

# 2004 IARU HF World Championship Results

*“Very interesting contest. Never a dull moment. This contest has great rules, and great all-band activity. Hard to complain about a contest that gives you 100/hrs all contest long!”—N9RV*

**Carl Luetzelschwab, K9LA**  
Editor, *National Contest Journal (NCJ)*

**P**at, N9RV, really seemed to sum up the 2004 running of the IARU HF World Championship on July 10 and 11. The creation of High, Low, and QRP sub-categories under each of the three Single Operator categories (Mixed, Phone-only, CW-only) brought a distinct new flavor to the contest.

## Summary

With new categories it is not surprising that the 2004 HF World Championship set a new record for the number of logs received. The 2479 logs received is up 32% from last year, and beats the old record (2105 logs in 2001) by almost 18%. The trend in the number of logs received is increasing.

This year's event had submissions from 49 of the ITU zones. With many ITU zones over open sea, it's obvious that having participation from all zones is not very likely. But a look at an ITU zone map



**Loud for a reason—Andi, UA3DPX, the 5th place finisher worldwide in the Single Operator Low Power Mixed Mode category.**

shows that participation from at least 60 zones could be a reality. How about some of you DXpeditioning contestants? Some of the “easier” zones needing activation are 5 (OX), 17 (TF), 46 (9L, 5N, etc), 47 (TT, etc), 51 (P2, YB, H4), and 52 (D2, etc). (See “Zone Participation by Year” graph.)

The zone with the most logs submitted this year was again Zone 28 with 354 logs.

Zone 8 followed with 264 logs.

## Tight Races

There were several tight races in the World scores and in the W/VE scores. On the overall world stage, two stand out in particular.

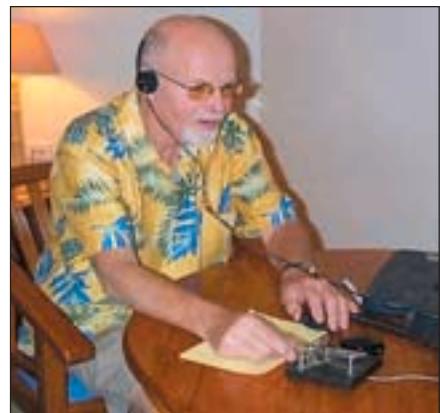
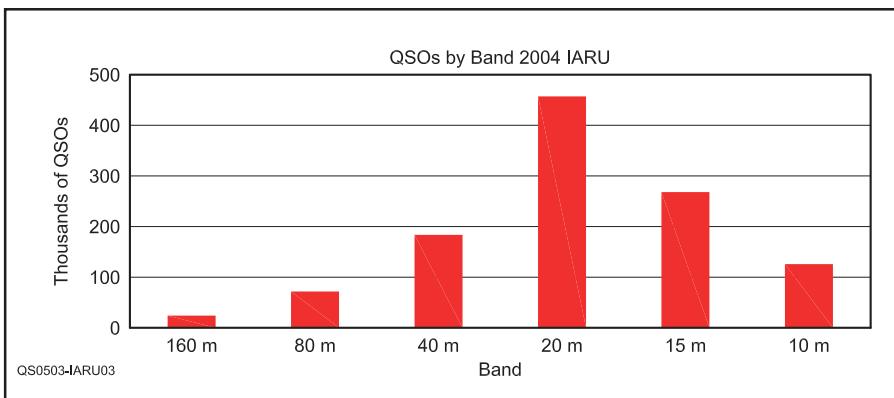
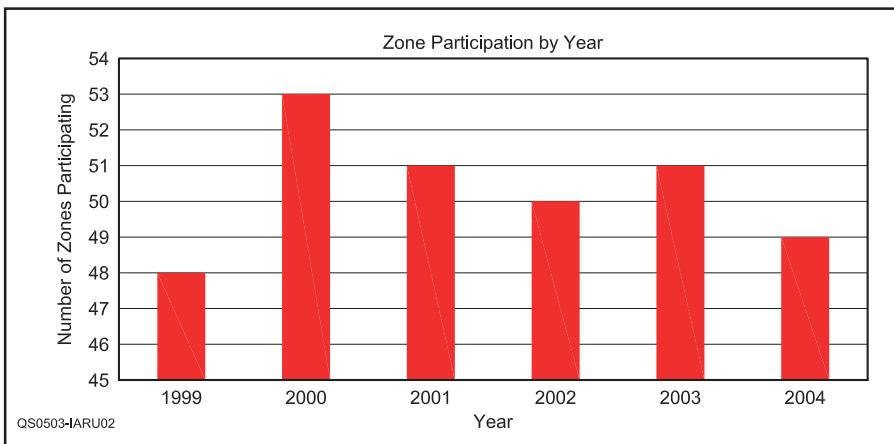
In the Single Operator Phone High Power category, Dimitry, UT5UGR,

## Results by Power Level

Category	Station	Zone	Score	QSOs	Mults
SO CW QRP	HA5IW	28	1,202,058	1850	234
SO CW Low	UN7MO	30	1,198,600	1655	250
SO CW High	RD3A	29	2,682,192	2626	323

## World Wide Top Ten

<i>Single Operator Mixed Mode QRP</i>	A61AJ (S53R, op)	2,933,718	<i>Single Operator Phone Only High</i>	OK2ZC	836,836
HG5Z (HA1CC, op)	RK4FF YT6A	2,890,880 2,834,170	UT5UGR OK1RI	S57J UY8IF UR3HC	809,416 797,720 760,092
YU1LM	207,315	IH9/OL5Y	HG8R OH2BH	RW3GB	719,178
NA4CW	131,712	OH0R	(SM0WKA, op)		
K5NZ	112,270	(OH2PM, op)	S50A S57DX		
DF1DX	76,494	RN3QO	2,223,277	RD3A N9RV	2,682,192 2,334,270
KA1LMR	71,690	EA3KU	2,076,375	K3CR	1,971,333
W6AQ	68,256		YT7A (YT7WA, op)	(LZ4AX, op)	
ES6PZ	64,390		US5D (UT7DX, op)	OH2PM (OH1WZ, op)	1,963,880 1,960,374
MM3AWD	55,596		K5TR	RA9JR	1,833,192
SP9RH	40,756	UA3BL KP4KE	1,171,233	G1W (M0SDX, op)	1,760,552
<i>Single Operator Mixed Mode Low</i>	WA0VBW	57,954	<i>Single Operator CW Only QRP</i>	HA8DU	1,741,480
HG3M (HA3MY, op)	SQ2DYF	44,172	SM6CRM	K4ZW	1,702,386
YT5A	2,095,522	M5AAV	22,715	RA9DD	1,645,344
CS6T (CT1ILT, op)	DL2EF	9,900	HA5IW HG1W (HA1WD, op)	YV2ZM RA9JR G1W	1,645,344
OH4R	1,228,752	JM2MWV	6,253	LY2MW LY4BF	1,502,205
(OH4JFN, op)	DB6FO	5,460	DB6FO YO8CQM	1,239,327 1,202,058	1,502,205
UA3DPX	1,115,000	Y08CQM	4,350	HA8DU HG1W (HA1WD, op)	1,202,058
RW3GU	1,061,292	ST2T	381,388	YV2ZM RA9JR G1W	1,202,058
UA9CDC	855,376	XE2K	347,070	LY2MW LY4BF G3YMC	1,198,600
DL2RMC	790,600	YR5A	344,350	192,424 168,883 150,328	4,524,170 3,640,890 3,320,461
OH6NIO	758,688	ZX2B (PY2MNL, op)	670,208	SM0GNS DL8MBS	3,227,064
RU9DD	655,894	UR5MNZ	422,184	118,160 104,788	3,185,595
<i>Single Operator Mixed Mode High</i>	G3PJY	392,238	G3VAO	LY7Z RL3A	3,094,344
3V8BB	4,287,712	G3VAO	391,988	HG1S PS2T	3,085,551
(YT1AD, op)	ST2T	381,388	DL8MBS	HG6N RY4J	2,279,952
DL6FBL	2,995,272	XE2K	347,070	RZ9OZO RZ9OZO	2,170,744
RG9A	2,941,056	YR5A	344,350	K4JA	2,038,155
(UA9AM, op)	ZX2B (PY2MNL, op)	334,488	CT1DHM	UN7MO UA4FER VE3DZ RN6AL N4PN	1,198,600 1,151,500 1,022,726 849,456 841,617



If you worked 3D2BY, this was what the other end looked like—it was Norm, W1BYH. Only a handful of Qs and Mults, but any contact with Zone 56 was appreciated.

