

1998 IARU HF World Championship Results

Summertime contests are...different. Absorption creates difficult propagation, sporadic E can occur at any time, and summer thunderstorms present a special challenge to operation on the lower frequency bands. Squeeze in vacation time and trips to the beaches in the Northern Hemisphere. Sprinkle in cold winter nights south of the equator, and you find a number of challenges to be conquered. Nevertheless, once again the IARU HF Championship proved to be one of the most popular worldwide contests, attracting over 1300 entries from most of the IARU zones across the globe.

Three different continents produced champions this year. The place to be during this year's running appears to have been Cyprus (5B). The top finishers in the CW and Multiop categories hailed from that Mediterranean island, as well as two more Top Ten Phone stations and another Top Ten Multi-op station. Congratulations to world winners in Mixed Mode DL6FBL; Phone Only 5X1T (ON6TT op); CW Only C4A (5B4ADA op); and Multiop H20A. Kudos to 5B4ADA operating C4A who set a new IARU HF World Championship CW Only record with 2,768,640 points, shattering the old record by over 715,000 points. A special acknowledgement goes to LT1F who also shattered the old mark but fell 240,000 points off the torrid pace set at C4A.

On the W/VE side, Top Ten stations appeared from several regions, with Canadian XJ3EJ (VE3EJ op) placing third worldwide in the Mixed Mode category as well as taking top W/VE honors in that category. John also set a new Mixed Mode W/VE record of 2,137,960 which shattered the mark he set last year by 369,000 points. K5TR (at W5KFT) paced the Phone Only scores for W/VE while establishing a new record for the category. K5ZD led the way for CW Only and became the first W/VE to break the 2 million point barrier for that category. In one of the tightest finishes in quite a while the gang operating WU4G edged out the crew at N3BB to take the top Multioperator W/VE championship, even though both surpassed the old W/VE record set in 1992. Top Ten finishes are seen from many areas of the US and Canada as the multiplier structure of the

Top World Scores

Mixed Mode

Call	Score
DL6FBL	2,277,587
EA8/OH2BYS	2,268,344
XJ3EJ	2,137,960
(VE3EJ,op)	
EA3KU	1,895,517
WP2Z	1,833,349
(AG8L,op)	
W3LPL	1,826,140
(KE3Q,op)	
YT1AD	1,771,308
K3ZO	1,766,336
KQ2M	1,711,300
UA3RAR	1,615,866

Phone Only

Call	Score
5X1T	2,583,504
(ON6TT,op)	
4X2F	2,450,553
(4Z5JK,op)	
C40M	2,415,276
(5B4AFM,op)	
P3P	1,815,220
(5B4LP,op)	
IR6F	1,538,604
(IK6BOB,op)	
S50A	1,530,675
H22H	1,456,218
(5B4MF,op)	
UT7DX	1,418,178
UX0MM	1,374,478
K5TR	1,314,423
(at W5KFT)	

CW Only

Call	Score
C4A	2,768,640
(5B4ADA,op)	
LT1F	2,528,524
K5ZD	2,067,062
W4AN	1,846,678
8P0V	1,832,272
6Y6A	1,539,825
K1TO	1,509,597
9A7A	1,497,890
IR2W	1,448,160
(I2VXJ,op)	
9A9A	1,387,800

Multioperator

Call	Score
H20A	5,481,752
P3A	5,451,576
HG6N	3,560,270
HG1S	2,938,880
RZ9AZA	2,553,657
IR4T	2,550,000
EW5O	2,495,080
HC8A	2,417,415
RK3AWL	2,266,250
RZ3Q	2,184,744

Top W/VE Scores

Mixed Mode

Call	Score
XJ3EJ	2,137,960
(VE3EJ,op)	
W3LPL	1,826,140
(KE3Q,op)	
K3ZO	1,766,336
KQ2M	1,711,300
XK7SZ	1,329,482
(VE7NTT,op)	
N9AG	1,271,160
(at N8NR)	
W3GH	1,001,472
(KB3AFT,op)	
N5JR	876,288
N6ED	822,950
W0TM	816,156

