was a most enjoyable contest (W3DA). I have been in contests for many years and have about the worst fist on the band. I have yet to meet a DX station that is not kind or even ready to assist me in completing contacts (WA3DMH). The 80 meter band was a real surprise! Saturday night 40 meters was dead, but 80 sounded like 40 should have. I worked 19 countries on 80, three times as many as last year. However, 20 meters is still the queen of the DX bands (N3UMA). I used my new FT-1000-MP for the first time in a major contest. The 80 meter band was great, but 10 meters was as bad as I've ever heard it (K3ZO). Some periods of good conditions. I worked Europe on 80 meters both evenings—unusual for my "pure" QRP and low antennas (K3WWP). Finding out that 6B2X was really 6D2X was a bit of a bummer. I listened to that operator for about 15 minutes and was amazed that he hardly ever asked for a fill (WA3SES). The propagation conditions were the worst I've seen in years. I couldn't even work the few Asians or the Eastern European stations I heard. Even 80 meters was nearly empty. Boy, do we need some sunspots! (N2EM). The sunspots might be at a minimum, but not the fun and enjoyment of the contest (KK4SM). After being off the air for over 20 years, I started back in 1996. The DX contest was a blast! I never heard one like that 20 years ago. Strong signals; low noise; lots of DX stations! I can't wait for the next one! (W4YNG). thought working DX was supposed to be difficult. I just hope they will QSL! (KE4AGT). This was my first contest since 1980. Thanks for the work running it; it was a blast! (N4HI). Even a newly tweaked transceiver couldn't overcome the puny propagation (N8LM). It didn't sound like the bottom of the cycle (K4FXN). I have been licensed for 65 years and I am 83 and blind. I can see slightly with optical amplification and a computer large-screen program called Zoom Text. I built an Index QRP PLUS along with key, tuner, and a 7 A-h gel cell into an apparatus case with a separate Naugahyde cover for my solar cell and regulator; and decided to check it out in the DX Contest. Unfortunately, my eyestrain limits the time I can spend in operating (K4JO). I worked several new band-countries for DXCC, one all-time new one. YC8TZR was loud and clear on 40 meters! It was also great to work the Pacific, South America, and the Caribbean on 10 meters (WO4O). Would like to see single ops limited to 30 hours

W/VE Plaque Winners Single Operator

MII Band W1KM
1.8 MHz K1ZM
3.5 MHz W1MK
7 MHz N7DD
14 MHz N8II
21 MHz N5LT
28 MHz W5AJ
Low Power K8PO
QRP AA2U

Assisted K1NG (KI1G,op)

Multioperator

Single Transmitter W3BGN KC1XX Unlimited W3LPL

DX Plaque Winners Single Operator

 World
 P4ØW (W2GD,op)

 Africa
 ZD8Z (N6TJ,op)

 Asia
 JH7DNO

 Europe
 G4BUO

 North America
 VP2EV (K7BV.op)

North America VP2EV (K7BV,op)
Oceania KH6RS

South America OA4SS

Frankford Radio Club George Schultz, WØUA, KØZZ Memorial Thomas Rylander, SM3DMP Northern Arizona DX Assn

QSLs By W4MPY Carl Luetzelschwab, K9LA Green River Valley, IL ARS Dauberville DX Assn Tod Olson, KØTO Richard Hallman, N7TR

Northern Illinois DX Assn Order of Boiled Owls of NY, W2AO Memorial Ehrhorn Technological Operations Inc.

North Jersey DX Assn Byron P. Peebles Jr, NZ3O Alamo DX Amigos Dr Jerry Griffin, K6MD Potomac Valley Radio Club Steve Franke, K9AN, and John Brosnahan,

WØUN Dean Straw, N6BV
 1.8 MHz
 V26CW (NM9H,op)

 3.5 MHz
 HH2AW (9A3A,op)

 7 MHz
 9Y4VU

 14 MHz
 ZF2NE (W5ASP,op)

 28 MHz
 PU2MRY

 Low Power
 HP2/N6NT

 QRP
 6YØA (K3DI,op)

 Assisted
 F5NBX

Multioperator, Single Transmitter

 World
 PJ9C

 Asia
 JR1ZTT

 Europe
 TM1C

 North America
 V31TP

 Oceania
 AH6MZ

Multioperator, Two Transmitters World 6Y4A

Europe DL3OI North America XE2L

Multioperator, Unlimited

World KP3Z Asia JA1YDU Europe 9A1A Fred Race, W8FR, DL1FF Memorial Jim Knutson, KDØAV

Thomas P. Gannon, W3YX, Memorial Bencher Inc. Ft Wayne DX Assn Jim Stevens, K4MA Dr Jerry Griffin, K6MD Willamette Valley DX Club

John Brosnahan, WØUN Western Washington DX Club The Radio Place Steve Morris, K7LXC, and Up the Tower

Tom De Meis, K2TD, Memorial, Frankford Radio Club Jim George, N3BB Texas DX Society

Gary Stilwell, KI6T, and Glenn Stilwell, WR6O

H. Stephen Miller, NØSM Hajime Kato, JO1RUR/2, KHØG Texas DX Society



Hans, DJ8UL, operating low power all bands from Germany, did not win the contest, but he had a beautiful ending.

operating time (K4LTA). I put in part-time effort, about 20 hours total. I had the flu and was operating under the influence of NyQuil, which adds an extra dimension to contesting! A few hours on, several hours off (K4RO). This was a fun contest, and my first with computer logging-what a difference! It was the maiden voyage of my newly constructed low-band vertical, which allowed me to work across the pond on 160 meters for the first time, and also to have a wonderful time on 80 meters. Not too bad for 50 W, battery powered. (AB4I). I had to operate from my mobile setup this year. Part of the time I operated on the ac power supply and the other part on the car battery. I wasn't able to hear anything on 10 meters and didn't try 80 or 160 meters due to my busy schedule in the evenings (K4UK). Great contest! My first contest since Sweepstakes 1979. I had a lot of fun and look forward to the next one! (N4BTO). Excellent European opening both days,

meters, but switched it on for the other bands and had lots of fun. I hadn't planned on competing before the event started, but got caught up in the spirit of the competition! (W5OT). I was able to make contacts on all five bands, with my best results coming in on 15 meters, followed by 20 meters. I am an ex-Navy radio operator from the Vietnam era, and the outstanding CW operators who participated in this contest made it a pleasurable weekend (KA5KLU). Parts of the conditions were terrific, especially the unexpected brief opening on 10 meters in the last hours on Sunday (K5GN). My new Beverages work, but need more attention. It's better than it was before though. (NX5M). Weak European signals, but strong Asian signals (KI6OY). Conditions good, with over 30% of my contacts in Europe! Signals on Sunday were very good to Europe with a five-hour band opening. I think someone ordered a few sunspots for the test (K6CEO). My highlight was being called by XX9TR in the middle of a JA run! Most productive band for South America was 15 meters! (WK6C). This is my theory: There is no correlation between HF propagation and solar activity. Proof: ZD8Z on three bands! Perhaps he makes his own sunspots! (K6GT). I overheard a funny thing while tuning on 20: "QRZ contest, this is JA#?" "November 7 Kilo...woops!" (I assume that meant he had just noticed that the JA was a dupe.) "November 7 Kilo Woops you're 59 500" (I can't imagine what the JA call sign was!) (K6GT). It was very hard trying to work Europe from the Left Coast with 100 W and a vertical antenna (KN6YD). Using QRP lends a new dimension to "hunt and pounce." It usually comes out "hunt and pounce and land in a heap" (K6ZX). A hearty "thank you" to all the patient stations that worked so hard to dig my signal out of the din (K8OUA). New antennas for 80 and 40 meters sure made a difference! (WT8P). What an incredible run Saturday morning! I stayed on essentially the same frequency and was actually running a pileup six or more stations deep on few occasions (N8II). I don't know about you, but at my new QTH the conditions were so bad that this should be called the "Caribbean Kilowatt Contest," since those were about the only stations I got (KE9EX). This contest is always good for a few new countries for me, no matter how little I operate (N9CIQ). I had good runs for the first time on 20 meters. The Fox Tango 400 Hz filters allowed me to actually hear on a crowded band (W4NF). The biggest shock I had during the contest was XX9TR answering my CQ on 40 meters (KC6X). Oh, foo! No JA run. Well, at least I won't get writer's cramp filling out QSL cards (AAØCY). Our first effort from the renovated station of N8NR (ex-WB8ENR). Temporary low-band antennas strung from a halvard between towers were noisy on receive. As a result, on Saturday afternoon we put a 170 foot

but poor conditions to other parts of the world (W4RRR). Great contest! A lot of signals; however, 10 meters was pretty poor (WA4JUK). Started at low power because my amp was broken on 40



Marin, YO4DCF, with that look of determination, is getting ready for the CW contest.

Beverage between other towers, which made a lot of difference on both 80 and 160 meters (N8NR). The combination of double stubs (tnx, K2KW) and W3NQN band-pass filters (tnx, K3LR) provided interference-free operation for the first time ever (N6RO).

DX

Many thanks to all operators who heard my QRP signals (GØOGN). I got a great pleasure out of working this contest. Thank you (F5YJ). I was operating outdoors in a portable location. It was tough! (JM1LPN/1). My small antenna could not catch many USA/VE but I enjoyed 132 QSOs (JR4GPA). I wish I could have operated all 48 hours (CT1BQH). The first day I had a nice pileup from the USA. The second day was quieter (DL9FBS). Conditions weren't perfect on 14 MHz during the day, but it was good to hear so many US stations. On Sunday evening, 7 MHz was very good, but I was causing TVI at home, so I had to restrict my transmissions (G4ZME). Great contest—plenty to work, especially the West Coast. However, it's a shame I couldn't contact Mississippi (ZD8DEZ). The high bands didn't open and heavy snow noise the second

night. Nevertheless, I enjoyed the contest very much (JH7XGN). Conditions were good for long path (JA6SHL). Conditions were good the first night; unfortunately, the second night they were not. I found that the low power category is the best for me, because of less interference (JE1SPY). I'm always astonished by the excellent ears of the USA operators (9A2OO). My first US QSOs on 3.5 MHz (DL6MWG). Due to the antenna laws in Germany, I had to work in this contest with an indoor dipole two meters long. This is not easy or a pleasure, but if you call each station six times, it works! (DL3SEM). I was very pleased to meet some of the US operators. I had a lot of fun working low power (DV3DM). During this contest I ran my oldest rig barefoot, using old-fashioned operating ways; it

was fun! (EA3ALV). Roll out the sunspots! It's a good sign when you work more stations on 80 meters than on 15 meters. At the peak of the cycle, I worked 40 states using 5 W (G3KNU). It was the first time I was able to work the US during this contest on 40 meters. Unfortunately, I missed some Canadian provinces (HB9FAP). Sunday morning was good on the top band, but the wind took down my lazy quad (IØKHP). I hope to work stateside again next year! (LA4EJ). The contest was a lot of fun from Finland, especially during the sunspot maximum. This time it seemed as if 14 MHz was the only competitive choice for me (OH4OC). My biggest thrill in this contest was to repeat my power to several stations who were astonished by my QRP

2 W (PAØRBO). It is obvious that power counts. Although I heard many stateside stations on 7 MHz with booming signals—well over S9—I got no answers on that band (SM5CLE). Many stations answered on my first call with just 3 W output to a half-wave vertical (SO5TW). Very poor conditions here in northern Russia. The temperature was –30° C outside, and –5° C inside. I was almost frozen without pileups to keep me active (UA10MS). The 15 meter band was hot! Running just 100 W into a R-5 vertical allowed me to have some incredible runs (HP2/N6NT). I wondered why 15 meters had closed so early on Saturday night. I then found out Sunday morning that the rotor brake went south, along with my antenna! (V26NA).

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**.