#### Headquarters Stations

Call	QSOs	Mults	Score
DA0HQ	23093	441	20,264,391
SN0HQ	18387	437	18,621,007
R7HQ	13332	435	17,882,415
TM0HQ	15792	401	17,592,271
GB5HQ	14856	415	17,543,295
9A0HQ	14138	421	15,473,855
EM7HQ	12250	422	15,111,398
YT80HQ	12724	384	11,994,240
LY0HQ	10466	390	11,974,170
OL4HQ	11583	386	11,646,392
IUxHQ	11844	326	10,650,150
YR0HQ	10912	414	10,635,660
T90HQ	10757	363	9,724,770
P40HQ	6097	316	8,765,208
HG0HQ	9897	368	8,581,392
PA6HQ	7694	345	8,284,830
OEXHQ	10157	22	8,199,360
LZ0HQ	7808	345	6,344,550
SK9HQ	6352	299	6,027,541
W1AW	7388	271	5,995,875
NU1AW	6108	298	5,752,294
EW5HQ	5073	314	4,490,514
LN2HQ	4483	279	3,973,518
8NxHQ	6237	210	3,444,840
VE7RAC	4015	211	2,902,094
OH2HQ	3620	201	2,436,723
B4HQ	2981	222	2,031,966
PJ2HQ	2105	185	1,736,595
OZ1HQ	2422	220	1,653,960
EAXURE	2260	156	1,051,752
OY1CT	1441	199	843,959
HB75A	1752	182	663,572
YL4HQ	1030	183	460,062
CX1AA	765	129	442,728
ATxHQ	733	124	351,540
ZL6A	578	117	302,094
HS0AC	603	103	229,896
YV5AJ	334	104	141,752
4L0HQ	442	107	130,754
VR2HK	272	70	49,840
4X4ARC	200	50	43,700

#### HQ Stations

Congratulations to the DA0HQ team for their First Place finish. Second Place went to the SN0HQ team. The difference between these two groups was only 4 multipliers, but DA0HQ had about 4700 more QSOs. These two stations mobilize the members of their IARU societies to get on the air.

Europe led the pack with 28 HQ stations. Asia had 6 HQ stations (8NxHQ took top Asia honors), North America had 4 HQ stations (W1AW/Ø took top honors), South America had 3 HQ stations (P40HQ took top honors), and Oceania had 1 HQ station.

edged out Jiri, OK1RI, by only 4.8%. The difference was UT5UGR's 107 more QSOs and 5 additional multipliers. A few multipliers more or less could have tilted the balance in this one.

In the Single Operator CW Low Power category, Nick, UN7MO, in Kazakhstan squeaked by Igor, UA4FER, in European Russia by 4.1%. Although Nick had 277 fewer QSOs and 50 fewer multipliers than Igor, his QTH in Zone 30 gave him enough higher-point QSOs to claim victory.

There were also three tight races among W/VE scores that caught our attention. In the Single Operator Mixed Low Power category, Felix, VE2/DL7FER, took advantage of the points-per-QSO rule to beat Don, W9IU, by 6.9%, even though he had 96 fewer QSOs and 19 fewer multipliers. Higher point QSOs do make a huge difference in this contest.

Single Operator Phone Low Power operator Fred, KK1KW, snuck by Ryan, N8RY, by 6.2% in a tight category. KK1KW had 288 fewer QSOs, but managed to put 41 more multipliers in the log.

In the Single Operator Phone High Power category, there was a close three-way race between George, K5TR; Mitch, K7RL, and Jerry, WB9Z. George came

out on top by virtue of having the most QSOs and most zones. But Mitch (thanks to a JA opening on 15 m) and WB9Z weren't too far behind. George's win is his third in the last four years, interrupted only by his participation on the W1AW/5 HQ operation in 2002.

The UN7MO versus UA4FER results and the VE2/DL7FER versus W9IU results show that carefully picking your QTH for the contest can mean the difference between first place and second place.

#### QRP Scores

The results by power level (see table) in the Single Operator Mixed and Phone categories nicely follow the power level. But the CW category scores show an exceptional effort by Simon, HA5IW, in the QRP category.

HA5IW had enough QSOs and multipliers not only to take First Place in the SO CW QRP category, but he also even squeaked by the SO CW Low power winner Nick, UN7MO. This was a great effort indeed! I have asked Simon to consider writing an article for *NCJ* (the *National Contest Journal*) about his outstanding QRP effort.

## W/VE Top Ten

Call	Score	Call	Score	Call	Score	Call	Score
<b>Single Operator Mixed Mode QRP</b>							
NA4CW	131,712	N9AG	1,118,214	VE1JX	755,136	W0AIH	332,920
K5NZ	112,270	K6XX	1,096,656	(K6HNZ, op)		(K8GU, op)	
KA1LMR	71,690	K3ZO	1,091,415	K5NA	740,960	WK2G	318,570
W6AQ	68,256	W5WMU	864,456	(K15DR, op)		W4QM	268,422
W6RCL	30,438	W6UE	814,260	K7ZSD	675,104	WB2AA	266,668
K4AQ	12,670	N4ZZ	556,636	(WM5R, op)			
NA4BW	6,642	<b>Single Operator Phone Only QRP</b>		N3HBX	395,740	<b>Single Operator CW Only High</b>	
W6IXP	2,816	WA0VBW	57,954	WP2Z	374,436	N9RV	2,334,270
N4CU	868	K5YM	910	(K8MJZ, op)		K3CR	1,971,333
WA6NOL	112	WB0IWG	3	<b>Single Operator CW Only QRP</b>		(LZ4AX, op)	
<b>Single Operator Mixed Mode Low</b>							
VE2/DL7FER	453,870	KK1KW	158,080	KG5U	85,008	VY2ZM	1,960,374
W9IU	424,438	N8RY	148,857	NJ4X	68,874	K4ZW	1,702,386
VE3XD	302,035	NJ2F	116,725	VA3NR	63,600	K1TTT	1,641,211
WO4O	279,152	K1WO	93,677	AA1CA	38,280	(N2OW, op)	
NF4A	228,238	VA3OX	82,056	NU4B	14,848	W1WEF	1,535,355
VE2AWR	220,704	N7VMR	63,516	W8TM	13,248	KT1V	1,535,020
W0VX	214,830	W8KNO	57,672	N2JNZ	12,909	K5ZD	1,519,518
W0YR	209,157	AB4GG	45,375	K5UV	11,375	K5GN	1,516,836
VE4YU	191,422	W3LL	39,501	NI8W	11,328	N4AF	1,511,171
N6NF	181,328	K2RED	39,123	K2EKM	11,176	<b>Multioperator</b>	
<b>Single Operator Mixed Mode High</b>							
VE3EJ	2,010,580	K5TR	1,171,233	VE3DZ	1,022,726	K4JA	2,038,155
VE3AT	1,769,952	K7RL	1,095,990	N4PN	841,617	NK7U	1,549,935
VE3JM	1,197,742	WB9Z	1,033,175	K8IA	470,550	KB1H	1,356,784
VE3EY	1,163,430	N5LT	931,944	K4OGG	406,720	N3AD	1,294,618
(@VE3SY)							
(KE5C, op)							

## Continental Leaders

Class: A = Single Op Mixed, B = Single Op Phone Only, C = Single Op CW Only, D = Multiop, HQ = Headquarters station; Power: A = QRP, B = Low, C = High

Class	Power	Call	Score	Class	Power	Call	Score
<b>Africa</b>							
A	B	CT3EE	134,820	A	B	V31KG (KG9N, op)	317,344
A	C	3V8BB (YT1AD, op)	4,287,712	A	C	V44NK (EW1AR, op)	498,617
B	B	ST2T	381,388	B	A	KP4KE	204,477
B	C	ZS4TX	708,722	B	B	XE2K	347,070
C	B	SU9US	226,156	B	C	ZF2AH	388,814
C	C	ET3TK (OK1DF, op)	880,844	C	B	XE1MM	59,228
D		ZT6T	151,129	C	C	TI3M (TI3TLS, op)	536,969
<b>Asia</b>							
HQ		8NxHQ	3,444,840	HQ		HR2RCH	8,395
A	A	JH7XMO	24,180	<b>Oceania</b>			
A	B	UA9CDC	855,376	A	B	ZL6A	302,094
A	C	A61AJ (S53R, op)	2,933,718	A	B	ZL1TM	178,020
B	A	JA2MWV	6,253	A	C	ZL1V (ZL1CT, op)	988,368
B	B	RA9AU	327,978	B	B	DU1BP	58,080
B	C	UA9JDP	876,432	B	C	DU9RG	156,972
C	A	UN7CN	48,240	C	B	5W0TR (K8AQM, op)	115,895
C	B	UN7MO	1,198,600	C	C	KH6WT (K1YR, op)	1,241,220
C	C	RA9JR	1,833,192	D		AH0/NA8O	263,934
D		5B/RW4WR	4,524,170	<b>South America</b>			
<b>Europe</b>							
HQ		DA0HQ	20,264,391	HQ		P40HQ	8,765,208
A	A	HG5Z (HA1CC, op)	1,046,964	A	B	LU5EML	218,280
A	B	HG3M (HA3MY, op)	2,095,522	A	C	PY2MTV	4,560
A	C	DL6FB	2,995,272	B	B	ZX2B (PY2MNL, op)	670,208
B	A	UA3BL	284,931	B	C	LU1NDC	757,464
B	B	UR5MNZ	422,184	C	A	CX2AQ	30,340
B	C	UT5UGR	2,009,079	C	B	4M5X	614,438
C	A	HA5IW	1,202,058	C	C	LU7EE	400,890
C	B	UA4FE	1,151,500	D	C	PS2T	3,094,344
C	C	RD3A	2,682,192				
D		LY7Z	3,320,461				

## IARU Stories in NCJ and in the Web Version

The November/December 2004 issue of *NCJ* contains two narratives of IARU contest efforts: SN0HQ by SP5UAF and IK2DZN by IK2DZN. In the same issue, W0CG's wife Cindy contributes her interesting observations of the PJ2HQ operation. The January/February 2005 *NCJ* has snippets about the contest compiled by N3BB. All of these are also available

on the Web version of this report.

