

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)

Pat, 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 contesters? 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.

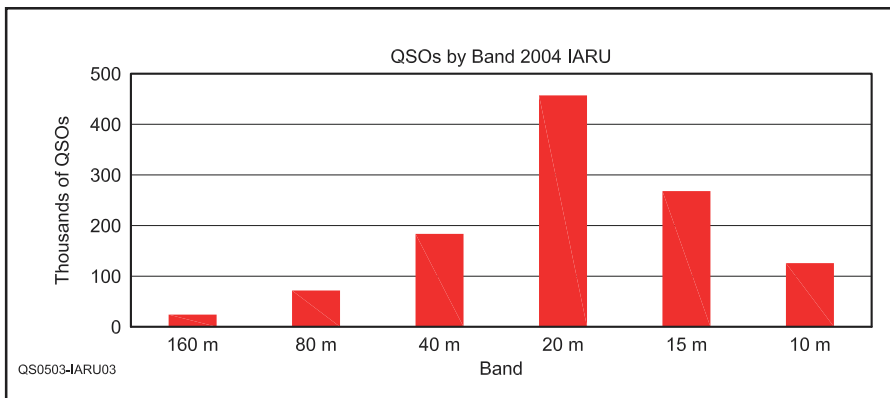
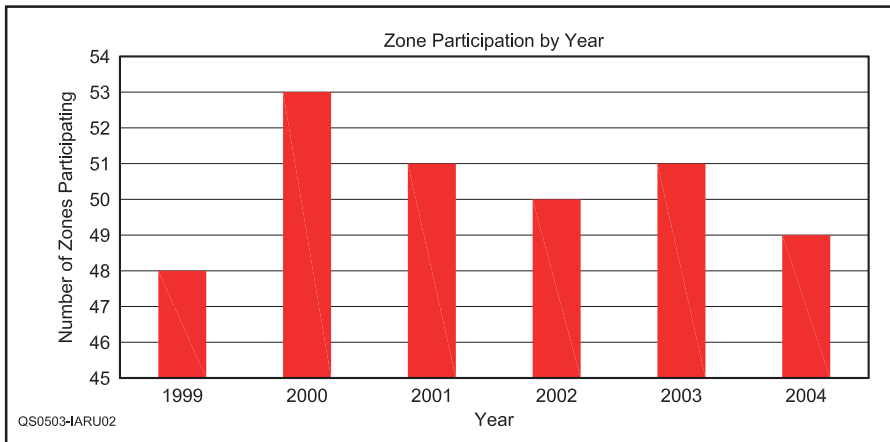
In the Single Operator Phone High Power category, Dimitry, UT5UGR,

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

Single Operator Mixed Mode QRP	A61AJ (S53R, op)	2,933,718	Single Operator Phone Only High	OK2ZC	836,836		
HG5Z	1,046,964	RK4FF	2,890,880	S57J	809,416		
(HA1CC, op)	YU1LM	207,315	YT6A	2,834,170	UY8IF	797,720	
NA4CW	131,712	IH9/OL5Y	2,674,992	UR3HC	760,092		
K5NZ	112,270	OH0R	2,463,504	RW3GB	719,178		
DF1DX	76,494	(OH2PM, op)					
KA1LMR	71,690	RN3QO	2,223,277	Single Operator CW Only High			
W6AQ	68,256	EA3KU	2,076,375	RD3A	2,682,192		
ES6PZ	64,390			N9RV	2,334,270		
MM3AWD	55,596	Single Operator Phone Only QRP		K3CR	1,971,333		
SP9RQH	40,756	UA3BL	284,931	(LZ4AX, op)			
		KP4KE	204,477	OH2PM	1,963,880		
Single Operator Mixed Mode Low	WA0VBW	57,954	Single Operator Phone Only Low	(OH1WZ, op)			
HG3M	2,095,522	SQ2DYF	44,172	VY2ZM	1,960,374		
(HA3MY, op)	YT5A	1,814,272	M5AAV	40,579	RA9JR	1,833,192	
CS6T	1,728,202	(CT1ILT, op)		SM6CRM	22,715	G1W	1,760,552
OH4R	1,228,752	OH4R	1,228,752	DL2EF	9,900	(M0SDX, op)	
(OH4JFN, op)		JA2MWW	6,253	DB6FO	5,460	HA8DU	1,741,480
UA3DPX	1,115,000	YO8CQM	4,350	Y08CQM	4,350	K4ZW	1,702,386
RW3GU	1,061,292					RZ3AZ	1,645,344
UA9CDC	855,376	Single Operator Phone Only High					
DL2RMC	790,600	ZX2B	670,208	Single Operator CW Only QRP			
OH6NIO	758,688	(PY2MNL, op)		HA5IW	1,202,058	Multioperator	
RU9DD	655,894	UR5MNZ	422,184	HG1W	612,942	5B/RW4WR	4,524,170
		G3PJV	392,238	(HA1WD, op)		RT9W	3,640,890
Single Operator Mixed Mode High		G3VAO	391,988	YT7TY	402,810	LY7Z	3,320,461
3V8BB	4,287,712	ST2T	381,388	LY2MW	337,306	RL3A	3,227,064
(YT1AD, op)		XE2K	347,070	LY4BF	279,480	HG1S	3,185,595
DL6FBL	2,995,272	YR5A	344,350	G3YMC	192,424	PS2T	3,094,344
RG9A	2,941,056	(YO5TE, op)		HA0GK	168,883	HG6N	3,085,551
(UA9AM, op)		IK2DZN	334,488	OK1JOC	150,328	RY4J	2,279,952
		DL2DBH	333,207	SM0GNS	118,160	RZ9OZO	2,170,744
		CT1DHM	329,300	DL8MBS	104,788	K4JA	2,038,155
				Single Operator CW Only Low			
				UN7MO	1,198,600		
				UA4FER	1,151,500		
				VE3DZ	1,022,726		
				RN6AL	849,456		
				N4PN	841,617		