CW W/VE	K1IK 16,950 113 50 C 160 KD1SG 40,533 229 59 B 80	N2IXD 7,500 50 50 B NJ2L 1,526,784 1792 284 C W2FU 1,357,200 1560 290 36 C	4 Alabama
Single Operator	Western Massachusetts KD1YN 108,927 273 133 B AA1OK 11,250 75 50 9 B	W6XR 1,143,750 1525 250 C K2NV 845,964 1119 252 C	W4DEC 34,263 141 81 A KK4SM 180,540 354 170 B
USA 1	K5ZD (W2SC,op) 3.109.509 2953 351 C	KW2J 391,680 768 170 C WA2ABN 201,891 389 173 C KE2WY 179,490 386 155 C	W4YNG 13,992 88 53 20 B K4NR 12,312 76 54 B KE4AGT 270 10 9 1 B
Connecticut N1TM 182,880 381 160 A	KV1W (K1MBO,op) 780,678 1098 237 C WF1L 102,051 493 69 B 20	W2OMV 167,388 377 148 C W2QIP 142,197 341 139 C	KE4AGT 270 10 9 1 B K4AB 1,260,840 1580 266 C W4NTI 31,563 167 63 C 80
K1VW 530,565 815 217 34 B K1NO (K5FUV,op)	WB2NLR 33,453 177 63 B 20	KU2N 105,732 267 132 C WB2YQH 89,964 252 119 C KK2M 54,378 171 106 C	Georgia KE2WB 11,607 73 53 8 A
268,068 502 178 B W1EQ 246,753 481 171 B K1EFI 205,452 439 156 B	2 Eastern New York	N2UM 45,000 150 100 C W2EZ 40,248 156 86 15 C	N4HI 217,485 405 179 B K4OGG 166,992 392 142 B N8LM 123,402 314 131 B
NA1I 97,536 254 128 B KA1JVR 76,962 254 101 B W1AB 46,500 155 100 17 B	W2QYA 1,575 25 21 A K2UF 92,355 235 131 B	KQ2K 37,674 161 78 C W2OP 33,948 138 82 C WF2Y 10,971 69 53 C	K4TEA 17,316 111 52 C 160 NN4S 20,592 132 52 B 15
WIAB 46,300 155 100 17 B AB1U 45,510 185 82 B K8CH 7,326 66 37 4 B	K2RI 17,181 83 69 B NJ1F 5,040 48 35 B W2XL 703,044 993 236 C	WB2RAJ 10,080 60 56 C K2FR 6,318 54 39 4 C KA2CDJ 1,242 23 18 B 160	Kentucky K4FXN 96,033 269 119 B
KQ2M 2,708,475 2695 335 C WV1C 112,119 281 133 C N1HRA 66,660 202 110 C	WA4VKD 281,160 568 165 C K2XF 207,927 459 151 C	W2DR 18,285 115 53 9 C 80 WØVU 16,560 120 46 B 80	AE4UK 22,557 103 73 B K4TXJ 14,070 70 67 7 B KF4AV 10,437 71 49 4 B
W1UK 119,928 526 76 8 C 80 W1VT 32,436 212 51 A 20	W2GDJ 124,581 317 131 C K1ZM 56,280 268 70 C 160	N2AU 51,333 241 71 C 40 WB2DVU 15,444 117 44 C 40 WA2BQI 12 2 2 A 40	N4XM 298,044 487 204 22 C WB4PRU 73,593 221 111 C
WA1FCN 26,280 146 60 B 15 W1CU 15,729 107 49 C 15 K1DII 30 5 2 B 10	WX2N 4,350 50 29 18 B 15 NYC-Long Island	NA2X 12,558 91 46 C 15	W4KY 6,237 63 33 5 C 80 K2YJL 21,168 126 56 C 40
Eastern Massachusetts	W2HLI 285,696 512 186 B KG2BI 17,460 97 60 B	3 Delaware	North Carolina N4IJ 89,088 256 116 A K4.IO 1.080 20 18 A
K8PO 1,476,618 1721 286 B K1VUT 558,888 803 232 B W1ZZ 345,462 559 206 17 B	W3EH 8,496 59 48 B N2MBM 5,775 55 35 B N2UN 210,195 405 173 C	N8NA 121,410 285 142 B W3DA 375,732 639 196 C	NW6S 178,560 372 160 34 B
K1HT 153,900 342 150 B K1DC 146,700 326 150 B	K2AW 64,530 239 90 C W2KPA 18,618 107 58 C	W3NX 176,853 353 167 C Eastern Pennsylvania	N4AF 1,223,100 1510 270 25 C W4IX 100.224 261 128 C
K1OA 92,565 255 121 7 B K1EP 62,160 185 112 B N1OY 26.418 119 74 B	WB2AMU 10,647 91 39 B 80 K2MFY 50,400 240 70 12 B 20	K3PH 228,957 457 167 A KB3MM 171,558 353 162 B	N4UH 47,724 164 97 C K4RZ 27,135 135 67 C W4ZV 44,823 223 67 C 160
WU1F 23,664 116 68 8 B N1ET 20,601 109 63 B	Northern New Jersey AA2U 363,156 571 212 A	K3ZA 112,218 317 118 B N3AS 16,296 97 56 7 B K3IPK 1,246,500 1662 250 C	W3TUX 264 11 8 B 40 K4SI 18,720 130 48 B 15
W1OHM 15,753 89 59 B K1MC 6,669 57 39 10 B N1HOG 6,426 51 42 B	K2JT 5,550 50 37 4 A K2SG 1,244,040 1481 280 B NA2U 710,424 1012 234 B	K3TEJ 788,391 1047 251 C K4JLD 348,156 509 228 20 C	Northern Florida WC4E 1,058,169 1229 287 C
KC1WD 1,944 27 24 4 B W1KM 3,159,189 2901 363 C	K2SZ 76,593 211 121 B WB2VVV 52,155 183 95 B	N3RW 180,576 396 152 C N3KR 159,840 360 148 C W3QIR 90,168 221 136 C	K8CV 2,160 30 24 C K4TT 17,304 103 56 7 C 40
AA1ON 1,052,526 1334 263 C WT1O 569,535 883 215 C K5MA 532,140 980 181 15 C	KU3D 31,974 146 73 15 B W2LRO 31,185 135 77 12 B N2NF 11,475 75 51 11 B	W3EVW 66,780 210 106 C WE3E 54,288 232 78 C	South Carolina W3VT 705,330 922 255 30 C
KA1DWX 517,608 728 237 C N1DG 253,989 409 207 C	N2NT 2,804,976 2718 344 C W2RQ 2,767,065 2555 361 C N2LT 2,631,888 2611 336 C	N3IKJ 20,016 139 48 8 C KT3T 5,202 51 34 C K3RR 193,344 848 76 C 80	K4CSB 33,366 134 83 C W4JKC 2,808 36 26 B 160 N2FY 57,564 234 82 C 40
AA1HB 209,592 426 164 C W1RH 184,824 408 151 C N1IA 142,650 317 150 C	K2DM 1,855,050 2075 298 C K2WK 1,819,098 1773 342 C	K3SV 50,250 250 67 C 80 WA3DMH 10,296 88 39 C 40 W3EHZ 39,648 224 59 B 20	Southern Florida KT4RG 48 4 4 9 A
NZ1Q 93,534 262 119 C K1VV 76,935 223 115 C	W2EN 752,229 1007 249 C WA2VYA 553,356 809 228 C K2GN 260,820 460 189 C	KR3I 18,963 129 49 8 C 20 W8IJ 3 1 1 1 B 20	KN4T (N4RN,op) 1 019 640 1160 293 41 B
WR1P 9,150 61 50 C K2LP 4,680 52 30 C	W2HCA 134,400 320 140 11 C AJ2U 17,112 92 62 3 C	N3CZB 126 7 6 B 15 Maryland-DC	WD4AHZ 515,508 722 238 B W4PLL 233,142 427 182 32 B N4PSE 151,803 303 167 B
W1MK 275,670 1021 90 C 80 WS1M 230,175 775 99 C 40	WA2ASQ 6,588 61 36 B 80 N2TN 49,680 207 80 B 40 K2WJ 26,718 146 61 C 40	W3UJ 367,722 659 186 B W3CP 148,356 317 156 B	N8PR 66,348 194 114 B W4YN 504 14 12 B
Maine N1AFC 156,492 378 138 A	W2CG 21,948 124 59 B 40 W9NTU 27,552 164 56 B 20	K3AJ 128,853 309 139 16 B W3MR 125,550 270 155 B AA3LE 61,182 206 99 B	W4EQE 11,178 81 46 B 40 KN4JN 2,925 39 25 7 B 40 W9CN 420 14 10 B 40
NX1C 10,956 83 44 B K1EU 22,200 100 74 C N1CGP 3,132 36 29 C 160	Northern New York N2TNW 5,616 52 36 5 B	N3UMA 35,604 138 86 15 B K3ZO 2,417,364 2487 324 C W3GN 426,816 684 208 C	W4GD 28,365 155 61 6 C 20 W2SDB/4 2,520 35 24 B 20 W1KBI 108 6 6 3 B 20
NR1F 3 1 1 B 20 K1JB 8,820 70 42 C 15	W2ZZ 70,074 229 102 15 C Southern New Jersey	W3AZ 360,177 569 211 C W3TMZ 121,230 449 90 C	N4BP 50,250 250 67 12 C 15 WD8PNL 3 1 1 1 A 15
New Hampshire AA1CA 90,774 246 123 A WS1E 774,090 1098 235 B	K2PS 157,356 372 141 A WA2VSQ 2,418 31 26 A	N3UN 78,480 218 120 C WV3B 15,714 97 54 C W3DAD 36,465 187 65 15 C 40	Tennessee N1CWR 89,667 243 123 A
WS1E 774,090 1098 235 B N1SNB 127,710 330 129 15 B K1WD 10,488 76 46 5 B	K2JLA 121,800 290 140 B K2ZA 80,712 236 114 B KA2GSL 49.995 165 101 B	Western Pennsylvania	WO40 416,070 603 230 37 B K4OAQ 153,450 341 150 B
N1SMB 10,206 63 54 12 B KC1F 9,360 65 48 1 B	K2SWZ 22,236 109 68 B W2UL 15,555 85 61 7 B	K3WWP 17,472 91 64 16 A AA3GM 13,284 82 54 A WW3S 254,880 480 177 B	N5OR 30,888 132 78 B W4TYU 27,840 116 80 10 B AA4WX 25,515 135 63 B
N6BV 2,491,299 2571 323 C K1ZR (at KB1SO) 1,071,036 1692 211 C	W5KI 1,584 24 22 24 B WA2VQV 912 19 16 B N2MR 307,536 596 172 C	AD8J 192,696 434 148 18 B WA3SES 127,725 325 131 48 B	W4NI 6,888 56 41 5 B W4XJ 1,015,296 1322 256 C
K1PTF 362,850 590 205 C W1ECT 268,056 584 153 C	W2BE 60,300 201 100 C NN2Y 9,900 66 50 21 C	WA3HAE 123,414 307 134 46 B K3FH 73,188 228 107 11 B W3TWI 58,830 185 106 48 B	K4LTA 837,930 1054 265 C KØEJ 705,432 988 238 29 C K4AMC 250,650 557 150 C
W1END 3,741 43 29 4 B 15	W2ESX 24,600 164 50 C 80 W2PAU 14,310 106 45 C 80 AE2N 5,688 79 24 B 20	NB4J 44,541 147 101 13 B N2EM 11.700 78 50 B	K4RO 209,034 441 158 C N4IR 149,436 593 84 C
Rhode Island K1ZE 203,175 387 175 11 B K1VSJ 31,005 159 65 7 B	WA3RHW 741 19 13 B 20 Western New York	KA3MYM 9,246 67 46 12 B W3QOS 5,985 57 35 4 B K3MD 1,258,752 1408 298 C	W4PA 241,947 783 103 C 40 N4ZZ 320,463 1079 99 25 C 20 W9WI 111,627 471 79 B 20
K1AM 1,255,188 1628 257 C W1WFZ 180,642 374 161 C	W2TZ 759,684 1073 236 B NA2Q 290,700 570 170 B	KC4K 101,772 257 132 23 C KX2A 57,240 180 106 C	Virginia
K1MO 141,636 319 148 C W1RFQ 9,471 77 41 C 15	N2PEB 154,128 338 152 28 B WA2EYA 108,966 286 127 13 B WA2YSJ 78,234 221 118 B	W3HDH 21,168 112 63 3 C K3CR (KB3AFT,op) 184,260 740 83 C 80	K4FPF 164,640 343 160 B N3TG 123,525 305 135 B
Vermont W1SA 383,799 757 169 B	K2JL 56,430 171 110 B WB2JFP 37,752 143 88 B	K3GW 6,720 56 40 C 80	N6MW 65,037 163 133 B N3RC 37,848 152 83 B K4JM 36,024 158 76 6 B
W1ZK 464,448 656 236 C N1RJF 181,770 415 146 C	KG2HS 11,448 72 53 B		K4JM 36,024 158 76 6 B