Also be sure to check out the "2004 IARU HF World Championships" soapbox comments at [www.arrl.org/contests/soapbox](http://www.arrl.org/contests/soapbox).

## Propagation

This year's contest was blessed with quiet geomagnetic field activity (the planetary K index Kp remained at or below 3 throughout the entire contest period) and

## IARU Administrative Council

G3BJ	1,926,760
K1ZZ	1,649,836
VE6SH	12,628

## IARU Regional Officials

R1	PB2T	18,308
R1	LZ1US	1,125
R2	PT2ADM	67,600
R3	9V1UV	70,432

low solar activity (no X-ray flares were observed on Saturday and only a magnitude C4.2 flare was observed right at the end of the contest on Sunday). The smoothed sunspot number for July 2004 is expected to come in at around 40, so for all intents and purposes this determined the propagation conditions for the contest.

"20 was a real workhorse and it was open all the time from here. I think I missed at least a dozen mults by not spending enough time on 15 and 10."—VE3EY

This comment from VE3EY is what would be expected of the summer ionosphere for stations in the northern hemisphere. With summer daytime MUFs (maximum usable frequencies) being lower than winter daytime MUFs, the number of QSOs on 15 and 10 m would be significantly fewer. And with longer hours of daylight during the summer, the number of QSOs on the lower bands would suffer, too. [See the "QSOs by Band" graph.] Obviously many people spent lots of time on 20 m.

"Mother nature gave us a nice lift at 1 AM Sunday morning with a rip-roaring JA opening on 15m. That little surprise added about 250 five-pointers to the log during what is typically a slow period. It sure pays to check those would-be dead bands."—K7RL

The surprise 15 m opening from Washington State to JA is a little tough to explain without digging very deeply into space weather and ionospheric data. Regardless of how it happened, it's a reminder that we don't know everything. If you have an extra receiver available, next year it might be beneficial to let it sit on the NCDXF/IARU beacon frequencies to catch any of these unusual openings.

## 2005 Contest

The 2005 IARU HF World Championship will be held the weekend of July 9-10. The announcement will be published in the April 2005 issue of *QST* and the full rules will be found on-line at [www.iaru.org/contest.html](http://www.iaru.org/contest.html). Hope to see you in the 2005 event!

Scores are sorted first by ITU Zone then by ARRL/RAC Section or DXCC entity within the zone. For US stations, they are sorted first by US call area within the zone. Next they are sorted by operating category (A=Single Op Mixed Mode, B=Single Op Phone Only, C=Single Op CW Only, D=Multioperator) then by power for single operator categories (A=QRP, B=Low, C=High).

Call Zone	Score	QSOs	Mult	Cat	Power	K6ST	39,360	217	60	B	C	WB0DUL	3,388	48	22	C	B	K5XR (W5ASP, op)	115,346	495	77	C	C
Zone 1						NU6T	750	25	10	B	B	Iowa						N5TW (K5SC, op)					
7						W6FA	229,026	439	133	C	C	W0PPF	11,900	114	34	B	C	359,156	949	127	C	B	
Alaska						W6RKC	29,832	178	44	C	C	K0IO	160,064	475	122	C	B	65,736	266	88	C	B	
W1FM	29,856	188	48	A	B	NT6K	123,000	577	82	C	B	WA0IAF	9,476	88	46	C	B	KA5KLU	56,133	267	77	C	B
N1SOH	21	3	3	B	B	W6NKR	54,288	173	87	C	B	Kansas						KG5U	85,008	327	92	C	A
KL7DX	276,340	990	82	D		K6DGW	23,532	163	53	C	B	KC0DEB	17,543	117	53	A	B	NX5M	1,156,320	1916	198	D	
Zone 2						W6SZN	1,890	27	18	C	B	K0RH	343,023	1101	109	B	C	W5ZL	402,178	789	161	D	
Alberta						K6FO	184,468	594	107	D		W0IE	3,979	55	23	B	B	West Texas					
VA6MM	33,540	174	65	B	C	K6KQ	52,700	290	62	B	C	WB0UZM	90	8	5	B	B	N5ZC	21,801	201	43	A	B
VA6DXD	26,871	194	53	C	C	K6CMIE	6,699	79	33	C	B	KG0UA	74,841	247	101	C	C	AD5BY	3,458	47	26	B	C
VE6BF	102,919	301	101	C	B	K6NA	825,608	1316	184	C	C	KOBJ	86,897	274	113	C	B	N5DO	435,956	1008	146	D	
VE6AO	413,595	1162	117	D		N6KI	74,781	404	63	D		NT3R	52,592	266	76	C	B						
British Columbia						K6RIM	63,099	247	81	A	C	KK0HF	16,731	149	39	C	B	7					
VE7NS	33,217	174	59	A	B	K6RAD	47,180	235	70	A	B	K4IU	224,125	655	125	A	C	Montana					
VE7UQ	17,745	141	39	B	B	W6FRH	86,632	316	98	A	C	K0VG	2,709	51	21	B	C	N7VMR	63,516	280	79	B	B
VA7XX	338,082	712	134	C	C	K6OQ	39,292	161	76	A	C	W0GJ (KC0PXN, op)	21,838	126	61	B	B	KO7X	224,724	706	122	A	C
VE7UF	74,880	297	65	C	C	K6PG	6,240	62	39	B	B	AE0C	6,641	93	29	B	B						
VA7ST	125,488	460	88	C	B	K6CSL	16,770	118	43	C	C	W0YC (N0YNT, op)	9	9	1	B	B	Zone 8					
VA7LC	75,690	258	90	C	B	N6SUZ	10,906	97	38	C	B	WA0VBW	57,954	240	78	C	B	0					
VA7CAB	3,000	48	24	C	B	N6IV	442	17	13	C	B	WA0HW	54,600	237	78	C	B	Missouri					
VA7MM	4,144	50	28	C	A	KT0R	279,306	806	118	D		K0AD	34,485	248	57	C	B	K5QQ	969	32	19	A	B
VE7FO	210,635	622	103	D		WA5VGI	100,719	314	93	A	C	WG0M	22,224	176	48	C	B	1					
Northern Territories						KD6PQF	11,026	100	37	B	B	KT0R	279,306	806	118	D		Connecticut					
VE1JA	5,219	104	17	C	B	WA6FGV	27,554	234	46	C	B	K0OU	406,868	865	154	A	C	W1NK	38,540	157	82	A	C
Zone 3						Santa Clara Valley	1,096,656	1605	201	A	C	K2HT	5,852	66	38	A	B	W1QJ	157,896	441	129	A	B
Manitoba						K6GT	124,839	457	97	A	C	KU1CW	1,162,664	1621	206	C	C	W1WEF	1,535,355	1961	223	C	C
VE4YU	191,422	534	113	A	B	W6ISO	31,620	197	60	A	C	K0CA	15,458	101	59	C	B	W1QK	643,860	1306	147	C	C
VE4VID	1,625	44	13	B	B	N6EM	39,624	193	78	A	B	KS0M	12,993	104	61	C	B	N4XR	17,280	100	60	C	C
Zone 4						N6RCE	12,204	109	36	B	B	NJ4X	68,874	333	78	C	A	KB1H	1,356,784	1778	208	D	
Ontario						W6ZZZ	145	12	5	B	B	Nebraska						Eastern Massachusetts					
VE3EJ	2,010,580	2193	247	A	C	K6RB	323,204	807	119	C	C	W0UVC	31,324	129	82	B	C	W1WV	19,778	126	58	B	C
VE3AT	1,769,952	2179	206	A	C	K6VVA	112,476	394	91	C	C	NE0DX	28,002	113	78	B	C	AK1Q	36,335	195	65	B	B
VE3JM	1,197,742	1713	182	A	C	AD6E	66,816	278	72	C	C	K0XU	1,674	28	18	B	B	K1PNQ	3,384	45	24	B	B
VE3EY (@VE3SY)	1,163,430	1684	186	A	C	N6NM	62,726	265	79	C	B	South Dakota						K5MA	670,194	1145	162	C	C
VE3/W1AJT	114,932	296	118	A	C	KO6LU	3,108	56	21	C	B	K0HW	128,544	480	104	A	B	K1WCC	4,582	59	29	A	B
VE3XD	302,035	649	145	A	B	W6PRI	1,953	50	21	C	B	K0EWS	3,014	69	22	A	B	N1FR	251,520	659	120	C	B
VE3SUN	109,585	369	101	A	B	W6OAT	33,232	150	67	D		WD0BMS	18,460	100	71	B	C	K1SWG	60,600	229	101	C	B
VA3IX	14,478	109	38	A	B							WD0BMR	27,048	141	69	B	B	New Hampshire					
VE3MGY	2,736	56	18	A	B							KN1F	14,416	93	53	A	B	W1DAD	50,460	267	87	A	B
VA3PL	110	8	5	A	B							KA1LMR	71,690	268	107	A	B	K1AKW	158,080	380	128	B	B
VA3JFF	76	7	4	A	A							K1KWO	93,677	263	113	B	B	K12KON	12,599	106	43	B	B
VA3OZ	82,056	344	78	B	B							KT1V	1,535,020	1766	230	C	C	KC1F	51,840	277	48	C	C
VE3TW	19,278	121	54	B	B							W1END	39,150	236	54	C	B	W1TE	104,076	306	126	C	B
VA3FP	13,026	106	39	B	B							AE1T	15,132	118	39	C	B	AA1CA	38,280	186	88	C	A
VA3UOT (VE3RFT)	1,456	38	14	B	B							KC3MD	243,417	830	123	D		Rhode Island					
VE3ZIG	1	1	1	B	B							K1PLX	187,920	440	120	B	C	KB1QKJ	132	16	6	B	B
VE3DZ	1,022,726	1429	202	C	B							K1G	125,895	334	109	C	C	N1NK	90,744	278	114	C	B
VE3KP	235,708	619	121	C	B							N1BCL	155,135	494	115	B	C						
VE3IAY	101,160	356	90	C	B							Western Massachusetts						K1TTT (N2OW, op)	1,641,211	1865	253	C	C
VE3OM	100,240	259	112	C	B							K5ZD	1,519,518	1780	231	C	C						
VA3RJ	49,580	216	74	C	B																		
VE3TAZ	41,172	204	73	C	B																		
VA3XZR	36,240	211	60	C	B																		
VE3UKR	13,488	101	48	C	B																		
VA3HUN	627	19	11	C	B																		
VA3NR	63,600	286	75	C	A																		
Quebec																							
VE2AWR	220,704	592	121	A	B																		
VE2GLA	552	26	12	A	B																		
VE2DC	954	22	18	B	B																		
VE2QY	67,704	240	78	C	B																		
VE2FEF	13,940	122	41	C	B																		
VE2HLS	11,808	102	36	C	B																		
VE2XAA	2,574	44	22	C	B																		
Zone 6																							
East Bay																							
KE6ZSN	114,704	653	67	A	C																		
KE6QR	29,700	197	50	A	B																		
KI6OY	2,394	62	14	A	B																		
K6JAT	27,240	156	60	B	C																		
WB6RNS	4,176	55	24	B	B																		
N6RO	18,096	136	39	C	C																		
Los Angeles																							
N6ED	495,180	1149																					