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.



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
OExXHQ	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/0 took top honors), South America had 3 HQ stations (P40HQ took top honors), and Oceania had 1 HQ station.

W/VE Top Ten

Call	Score	Call	Score	Call	Score	Call	Score
Single Operator Mixed Mode QRP		N9AG	1,118,214	VE1JX	755,136	W0AIH	332,920
NA4CW	131,712	K6XX	1,096,656	(K6HNZ, op)		(K8GU, op)	
K5NZ	112,270	K3ZO	1,091,415	K5NA	740,960	WK2G	318,570
KA1LMR	71,690	W5WMMU	864,456	(K15DR, op)		W4QM	268,422
W6AQ	68,256	W6UE	814,260	K7ZSD	675,104	WB2AA	266,668
W6RCL	30,438	N4ZZ	556,636	N5OT	475,984		
K4AQ	12,670			(W5MR, op)		Single Operator CW Only High	
NA4BW	6,642	Single Operator Phone Only QRP		N3HBX	395,740	N9RV	2,334,270
W6IXP	2,816	WA0VBW	57,954	WP2Z	374,436	K3CR	1,971,333
N4CU	868	K5YM	910	(K8MJZ, op)		(LZ4AX, op)	
WA6NOL	112	WB0IWG	3			VY2ZM	1,960,374
				Single Operator CW Only QRP		K4ZW	1,702,386
				KG5U	85,008	K1TTT	1,641,211
				NJ4X	68,874	(N2OW, op)	
Single Operator Mixed Mode Low				VA3NR	63,600	W1WEEF	1,535,355
VE2/DL7FER	453,870	KK1KW	158,080	AA1CA	38,280	KT1V	1,535,020
W9IU	424,438	N8RY	148,857	NU4B	14,848	K5ZD	1,519,518
VE3XD	302,035	NJ2F	116,725	W8TM	13,248	K5GN	1,516,836
W04O	279,152	K1WO	93,677	N2JNZ	12,909	N4AF	1,511,171
NF4A	228,238	VA3OX	82,056	K5UV	11,375		
VE2AWR	220,704	N7VMR	63,516	NI8W	11,328	Multioperator	
W0VX	214,830	W8KNO	57,672	K2EKM	11,176	K4JA	2,038,155
W0YR	209,157	AB4GG	45,375			NK7U	1,549,935
VE4YU	191,422	W3LL	39,501			KB1H	1,356,784
N6NF	181,328	K2RED	39,123	Single Operator CW Only Low		N3AD	1,294,618
				VE3DZ	1,022,726	NO2R	1,201,288
				N4PN	841,617	NX5M	1,156,320
Single Operator Mixed Mode High				K8IA	470,550	N5YA	897,870
VE3EJ	2,010,580	K5TR	1,171,233	K4OGG	406,720	WK6O	541,260
VE3AT	1,769,952	K7RL	1,095,990	WB4TDH	387,328	WW4LL	516,578
VE3JM	1,197,742	WB9Z	1,033,175	N5TW	359,156	AA5NT	506,088
VE3EY	1,163,430	N5LT	931,944	(KE5C, op)			
(@VE3SY)							

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. Hope to see you in the 2005 event!