N4OT 26,520 AB4I 23,175	104 103	85 B 75 B	KO6KA 60 W7CB/6 3,300	5 44	4 3 A 80 25 C 15	Ohio		74 40 7	KØJPL 86,58 WØTT 79,33	3 217 5 215	133 123	C 21 C
K4UK 20,865 WB4DNL 18,942 KC4GIA 14,040	107 82 78	65 8 B 77 B 60 8 B	W6KFV 1,209 Santa Clara Valley K7JJ 95,508	31	25 C 15 13 C 10	K8OUA 37,701 N8XA 300 N8AA 543,030 KA8ZPE 165,798	177 10 787 302	71 19 A 10 A 230 B 183 B	North Dakota WØHSC (KBØO,op)		100	21 C 17 C
K4FOY 13,416 K4PK 7,560 N4BTO 4,725 KT3Y 2,069,793	86 56 45 2277	52 B 45 B 35 44 B 303 C	N6NF 74,256 N7FF 31,506 WD6DX 25,920	221 178 135	112 8 B 59 B 64 B	WB8YJF 154,548 WA8YRS 115,632 WT8P 113,169 KF8TM 104,706	324 292 317 277	159 38 B 132 B 119 B 126 11 B	108,570 KØE 9,900 Nebraska		104 44	22 B C
W4ZYT 549,696 W4RRR 263,529 N3JT 232,500	818 987 500	224 24 C 89 C 155 C	K6XX 298,908 K6GT 159,600 KG6AO 56,358 W6PLJ 43,956	722 400 202 198	138 C 133 C 93 C 74 C	W8GOC 93,000 W8UPH 81,900 W8IDM 63,840	248 260 190	125 B 105 43 B 112 9 B	KØIL 12,08- KOIL 12,08- KØSW 111,54	4 76	53 53 143	B 9 B 12 C
WA4JUK 169,200 W4YE 159,003 W4IF 119,424 W4XD 117,114	376 351 311 298	150 48 C 151 C 128 C 131 C	KA6W 4,278 W6OPO 3,420 San Diego	46 57	74 C 31 C 20 24 B 40	KB8FLY 41,223 W8CS 40,128 AF8C 20,280 W8DWP 12,993	151 152 104 71	91 B 88 12 B 65 B 61 B	VE Newfoundland			
W2YE 107,682 K4VV 70,725 N4MM 61,845	274 205 217	131 C 115 C 95 C	W8QZA/6 57,681 WN3K 170,235 WN6K 170,235	221 485 485	87 A 117 B 117 B	K9DTB/8 6,600 W8KH 5,106 K8VUS 1,260	50 46 21	44 B 37 B 20 B	VO1MP 833,940 Nova Scotia		246	С
K6ETM/4 45,300 N3OS 19,392 WA4DOX 17,400 W4BQF 111,987	151 101 100 541	100 C 64 C 58 6 C 69 C 80	AA6EE 27,126 W6MVW 139,854 W6JVA 48,024	137 326 174	66 B 143 C 92 10 C	W8RSW 173,445 K8LN 77,490 W8PN 50,490 K8MR 48,360	373 210 165 155	155 C 123 C 102 C 104 3 C	VE1ZJ 118,75: VE1LV 30,86 Prince Edward Is	1 127	145 81	C
K4MX 7,776 W4HM 52,650 K4GEL 24,300	72 225 162	36 B 80 78 48 B 40 50 A 20	WA6TKT 24,948 San Francisco W6JTI 558,732	154 922	54 C 40	K8ZD 43,263 W8JGU 49,704 WA8RCN 28,350	209 218 150	69 37 C 80 76 B 40 63 15 C 40	VY2OX 393,984 Quebec VE2AWR 182,520		216 169	В
AI2C 26,784 W4YV 1,014	144 26	62 C 15 13 C 10	K6UM 151,206 WA6CTA 144,960 W6WB 69,156 W6BIP 20,826	319 320 226 89	158 15 B 151 11 C 102 C 78 C	N8WS 351 AA8PJ 10,560 WA8RJF 1,764	13 88 28	9 B 40 40 24 A 20 21 A 15	VE2AVI 162,321 VE2AZJ 2,83 VE2AYU 469,86 VE2FFE 7,45	5 35 0 820	27 191 35	B C C
Arkansas N8VV 207,363	409 777	169 B	San Joaquin Valley KE6GTR 1,071	21	17 B	West Virginia KG8GW 133,650 W9LT 1,073,814	330 1382	135 B 259 38 C 151 C	Ontario VE3KP 297,000 VA3TEE 81,390		180 114	B B
KM5G 505,827 WA5SOG 31,080 Louisiana	148	217 48 C 70 C	WC6H (NU6S,op) 860,247 KA6BIM 126,054 KN6YD 6,900	1359 282 50	211 C 149 C 46 C	N4ZR 223,329 W8PT 134,520 K8OQL 32,136 N8II 552,420	493 295 206 1674	151 C 152 C 52 C 80 110 C 20	VE3WIB 77,859 VE3WZ 66,433 VE3BZR 32,943	9 211 5 215 3 139	123 103 79	B B
K5KLA 352,089 W5OT 102,870 N8RR 24,462 W5WMU 243,882	551 254 151 797	213 B 135 15 C 54 5 C 80 102 C 40	KI6PG 570 N6MU (at N6NB) 173,550	19 650	10 4 B 80 89 28 C 20	9 Illinois			VA3JFF 26,670 VE3STT 13,720 VE3XN 180,070 VE3OSZ 4,320	8 88 5 343	78 52 175 30	B B C 15 B 160
KZ5D 241,680 New Mexico	848	95 C 20	Sacramento Valley N6JM 87,246 W7XZ/6 80,712	262 236	111 B 114 33 B	K90M 94,122 NM9C 15,687 N9CO 229,824	249 83 456	126 31 A 63 A 168 20 B	VE3MX Manitoba VE4JB 112,899	3 1	1 128	C 10
K50I 2,457 N5AV 1,080 WW5DX (KN5H,op) 145,416	39 24 584	21 A 15 4 B 83 C 40	K6VX 203,445 N6GG 201,465 W6NKR 102,000	411 407 272	165 C 165 26 C 125 C	K9MMS 212,652 WD8AHR 87,750 N9JF 77,343	396 250 203	179 25 B 117 27 B 127 B	VE4YU 26,629 Saskatchewan	5 125	71	C
W5YA (KT5X,op) 864 North Texas WD5K 393,918	24	12 A 40	W6RFF 66,792 KI6T 66,528 K6RN 6,831	242 231 69	92 C 96 C 33 C 15	AK9N 47,094 W9MYY 25,752 AA9KH 24,354 K9PPW 21,090	167 116 99 95	94 B 74 B 82 B 74 B	VE5SF 97,29 VE5RA 2,17 Alberta		115 25	B C 160
NN5T 122,988 K5WO 57,267 WK5K 45,318	277 189 166	148 B 101 29 B 91 B	7 Arizona N7IR 20,904	134	52 A	K9JE 20,352 KB9KTC 5,031 WB9LAV 4,788	106 43 42	64 B 39 B 38 24 B	VE6BF 106,76- VE6KRR 22,77- VE6LB 54	0 165	124 46 9	28 B C C 160
KE5IR 34,686 N6ZZ 753,300 K5RX 715,350 KN6M 88,725	141 930 950 325	82 B 270 C 251 C 91 C 40	NQ7X 11,232 N7RD 2,580 WN7J 108,750	72 43 290	52 A 20 A 125 B	W9LNQ 4,590 KE9EX 2,856 K9AN 771,144 K9USA 438,381	45 34 1012 727	34 B 28 B 254 C 201 C	British Columbia VE7FJE 46,711 VE7XF 6,04	6 229 2 53	68 38	B 26 B
K5LH 480 Oklahoma	20	8 B 10	AB7II 101,136 AA4Q 7,740 AB7TX 5,616 KC7V 781,140	301 86 78 1108	112 B 30 11 B 24 B 235 34 C	W9YYG 146,784 W9OA 142,002 KI9A 81,795	352 322 205	139 C 147 C 133 46 C	VE3IY/7 230,200		176	С
KO9X 21,504 K5YAA 659,097 South Texas	112 927	64 17 B 237 25 C	W7YS 178,776 N7DD 390,060 N6MA 13,392	382 1182 93	156 C 110 C 40 48 6 C 40	K9LUW 73,872 WA9TPQ 57,600 K9UQN 35,775 WB9Z 25,488	216 200 159 144	114 C 96 C 75 C 59 C 160	Single Operator I US 1	4551516	u	
KG5U 119,601 K5LJ 46,200 NK6F/5 45,147 KA5KLU 30,876	291 154 149 124	137 19 A 100 18 B 101 19 B	W7YU 11,703 W7AYY 38,280	83 220	47 C 40 58 C 20	W9RM 18,408 W9IXX 3,510 K9VFA 14,523	118 39 103	52 C 80 30 C 80 47 24 B 40	K1NG (KI1G,op) 3,325,56		428 335	C
			Eastern wasningtor						NZ5X/1 1.907.49	0 1898		
N7XX 26,199 W9YO 19,110 K6LRN/5 18,318	123 98 86	83 B 71 B 65 23 B 71 B	Eastern Washington K7GS 15,840 K7FR 153,090 K7EFB 6,660	120 405 74	44 A 126 B 30 B	K9BG 221,352 K9QVB 182,790 W9OF 145,512	802 677 564	92 18 C 20 90 C 20 86 C 20	K2SX/1 1,907,49 N4XR 1,320,90 K2TE 1,267,72 KS1L 1,139,56	0 1295 8 1372 2 1347	340 308 282	00000
N7XX 26,199 W9YO 19,110 K6LRN/5 18,318 K5GN 1,761,924 W5UN 1,137,090 K5YA 1,117,695	123 98 86 1769 1307 1385	71 B 65 23 B 71 B 332 C 290 C 269 C	K7GS 15,840 K7FR 153,090	120 405	126 B	K9QVB 182,790 W9OF 145,512 Indiana K9DIY 3,150 W9RE 1,769,916	677 564 35 1867	90 C 20 86 C 20 30 B	N4XR 1,320,90 K2TE 1,267,72	0 1295 8 1372 2 1347 5 975 0 820 6 654	340 308	CCCC
N7XX 26,199 W9YO 19,110 K6LRN/5 18,318 K5GN 1,761,924 W5UN 1,137,090	123 98 86 1769 1307	71 B 65 23 B 71 B 332 C 290 C 209 C 209 48 C 92 C 143 C 41 C	K7GS 15,840 K7FR 153,090 K7EFB 6,660 W7LGG 41,145 Idaho 81,585 Montana K7BG 773,721	120 405 74 211 259	126 B B C 20 105 35 B 221 34 C	K9QVB 182,790 W9OF 145,512 Indiana K9DIY 3,150	677 564 35	90 C 20 86 C 20 30 B 316 C 102 C 56 C 30 C 43 6 B 20	N4XR 1,320,90 K2TE 1,267 27 KS1L 1,139,56 W1RZF 704,92: KG1D 558,42: AA1V 476,76 K1RM 404,58 K1SM 338,92: W1TE 311,68! N6RFM 230,20:	0 1295 8 1372 2 1347 5 975 0 820 6 654 6 798 8 614 8 468 2 406	340 308 282 241 227 243 169 184 222 189	0000000
N7XX 26,199 W9YO 19,110 K6LRN/5 18,318 K5GN 1,761,924 W5UN 1,137,090 N5LZ 467,115 K5AX 123,123 W5NR 8,241 NX5M 2,700 K5TR 205,200 N5LT 61,404	123 98 86 1769 1307 1385 745 616 287 67 36 760 301	71 B 65 23 B 71 B 332 C 290 C 269 C 209 48 C 92 C 143 C 41 C 25 C 160 90 C 20 68 C 15	K7GS 15,840 K7FR 153,090 K7EFB 6,660 W7LGG 41,145 Idaho AB7K 81,585 Montana K7BG 773,721 KC7UP 70,422 K7LUH 3,969 N7MSU 3,036	120 405 74 211 259	126 B B B C 20	K9QVB 182,790 W9OF 145,512 Indiana K9DIY 3,150 W9RE 1,769,916 W9KTP 73,440 KJ9C 10,248 KG9JD 3,600 WBØOLA 11,094 W9AU 702 Wisconsin	35 1867 240 61 40 86 18	90 C 20 86 C 20 30 B 316 C 102 C 56 C 30 C 43 6 B 20 13 B 20	N4XR 1,320,90 K2TE 1,267,72 KS1L 1,139,56 W1RZF 704,92: KG1D 558,42! AA1V 476,76 K1RM 404,58! K1SM 338,92: W1TE 311,68!	0 1295 8 1372 2 1347 975 0 820 6 654 6 798 8 614 468 406 5 335 307 0 356	340 308 282 241 227 243 169 184 222	0000