K2MK	6,474	67	39	C	B	WO4O	279,152	710	146	A	B	N9LF	12,684	99	42	B	B	PT2BW	15,327	100	39	B	B	
N2CQ	5,376	73	28	C	A	W4DAN	50,765	273	71	A	B	K9SQL	2,392	49	23	B	B	PT2OP	3,772	48	23	B	B	
<b>Western New York</b>																								
KM2L	61,243	248	91	A	B	WA4GLH	1,072	32	16	A	B	K9ZEN	245	16	7	B	B	PY6KY	1,210	25	22	B	B	
AA2YG	20,280	187	40	B	C	AB4GG	45,375	214	75	B	C	N9RV	2,334,270	2505	255	C	C	PR7BOK	867	21	17	B	B	
NF2L	539	23	11	B	B	WA4OSD	8,118	102	33	B	B	K9N9W	1,225,224	1621	221	C	C	PY7GK	-1,258	24	37	B	B	
						K1EVB	1,068	39	12	B	B	K9WJU	(W9CG, op)					PR7AR	40,964	149	77	C	B	
						K4GF	360	20	9	B	B		54,782	197	86	C	B	PY7OJ	2,728	35	31	C	B	
						W4NZ	681,435	1286	171	C	C	N9NDS	240	14	8	C	B							
						NA4K	342,069	801	147	C	C	AD9T	5,792	97	32	C	A							
						K4LTA	325,008	1033	122	C	C													
						N4ZI	24,981	277	33	C	C													
						W9WI	8,606	150	26	C	C													
						AA3VA	160	10	8	C	C													
						K1GU	206,780	503	140	C	B													
						K4BX	25,326	200	54	C	B													
						W4TYU	2,970	54	27	C	B													
						NU4B	14,848	99	58	C	A													
						KW4JS	488	26	8	C	A													
						Virginia																		
						N3JT	57,330	193	98	A	C													
						K4VV	7,800	71	40	A	C													
						W0YR	209,157	640	93	A	B													
						WM3T	61,971	234	91	A	B													
						AD4AX	32,010	258	55	A	B													
						K3MZ	1,200	25	20	A	B													
						N8IK	324	24	6	A	B													
						K4PUA	138	13	6	A	B													
						N4MM	144,408	339	132	B	C													
						K2E2N	39,040	147	80	B	C													
						W4MM	17,024	1958	229	C	C													
						W3BP	562,880	1021	160	C	C													
						K4EU	202,032	468	138	C	B													
						KI4FDF	134,788	439	124	C	B													
						K1O	64,224	275	96	C	B													
						K4UK	20,340	150	60	C	B													
						K4GM	11,781	113	51	C	B													
						K4GMH	8,512	96	32	C	B													
						K6ETM	720	21	16	C	B													
						K2EKM	11,176	129	44	C	A													
						KC4AU	4,836	97	31	C	A													
						K4JA	2,038,155	2175	245	D														
						<b>West Central Florida</b>																		
						K4LQD	249,128	510	152	A	C													
						K4GKD	71,889	304	93	A	B													
						K8FK	11,730	106	46	B	B													
						AG4ZM	5,746	71	34	B	B													
						K4AQ	12,670	156	35	A	A													
						NA4BW	6,642	109	27	A	A													
						WA4TII	308,568	588	172	B	B													
						WK2G	318,570	974	111	C	B													
						WD4AHZ	230,759	662	127	C	B													
						<b>5 Mississippi</b>																		
						N5PA	160,310	526	115	A	C													
						N5PU	23,625	152	63	C	B													
						N8RY	148,857	668	87	B	B													
						AB8PW	513	24	9	B	B													
						N8DEW	440	23	8	B	B													
						K8GL	733,792	1149	184	C	C													
						KT8X	97,857	386	83	C	C													
						K8R1	225,906	578	138	C	B													
						KB8TYJ	2,415	54	23	C	B													
						K8HZ	27,664	209	56	D														
						Ohio																		
						N9AG	1,118,214	1511	219	A	C													
						N8KQJ	498,617	1091	133	A	C													
						W8KNO	57,672	233	89	B	B													
						K8AZ	(K8NZ, op)																	
						K9TTF	697	25	17	A	B													
						K8ZZU	54,614	208	94	B	C													
						N8OL	30,680	206	59	B	C													
						N8RY	148,857	668	87	B	B													
						AB8PW	513	24	9	B	B													
						N8DEW	440	23	8	B	B													
						K8GL	733,792	1149	184	C	C													
						KT8X	97,857	386	83	C	C													
						K8R1	225,906	578	138	C	B													
						KB8TYJ	2,415	54	23	C	B													
						K8HZ	27,664	209	56	D														
						Ohio																		
						N9AG	1,118,214	1511	219	A	C													
						N8KQJ	498,617	1091	133	A	C													
						W8KNO	57,672	233	89	B	B													
						K8AZ	(K8NZ, op)																	
						K9TTF	697	25	17	A	B													
						N8OL	30,680	206	59	B	C													
						N8RY	148,857	668	87	B	B													
						AB8PW	513	24	9	B	B													