Phone Only

Call	Score
K5TR	1,314,423
(at W5KFT)	
WB9Z	1,069,328
N2QT	807,048
W7NN	782,246
VE1JX	659,664
(K6HNZ,op)	
N4UH	645,507
N2TX	604,044
WS1A	576,600
N6WLX	521,572
KQ3V	518,140

CW Only

Call	Score
K5ZD	2,067,062
W4AN	1,846,678
K1TO	1,509,567
N2IC	1,246,138
VO1MP	1,149,480
AA3B	1,060,514
KT3Y	958,433
WC4E	933,282
K9IG	921,225
K7SV	874,412

Multioperator

Call	Score
WU4G	1,796,005
N3BB	1,792,036
K5MR	1,599,442
N1BB	1,442,721
K8AZ	1,420,212
K8CC	1,398,600
W4PA	1,344,525
K2LE	1,173,879
K3EST	969,246
K5NZ	950,544

contest tends to level the playing field for entrants from all across North America.

For the Headquarters stations, there was DA0HQ, and then there was the rest of the



The UX3M team: (clockwise from back left) included UR5MTA, UR3MC, UR5MAW, UR5MTJ, UR7MR, UR5MNL and UR3MP.

pack. While their 11,110,944 points did not set a new HQ station record, it was good enough to distance themselves from the two runner-up stations; 12,568 QSOs and 377 multipliers under *any* condition is outstanding. OL8HQ took second place among the 34 HQ stations and IARU officials on the air for the event.

As in most competitive endeavors, that which is not prohibited under the rules is permitted. Rules for this contest are different from most others. There is no 500-meter circle rule for multiops, something that HQ stations and certain other multiops have used to their advantage. While there is a band change limitation for multiops, there has not been a mode change rule. This has allowed multiops in some jurisdictions to alternate CW and phone contacts on a single band—a great advantage over those who operated under the traditional rules. However, look for a rule change in 1999 requiring band and/or mode changes to be made under the 10-minute rule. It's hard to imagine how simultaneous transmissions, which aren't permitted under the rules except for HQ stations, are prevented with a combination of split site and same band different mode operation.