N7XX 26,199 W9YO 19,110 K6LRN/5 18,318 K5GN 1,761,924 W5UN 1,137,090 K5YA 1,117,695 K5LZ 467,115 K5AX 170,016 K5DX 123,123 W5NR 8,241 NX5M 2,700 K5TR 205,200 N5LT 61,404 K5NA 50,301 W5AJ 1,632 West Texas	123 98 86 1769 1307 1385 745 616 287 67 36 760 301 243 34	71 B 65 23 B 71 B 332 C 290 C 269 C 209 48 C 92 C 143 C 41 C 25 C 68 C 68 C 69 C 15 69 C 10	K7GS 15.840 K7FR 153.090 K7EFB 6.660 W7LGG 41,145 Idaho AB7K 81,585 Montana K7BG 773,721 KC7UP 70.422 K7LUH 3,969	120 405 74 211 259 1167 242 49	126 B B B C 20 105 35 B 221 34 C 97 C 27 C 80	K9QVB 182,790 W9OF 145,512 Indiana K9DIY 3,150 W9RE 1,769,916 W9KTP 73,440 KJ9C 10,248 KG9JD 3,600 WB8OLA 11,094 W9AU 702 Wisconsin N9LMU 39,897 WD9IAB 3,861 W9WUU 26,442 N9CIQ 22,860	35 1867 240 61 40 86 18	90 C 20 86 C 20 30 B 316 C C 56 C C 30 C C 43 6 B 20 13 B 20 93 A 78 B 60 B	N4KR 1,320,90 K2TE 1,267,72 KS1L 1,139,56 W1RZF 704,92 KG1D 558,42 AA1V 476,76 K1RM 404,58 K1SM 338,92 W1TE 311,68 N6RFM 230,20 N1SP 187,93 KA1O 161,17 W1XK 160,20 K1RV 119,47 KE4GI 71,90 K1AJ 56,43 KA1CLX 52,29	0 1295 8 1372 2 1347 5 975 0 820 6 654 6 654 8 68 468 8 614 8 468 2 406 335 5 305 5 307 0 356 2 304 4 224 0 198 0 198	340 308 282 241 227 243 169 184 222 189 187 175 150 131 107 95 105	COCCOCCOCCOBCOB
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N7XX 26,199 W9YO 19,110 K6LRN/5 18,318 K5GN 1,761,924 W5UN 1,137,090 K5YA 1,117,695 N5LZ 467,115 K5AX 170,016 K5DX 123,123 W5NR 8,241 NX5M 2,700 N5LT 61,404 K5NA 50,301 W5AJ 1,632 West Texas KM5BN 34,200 NZ5M 2,109 6 East Bay K6WV 214,080	123 98 86 1769 1307 1385 616 287 67 36 760 301 243 34 152 37	71 B B 65 23 B 71 B B 332 C 290 C 209 C 209 48 C 92 143 C 25 C 160 90 C 15 69 C 15 16 C 10 75 B 19 B 15	K7GS 15,840 K7FR 153,090 K7FFB 6,660 W7LG 41,145 Idaho AB7K 81,585 Montana K7BG 773,721 KC7UP 70,422 K7LUH 3,969 N7MSU 3,036 Nevada K6GNX 46,020 K60MB 9,450 KM6F 135 Oregon K6ZX 2,997 W7YAQ 349,149 A7KF 195,000 W7TRE 8,322 W2VJNI7 823,200	120 405 74 211 259 1167 242 49 44 236 105 15 37 643 500 7 31 225	126 B B C 201 105 35 B 221 34 C C 20 27 C C 20 23 14 B 20 26 C C 80 30 B 40 3 2 B 20 27 A A B 20 27 A A B 20 27 A C C C C C C C C C C C C C C C C C C	RSQVB 182,790 W90F 145,512 Indiana RSDIY 3,150 W9RE 1,769,916 W9KTP 73,440 KJ9C 10,248 KG9JD 3,600 WBØOLA 11,094 W9AU 702 Wisconsin NSLMU 39,897 WD9IAB 3,861 W9WUU 26,442 N9CIQ 22,860 KB9KWL 396 KB9KWL 396 KB9KWL 396 KB9KWL 19,625 W9GKR 759,303 KSCAW 119,625 W9GKR 33,264 N9AW 30,429 KSNWU 274,140 274,	35 1867 240 61 40 86 18 143 39 113 127 12 1059 275 240 132 147 972	90 C 20 86 C 20 30 B C 102 C C 56 C 30 C B 43 6 B 20 13 A 20 93 A A 33 A B 20 93 A C B 20 11 B 20 94 C C 40 94 C 20	N4KR 1,320,90 K2TE 1,267,72 KS1L 1,139,56 W1RZF 704,92 KG1D AA1V 476,76 K1RM 404,58 K1SM 338,92 W1TE 311,68 N6RFM 230,20 K1SP 187,93 KA1O 161,17 W1XK 160,20 K1RV 119,47 KE4G1 71,90 K1AJ 56,43 KA1CLX 52,29 KS92/1 50,61 K1PV 48,60 K1TH 39,21 V2 N2MM 2,156,95 K2BU 2,156,95 K2BU 2,156,95 K2BU 1,519,83	0 1295 8 1372 2 1347 5 975 6 664 6 654 6 654 8 614 8 468 5 335 5 307 5 307 5 307 6 152 2 408 6 152 2 108 6 152	340 308 282 241 227 243 169 189 187 175 150 131 107 95 105 111 108 86	CC
N7XX 26,199 W9YO 19,110 K6LRN/S 18,318 K5GN 1,761,924 W5UN 1,137,090 K5YA 1,117,695 N5LZ 467,115 K5AX 170,016 K5DX 123,123 W5NR 8,241 NX5M 2,700 K5TR 205,200 K5TR 205,200 K5TR 205,200 W5LT 61,404 K5NA 1,632 West Texas KM5BN 34,200 NZ5M 2,109 6 East Bay K6WV 214,080 W6FSJ 77,436 W6BSY 150,966 K16OY 180	123 98 86 1769 1307 1385 745 616 287 36 760 301 243 34	71 B B 65 23 B 71 B 3322 C 290 C 2899 C 209 48 C 9143 C 215 C 160 90 C 215 69 C 15 16 C 10 75 B 19 B 15	K7GS 15,840 K7GS (AFR) (120 405 74 211 259 1167 249 44 236 105 15 37 643 500 73	126 B B C 20 105 35 B 221 34 C C 20 17 C 80 23 14 B 20 65 C 80 30 B 40 3 2 B 20 27 A B B 130 22 B B	K9QVB 182,790 W90F 145,512 Indiana K9DIY 3,150 W9RE 1,769,916 W9KTP 73,440 KJ9C 10,248 KG9JD 3,600 WBØOLA 11,094 W9AU 702 Wisconsin N9LMU 39,897 WD9JAB 3,861 W9WUU 26,442 N9CIQ 22,860 KB9KWL 396 KB9KWL 396 KB9KWL 396 KB9KWL 119,625 W9GXR 79,200 W9RN 30,242 K9NW 30,429 K9NW 274,104 W9GIL 16,638	35 1867 240 61 40 86 18 143 39 113 127 12 1059 240 132 147	90 C 20 86 C 20 30 B 316 C 102 C 56 C 30 43 6 B 20 13 B 20 93 A 8 B 20 93 A 8 B 20 11 B C 145 C	N4KR 1,320,90 K2TE 1,267,72 K51L 1,139,56 W1RZF 704,92: KG1D 558,424 AA1V 476,76 K1RM 404,58 K1SM 338,92: W1TE 311,68 N6RFM 230,20 N1SP 187,93 KA10 161,17 W1XK 160,20 K1AL 56,29 KS9Z/1 50,61 K1AL 56,29 KS9Z/1 50,61 K1PVT 48,60 K1TH 39,21 L2 N2MM 2,156,95 K2BU 1,519,83 K2XA 1,152,74 K2ONP 1,112,85 W2RE 1,064,71 K1PVT 46,60 K1TH 39,21 L2 N2MM 2,156,95 K2BU 1,519,83 K2XA 1,152,74 K2ONP 1,112,85 W2RE 1,064,71 K1PVT 4,00 M2	0 1295 8 1372 2 1347 5 9850 6 654 6 6798 8 614 8 614 8 614 8 2 406 5 335 5 307 0 356 6 152 0 150 6 152 0 152 0 152 2 27 2 27 2 2 1477 4 1117 9 2 1199	340 308 282 241 227 243 169 184 222 189 187 175 150 131 107 95 105 111 108 86	CC
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N3AM 638,820 910 234 C	K2NG (+KU2M)	WØAIH (+KØTG,N9CK,NØs AXL,KK,XB,	JAØQNJ 8,700 100 29 C 160
N3NT 561,708 743 252 C N3ZA 479,880 620 258 C	1,946,721 2009 323 C AA2FB (+K2QMF)	ND9O,NE9U,WAØRBW,WT9Q) 2,143,836 1921 372 C	JE1SPY 252 12 7 B 160 JH1AEP 33,210 270 41 C 80
N3II 479,304 634 252 B	1,886,040 1860 338 40 C	N3AD (+N9GG)	JN2QCV/9 23,766 233 34 B 80
W3HVQ 411,450 650 211 C	NA2N (+KY2J) 1,608,204 1586 338 C	K1GW (+K1ART,W6PH)	JS1UMQ 1,947 59 11 B 80 JRØBQD 1,032 43 8 B 80
K3SA 370,872 606 204 C K3CP 306,504 473 216 C	K2OWE (+WK2G) 513,684 751 228 C	1,440,582 1606 299 C K5RT (+N5s JR,KM,WB5B)	JA6BIF 816 34 8 C 80 JA6TQ 240 16 5 C 80
K3OO 281,106 582 161 C WT3P 257,520 464 185 B	N2LBR (+WA1KKM) 423,120 656 215 C	1,327,161 1441 307 C N1AU (+K1HQ,N1DS,WC1D)	JH1NXU 12 2 2 B 80 JA6SHL 70,992 535 48 C 40
N3ADL 207,900 330 210 C	K2DS (+WA2JQK)	907,326 1137 266 C	JR7OMD/2 32,175 325 33 B 40
W3KV 185,808 392 158 C	W2CM (K2BJ,WA2ISC,ops)	W1QK (+AA1MY,K2ZZ,N1GS)	JK3GWT 7,020 117 20 9 B 40
K3AR 167,904 318 176 C K3PP 161,352 324 166 18 B	81,675 225 121 C	463,353 739 209 C N2VW (+W2OF)	JS1OYN 6,966 129 18 B 40 JR9NVB 6,273 123 17 B 40
W8FJ 154,473 341 151 C W3FG 115,902 274 141 B	3 W3BGN (+K2TW,W2REH)	174,984 317 184 C	JM1LPN/1 5,670 135 14 B 40 JA1XEM 3,510 78 15 C 40
W3FG 115,902 274 141 B WT3W 108,621 243 149 C K3KY 84,102 214 131 C	3,448,650 2770 415 C N3DL (+AA3s JU.TT)	DX	JH1FNU 2,628 73 12 B 40
W3DMC 62,622 213 98 B	1,468,575 1605 305 C	Single Operator	JA4XRN 1,980 44 15 B 40
NY3C 40,098 163 82 8 B N3MKZ 31,212 102 102 C	N3BNA (+ops) 1,032,786 1086 317 C	Africa	JA1MSS 1,296 48 9 B 40 JA4ETH 1,269 47 9 B 40
4	NE3F (+KS3F,KT3T) 849,888 909 312 C	Swaziland	JE9PFD 960 40 8 B 40 7K1EQG 504 24 7 B 40
NN4T 1,572,732 1659 316 48 C K3KO 1,107,078 1226 301 C	WR3L (+WR3Z) 680,481 813 279 C	3DAØCA 13,608 126 36 3 C 80	JG1TVK 480 20 8 B 40 JAØGEY 420 20 7 B 40
W4NF 665,742 917 242 32 C	KB3TS (+KE3RR)	Uganda 5X4F 224,697 619 121 C	JF3LGC 408 17 8 4 B 40 JG1RDV 315 15 7 B 40
WB8BMV 254,616 412 206 C	NY3M (+ops)	Ghana	JA4DXT 312 13 8 A 40
K3OSX 203,040 360 188 C WA4ZXA 154,548 324 159 B	80,172 262 102 C	9G5BQ 1,252,224 2174 192 C	JA5CDL 306 17 6 A 40 JE9REN 306 17 6 B 40
K4LM 113,538 254 149 C K2SD 79,056 216 122 C	4 K4AAA (K4BAI,N4VJ,ops)	Sierra Leone 9L1KA 216,300 700 103 B	JA1XPU 270 15 6 B 40 JM2RUJ 252 12 7 B 40
W4UE 69,375 185 125 C NM4K 66,462 209 106 11 C	2,706,750 2406 375 48 C	Angola	JG1VGX 60 5 4 2 B 40 JR3NZC 91,743 577 53 C 20