SM4XIH	23,822	131	86	A	B	M0RNA	4,860	63	27	B	B	<b>Northern Ireland</b>		64,047	253	111	A	C					
SM/DL4JWU	6,578	71	46	A	B	G7IIQ	4,218	57	38	B	B	M13OZX	2,508	38	33	B	B	DF3ML	8,568	76	68	A	C
8S5A (SM5AJV, op)	30,291	156	69	A	A	M1MAJ	1,036	28	28	B	B	G14KSH	84,564	274	108	C	B	DF5AU	3,672	76	24	A	C
SM6AHU	13,301	91	47	A	A	M5AAV	40,579	209	77	B	A	SP1LJP/MM132,888	761	56	A	B	DL8MUG	3,672	76	24	A	C	
SM3LIV	267,270	641	151	B	C	G1W (M0SDX, op)	1,760,552	2182	248	C	C	<b>Maritime Mobile</b>		3,465	61	45	A	C					
SM5U (SM5UGC, op)	228,068	540	148	B	C	G3GLL	319,518	589	183	C	C	GM4SID	137,375	381	125	A	C	DL1ARJ	220,140	580	180	A	B
SM6FJY	15,134	102	47	B	C	M3C (G0VQR, op)	284,151	735	147	C	C	MM3AWD	55,596	306	82	A	A	DL3ZAI	213,696	518	168	A	B
SM0FM	20,160	112	64	B	B	G4HZV	59,143	190	119	C	C	MM3JHS	12,168	97	52	B	B	DL8HCO	163,441	539	137	A	B
SM3XRJ	5,124	72	28	B	B	G3ZRJ	192,864	496	123	C	B	GM4ELV	1,962	41	18	B	A	DL1NKS	161,436	524	132	A	B
SM6CRM	22,715	126	77	B	A	G3VGR	134,830	348	139	C	B	GW3NJW	923,281	1582	181	C	C	DL8AAM	159,797	452	199	A	B
SM2CEW	881,664	1387	192	C	C	G3RSQ	123,234	313	141	C	B	GW3NJW	923,281	1582	181	C	C	DL3AMA	150,625	551	125	A	B
SK6HD (SM6FKF, op)	237,920	510	160	C	C	M0GMT	106,000	390	100	C	B	DL8UFO	104,538	337	133	A	B	DL9ABM	102,555	299	129	A	B
SM5G (SM5JBM, op)	703,514	1033	217	C	B	G3MPB	97,773	295	109	C	B	DJ9MH	79,593	317	129	A	B	ZA1E	5,852	187	22	B	C
8S0F (SM0GGQ, op)	365,366	871	142	C	B	G3LHJ	28,905	258	41	C	B	DL1DVN	77,803	329	121	A	B	T96A	40,376	222	98	A	B
SM/DL1BUG	279,890	710	130	C	B	G3YMC	192,424	517	134	C	A	DK4MT	75,147	320	111	A	B	OE7AJT	67,850	295	115	B	B
SM7EH	163,170	395	147	C	B	M4A	1,433,709	1988	241	D		OE1CWA	22,848	185	56	B	B	DF6WE	73,800	364	123	A	B
7S3J (SM0DZH, op)	106,862	309	119	C	B	F5ROW	11,050	97	50	A	B	OE1WIU	51,150	231	75	C	B	DK7AN	73,625	248	125	A	B
SM0BDS	63,250	215	110	C	B	F6ETI	576	24	18	A	B	OE2S	1,969,212	2367	294	D		DL8UVG	62,678	293	121	A	B
SM5RE	34,560	180	96	C	B	F5MLJ	57,984	242	96	A	B	DJ2YE	55,388	285	122	A	B	T98R	7,524	210	19	C	B
SM3Q (SM3BFH, op)	19,955	114	65	C	B	F6FTB	27,153	166	63	A	B	DL2HWI	45,248	178	112	A	B	LZ3SM	110,112	315	148	A	B
SM6PVB	18,081	115	63	C	B	F6DZB	23,088	162	74	A	B	DJ4EJ	41,148	209	108	A	B	LZ5PL	69,865	340	89	A	B
SM7TKL	15,776	109	68	C	B	F5NEV	72	12	6	A	B	DL4FDM	33,770	156	110	A	B	LZ1DQ	79,143	349	93	C	B
SM4OY	3,256	54	22	C	B	F5NYK	2,320	46	40	A	A	DM3PKK	21,204	148	62	A	B	LZ2BE	339,306	684	194	C	B
SL5ZX	96	8	6	C	B	F8DFN	79,488	302	108	B	B	DL4S2Z	19,834	111	94	A	B	LZ6C (LZ2TF,op)					
SM5ARR	20	4	2	C	B	F1FPL	45,408	205	88	B	B	DL6UAM	11,385	110	45	A	B	LZ1IA	83,688	272	132	C	B
SM0GNS	118,160	373	112	C	A	F4DZY	30,012	148	82	B	B	DC9AM	8,957	98	53	A	B	LZ1ZM	31,200	218	78	C	B
SM6EQO	12,600	137	35	C	A	F1ORL	26,160	162	60	B	B	DL7FA	6,278	69	43	A	B	LZ4DW	27,648	127	108	C	B
SM5CJW	4,564	63	28	C	A	F6BLZ	13,145	92	55	B	B	DL6UAA	5,353	66	53	A	B	LZ1EP	2,223	101	13	C	B
<b>Zone 19 European Russia</b>																							
RV1AT	384,241	1056	143	A	C	F1IWH	7,943	79	47	B	B	LZ7Z (LZ1IS,op)			5,038	95	22	A	B				
UA1OMS	1,908	39	18	A	B	F1EIT	7,110	69	30	B	B	DK0NS	4,732	69	52	A	B	LZ1KNZ (LZ1NE,op)					
U1BA	99,484	383	119	B	B	F4BPRJ	5,980	65	46	B	B	DL8DXL	3,828	67	44	A	B	F8DYD	2,548	40	26	B	B
RA1ANO	340,315	800	145	C	C	F2FZ	36	6	6	B	B	DK5OBB	2,925	58	45	A	B	F5BBB	300,369	583	177	C	C
RK1NA	149,058	422	117	C	C	F6GQO	99,900	334	111	C	C	Corsica						DK3WJ	2,432	49	32	A	B
UA1NFA	173,950	501	142	C	B	F/DJ9RR	230,370	742	105	C	B	TK/F6AUS	66,300	393	102	A	B	DK2AXM	994	36	14	A	B
<b>Zone 20 Asiatic Russia</b>																							
RU9DD	655,894	939	191	A	B	F5TN1	113,442	381	111	C	C	Croatia						DK2MY	950	26	19	A	B
RK9CR	279,048	549	151	A	B	F5INJ	110,194	320	119	C	B	9A5ZP	68,373	290	107	A	C	OK4RC	117,925	591	89	A	B
UA9XF	142,324	327	119	A	B	F8BTB	38,970	167	90	C	B	9A4RK	62,468	383	46	C	C	OK4KW	62,468	314	195	C	B
UA9OUU (RZ9OS, op)	101,926	351	82	A	B	F6KDF	1,116,290	1929	185	D		OK5CC	151,130	386	127	C	B	OK2EQ	287,820	621	180	A	B
UA9JDP	876,432	1332	152	B	C	F5KEQ	376,740	760	180	D		OK1DXD	136,240	424	130	A	C	OK1FNM	269,868	707	191	A	B
RK9XX	48,246	237	51	B	B	MU3GSY	23,010	143	78	B	B	OK1VBA	218,284	521	164	A	B	OK2CLW	134,824	407	152	A	B
RV9JE	936,636	1212	178	C	C	MU2K (G3SQX, op)						OK2PBM	105,791	369	119	A	B	OK2SWD	45,924	233	89	A	B
RV9XM	114,080	346	80	C	C	GU0SUP	79,056	249	122	C	B	OK1R1	1,917,452	2205	274	B	C	OK1KA	36,708	181	76	A	B
RA9XU	77,328	348	54	C	B	E14DW	330,690	762	151	A	C	OK1PT	104,257	320	137	B	C	E14CF	220,050	525	163	A	B
UA9XC	67,817	250	73	D		E17CC	191,808	547	144	A	B	OK1R2	96,258	411	122	B	B	E17JK	153,629	540	119	A	B
<b>Zone 21 Asiatic Russia</b>																							
RA0BA	571,444	946	146	A	C	E1II	31,450	34	29	A	B	OK1MJI	192,705	495	145	C	B	LZ1XJ1 (LX2AJ, op)					
RW0BG	20,196	120	51	A	B	E1II	50,925	197	97	B	C	OK2PDT	685,850	1082	215	C	B	PA0JNH	390,637	727	199	A	B
RA9JR	1,833,192	1786	243	C	C	PG3N	436,832	859	187	A	B	OK2ZC	836,836	1221	242	C	B	PA0ADP	206,956	751	204	A	B
RA9KM	602,310	880	170	C	B	PA0MIR	396,576	751	204	A	B	OL0A (OK1CZ, op)						PA0ADP	203,958	486	162	A	B
RK9JWV	1,318,400	3184,000	206	D		PG7V	278,775	649	175	A	B	OK1H1X	547,334	928	236	C	B	PC4M	179,010	459	153	A	B
UA0QNV	45,258	205	57	A	B	PA0ADP	203,958	486	162	A	B	OK2MPB	491,625	914	207	C	B	PA0CH	146,444	246	124	C	B
<b>Zone 22 Asiatic Russia</b>																							
RT0Q (RZ3BY, op)	122,877	339	111	A	B	PA0CH	146,444	246	124	C	B	OK2DU	477,071	863	211	C	B	PA0LRL	50,292	208	99	A	B
UA0QNV	45,258	205	57	A	B	PA0LRL	8,460	76	47	A	B	OK2QX	417,996	753	204	C	B	PA0LRL	8,460	312	104	C	B
<b>Zone 27 Belgium</b>																							
ON4AEK	91,599	591	57	A	C	PA0FEI	1,450	34	29	A	B	OK1NFC	193,170	446	141	C	B	PA0JRM	236,640	581	136	B	C
ON5WL	36,936	188	81	A	B	PA1TON	1,045	27	19	B	C	OK1MKI	192,705	495	145	C	B	PA0OI	1,040	27	16	B	C
ON4CIN	13,298	93	61	B	B	PA0OI	1,040	27	16	B	C	OK2BND	187,512	463	156	C	B	PA0PATM	819	26	21	C	B
ON6LEO	13,018	121	46	B	B	PA1PATM	819	26	21	C	B	OK1MZO	168,216	413	163	C	B	PA0ADP	203,958	486	162	A	B
ON4XG	89,572	299	98	C	C	PA5O	27,084	156	74	B	B	OK1SF	165,519	359	15								