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
Africa							
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	T13M (TI3TSL, op)	536,969
				D		HR2RCH	8,395
Asia							
HQ		8NxHQ	3,444,840	Oceania			
A	A	JH7XMO	24,180	HQ		ZL6A	302,094
A	B	UA9CDC	855,376	A	B	ZL1TM	178,020
A	C	A61AJ (S53R, op)	2,933,718	A	C	ZL1V (ZL1CT, op)	988,368
B	A	JA2MWW	6,253	B	B	DU1BP	58,080
B	B	RA9AU	327,978	B	C	DU9RG	156,972
B	C	UA9JDP	876,432	C	B	5W0TR (K8AQM, op)	115,895
C	A	UN7CN	880,440	C	C	KH6WT (K1YR, op)	1,241,220
C	B	UN7MO	1,198,600	D		AH0/NA8O	263,934
C	C	RA9JR	1,833,192	South America			
D		5B/RW4WR	4,524,170	HQ		P40HQ	8,765,208
Europe							
HQ		DA0HQ	20,264,391	A	B	LU5EML	218,280
A	A	HG5Z (HA1CC, op)	1,046,964	A	C	PY2MTV	4,560
A	B	HG3M (HA3MY, op)	2,095,522	B	B	ZX2B (PY2MNL, op)	670,208
A	C	DL6FBL	2,995,272	B	C	LU1NDC	757,464
B	A	UA3BL	284,931	C	A	CX2AQ	30,340
B	B	UR5MNZ	422,184	C	B	4M5X	614,438
B	C	UT5UGR	2,009,079	C	C	LU7EE	400,890
C	A	HA5IW	1,202,058	D	C	PS2T	3,094,344
C	B	UA4FE	1,151,500				
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.arri.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