KF8VS 46,206 151 102 14 B	AA4NC (+N4CW) 1,680,204 1718 326 C	D25L (PA3DZN,op) 148,050 987 50 C 40	JA7XBG 56,742 386 49 C 20 JAØDWY 27,477 213 43 C 20
WM4I 35,814 127 94 C	W4PRO (+W4DHZ,WB4DNL) 404,064 552 244 C	Canary Islands	JH7QXJ 17,034 167 34 6 B 20
5 K5LP 503,463 653 257 C	6	EA8/DJ8MT 3,720 62 20 B	JA9CWJ 13,860 140 33 C 20 JA4CSH 12,804 194 22 C 20
N5HRG 157,257 303 173 B	N6KI (+KE6WEO, N2UE, VE6BMX)	EA8ASJ 78,000 325 80 C Seychelles	JR4GPA 9,504 132 24 B 20 JA1YNE (JR1NKN,op)
AC5AA 65,844 186 118 C	428,274 721 198 C	S79MAD 4,692 68 23 3 C 40	9,222 106 29 11 A 20 JA5FP 5,796 84 23 B 20
AB5SE 55,776 166 112 10 B	KO7X (+NG7M) 213,624 516 138 C	Ascension Island	JA1KI 5,742 87 22 B 20 JA1HP 5,280 80 22 C 20
6 W6GO (N6IG,op)	8	ZD8Z (N6TJ,op) 4,322,640 4648 310 C	JA1QN 4,725 75 21 B 20
1,820,940 1780 341 44 C NC6M 669,951 919 243 C	N8NR (+N8BJQ,N9AG,W8QID)	ZD8DEZ 204,972 1178 58 C 20	JI7OED 3,600 60 20 B 20
N5KO 359,640 648 185 C	1,019,304 1089 312 C WA8WV (+K8KFJ)	South Africa ZS6AJS 112,035 385 97 B	JA9KUG 2,703 53 17 B 20 JE1LFX 2,700 45 20 B 20
W6TI (AD6E,op) 327,888 621 176 C	275,049 501 183 B NE8I (+KB8TI)	ZS6CAX 93,750 625 50 B 40	JM1KNI 672 28 8 2 B 20 JA1AAV 144 8 6 B 20
327,888 621 176 C KC6X 298,350 510 195 C K6SG 269,514 483 186 C	214,326 378 189 C W8ZA (+WD3A)	Asia	7L2OHM 108 12 3 A 20
K6SG 269,514 483 186 C KV6H 259,572 446 194 C K6XT 236,094 361 218 C	198,648 372 178 C	Israel	JM6NJU/6 12 2 2 B 20
K6CT 212,760 360 197 C	9	4X1VF 74,880 320 78 C	JA7FTR 14,832 206 24 C 15 JI2UNR 6,048 112 18 C 15
K6ANP 205,446 353 194 30 C K6MA 68,931 207 111 C	W9SF (+K8XP,KØSN) 941,160 1265 248 C	4Z4TA 8,400 100 28 B 20 Kuwait	JG1UKW 225 15 5 B 15 JHØFWV 135 15 3 B 15
K6LEB 64,989 249 87 C K6PU 55,335 217 85 C	WN9O (+K9DAL) 139,536 306 152 C	9K2/YO9HP 40,824 243 56 B	Ogasawara
K6RO 35,712 124 96 C K6JYO 31,557 157 67 C 40	Ø	West Malaysia	JD1/JQ1NGT 32,301 291 37 B
N6RT 26,937 123 73 B N6ED 20,865 107 65 C	NØZA (+KØs CL,UK)	9M2OM 42,513 383 37 C 9M2MC 1,350 45 10 6 B 20	Asiatic Russia RAØJX 594 22 9 B
WA6KAH 11,163 61 61 29 C	493,272 806 204 28 C WØTM (+NØKE)	China	RA9CKQ 480 16 10 B
7	315,861 623 169 C KJØG (+KØSX)	BA4TB 7,128 132 18 B	UAØSJ 432 18 8 B RAØFA 188,094 667 94 C RAØFF 13,725 183 25 C 40
K7ED 246,420 555 148 B NØAX 234,468 468 167 B	253,008 502 168 C	Armenia EK4JJ 2,295 45 17 B	RAØFF 13,725 183 25 C 40 UAØKCL 6,300 75 28 B 20
K7NPN 154,224 378 136 B	Multioperator Two Transmitters	Saudi Arabia	RV9CE 1,122 34 11 A 20
W7NN 59,472 236 84 C	KC1XX (K1s DG,LZ,KC1s F,XX,KM3T,ops) 5,861,124 4148 471 C	HZ1HZ 84,564 348 81 C 7Z5OO (K3UOC,op)	Kazakhstan UN6P 15,744 128 41 C
AAØCY 21,000 100 70 39 C AB7CH 17,169 97 59 18 C	K1AR (+K1s EA,GQ,K5ZD) 5,779,485 4143 465 C	19,656 168 39 C	Hong Kong
8	K1ZZ (+K1RO,N1RL) 4,385,964 3278 446 C	Japan	VS97BG 196,560 728 90 21 C
WA8ZDT 1,451,154 1394 347 C	K8AZ (+K8NZ,W8s CAR,KIC,KG8TS,ND8L,	JJ1VRO 32,754 206 53 A JA6UBK 32,046 218 49 A	VR2SS 6,375 125 17 B 40 Macao
ND5S 424,593 741 191 C N8TR 333,564 418 266 C KT8Y 70,560 210 112 C	NX8R,WT8C) 3,842,028 3116 411 C	JH1HRJ 30,240 210 48 A JA2XI 21,543 167 43 A	XX9TR (OH2PM,op)
KT8Y 70,560 210 112 C KB8NTY 25,803 141 61 B 20	K40J (+K1TO,W1CW) 3,585,015 2995 399 C	JA6ZLI (JJ4HWC,op) 19,266 169 38 A	101,094 581 58 B
K8SM 20,703 103 67 C W8XI 11,520 64 60 48 C	K1RX (+K1EPJ,KF1V) 3,221,952 2768 388 C	7K4QOK 13,608 108 42 A JR4DAH 9,048 116 26 A	Europe
9	W4WA (+AA4s GA,S,KB4GID,NX9O) 3.171.384 2591 408 C	JE1PMQ 8,175 109 25 A	Croatia
WE9V (at KS9K)	K1KP (+K1OA,KM1D,N1RD,NB1B,WA1S)	JA1GTF 2,652 52 17 A JH3FTZ 2,475 55 15 A	9A2UA 41,358 226 61 B 9A2WJ 20,196 198 34 B
1,044,684 1138 306 C KS9W 705,291 1009 233 C	2,842,476 2603 364 C W8AV (+AF8A,K4LT,K8LR,KU8E,W8s RZ,WTS)	JG1RYQ 990 30 11 A JI3BFC 45,552 292 52 B	9A3SM 10,290 98 35 B 9A2TW 14,760 164 30 B 160
N9BR 518,364 847 204 C W9OP 334,062 554 201 C	2,398,242 2233 358 C WXØB (+K5s GA,OT,N4YGP,NM5M,W5XJ)	JH8KYU/1 28,980 210 46 9 B 7L4IOU 23,700 158 50 B	9A3B 12,876 148 29 C 160 9A7V 1,989 39 17 B 160
WO9S 154,524 326 158 C K9OSH 24,642 111 74 B	2,183,472 2056 354 C KB1H (+AA1CE,K1EBY,N1RR,NB1U,W3TB,	JA1TRP 14,040 120 39 B JA2YKA (JS2ERL,op)	9AØC (9A3TF,op)
WD9GGY 15,936 83 64 B	WA1RLV) 1,993,410 1926 345 C	13,566 133 34 B	9A4RU 45,279 351 43 B 80
N9YXA 6,678 53 42 B	W3PP (+NW3Y,NX3A)	JA1AB 11,760 112 35 B JA1BUI 11,544 104 37 B	9A2AJ 35,670 290 41 C 80 9A3QK 15,456 161 32 B 80
Ø KMØL 326,559 547 199 C	1,829,100 1820 335 C N2FF (+K2KV,KF2ER,KG2HV,N2s GA,KA,	JH5OXF 11,346 122 31 5 B JR1XKU 10,752 112 32 B	9A9AA 119,187 779 51 C 40 9A6K 112,608 736 51 C 40
NØAT 240,240 440 182 C	W2LK,WM2V) 570,474 773 246 C	JA2BY 9,648 134 24 B JA1CP 5,925 79 25 B	9A2NO 8,034 103 26 B 20 9A2OO 6,348 92 23 B 20
KØMP 121,044 308 131 47 C	Multioperator Unlimited Transmitters	JA8AJE 4,761 69 23 B JG5OYU 3,339 53 21 B	9A2VN 5,148 78 22 C 20
N7DR 92,628 332 93 C KØXD 26,325 117 75 C	W3LPL (+AI3M,K1HTV,K2YWE,K3s MM,RA, RV,K4ZW,KD4D,N3OC,ND3F,W3UR,OK1RI)	JAØFVU 2,508 44 19 B	9A2HF 5,103 81 21 B 20 9A5Y 4,032 84 16 B 15
KØMS 24,486 106 77 12 B WB8ZRL 16,875 75 75 C	7,246,491 4727 511 C N2RM (+K2s BM.WI.KA2AEV.N2s AA.NC.NL.	JHØSJJ 2,442 74 11 B JN2AMD 2,352 56 14 B	9A1CTL (9A4MF,op) 2,205 49 15 B 15
KGØEJ 6,150 50 41 B WA6PDZ 546 14 13 4 B	NU,WT3Q,WW2Y)	JF1SQC 2,091 41 17 8 B 7N3SDR 2,070 46 15 B	Portugal
VE	7,071,102 4733 498 C N3RS (K2TW,W2REH,W3BGN,ops)	JI3MVO 1,596 38 14 B JA1BCP 1,344 32 14 B	CT1ETT 21,684 139 52 A CT1BQH 331,800 790 140 C
VE9AA 438,075 649 225 C	6,413,784 4381 488 C K1KI (+K1s CC,PI,K2KQ,KM1P,NQ1K,W1RM,	JH7DNO 697,965 1501 155 C	CT4DX 13,950 150 31 B 40
VA3NR 139,650 266 175 B VE3ZTH 27,984 106 88 45 C	W2ÈQ) 6,032,712 4172 482 C K3LR (+K3UA,K8CX,K9VV,KA3JWJ,N3RA,N8SM,	JH5FXP 668,736 1376 162 C JH4UYB 510,000 1250 136 C	CT1BNW 2,550 50 17 C 20 Fed. Rep. of Germany
	N9RV,W3YQ,VE3EJ)	JH7WKQ 455,040 1185 128 30 C JH7XGN 395,127 1021 129 40 C	DL3KVR 41,595 235 59 A
Multioperator Single Transmitter	W3EA (+K3s MQH,NW,OX,W3FV,WF3T,WK3M)	JR8VSE 351,000 1000 117 33 C	DL3JRA 6,525 75 29 A DJ3GE 2,808 52 18 A
US	4,862,592 3618 448 C K1TI (+K1s BG,CA,FWE,TR)	JA1JKG 311,880 920 113 C JH4NMT 287,379 863 111 C JH2BCN 212,106 667 106 C	DL2TG 828 23 12 A DJ8UL 80,640 320 84 B
1 K1AE (+K1XM,KQ1F,N1RWM)	4,214,592 3252 432 C K8CC (+AC8W,K8s DD,GL,JM,SIA,K9TM,KT8X,	JF3CCN 152,235 597 85 C	DF2KK 66,924 338 66 B DL7ANR 61,983 291 71 B
2,019,150 1923 350 C W1IA (+K1s TWF,WD,N1TT,W1s ES,IA,TQ,WO1N)	N8s CC,CQA,VA3s EFM,NA,W8s JJ,MJ,RU) 3,064,005 2485 411 48 C	JR2AGL 107,352 426 84 C JA2AXB 36,624 218 56 C	DL9XY 60,903 303 67 B DL8ZAW 59,220 282 70 B
1,448,604 1578 306 C WA1PMA (+WS1F)	W4MYA (+AD4TS,K4BAM,WA4s DAI,PGM,	JA1QOW 27,300 182 50 24 C JA3ARM 24,252 172 47 C	DJ8EW 51,480 260 66 B
705,432 988 238 C	QDM,WU4G) 2,993,358 2507 398 C	JA1RZD 21,930 170 43 C JE3UUS 19,152 168 38 C	DK7FP 44,835 245 61 B DL6UNF 36,414 238 51 B
W1NR (+AI3E,W1BK) 324,276 443 244 C	N6RO (+AEØM,K3EST,K6AW,W6RGG) 2,536,740 2487 340 C	JA2QVP 16,848 144 39 C JR1GSE 11,484 116 33 C	DL2GBB 32,088 191 56 B DL5WS 27,072 192 47 B
AA1LN (+NV1U,WB2BFP) 143,562 337 142 C	W3MM (+N2BIM) 2.344.059 2019 387 C	JR1LEV 7,848 109 24 C	DL6MWG 17,220 140 41 B DL3YEI 15,840 132 40 B
2	K3ANS (+AJ2Ú,K3ÝD,N2KJM,N3XKG,WF3H) 2,337,174 2061 378 C	JA2QXP 4,350 50 29 C JL4ADI 2,112 44 16 C	DL3BZZ 13,500 100 45 B DK5ZX 11,817 101 39 B
		JA1AAT 792 22 12 C	