YR5A (YO5TE, op)	344,350	927	194	B	B	European Russia	RK4FDE	2,890,880	2875	320	A	C	RU4CO	9,090	99	45	C	B	UY0ZG	537,588	882	218	C	C
YO3CZW	231,275	778	145	B	B	RN3QO	2,223,277	2432	289	A	C	UA3VFI	7,881	88	37	C	B	UT2AU	228,689	508	163	C	C	
YO3FYS	60,480	290	105	B	B	RK6BZ	155,122	493	121	A	C	RA1ATF	6,936	71	34	C	B	UT4XU	208,200	519	150	C	C	
YO3AIL	53,880	239	120	B	B	RA6DB	143,484	710	66	A	C	UA4AN	1,995	57	15	C	B	UV5U (UX1UA,, op)	41,791	220	79	C	C	
YO5BWI	41,984	187	82	B	B	UA3TCJ	75,682	317	79	A	C	UA3DOM	903	25	21	C	B	UT3EK	15,036	127	42	C	C	
YO8GFX	23,256	168	76	B	B	UA4NCI	26,712	179	53	A	C	RD3AP	133	7	7	C	B	UY8IF	797,720	1452	185	C	B	
YO9DBP	22,242	170	66	B	B	RU3DX	4,797	60	39	A	C	RU2FM	37,130	196	79	C	A	UR5HC	760,092	1330	194	C	B	
YO8ROM	17,877	156	59	B	B	UA3DPX1	115,000	1742	223	A	B	RV3DBK	21,222	174	54	C	A	UT2IO	688,023	1188	201	C	B	
YO2LPC	9,145	143	31	B	B	RW3GU	1,061,292	1574	236	A	B	RL3A	3,227,064	3126	344	D	B	UT4ZG	649,235	1123	205	C	B	
YO2LYN	6,840	109	30	B	A	RZ4AG	557,037	969	207	A	B	RF3A	1,788,480	2275	270	D	B	UW2F (UT0FT, op)	349,575	765	177	C	B	
YO8CQM	4,350	108	25	B	A	RU4SS	397,950	1007	150	A	B	RK3MWD1	164,886	1671	239	D	B	UV7M (US5MTJ, op)	250,694	624	163	C	B	
YO2AQB	116,802	350	126	C	C	RV4LC	178,532	442	157	A	B	RK3SWB	500,760	982	180	D	B	UR7EQ	243,486	592	162	C	B	
YO6BHN	59,020	522	52	C	C	RN6FA	172,508	650	101	A	B	RK3VA	189,924	501	147	D	B	UR8RF	176,863	466	149	C	B	
YO5CBX	373,458	831	201	C	B	UA3LEO	146,880	434	135	A	B	RK3QWM	387,315	798	171	D	B	UR5FS	164,500	485	125	C	B	
YO4GDP	283,650	820	150	C	B	RZ3VA	138,414	456	138	A	B	Georgia	4L1MA	570	17	15	C	B	UT1IR	138,262	361	146	C	B
YO9AGI	115,840	444	128	C	B	RZ3DA	125,891	374	131	A	B	Latvia	YL0A (YL2KA, op)					B	UT3NK	96,810	413	105	C	B
YO8BIG	88,260	555	60	C	B	RX3DBG	89,600	365	100	A	B	YL0L	1,646,670	2100	262	A	C	UU4J (UU4JO, op)	94,282	310	118	C	B	
YO5DAS	80,250	313	107	C	B	RA3AF	85,956	272	116	A	B	YL2GD	1,212,299	1764	233	A	C	UY0ZG	94,282	310	118	C	B	
YO8RKQ	79,492	322	119	C	B	RD3AN	80,304	294	112	A	B	YL2KO	757,668	1205	206	A	C	UX7QD	90,090	571	55	C	B	
YO8BPY	71,762	305	106	C	B	RW3VZ	68,882	294	101	A	B	YL2TW	499,748	985	202	A	B	UX0ZX	69,030	280	90	C	B	
YO4BBH	53,040	295	60	C	B	RA4FJV	66,248	300	91	A	B	YL2CZ	58,850	273	110	A	B	UX1HW	61,152	263	91	C	B	
YO7ARZ	171	11	9	C	B	RA6FQL	55,204	288	74	A	A	YL1ZJ	8,164	151	26	B	B	UY5YA	49,560	225	84	C	B	
YO4BII	40,626	218	74	C	A	RK3DH	41,314	190	91	A	B	YL3BZ	6,864	90	24	B	B	US1IV	39,060	177	93	C	B	
YO2IS	31,119	275	41	C	A	RA3FD	40,495	209	91	A	B	YL2LY	954,980	1262	260	C	C	UR5IPD	32,725	148	77	C	B	
YO9KPM	23,725	157	73	D		RX3RZ	37,500	199	75	A	B	YL2PA	50,864	215	88	C	B	UT2QQ	23,520	120	80	C	B	
Sardinia						RN3AQ	11,286	115	38	A	B	YL2RM	3,441	62	31	C	B	UW5RO	10,810	98	47	C	B	
ISOOMH	36,120	222	84	C	B	RN6HZ	4,930	63	34	A	B	YL2PQ	936,064	1625	206	C	C	UY2RZ	6,232	66	41	C	B	
Serbia and Montenegro						UA4CC	1,584	36	22	A	B	YL5W	644,850	1056	225	C	B	UR4EXA	1,152,651	1824	233	D	D	
YT6A	2,834,170	3311	290	A	C	UA6JVP	1,683	45	17	A	A	YL8M (YL2KL, op)						UR4QWW	618,032	1109	214	C	D	
YT5A	1,814,272	2555	256	A	B	RK4FD	958,870	1531	230	B	C	YL2PA	573,438	1210	186	C	B	UT5IZO	497,952	1073	168	D	D	
YZ1V (YU1SB, op)						RN4LP	787,077	1208	243	B	C	YL2RM	3,441	62	31	C	B	UW7W	180,300	365	150	D	D	
YT7A (YT7WA, op)						RA6AFB	461,296	1007	176	B	C	YL1TN	176,593	589	137	D	B	UR4ZWL	32,760	239	60	D	D	
YT1AT	49,416	220	116	A	B	RV4HC	173,745	538	117	B	C	LY5R (LY3BP, op)						UR4EXA	1,100	28	25	D	D	
YU1RA	5,850	94	39	A	B	UA4HOX	156,000	526	120	B	C	Lithuania	LY3CY	180,908	554	142	A	B	Zone 30					
YU7CW	4,655	75	35	A	B	RX3DCN	112,840	354	124	B	C	LY3DZ	107,983	428	83	B	C	Asiatic Russia						
YU1LM	207,315	573	153	A	A	UA4NC	78,045	284	121	B	C	LY2CA	29,425	201	55	B	C	RG9A (UA9AM, op)						
YT7A (YT7WA, op)						RV3NA	24,708	137	58	B	C	LY2BET	13,534	93	67	B	B	2,941,056	2509	276	A	C		
YT1BB	1,066,318	1886	209	C	C	RV6BC	146,300	432	133	B	B	LY2DM	392,951	807	181	C	B	ER3CT	71,656	298	104	B	B	
YU1WC	432,140	770	205	C	B	UA3LHL	113,710	350	137	B	B	LY2AT	115,780	347	140	C	B	Ukraine						
YU1JU	322,538	719	166	C	B	RN3FS	87,639	272	131	B	B	LY2GW	104,940	315	132	C	B	UW5Q	1,557,328	1998	262	A	C	
YZ1EW	305,577	750	171	C	B	UA3QO	84,490	295	119	B	B	LY2BOS	25,071	165	61	C	B	UA9FM	4,401	57	27	A	C	
YU1PC	134,332	412	142	C	B	RK6AIQ	40,866	193	98	B	B	LY1DT	452,140	869	188	C	B	UA9CLB	1,055,894	1272	199	A	C	
4N1GZ	63,072	242	96	C	B	UA3BZ	39,220	171	106	B	B	LY2MM	392,951	807	181	C	B	UA9CDC	855,376	1092	193	A	C	
YU7KM	32,010	183	66	C	B	RA6FNG	37,224	207	88	B	B	LY2PQ	289,490	693	170	C	A	UR9WB	70,600	223	100	A	C	
YU7RQ	27,101	267	41	C	B	RA3DGH	31,680	168	80	B	B	LY2RM	3,320,461	3043	337	D	B	RA9WN	10,200	74	51	A	C	
YT7TY	402,810	920	174	C	A	RA3AMG	30,880	148	80	B	B	LY1TN	77	7	7	A	B	UR4EXA	1,100	28	25	D	D	
YU1R	1,082,984	2367	166	D		RA3DNC	10,980	104	45	B	C	LY2AT	115,780	347	140	C	B	Zone 30						
YT1U	70,560	331	112	D		RK3DZD	6,952	76	44	B	B	LY2GW	104,940	315	132	C	B	Asiatic Russia						
4N200A	70	14	5	D		RN3OG	6,182	93	22	B	C	LY2BOS	25,071	165	61	C	B	RG9A (UA9AM, op)						
OM5A (OM3LA, op)						RA4AKA	1,026,931	608	183	B	C	LY2DM	337,130	299	104	C	B	UR5HC	241,449	503	123	C	C	
OM7YC	132,580	410	140	A	B	RZ3AZ	1,645,344	1942	288	C	C	LY2AT	115,780	347	140	C	B	UA9CLB	1,055,894	1272	199	A	C	
OM7AT	99,568	370	127	A	B	RA3ARAI	1,610,946	2010	279	C	C	LY2GW	104,940	315	132	C	B	UA9CDC	855,376	1092	193	A	C	
OM1AW	80,652	309	132	A	B	RT3A (RU3AA, op)				C	C	LY2BOS	25,071	165	61	C	B	UR9FB	668,300	978	164	C	C	
OM5NA	40,117	207	77	A	B	RT3A	1,345,194	1716	261	C	C	LY2DM	337,130	299	104	C	B	UA9QF	398,008	609	172	C	C	
OM3YK	76,136	262	124	B	B	RM3C (RA3CV, op)				C	C	LY2PQ	289,490	693	170	C	B	UA9QFJ	398,008	609	172	C	C	
OM4JD	13,446	96	81	B	B	UA3AGW	1,026,935	1388	259	C	C	LY2RM	3,320,461	3043	337	D	B	UA9QFJ	398,008	609	172	C	C	
OM4DN	354,048	701	192	C	B	UA3AGW	1,026,935	1388	259	C	C	LY2PQ	289,490	693	170	C	B	UA9QFJ	398,008	609	172	C	C	
OM1GM	332,940	674	179	C	B	UA3AGW	1,026,935	1388	259	C	C	LY2RM	3,320,461	3043	337	D	B	UA9QFJ	398,008	609	172	C	C	
OM3CDN	28,120	186	74	C	B	RA3MDX	20,886	153	59	C	C	LY2PQ	289,490	693	170	C	B	UA9QFJ	398,008	609	172	C	C	
Switzerland						UA6JFG	17,836	131	52	C	C	LY2RM	3,320,461	3043	337	D	B	UA9QFJ	398,008	609	172	C	C	
HB9QA	19,669	123	89	A	B	RU3RQ	4,959	67	29	C	C	LY2PQ	289,490	693	170	C	B	UA9QFJ	398,0					