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 DG0BN DG0HD DG0KW DH1DX DH4SBO, DH7WU DJ2MX DJ7AA DK1QH DK4WA DK7YY DK8YY DL1AUZ DL1AWD, DL1AWI, DL1D1T, DL1MFL, DL1MGB, DL1VDL, DL1WA, DL2AMC, DL2AMT, DL2ARD, DL2NBU, DL2OE, DL2SAX, DL3ALI, DL3APO, DL3ARK, DL3DXX, DL3MXX, DL3OI, DL3TD, DL3JJ, DL4YY, DL4ALB, DL4RDJ, ops) DL5ANT DL5AOJ DL5AOL DL5ASE DL5AWI DL5AXX DL5LYM DL5XU DL5YY DL6MYL DL6RAI DL7VOA DL7ZZ DL8ALU DL8AUA DL8DYL DL8WAA DL9AWI DO2WWW DO6WS DE1DDH, ops)	(UU0JX, UU3JM, UU0JL, UU1DX, UR5FEL, UY2UF, UT7QF, UR8QX, UT7EC, UY5ZZ, ops)	YT80HQ	11,994,240	12724	384	(4N1SM, YZ7AA, YU7CB, YU9VK, YU1YV, YZ1ZV, 4N1JA, YU1BX, 4N1NW, 4N1LB, YU1EW, YU1XX, YU1XX, YU1NW, YU1AU, YU1IG, YU1JW, YU1ZZ, YU1WS, YZ1AU, YT1HA, YU1KK, YU1DX, YZ1SG, YZ1DO, YT7AW, YZ7EM, YU7AL, 4N1FAN, YT1RX, YT1KX, YZ1KA, YT7IM, ops)	OEExHQ	8,199,360	10157	22	(OE1EMS, OE1TKV, OE2UKL, OE2WPO, OE3MWS, OE5BJN, OE5EBO, OE5HSN, OE5NNN, OE5OHO, OE5UAL, OE6CWL, OE8CIQ, OE8KDK, OE8OLK, OE8SKQ, OE9MON, OE9PTI, ops)	B4HQ	2,031,966	2981	222	(BA4RC, BA4RD, BA4RF, BA4RX, BD4RS, BA4ED, BA7NQ, VR2KW, BA1RB, BA4TA, BA6BF, BG4AGM, BD5HAG, BD5HAT, BD5RV, ops)	
SN0HQ	18,621,007	18387	437	LY0HQ	11,974,170	10466	390	LZ0HQ	6,344,550	7808	345	PJ2HQ	1,736,595	2105	185		
(SP.0404-JG SP2BZW SP2FAX SP3DOI SP3DWQ SP3GEM, SP3HRN SP3HUU SP3J SP3RBR SP3VT SP4-17-001 SP4DZT, SP4GFG SP4JQC SP4R SP4Z SP4ZO SP5HKN SP5UAF, SP5XVY SP6A SP6BBE SP6CZ SP6DNS SP6EKS SP6GCU, SP6HEQ SP6IXF SP6M SP6ML SP6RZ SP6T SP6TGD, SP7GIQ SP7MTF SP7NJX, (SP7SP, SP7VC, SP8ATI, SP8BRQ, SP8FHK, SP8FUX, SP8GQU, SP8GW, SP8GXA, SP8LBK, SP8NFE, SP8NR, SP8QED, SP8RX, DJ0IF, SP8SRZ, SP8TJU, SP9ENV, DL1EKO, SP9H, SP9HVV, SP9P, SP9XCN, SQ2BZW, SQ2CFB, SQ3A, SQ3JPM, SQ3TQM, SQ6ELV, SQ6MS, SQ8J, SQ8JLA, SQ8JX, ops)	(LY1DI, LY1FW, LY2BW, LY2CO, LY2DX, LY2FN, LY2FY, LY2GJ, LY2PAJ, LY2TE, LY2UF, LY3BS, LY3CI, LY3DA, LY3KB, LY3NUT, LY4AA, LY4CV, ops)	OL4HQ	11,646,392	11583	386	(OL5Q, OL7N, OL7R, OL5T, OL5K, OK5W, OK1AVY, OK1MSP, OK1PI, ops)	SK9HQ	6,027,541	6352	299	(SM0DRD, SM2LIY, SM3DMP, SM3JLA, SM3OSM, SM3SGP, SM3WVW, SM3XIK, SM5KCO, SM5NBE, ops)	OZ1HQ	1,653,960	2422	220	(OZ0J, OZ1ETA, OZ1HXQ, OZ1INN, OZ4ABH, OZ4AFQ, ops)	
R7HQ	17,882,415	13332	435	IU0HQ	10,650,150	11844	326	W1AW/a	5,995,875	7388	271	EAXURE	1,051,752	2260	156		
TM0HQ	17,592,271	15792	401	YR0HQ	10,635,660	10912	414	(KV0Q, W0ZA, N0KV, W0CP, KT0F, N0WBV, A00MV, A00Q, N0NR, A00RS, W0YG, K0RF, N2IC, W0UA, K0EU, W1XE, W0UT, K0KR, AA5B, N4VI, K7NV, W0UN, ops)	W1AW/a	5,995,875	7388	271	OY1CT	843,959	1441	199	(OY1CT, op)