DL8ULO	10,608	104	34	В	F6IIE 12	000 1	25 3	32	B 20	IKØYUM	9,300	124	25	B 20	OK2BVM	50,232	364	46	B 20
DL3DRN DL1DWT DL6MDT	8,400 8,085 1,470	100 77 35	28 35 14	B B B	F5AKL 5 F5PGP 50	976 778 4	83 2 34 3	3	B 20 B 15 B 15	IK3AWP IK5ZAH IK8UIF	8,190 6,120 4.623	105 85 67	26 24 23	B 20 C 20 B 20	OK1AXB OK2UWY OL8M (OK1E	40,893 34,524	317 274	43 42	C 20 B 20
DL7ON DJ1XT DL7ALM	643,104 150,660 149,850	1276 540 450	168 93 111	CCC	England			4	Α	I3MGN IR4D (IK4ME	2,340	39 470	20	B 20 C 15	OK2PCN OK1WF	30,240 22,575 22,542	240 215 221	42 35 34	B 20 B 20 B 20
DL5JAN DF1DV	114,210 110,016	405 382	94 96	C	G2QT 169 G3RSD 95	950 5 202 3	15 11 69 8		B B B	I4LCK IK5TBK	29,376 4,095	306 65	32 21	C 15 B 15	OK1EV OK2TBC	20,394 19,872	206 184	33 36	B 20 B 20
DL3ZBJ DL1TH DL6KWU	87,897 63,000 37,047	353 300 233	83 70 53	C C	G3KNU 72 G3VNG 54	732 3 978 2	19 7 38 7	'6 '7	B B	Sardinia ISØOMH	173,016	534	108	В	OK1PUP OK2BEE OK2BJT	16,170 15,717 15,072	154 169 157	35 31 32	B 20 C 20
DJ6TF DK3YD DL1IAO	27,600 13,110 124,578	200 115 769	46 38 54	C C C 80	G4ZME 20 G4BUO 2,029	064 1 428 29	52 4 67 22	14 18	15 B B C	ISØHQJ ISØIGV ISØUWX	119,496 36,288 4,488	383 252 68	104 48 22	B B B 20	OK1XC OK2HBR OK2PHC	13,536 6,060 5,670	141 101 90	32 20 21	C 20 C 20 B 20
DK2OY DL6UAA DL2GGA	101,250 11,178 54,567	625 138 423	54 27 43	C 80 C 80 C 40	G3NKS 45 GØORH 6	795 2 555	15 7 95 2	7 1 23	8 C C C 160	Norway LA1YE	41,238	237	58	В	OK1AES OK2SAT	1,710 1,224	38 34	15 12	B 15 B 15
DK3KD DL4YAO DJ9RR	35,178 24,600 15,531	286 200 167	41 41 31	C 40 C 40 C 40		794 5	13 4	6 16 15	C 80 C 80 B 40	LA4XFA LA2O LA7AK	10,098 91,200 23,868	102 380 153	33 80 52	B C C	Slovakia OM1AF OM3BA	73,260 20,385	330 151	74 45	B B
DJØSH DL2BWG DL5YM	10,611 6,555 4,620	131 95 70	27 23 22	C 40 C 40 C 40	G4IQM 14, G3MXJ 278, GØWKW 180,	046 16	26 5	31 57 58	B 40 C 20 C 20	LA6FJA LA5LJA LA4EJ	126 648 2,760	7 24 46	6 9 20	C B 80 B 40	OM3RM OM5DX OM5KM	1,175,052 120,999 10,650	2164 761 142	181 53 25	C C 80 B 80
DL3SEM DJ2YE	4,440 4,200	74 70	20 20	B 40 C 40	GØOGN 12 G4UOL 3	267 1 960	41 2 60 2	9 2 9	A 20 A 20 C 15	LA5ZC LA7OC	18,204 4,368	164 52	37 28	B 20 C 20	OM1AW OM3TU OM5M (OM3	5,478 294	83 14	22 7	B 40 B 40
DL5AUJ DL4HRM DL2CC	3,960 1,152 132,048	60 32 786	22 12 56	C 40 C 40 C 20	Northern Irelan	d		7	c .c	LX1TI	11,526	113	34	С	OM5M OM3TB	160,218 160,056 9,177	989 988 133	54 54 23	C 20 C 20 B 20
DL2DX DL9FBS DK3DM	125,064 103,122 _78,624	772 674 504	54 51 52	C 20 C 20 B 20	Jersey MJ/K2WR 614.				С	Lithuania LY3JY LY1DS	7,455 194,040	71 616	35 105	B C	Belgium ON6TJ	38,136	227	56	А 20
DKØTZ (DL4	69,264 52,272	444 363	52 48	C 20 C 20	Scotland GM3NHQ 23		55 5	i1	В	LY3DA LY3BS LY7A (LY2BN	756 73,980 MX,op)	21 548	12 45	C 160 C 80	ON4XG ON4CAS ON7SS	97,704 27,495 13,110	354 195 115	92 47 38	B B 7 B
DK7ZT DL7BY DL1YAW	38,700 30,573 25,578	300 237 203	43 43 42	B 20 B 20 B 20	Guernsey		60 4	13	B 20	LY1DR LY1DD	27,615 12,348 5,772	263 147 74	35 28 26	C 80 C 80 C 40	ON4AKL OT7T	59,598 182,616	473 1087	42 56	C 80
DJ3XK DL2BWM DK7GH	20,910 19,116 17,712	170 177 164	41 36 36	A 20 C 20 B 20		p) 761	69 2	23	B 20	LT1DD LY3BA LY3CW	5,772 11,625 11,625	74 125 125	26 31 31	C 40 B 20 B 20	ON4IG ON6CW Denmark	6,996 60,345	106 447	22 45	B 40 B 20
DJ3LR DF3SM DJ3XD	15,645 13,230 13,167	149 147 133	35 30 33	A 20 B 20 B 20	Wales GW3SYL 27 GW3YDX 1,890	213 28	51 22	i0	B C	LY3BY LY3BAD LY2FF	8,400 7,290 2,100	100 90 35	28 27 20	B 20 B 20 A 20	OZ8SW OZ5UR	23,829 1,860	169 31	47 20	B B
DL5SVB DL2HUM DL1KUG	11,508 9,579	137 103 106	28 31	B 20 B 20	GW3WVG 283,			84 88	C 160 C 20	LY2CX Bulgaria	1,584	33	16	B 20	OZ1LO OZ3W OZ8RO	811,740 237,900 159,216	1630 610 496	166 130 107	C
DL6UKL DL1DXA	9,048 7,920 4,860	110 81	29 24 20	B 20 A 20	Hungary HA9PB 3 HA5AWH 286,	366 770 7	51 2 90 12	22	B C	LZ1UQ LZ1IQ LZ2UZ	40,068 35,112 14,592	212 209 128	63 56 38	B B B	OZ7BW OZ1APA OZ9Y	21,528 216 112,365	156 12 681	46 6 55	C B 80 C 20 16 B 20
DL9GMC DK8RE DL3BRA	3,024 2,478 1,620	56 59 45	18 14 12	C 20 B 20	HA7PX 60 HG1W 16	651 2	36 4	9 10	C C	LZ2MP LZ1NJ	13,152 6,789	137 73 50	32 31	B B	OZ1KWG OZ1BMA OZ7YL	16,422 16,218 12,741	161 159 137	34 34 31	B 20 C 20
DL6AP DL2TM DJ3EF	1,176 567 510	28 21 17	14 9 10	B 20 A 20 B 20	HA8BE 5	808	88 2	2 2 2 5	C C 160 14 B 80	LZ4BU LZ4UU LZ1BJ	4,650 14,883 6,510	121 70	31 41 31	B C C	OZ8AE OZ4FF OZ5ABD	6,438 4,284 1,710	74 51 38	29 28 15	A 20 B 20 C 20
Spain EA1DAV	479,208	974	164	В	HA4YG 3 HA9PP 138	339 264 8	53 2 23 5	21 66	4 C 80 C 40 21 C 40	LZ1NG LZ1KAZ LZ3AB	14,973 14,973 8,658	161 161 111	31 31 26	C 80 C 80 C 80 C 40	OZ1BUR OZ1BXM	1,620 27	30 3	18 3	B 20 A 20
EA2CLU EA2BNU EA3ALV	395,070 234,000 120,960	1013 624 420	130 125 96	B B B	HA6IAM 9	882 1 666 1	22 2 01 2	27	B 40 48 B 40 C 20	LZ5W LZ2JE LZ7Y	207,144 84,456 28,386	1233 552 249	56 51 38	C 40 C 20	Netherlan PAØTA PAØRBO	1,260 546	28 14	15 13	A 12 A
EA1ABM EA4AU EA4AAF	120,897 116,424 78,240	399 441 326	101 88 80	B B B	HA1KRR 117, HA5BSW 89	183 7 424 5	37 5 52 5	3 3 4 8	C 20 B 20	LZ2TF LX2MP LZ1ZQ	26,208 13,152 1,080	224 137 30	39 32 12	C 20 B 20 B 20	PAØCYW PA3FMB PA3AOT	83,640 40,809 20,727	340 223 147	82 61 47	B B B
EA4ECF EA1AMM EA3AHQ	46,200 20,961 20,022	200 137 142	77 51 47	B B B	HA6NW 25 HA1VE 17	080 2 871 1	20 3 61 3	88 87	B 20 C 20	LZ5LK LZ3GC LZ2RS	48 27 3,744	4 3 78	4 3 16	B 20 B 20 B 15	PA3BWQ PAØCOR PAØJED	16,992 13,572 3,456	118 116 48	48 39 24	B B B
EA2CR EA3CA EA5FV	2,451 694,560 416,976	43 1447 952	19 160 146	B C C				27 8	B 20 C 15	Austria OE3JOS	56,088	246	76	С	PA3ERC PA3EWP	303,363 207,270	911 705	111 98	C
EA3AJI EA5CKP EA5VG	52,710 48,825 47,400	251 217 395	70 75 40	C	HB9ARF 82 HB9CVO 39	390 2	02 6	3 5	B B	OE3TL Aland Isla	25,281 nds	159	53	С	PAØLOU PA3BUD PA3DWD	94,863 42,210 4,836	307 201 52	103 70 31	CCC
EA1AKB EA4AAK	24,180 12,420	155 90	52 46	CCC	HB9DCM 120, HB9HFN 103,	042 3 467 3	51 11 79 9	1	B C C	OHØPA Finland	240	10	8	B 20	PA3AEX PA3BTH PA3GUA	3,960 19,548 11,919	60 181 137	22 36 29	C 40 C 20 B 20
EA1FBJ EA7KW EA7WA	1,224 216,975 105,987	24 1315 721	17 55 49	C C 40 B 40	HB9KC 3 HB9FAP 167,	915 562 9	45 2	0 29 58	C C C 40	OH8MDG OH4OC OH6NEV	230,676 194,220 29,106	818 1079 198	94 60 49	11 C C	PA3BWD PA3FDO PAØADT	11,664 9,570 8,268	108 110 106	36 29 26	C 20 B 20 A 20
EA5FID EA5ANY EA4AUF	30,135 5,733 5,610	245 91 85	41 21 22	B 40 B 40 B 40	HB9DAX 2	670	89 3	13 10 5	C 20 A 20 B 20	OH1TN OH1SH OH5PA	23,838 1,935 36	137 43 2	58 15 6	C C 80 B 40	PAØJR Slovenia	2,880	60	16	B 20
EA3ALN EA7DPU EA1NK	159,600 72,150 56,100	950 481 374	56 50 50	C 20 B 20 C 20	Vatican HV4NAC (IØHCJ,op)				OH8LQ OH6RM (OH	176,958	1017 444	58 47	C 20 C 20	S51JA S51TA S51ND	43,338 43,338 32,661	233 233 191	62 62 57	B B B
EA1BMA EA4AYB	6,864 2,520	88 40	26 21	A 20 B 20	157,			51	C 40	OH8BQT OH1HS OH2OT	46,800 45,936 40,500	312 319 270	50 48 50	B 20 C 20 C 20	S51WO S55OO S59AA	15,015 12,300 781,872	143 100 1432	35 41 182	B B C
Ireland EI4DW EI6BT	193,569 61,335	571 435	113 47	B C 160	I3BBK 125, IKØCNA 13, IK2AHB 116,	068 1	21 3	12 16 12	A A B	OH2YL Czech Rej	567	21	9	A 20	S5ØU S57M S53O	33,411 10,725 66,264	301 143 502	37 25 44	C 160 C 160 C 80
EI8GP EI7M (EI9H	63,651 C,op) 27,060	433 220	49 41	B 20 C 20		925 2		2 9 5	B B B	OK1FKD OK2PAY OK1BA	6,750 307,098 93,555	75 846 405	30 121 77	A B B	S57AD S57J S57NGR	51,282 21,525 1,521	407 205 39	42 35 13	C 80 B 80 B 80
Moldova ER1LW	21,414	166	43	В	IK8TPJ 30, IK2ULV 27,	870 2 507 1	10 4 73 5	19 13 17	B B B	OK1ZP OK1DSZ OK1JOC	72,576 61,770 52,224	336 290 272	72 71 64	B B B	S50A S53M (S51R	218,367	1277 1051	57 56	C 40
ER10A Belarus	45,201	247	61	С	IZØAIS 23 I6NOA 23	220 1 184 1	72 4 61 4	15 18 11	B B B	OK1FPG OK1KZ OK1OX	37,440 33,234 31,800	195 191 200	64 58	B B	S53F S51AY S5ØR	23,484 19,530	206 186	38 35	B 40 14 C 40
EW6AL EU1DX EU1FC	16,416 151,200 119,301	114 504 437	48 100 91	B C C	IKØFUX 18 IV3GCN 12	900 1 192 1	40 4 27 3	5 12 17	B B B	OK1AOU OK1AVY	23,688 15,276	168 134	53 47 38	B B	S57DX S57U	210,240 163,185 68,943	1168 989 469	60 55 49	C 20 B 20
EU4AA EW3LN EW3LB	78,624 3,888 8,418	312 48 122	84 27 23	C C C 80	IK3MLF 9 IK5RLS 6	720 417	72 4 69 3	15 11	B B	OK2AJ OK1GS OK2ZV	13,608 12,780 6,240	126 142 80	36 30 26	B B C	S55A S53BM S59D	64,800 39,285 32,928	435 291 196	50 45 56	C 20 B 20
EW3CW EW3AC EW1NY	4,275 594 18,036	75 22 167	19 9 36	C 80 B 80 B 20	IK1ZFP IZ3ALS	912 240	19 1 10	6 8	B B	OK1RF OL3A OK1VD	1,604,610 1,199,016 180,435	2547 2196 523	210 182 115	C C	S57KW S57NW S53FO	31,242 4,977 6,615	254 79 105	41 21 21	B 20 B 20 C 15
EW6CF EW1EA EU1AF	7,743 3,648 1,638	89 64 39	29 19 14	B 20 B 20 C 20	IR2W 1,824 IQ4T 1,404 IØZUT 268,	486 25 500 7	17 18 16 12	6 4 5	48 C C C	OK1SI OK1DSA OK1AEZ	81,054 8,640 9,477	342 80 117	79 36 27	C C C 160	Sweden SM6NM	11,322	111	34	В
France F6CRP	27,864	172	54	A 20	IK2UJF 11,	766 1	06 3	i9 i7 i2	C C	OK2FD OK1FNJ OK1KT	70,242 37,680 22,560	509 314 235	46 40 32	C 80 C 80 B 80	SMØNJO SM2DMU SM6OLL	9,246 187,302 14,490	67 589 115	46 106 42	B C C
F5PRH F5RZJ F6FII	560,358 89,964 88,725	1153 306 325	162 98 91	B B	I4VJC 5 I1QGZ 1	628 2 344	01 2 32 1	8 4 0	c c	OK1DTP OK1DNZ OK2HI	19,380 12,510 9,216	190 139 128	34 30 24	C 80 B 80 B 80	SL3ZV (SM3 SMØJHF		421 345	48 51	C 20 C 20
F5PIQ F6IFY	72,480 62,601	302 271	80 77	B B 12 B	I3VHO 5 IK4MGP 4	733 830	91 2 70 2	21	C 160 C 160 B 80	OK1HFP OK1FF	8,568 4,032	119 64	24 21	B 80 C 80	SMØBDS SM5DQC SM5CLE	27,000 19,152 9,888	180 168 103	50 38 32	B 20 C 20 A 20
F5YJ F6CAV F5TCN	62,484 33,120 31,659	254 184 173	82 60 61	B B B	IV3DRP 6 IK4TVQ 23	480 730 2	80 2 26 3	7 15 9	C 80 C 40 B 40	OK2EQ OK2PMN OK2ABU	3,618 2,352 2,256	67 56 47	18 14 16	B 80 B 80 C 80	SM4SX SM5ALJ SMØDZH	5,016 3,744 624	76 52 16	22 24 13	B 20 C 20 C 20
F5NQL F2FX F8IN	15,120 6,873 5,307	120 79 61	42 29 29	B B	IT9GSF 217, IT9XUC 214,	356 12 347 12	28 5 11 5	9	C 20 C 20	OK2BNF OK2BHE OK1FPS	1,680 672 35,100	40 84 300	14 8 39	C 80 B 80 C 40	Poland SP2UKB	66,960	310	72	В
F5NSO F5NYK F6FGZ	1,968 1,575 1,815,516	41 35 2726	16 15 222	B B C	IQ7A (IK7XIV,op) 92,	250 6	15 5	i2 i0	C 20	OK1IE OK2GG OK1YM	22,263 21,204 18,462	181 186 181	41 38 34	C 40 C 40 B 40	SP6NIC SP5GRU SP1AFU	49,473 36,285 33,453	239 205 177	69 59 63	B B B
F5ROX F6CXJ TM6P	43,260 28,014 131,175	206 161 795	70 58 55	C C C 80	IK1RQQ 26 IKØUUM 19	334 2 200 2	31 3 00 3	15 18 12	B 20 B 20 B 20	OK1ARN OK2PO OK1DMS	17,850 15,606 4,025	170 153 115	35 34 35	B 40 B 40 B 40	SP1AFU SP1AEN SP5CGN SP6BEN	27,930 24,702	177 190 179 117	49 46 37	B B B
F5JKK FB1IPH	57,105 25,200	405 200	47 42	B 20 A 20				31 32	B 20 C 20	OK2ZU OK2ON	76,797 51,606	483 366	53 47	C 20 B 20	SP3ESV SP9AGS	12,987 12,852 8,613	117 126 99	37 34 29	B B