UN5J	12,480	90	40	C	C	<b>Zone 39</b>		JH8DEH	8,118	270	22	B	C	HS0EHF	3,575	49	25	C	B
<b>Kyrgyzstan</b>						<b>Cyprus</b>		JH2BMT	5,070	56	39	B	C	HS8KAY	612	21	12	C	B
EX2X	348,356	609	146	C	B	H2G (5B4AGC, op)	1,607,151	1751	203	C	C	JA3AOP	62,961	218	93	B	B		
						449,732	848	116	C	C	JO1ZYI	45,485	306	55	B	B			
<b>Zone 32</b>						5B/RW4WR		JA0AEB	6,125	57	35	B	B						
<b>Asiatic Russia</b>						4,524,170	4038	245	D		JR1MRG	3,668	44	28	B	B			
RA0AM	294,224	542	148	B	C	Israel		JA2GHP	2,604	50	21	B	B	DU1EV	2,000	44	10	A	C
RV0AR	147,138	304	137	B	B	4Z5LZ	22,387	110	61	B	B	JA8IJI	2,461	36	23	B	B		
UA0APV	65,120	224	80	B	B	4X/OK1FIA		JA1KK	2,001	27	23	B	B	DU9RG	156,972	356	103	B	C
RU0AW	591,690	901	165	C	C	Qatar	877,211	1380	137	C	C	JG0EKW	1,836	29	17	B	B		
UA0ACG	273,878	581	118	C	C	Turkey		JH1RDU	1,602	30	18	B	B	4E1SAN (DU1SAN, op)					
UA0AZ	14,663	95	43	C	C	TA2MW	155,520	497	81	B	B	JA3PYH	1,566	33	18	B	B		
RA0AA	351,267	705	129	C	B	TA1DX	1,624	34	29	B	B	JG1GCO	583	15	11	B	B		
RU0AE	119,508	332	92	C	B	TA4/DL2OBO		JD1BIA	408	24	8	B	B	4F2KWT	2,254	37	14	B	B
UA0ASJ	25,767	134	63	C	B		92,796	JR3KAH	189	11	7	B	B						
RU0ST	5,040	48	40	C	B		2,933,718	2713	249	A	C	JA1LBZ	105	8	5	B	B		
UA0AZA1	426,656	1612	231	D				JA8BUR	95	11	5	B	B						
<b>Zone 33</b>								JK1BII	4	2	2	B	B						
<b>Asiatic Russia</b>								JA2MWV	6,253	67	37	B	A						
RW0UU	43,098	203	66	B	C			JH3DMQ	516	17	12	B	A						
RK0UWC	223,443	570	111	D				JA18GZS/1	322	28	7	B	A						
<b>Zone 34</b>																			
<b>Asiatic Russia</b>																			
UA0FX	294	17	6	A	A														
RA0LE	43,945	177	85	B	C														
RU0LL	293,720	622	140	C	C														
RA0FU	165,572	470	106	C	B														
RW0LIA	68,714	259	86	C	B														
UA0AKY	35,206	173	58	C	B														
<b>Zone 36</b>																			
<b>Azores</b>																			
CU2YK	66,528	322	72	B	B														
<b>Canary Islands</b>																			
EA8ASJ	66,176	344	44	C	B														
<b>Madeira Islands</b>																			
CT3EE	134,820	330	107	A	B														
<b>Zone 37</b>																			
<b>African Italy</b>																			
IH9/OL5Y																			
	2,674,992	3074	184	A	C														
<b>Balearic Islands</b>																			
EA6TU	2,848	43	32	B	B														
<b>Morocco</b>																			
CN8YR	17,775	102	45	C	B														
<b>Portugal</b>																			
CS6T (CT1ILT, op)																			
1,728,202	1978	266	A	B															
CT1DV	451,605	788	187	B	C														
CT1DHM	329,300	662	185	C	A														
CT/P1A1	27,160	162	56	C	A														
CT1CX	559	19	13	D															
<b>Spain</b>																			
EA3KU	2,076,375	2595	245	A	C														
EA7RM	555,100	1044	175	A	B														
EA3FHC	24,455	170	67	A	A														
EA5ON	552,096	1152	162	B	C														
EA5KV	445,704	989	147	B	B														
EA3QP	224,100	730	108	B	C														
EA2CR	976	27	16	B	C														
EA1OT	162,110	657	86	B	B														
EA3EYD	150,600	457	120	B	B														
EA5AFM	34,594	246	49	B	B														
EA7GXW	33,215	182	65	B	B														
EA3DEN	25,025	151	65	B	B														
EA3NA	20,996	120	58	B	B														
EA1TI	15,850	120	50	B	B														
EA5GFK	10,920	108	42	B	B														
EA4WC	10,384	77	59	B	B														
EA7FRX	10,304	79	56	B	B														
EA3FHP	4,176	60	29	B	B														
EA2CHL	1,999	52	31	B	B														
EA7HE	200	11	10	B	B														
EA5FV	1,480,715	1917	233	C	C														
EA5FID	184,731	466	139	C	C														
EA1DX	10,080	96	40	C	C														
EA5AFP	179,676	623	92	C	B														
EA1WX	125,668	413	89	C	B														
EA5EOH	102,491	300	113	C	B														
EA7CA	91,332	250	129	C	B														
EA1CS	50,775	239	75	C	B														
EA7AAW	35,496	333	36	C	B														
EA1VM	22,222	127	82	C	B														
EA2AHZ	16,848	176	36	C	B														
EA1FBJ	2,299	51	19	C	B														
EA4RCT	719,320	1184	196	D															
ED5QB	128,084	352	142	D															
<b>Tunisia</b>																			
3V8BB (YT1AD, op)																			
4,287,712	3320	286	A	C															
<b>Zone 38</b>																			
<b>Egypt</b>																			
SU9US	226,156	589	82	C	B														