(F5LEN, F3CW, F8AQK, F5MSR, F5RMY, F5TSB, F6DDW, F5MBM, F1HAR, F5HRY, F5CW, F5IN, F6FVY, F5MZN, F5CQ, F6BEE, F8CRH, F6IFY, F5FLN, F6IRA, F4CIB, F1BLQ, F5OIU, F6DZO, F6ETI, F6IOC, F6HYE, F8BPN, F5IQ, F6FGZ, F5JSD, F6BGC, OM3CGN, F6FNL, F8BTR, F1ADG, F6AOI, F6DMQ, F5USK, F5LTT, F18039, F15452, F4ARU, F1JRD, ops)	(Y02DFA, Y02LDC, Y03APJ, Y03BL, Y03CD, Y03CDN, Y03CTK, Y03FF, Y03FRI, Y03GDA, Y03GJC, Y03GOD, Y03HAE, Y03JF, Y03JOS, Y03ND, Y03RU, Y04AB, Y04ATW, Y04FYQ, Y04NF, Y04RDN, Y04REA, Y04REC, Y04RIU, Y04RXX, Y04SI, Y05AIR, Y05BRZ, Y05OED, Y05OEF, Y05PBF, Y05PBW, Y07ARY, Y07BGA, Y07CKP, Y07HMH, Y07LFV, Y07LGI, Y07LJJ, Y07LMU, Y07RFH, Y07VJ, Y08WW, Y09AFY, Y09BPX, Y09GZU, Y09WF, ops)	YR0HQ	10,635,660	10912	414	(NU1AW, K2LE, K2DO, K2SG, N2FF, N2GA, N2UN, NY2L, N5MM, W1RM, W1VE, W2LK, ops)	EW5HQ	4,490,514	5073	314	(EU1CJ, EU1DX, EU1SA, EU3AR, EW3EW, EW6AF, EU6DX, EW6MM, EW8MW, ops)	HB75A	663,572	1752	182	(HB9DUR, HB9DOS, HB9DQP, HB9BLQ, HB9FAE, HB9ODK, HB9TIH, HB9TII, HB9PHA, HB9OBP, HB9FBL, ops)	
GB5HQ	17,543,295	14856	415	T90HQ	9,724,770	10757	363	LN2HQ	3,973,518	4483	279	YL4HQ	460,062	1030	183		
(G0CAC, G0CKP, G0DVJ, G0MTN, G0WMMW, G3LZQ, G3SJJ, G3SXW, G3SVL, G3TJE, G3TXF, G3WVG, G4BJM, G4BUO, G4BWP, G4BYG, G4CXT, G4DRS, G4OBK, G4PIQ, G4RCG, G4TSH, G5LP, G6PZ, GM0GAV, GM0RLZ, GM4AFF, GM4ZRR, GU4YOX, M0BEW, M0CLW, M0CMK, M5RC, MM0ERK, ops)	(T92D, T92T, T93T, T93Y, T94D, T94DJ, T94DT, T94DU, T94FC, T94GZ, T94MZ, T94NO, T94NR, T94OL, T94QK, T94W, T94YT, T94ZZ, T95LSD, T95MEQ, T96Q, T97M, T99C, T99T, T99W, T99Z, ops)	P40HQ	8,765,208	6097	316	(LA6FJA, LA9HW, LA6EIA, LA7WCA, LA5HE, LA5LJA, LA7EJA, ops)	8NxHQ	3,444,84	6237	210	(JG1ILF, JM1LPN, JA1BPA, JM3CRK, J11ACI, J10VWL, JG1VXG, JA1DYB, JH8CHX, JR1AIB, JE1CKA, JH1EAQ, JF1PJK, JH1EVE, JM1RFT, JA3HXJ, JA3HBF, JA3KLI, JA3NDM, JF3EIG, JF3PLF, JH3GXF, JH3AGV, JL3JRY, JS3CTQ, JR3MVF, J3WVPF, JA3UJR, JM3UGA, JN3WRL, JH5JKH, JH4WBY, JH4IFF, JH4UTP, JH4VDP, JE4MHL, JN4FEU, JF4ETK, JS1PWW, JH4NMT, JA0FVU, JA0QNJ, JA0DAI, JA0UMV, JA0JHA, JH0RNN, JH0USD, JR0BAQ, JA0KSO, JH0MXV, JF0QOR, JG0AXT, JE0GGA, ops)	HS0AC	229,896	603	103	(HS0ZDZ, HS1CKC, ops)	
9A0HQ	15,473,855	14138	421	HG0HQ	8,581,392	9897	368	VE7RAC	2,902,094	4015	211	YV5AJ	141,752	334	104		
(9A2EU, 9A3LG, 9A3NM, 9A3NY, 9A3OS, 9A3PA, 9A4RV, 9A4RX, 9A4VV, 9A5MR, 9A6DM, 9A3TR, 9A7V, 9A8A, 9A9A, 9A5E, 9A5W, 9A7R, 9A5AEI, 9A2RD, 9A6XX, 9A6NDX, ops)	(HA1XY, HG1ZE, HA1RS, HA1DRR, HA1ZZ, HA1XU, HA1ZN, HA4GIN, HA5GY, HA5MA, HA5MK, HA5MO, HA5WU, HA5LV, HA5LN/HG4I, HA6FQ, HA6IAB, HA6ZQ, HA6IAM, HA6VHV, HA6IGU, HA6QT, HA6OL/3, HA7MW, HA7JJS, HA7SBQ, HA7RY, HA8BE, HA8VK, HA8TP, HA8LNN, HA8ZO/HG8W, HA8UK, ops)	(P43A, P43DJ, P43E, P43JB, P43P, P43RC, P43W, P49V, K1LZ, K6ND, N3KS, ops)	VE7RAC	2,902,094	4015	211	(VE7SZ, VE7ON, VE7IN, VA7AM, VE7SV, VE7AHA, VE7AG, VE7CC, T95A, VA7NT, ops)	4X4ARC	43,700	200	50	(4Z5OZ, op)					