SP1RKB 4,140 60 23 B SQ9DXN 3,564 44 27 B	YU1EA 26,568 164 54 C 4N7ZZ 264 11 8 C 160 YU1EXY 94,500 630 50 19 C 80	47,637 237 67 C Uruguay	IO2L (I2OKW, IK2s NCF,PIG,YYE,IZ2ACZ,ops) 321,408 837 128 C
SP8FHJ 2,448 34 24 B SQ9CAQ 1,170 26 15 B SP8GQU 169,764 602 94 C	YU1EXY 94,500 630 50 19 C 80 YT7TY 27,027 231 39 B 40 YU1BO 8,928 124 24 B 40	CX7BY 109,350 675 54 C 20 Argentina	ES5Q (ES5s MC,MG,RN,RY,QX,ops) 215,412 619 116 C EA4AED (+EA4AFD)
SP4GHL 37,062 213 58 C SP1MHV 30,600 150 68 C SP2AVE 16,506 131 42 C	YU1ZZ 227,268 1284 59 C 20 YU7BJ 48,951 333 49 B 20 4N1N 27,360 240 38 B 20	LU8HSO 623,700 1155 180 36 B LU1EWL 597,645 1165 171 24 B	211,014 617 114 B IZ2ABW (+IK2JUB) 205,434 606 113 C
SP6BAA 8,004 92 29 C SP8FUX 7,728 92 28 C	YU7LS 18,576 172 36 C 20 YT1MP 15,264 159 32 B 20	LU4HKN 287,955 711 135 B AZ9W 245,220 610 134 B LU5VC 144,222 559 86 B	RK6AYN (RN6BP,RU6AV,RW6ACM,UA6AH,ops) 121,212 444 91 C
SP5GRM 23,562 238 33 C 160 SN3A (SP3HLM,op) 146,832 874 56 C 80	YU1AAV 7,332 94 26 B 20 YU1KX 41,055 391 35 C 15 YT1BB 25,500 250 34 2 C 15	L5V 144,222 559 86 B LU1AEE 33,120 184 60 B	OL2A (OK2s HBY,PDK,PEM, ops) 87,543 411 71 C OK1KZD (OK1s JEF,TO,ops)
SP5GH 7,704 107 24 B 80 SP4JWR 7,200 96 25 C 80	4NIZ 4,536 84 18 C 15 Macedonia	LU5GPL 13,932 108 43 B LU2BAR 6,177 71 29 B 20 LU6ETB 342,942 1874 61 C 15	62,568 474 44 C OH3FX (+OH3KCB)
SP9FZC 5,928 76 26 B 80 SP9AAB 3,132 58 18 B 80 SP5ANX 2,655 59 15 B 80	Z31RB 22,815 169 45 B Z31JA 44,649 363 41 B 40	LU5FIL 212,046 1198 59 B 15 LW6EFP 136,800 800 57 B 15	47,628 252 63 B OK1OKE (OK1DUT,OK1VBA,ops) 35,577 201 59 C
SP3FAR 1,710 38 15 C 80 SP8WJT 528 16 11 C 80	Z3ØM 125,226 773 54 C 20	LU3UI 128,370 778 55 C 15 LU2DW 17,745 169 35 C 10 LU7DW 3,465 77 15 2 C 10	UR4PWC (+UPTPZ) 29,928 172 58 C
SP9KJU 1,974 47 14 B 40 SP2FAX 209,214 1182 59 C 20	North America Jamaica	Peru OA4SS 1,730,520 2530 228 32 C	OK1KCF (+ops) 24,900 166 50 B HB9MG (HB9s CNV,JAW,JBL, JCF,ops)
SP7GIQ 160,428 922 58 C 20 SP9ATE 72,864 506 48 C 20 SP3SLA 22,896 212 36 B 20	6YØA (K3DI,op) 1,047,960 1704 205 A	Aruba P4/K2LE 1,066,257 1717 207 B	22,680 189 40 2 C 20 9A1CEI (9A3RE,9A4IP,9A6NPM,ops) 20,418 166 41 B
SP2QCH 22,311 201 37 B 20 SP3CYY 19,584 204 32 B 20	Bahamas C6A/N4RP 1,228,920 1862 220 B	P4ØW (W2GD,op) 5,263,380 5415 324 43 C	SMØAJV (+ops) 2,394 42 19 C North America
SP8BAB 17,280 160 36 B 20 SP6YGB 14,784 154 32 B 20 SP1BLE 10,668 127 28 B 20	KR8V/C6A 564,921 1281 147 B C6A/W7DRA 12,555 135 31 B 40	Brazil ZX2X (PY2OU,op)	V31TP (+V31EV) 3,824,724 4586 278 C
SP2JGK 6,600 100 22 B 20 SP6STS 6,180 103 20 B 20	Cuba CM8TW 73,008 468 52 B 40 CM2LG 21,000 175 40 B 40	629,472 1328 158 A PP5VX 27,267 149 61 A PY1BGJ 8,772 86 34 A	XA5T (K5NZ,N5s RP,TU,WB5N,W5MJ,ZE2s ABN,KB,XMH,ops) 3,512,781 4167 281 48 C
SP1LJP 4,356 44 33 B 20 SP6SYF 4,320 80 18 B 20 SP3FPF 3,600 48 25 B 20	CO8LY 81,006 587 46 B 15 Martinique	PU2MHB 401,547 977 137 B ZZ2Z (PY2YP,op)	J75T (DL3LAR,DL6LAU,DL8OBQ,ops) 3,436,830 4243 270 48 C
SP3VZY 3,564 66 18 B 20 SP3XR 2,166 38 19 C 20	FM5BH 57,450 383 50 C 160	318,402 798 133 B PV8ONU 69,918 271 86 B PP7CI 49,608 212 78 B	Oceania AH6MZ (+KH6IFN)
SO5TW 336 14 8 A 20 Greece	Haiti HH2AW (9A3A,op) 222,666 1258 59 C 80	PP7CW 43,056 184 78 B PY1CAS 178,200 495 120 C	2,476,320 3080 268 43 C South America
SV2AVP 2,016 42 16 B 80 SV2BOH 23,310 210 37 B 40 SV2BFN 11,760 140 28 C 20	Panama HP1AC 76,806 251 102 A	PY1EDB 16,669 127 49 C PY2NY 26,460 210 42 B 40 PT2AW 12,036 118 34 B 20	PJ9C (W1BIH,W1WEF,ops) 5,602,896 5694 328 C
Bosnia-Herzegovina T94YT 47,628 252 63 A	HP2/N6NT 3,078,855 3705 277 B HP3XUG 5,460 65 28 B 40	PY2EYE 11,781 119 33 B 20 PP5BRV 108,192 644 56 B 15 PY2ZI 24,000 200 40 B 15	P49V (Al6V,I2UIY,W6OAT,ops) 5,124,072 5288 323 C PYØFF (+W9VA)
Kaliningrad RA2FZ 32,118 202 53 B	Guantanamo Bay KG4ML 1,541,592 2196 234 C	PU2KER 6,240 80 26 B 15 PY2APQ 1,680 40 14 B 15	3,489,360 4340 268 C
European Russia UA4FAO 13,545 105 43 B	Alaska KL1R 18,165 173 35 5 B KL7RA 202,122 1182 57 C 20	PU2MRY 27,522 278 33 B 10 Falkland Islands	Multioperator Two Transmitters Africa
RX3DRU 2,337 41 19 B UA1OMX 147 7 7 B	KL7RA 202,122 1182 57 C 20 Virgin Islands	VP8CWI 2,964 52 19 B 15 South Shetland Islands	V51Z (KVØQ,WØYG,W8UVZ,WBØHBS,ops) 2,699,580 3461 260 B
RZ4AYT (UA4ALI,op) 45,120 235 64 C RV1CC 27,000 150 60 C	WP2Z (KE2VB,op) 86,355 505 57 C 160	LZØA (LZ2UU,op) 877,128 1589 184 C	Asia JA2ZJW (JA2MNB,JE2PCY,JH2CM,JL2ICO,JL2WNA,JM2NFQ,ops)
UA10MS 7,104 74 32 C RA4NW 1,344 28 16 C RZ6LG 12,528 144 29 C 80	Puerto Rico WP4LNY 8,058 79 34 B	Venezuela YY4GLD 86,580 555 52 B 15 YV7QP 13,464 132 34 B 15	493,725 1135 145 C Europe
RU1AO 780 26 10 C 80 RX3QAM 513 19 9 B 80	St Maarten Saba PJ5JP 315,000 700 150 B	Single Operator Assisted	DL30I (+DL5AXX) 1,927,284 3002 214 C
RA4AR 44,550 330 45 C 40 RW1AC 36,237 257 47 C 20	Costa Rica TI7/N4MO 270,864 1584 57 B 15	Asia JF2SKV 58,590 310 63 C	EA3AEK (+EA3s AJM,CKX,,EC3,EHE,EC3AHO) 268,134 667 134 C YTØX (YU7s ALS,ALX, ops)
RZ3FA 27,972 222 42 C 20 RW6AWT 6,888 82 28 C 20 RK3AD 6,072 88 23 C 20	Antigua and Barbuda V26CW (NM9H,op)	JA7SUR 19,608 152 43 B JE1XCZ 15,678 134 39 B	153,690 545 94 B North America