DA0HQ	20,264,391	23093	441	EM7HQ	15,111,398	12250	422	PA6HQ	8,284,830	7694	345	OH2HQ	2,436,723	3620	201
(DF3CB DG0OHD DG0OKW	(UU1JQ, UU3JJ, UU0JL, UU1DX, UR5FEL,			(DH5HV, DJ7EC, JK3GAD, PA0VHA,				(OH1UP, OH3WW, OH5DX, OH6BG,							
DH1DX DH4SBO, DH7WW DJ2MX DJ7AA	UY2UF, UT7QF, UR8QX, UT7EC, UY5ZZ,			PA0LFE, PA2A, PA2R, PA3BAG, PA3EW,				OH6QU, ops)							
DK1QH DK4WA DK7YY DK8YY DL1AUZ	ops)			PA3GCV, PA4JJ, PA4L4, PA5NIQ,											
DL1AWD, DL1AWI, DL1DTL, DL1MFL,	YT80HQ	11,994,240	12724	PA7KG, PE1ALV, PG2M, ops)				B4HQ	2,031,966	2981	222	(BA4RC, BA4RD, BA4RF, BA4RX, BD4RS,			
DL1MGB, DL1VDL, DL1WA, DL2AMC,	(4N1SM, YZ7AA, YU7CB, YU9VK, YU1YY,			(BA4ED, BA7NQ, VR2KW, BA1RB, BA4TA,				(BA4BF, BG4AGM, BD5HAG, BD5HAT,							
DL2AMT, DL2ARD, DL2NBU, DL2OE,	YZ1ZV, 4N1JA, YU1BX, 4N1NW, 4N1LB,			PJ2HQ	1,736,595	2105	185	(PJ2BR, PJ2EP, PJ2VR, PJ2MR, PA3FLD,				(PJ2BW, PJ2F, PJ2DH, PA0RPD, PB2T,			
DL2SAX, DL3ALI, DL3APO, DL3ARK,	YU1EW, YU1XX, YT1XX, YU1NW, YU1AU,			PJ2BVU, PJ2MR, KY1V, W2AU, W0CG,				(PJ2BV, PJ2MR, KY1V, W2AU, W0CG,				ops)			
DL3JJ, DL4YY, DL4ALB, DL4RDJ, ops)	YU1IG, YU1JW, YU1ZZ, YU1WS, YZ1AU,			OZ1HQ	1,653,960	2422	220	(OZ0J, OZ1ETA, OZ1HQ, OZ1INN,				(OZ4ABH, OZ4AFQ, ops)			
DL5ANT DL5AOJ DL5AOA DL5ASE	YT1HA, YU1KK, YU1DX, YZ1SG, YZ1DO,			EAxURE	1,051,752	2260	156	(EA7CWA, EA1AK + ops)							
DL5AWI DL5AXX DL5LYM DL5XU DL5YY	YT7AW, YZ7EM, YU7AL, 4N1FAN, YT1RX,			OY1CT	843,959	1441	199	(OY1CT, op)							
DL6MYL DL6RAI DL7VOA DL7ZZ	YT1KX, YZ1KA, YT7IM, ops)			W1AW/0	5,995,875	7388	271	HB75A	663,572	1752	182	(KV0Q, W0ZA, N0KV, W0CP, KT0F,			
DL8ALU DL8AUA DL8DYL DL8WAA	LZ0HQ	6,344,550	7808	N0WBV, AB0MV, AE0Q, N0NR, AA0RS,				(HB9DUR, HB9DOS, HB9DQP, HB9BLQ,				(W0YG, K0RF, N2IC, W0UA, K0EU, W1XE,			
DL9AWI DO2WW DO6WS DE1DDH, ops)	(LZ1BP, LZ1HB, LZ1MC, LZ1RAY, LZ1UK,			W7UT, K0KR, AA5B, N4VI, K7NV, W0UN,				(HB9FAE, HB9ODK, HB9TIH, HB9TII,				ops)			
SN0HQ	18,621,007	18387	437	LZ2AF, LZ2DB, LZ2DF, LZ2JE, LZ2LDS,				(HB9PHB, HB9OPB, HB9FBL, ops)							
(SP-0404-JG SP2BZW SP2FAX SP3DOI	LZ2PL, LZ2TU, LZ2UZ, LZ3YY, LZ5QZ,			SK9HQ	6,027,541	6352	299	Y1LHQ	460,062	1030	183	(LZ3NT, LY4AA, LY4CW, ops)			
SP3DWQ SP3GEM, SP3HRN SP3HUU	ops)			(SM0DRD, SM2LY, SM3DMP, SM3JLA,				(YL2PP, YL-RS-27, YL2HA, YL2KF,				(SM3OSM, SM3SGP, SM3WMV, SM3XIK,			
SP3J3 SP3RBR SP3VT SP4-17-001	OL4HQ	11,646,392	11583	SM5KCO, SM5NBE, ops)				YL3GCP, ops)							
SP4DZT, SP4GFG SP4JCQ SP4R SP4Z	(OL5Q, OL7N, OL7R, OL5T, OL5K, OK5W,			CX1AA	442,728	765	129	CX7BY, CX8CP, ops)							
SP4ZO SP5HNK SP5UAF, SP5XVY SP6A	OK1AVY, OK1MSP, OK1PI, ops)			EW5HQ	4,490,514	5073	314	ATxHQ	351,540	733	124	(EU1CJ, EU1DX, EU1SA, EU3AR, EW3EW,			
SP6B6BE SP6CZ SP6DNS SP6EKS	W1AW/0	10,650,150	11844	EW6AF, EU6DX, EW6MM, EW8MW, ops)				(VU2SWS, VU2UR, VU2PAI, VU2SMN,							
SP6GCU, SP6HEQ SP6IXF SP6M SP6ML	326			LN2HQ	3,973,518	4483		VU2NXM, VU2DSI, ops)				ZL6A	302,094	578	117
SP6RZ SP6T SP6TGD, SP7GIQ SP7MTF	(I1HJ, I1NVU, IK1QBT, 12MQP, I2PJA,			(LA6FJA, LA9HW, LA6EIA, LA7WCA,				(ZL1BHQ, ZL1DD, ZL1AIH, ops)							
SP7NJX, (SP7SP, SP7VC, SP8ATTI,	IK2AHB, IK2CIO, IK2HKT, IK2RZ, IZ2FME,			LA5HE, LA5LJA, LA7EJA, ops)											
SP8BRQ., SP8FHK, SP8FUX, SP8GQU,	IV3PRK, I4AVG, I4EAT, I7ALE, I7RIZ,			8NxHQ	3,444,84	6237	210	HS0AC	229,896	603	103	(JG1ILF, JM1LPN, JA1BPA, JM3CRK,			
SP8GW, SP8GX, SP8LBK, SP8NFE,	IK7JWY, I79A3A, IT9BLB, IT9CHU,			J11ACI, JI0VWL, JG1VGX, JA1DYB,				(HS0ZDZ, HS1CKC, ops)							
SP8NR, SP8QED, SP8RX, DJ0IF,	IT9EQO, IT9LGV, IT9NTD, IT9VDQ, ops)			JH8CHX, JR1AIB, JE1CKA, JH1EAQ,											
SP8SRZ, SP8TJ, SP9ENV, DL1EKO,	T90HQ	9,724,770	10757	JF1PK, JH1EVE, JM1RFT, JA3HXJ,				YV5AJ	141,752	334	104	YV5AJD, YV5JBI, YV5NWG ops)			
SP9PH, SP9HV, SP9P, SP9XCN,	363			JA3HBF, JA3KLI, JA3NDM, JF3EIG,											
SQ2BZW, SQ2CFB, SQ3A, SQ3JPM,	(T92D, T92T, T93T, T93Y, T94D, T94DJ,			JF3PLF, JH3GXF, JH3AGV, JL3JRY,				4L0HQ	130,754	442	107	(JG1ILF, JM1LPN, JA1BPA, JM3CRK,			
SQ3TQM, SQ6ELV, SQ6MS, SQ8J,	T94DT, T94DU, T94FC, T94GZ, T94MZ,			JS3CTQ, JR3MVF, JJ3WPF, JA3UJR,				(4L2M, op)							
SQ8JLA, SQ8JX, ops)	T94NO, T94NR, T94OL, T94QK, T94W,			JM3UGA, JN3WRL, JH5JKH, JH4WBY,				VR2HK	49,840	272	70	(VR2M, VR2YET, VR2UNG, VR2UVV,			
GB5HQ	17,543,295	14856	415	T94YT, T94ZZ, T95LSD, T95MEQ, T96Q,				(VR2YNW, VR2XGE, VR2ZYB, VR2VVV,							
(G0CAC, G0CKP, G0DVJ, G0MTN,	T97M, T99C, T99T, T99W, T99Z, ops)			T97M, T99C, T99T, T99W, T99Z, ops)				VR2YYD, VR2VRC, VR2XZK, VR2CIA,							
G0WMW, G3LZQ, G3SJ, G3SXW,	P40HQ	8,765,208	6097	P40HQ	8,765,208	6097	316	VR2ZST, VR2YPK, VR2UNA, VR2YTK,							
G3SVL, G3TE, G3TXF, G3WVG, G4BJM,	(P43A, P43DJ, P43E, P43JB, P43P, P43RC,			(P43A, P43V, K1LZ, K6ND, N3KS, ops)				VR2/DH3FAN, VR2BBC, ops)							
G4BUO, G4BWP, G4BYG, G4CXT,	P43W, P49V, K1LZ, K6ND, N3KS, ops)			HG0HQ	8,581,392	9897	368								
G4DRS, G4OBK, G4PIQ, G4RCG,	(HA1XY, HG1ZE, HA1RS, HA1DR, HA1ZZ,			(HA1XY, HG1ZE, HA1RS, HA1DR, HA1ZZ,											
G4TSW, G5LP, G6PZ, GM0GAV, GM0RLZ,	HA1XU, HA1ZN, HA4GIN, HA5GY,			HA1XU, HA1ZN, HA4GIN, HA5GY,											
GM4AFF, GM4ZRR, GU4YOX, M0BEW,	HA5MA, HA5MK, HA5MO, HA5WU,			HA5LV, HA5LN/HG4I, HA6FQ, HA6IAB,											
M0CLW, M0CMK, M5RIC, MM0ERK, ops)	HA6ZQ, HA6IAM, HA6VHV, HA6IGU,			HA6ZQ, HA6IAM, HA6VHV, HA6IGU,											
9A0HQ	15,473,855	14138	421	HA6QT, HA6OL/3, HA7MW, HA7JJS,											
(9A2EU, 9A3LG, 9A3NM, 9A3NY, 9A3OS,	HA7SBQ, HA7RY, HA8BE, HA8VK,			HA7SBQ, HA7RY, HA8BE, HA8VK,											
9A3PA, 9A4RV, 9A4RX, 9A4VV, 9A5MR,	HA8TP, HA8LNN, HA8ZO/HG8W, HA8UK,			HA8TP, HA8LNN, HA8ZO/HG8W, HA8UK,											
9A6DM, 9A3TR, 9A7V, 9A8A, 9A9A,															
9A5E, 9A5W, 9A7R, 9A5AEI, 9A2RD,															
9A6XX, 9A6NDX, ops)															