UA1OMZ 5,313 77 23 B 20 RA6AMU 1,800 40 15 B 20	109,230 662 55 B 160 V26NA (KX9X,op) 300,324 1726 58 B 15	JK2VOC 6,000 80 25 B Europe	6Y4A (JE3MAS, K2KW, N6BT, N6TV, W4SO,ops) 6,509,529 7257 299 C
UA4QK 480 10 16 B 20 RU6BV 360 15 8 B 20 Ukraine	St Kitts and Nevis V47KP (W2OX, op)	F5NBX 1,125,450 2050 183 C DL1ASA 703,080 1395 168 C IKØHBN 564,480 1176 160 C	XE2L (+K6s LA,LL,N6s HC,WS, XE2s BEY,BGD,DV,IO,) 5,961,480 6580 302 C
UY5TE 29,205 177 55 B UR5IBG 8,658 78 37 B	2,214,702 3038 243 C Anguilla	KØHBN 564,480 1176 160 C	KL7Y (+N7DF,NL7GP,WL7KY) 2,299,770 3030 253 C
UT4WT 394,902 927 142 C UT4UZ 312,039 819 127 C UT5JAJ 136,323 459 99 C	VP2EV (K7BV,op) 3,799,008 4397 288 C	OH2LU 16,650 150 37 C 20 S57KM 10,989 99 37 C	Multioperator Unlimited Transmitters Asia
UT2UB 42,639 233 61 C UR5UW 39,168 204 64 C	British Virgin Islands VP2V/K1DW 1,208,400 1900 212 B	DLØSRB 6,912 96 24 C 20 EA1BOP 2,886 37 26 B	JA1YDU (JA9VDA, JF2NXS, JL7MYL, JP1OGL, JH0NZN, N3NQL,ops)
UT3UA 38,610 198 65 C UT9IR 36,456 196 62 C UT1FA 36,252 212 57 C	Turks and Caicos Islands VP5/WJ2O 3,198,168 4132 258 C	South America ZZ2E 964,404 1806 178 C	804,924 1542 174 C JO1YAO (JA1PEJ,JH1AZO,JM1NKT,ops) 165,240 612 90 C
UX7IA 35,496 204 58 C UX1HW 23,124 164 47 C UU2JA 14,208 128 37 C	VP5JP (K8JP,op) 2,914,296 3666 266 41 C Cayman Islands	Multioperator Single Transmitter	Europe 9A1A (9A2s B,DQ,R,SD,TS,9A3s
UT4XU 6,570 73 30 C UT5UGR 5,700 76 25 C	ZF2NE (W5ASP,op) 396,360 2202 60 C 20	Asia JR1ZTT (JEJKL,JEØBKI,JK2FGD,JRØs UUU,	GW,NR,9A4OM,9A5W,9A6s A,D,9A7R,ops) 2,811,294 3954 237 C EA4ML (EA4s
UT5UIA 29,970 270 37 C 80 UYØZG 8,640 120 24 C 80	Oceania	XHL,ops) 516,672 1248 138 C JA7YAA (JE1AMC,JG7PSJ,JM1QPR,JRØSPG,ops) 415,275 1225 113 C	AFA,AKQ,AMC,CJA,EKR,ET,MC,MS,NN,UA,ops) 2,114,505 3105 227 C
U5WF 8,136 113 24 C 80 UY5ZZ 4,884 74 22 C 80 UT7WW 2,925 39 25 C 80	Philippines N7ET/DU7 15,015 143 35 A	JE6ZIH (JG4KEZ,JI6BRB,JK6SEW,JR6GKT,ops) 349,848 1032 113 48 C	4NØV (YU7sAV,AX,BW,GO,GW,KW,NU,OA,YZ1AU,YZ7UN,4N7DW,ops) 1,921,968 2966 216 C
URØQR 690 23 10 C 80 UT3C 82,992 532 52 C 40	DU3/W4NXE 17,763 191 31 C Hawaii	JA7YFB (JL2OGZ,JM1s HBO,UWB,ops) 330,630 1030 107 C RXØLWC (RUØLAX,RWØLL,UAØLS,ops)	RW2F (RA2FA,RN2FA,UA2s FB,FF,FM,FX,FZ,ops) 1,335,780 2172 205 C
UTØQA 20,826 178 39 C 40 UT1MW 9,999 101 33 C 40	KH6/WB6FZH 5,766 62 31 A KH6RS 1,712,196 2388 239 C KH6BZF (KH6ND,op)	122,322 551 74 C JE2YHS (JA2OLJ,JI2XUT,JJ2CEE,JR2JVR,ops) 15,792 188 28 C 40	4O4D (YT4AY, YU4s AR,ED,FA,NC,SO,SU,WU,ops)
UT5USQ 8,064 96 28 A 40 UT8I 4,920 82 20 C 40 US1PM 1,089 33 11 C 40	1,449,252 1988 243 37 C WB6FZH/KH6 750 25 10 3 A 20	Europe TM1C (F6s ARC,FVY,ops)	EM2I (UT2s IA,ID,II,IV,IY,UR5IOK,UX1IL,UXØIB,ops)
UR5WA 130,152 748 58 C 20 US6L 30,240 240 42 C 20 UT3QW 19,980 185 36 C 20	American Samoa KH8/N5OLS 65,550 230 95 C	3,035,136 3952 256 C HG1S (HA1s AH,AR,DAC,DAE,TJ,HG1DAI,ops)	654,750 1455 150 C UU5J (UU1JA, UU2s JQ,JZ, UU3JD,ops) 346,365 895 129 C
UR5QU 5,280 80 22 C 20 UT3QQ 2,976 62 16 B 20	Australia VK2AYD 172,827 519 111 B	1,665,438 2818 197 C II2K (I2HKM,IZ2AVK,ops) 1,663,677 2759 201 C	RK3DXG (RK3s FM,FT,RU3DGD,ops) 32,922 186 59 C OM7F (+OM7PY)
UT7LA 36 4 3 C 15 Latvia	VK8AV 94,335 331 95 B VK4XA 21,717 127 57 B VK2KM 58,500 300 65 C	DF9ZP (+DK8s FD,ZB) 1,625,844 2486 218 C T9DX (T9s 3M,3Y,T97M,ops)	3,402 54 21 B North America
YL8M 48,510 330 49 C 20 Romania	VK2VM 38,634 274 47 B 80 VK2APK 138,834 857 54 B 40	1,225,440 2220 184 C 9A5D (9A2FK,9A3s DU,NY,VM,9A4s	KP3Z (NP4Z,NP3J,KP4BZ,KP4RF,KP3L,NP3A,ops)
YO8FR 63,240 310 68 B YO3CTK 38,976 232 56 B YO3APJ 194,544 579 112 C	VK1FF 29,484 234 42 5 B 40 VK6HG 10,500 100 35 B 40 Indonesia	DU,PM,SG,9A5LU,9A6KKB,ops) 1,045,800 2100 166 C LA8G (LA4PHA,LA5IIA,LA9IY,ops)	5,055,492 5636 299 C Checklogs
YO3FWC 59,160 290 68 C YO4WP 27,639 249 37 B 40	YBØASI 6,240 80 26 C YC8TZR 37,440 320 39 B 40	932,955 1681 185 C DFØRU (DL7s UBA,UTM,ops) 704,160 1467 160 C	9A3QK, AA7VG, AK7O, CX6VM, DF3OL, DL2HWI, DL2KWW, EA5BHK, EA5BZS, EA5DCL, EA5EFV, EA5EU, EA5JC, EA5LA, EA7KN, EC5AEB,
YO2ARV 2,784 58 16 B 40 YO4GDP 1,350 30 15 B 40	YB2UDH 6,060 101 20 B 40 New Zealand	IK1DPA (IK1s CLP,LWL,QBT,ops) 689,232 1384 166 C	EU2MM, G8PW, GØWAL, HA3GÉ, HA5AEX, K3SWZ, K6FM, K9EMG, KE4LIA, LA4OGA,
YO4GRF 273 13 7 A 40 YO4NF 138,330 795 58 C 20 YO4DCF 4,920 82 20 B 20	ZL1ANJ 51,576 307 56 B	EA3MM (EA3s FWE, JW,ops) 508,602 1073 158 C UT7W (UR5WCW,UT7WZ,ops)	LA8CJ, LA8NC, LA9VGÅ, LU4GPL, LZ1AU, LZ1GU, LZ2SX, N1SNB, NØXCF, OK1KT, OK2BNC, OZ7QB, PAØRBA, PY1BLL, PY2SP,
YO4ATW 4,800 80 20 B 20 YO4ZF 1,980 44 15 B 20	South America Trinidad and Tobago	455,328 1054 144 C Z3ØB (Z3IRM,Z3IRQ,Z32TY,Z32TW,ops) 441,693 1107 133 C	PY2SY, RU4WE, SM5BFJ, SM5BUH, SM7CZC, SM7EH, SM0CSX, SP4JWR, SP5CEQ, SP6FZA, SP8HKT, VE3BR, VK3XB, W7LR, W8LYT, W9UV,
Yugoslavia YU7SF 75,330 310 81 B YU1OJ 255,843 651 131 C	9Y4VU 370,080 2056 60 C 40 Chile	GM7R (GM3YOR,GM0NAI,ops) 439,560 1221 120 C OH6OS (+OH6s MFN,MMC)	W9UV, WB2FXY, YO3FF, YV5BLP, YW3B.
YU1OJ 255,843 651 131 C YU1ZD 41,958 222 63 C	CE3B (CE3BFZ,op)	326,040 988 110 C	<u>Q5∓</u> ∠