IARU Headquarters Stations

DA0HQ (DF8XC,DJ7AA,DK3WW,DK4WA,DK7YY,DK8YY,DL1A0B,DL1A0Q,DL1A5A,DL1AWI,DL1AWD,DL1AUZ,DL1DTL,DL1VDL,DL2KUW,DL20BF,DL20E,DL2SAX,DL3ABL,DL3ALI,DL3APO,DL3DXX,DL3OI,DL3TD,DL4ALB,DL5MX,DL5XU,DL5YY,DL6MHW,DL6MYL,DL7AU,DL7BY,DL7IO,DL7IQ,DL7VOA,DL7VRO,DL7UBA,DL7URH,DL7UTM,DL8AKA,DL8ALU,DL9AUA,DL8WAA,DL9AWI,YB1AQS,ops)	11,110,944	12568	377
OL8HQ (OK1ADM,OK1AEZ,OK1AU,OK1AXB,OK1CF,OK1CM,OK1CW,OK1DIG,OK1DNR,OK1FAU,OK1F,OK1FLM,OK1FUA,OK1GW,OK1HSK,OK1MD,OK1MD,OK1MR,OK1RI,OK1RR,OK1TA,OK1TC,OK1TN,OK2FD,OK2PA,OK1RZ,OK1RZ,OK1ZU,ops)	10,059,626	10658	361
OM8HQ (OM8AA,OM8AU,OM2TW,OM3EI,OM5RW,OM5ZW,OM5RM,OM5DP,OM5MZ,OM3BH,OM6NM,OM1KM,OM3RG,OM3NA,OM5DX,OM2RA,OM3RM,OM3LU,OM3EA,OM8AM,OM8AW,OM3DX,OM3CD,OM5MB,OM5NA,OM3JW,OM5FM,OM5MF,ops)	9,490,357	9199	349
NU1AW (+K1CC, K1KI, K1RO, K1ZZ, N1RL, W1WEF, KM1P, K2KQ, K5FUV, N6BV, ops)	8,800,871	7871	317
R3HQ/6 (UA3AGW,RA4AJF/6,UA6AF,UA6AN,UA6AA,UA6AHF,UA6LO,UA6LU,UA6LV,UA6LFQ,UT6IZ,RA6AX,RA6CM,RA6CO,RA6Y,RA6YDX,RN6BN,RN6LG,RU6AB,RU6LG,RV6ASU,RV6LNA,RV6YY,RV6YZ,RW6YY,RX6BA,RZ6AZ,ops)	8,509,481	7736	347
HG5NHQ	8,065,008	7960	336
P40HQ (P43E,P43P,P43T,P43W,P49V,ops)	7,559,682	6340	247
YU0HQ (YU7AU,YU7AV,YU7AX,YU7BCL,YU7BJ,YU7BW,U7CB,YU7CM,YU7FN,YU7JX,YU7KW,YU7GO,U7GW,YU7NU,YU7NWW,YU7OA,YU7WA,YU7YG,Y7KF,Y7TY,YZ7AA,YZ7UN,4N7EA,4N7CA,4N7DW,4N7TW,4N7ZZ,ops)	7,421,865	7872	341
YP0A	6,798,208	8434	346
PA6HQ (PA3REC,PA3EPD,PA3ELV,PA3BSQ,PA3FVV,PA3ALK,PA3BAG,PA3CMG,PA3GZX,PE1LAU,PB0ALB,PE1ALV,PA0LFE,PA0VHA,PA3FWG,PA/DF8MQ,PA/HA1AG,PA3BBP,PA3BTH,PA3CAL,PA3DMH,PA3ELD,PA3EWP,PA3FDO,PA3FQA,PA3GBQ,PB0AIC,PE1PZS,ops)	6,663,457	7187	313
LY60RMD (LY1BA,LY1BW,LY1DQ,LY1DL,LY1DT,LY1DQ,LY1FF,LY2BIL,LY2BKF,LY2BT,LY2HM,LY2J,LY2KW,LY2PAJ,LY2PX,LY3JY,LY3MM,LY3NFV,LY4CW,ops)	6,411,333	6107	321
EM5HQ	6,086,430	6028	315
ER7A (US0ZZ,US7ZM,ER5WU,ER5OK,ER5DX,UX3FW,UXOFF,ER3DX,ER3OO,ER1LW,ER5AA,ER5AL,ER1DA,UR5FD,ER1OO,ops)	5,798,355	5781	305
W1AW/0 (K2VW,K4MA,K4VX,K9PG,AG9A,W9WI,W9WW,N9JF,W9QA,K9BL,W0AII,N0SS,NS0B,N0NX,KK0DX,K0BJ,K0IL,K0CA,ops)	4,905,719	6832	259
GB5HQ (GM3WOJ,GM4FDM,GM4YXI,GM0NAI,ops)	3,467,360	4053	260
OH3X(OH1KAG,OH3HEI,OH3LQK,OH3MEP,OH3MMF,OH3MMH,OH3MYD,OH3RB,OH3RM,OH3WW,ops)	2,904,552	3823	238
OZ7D (OZ1BOH,OZ1FTU,OZ1IVA,OZ1JSH,OZ1KRF,OZ1RH,OZ3W,OZ5ABD,OZ5LH,ops)	2,500,165	3129	235
ES9A (ES5MC,ES5MG,ES5QX,ES5RN,ES5RW,ES5RY,ES4TG,ops)	1,969,605	3142	207
L77E (LU4DXU,op)	1,043,152	1267	176
LU2AH	1,010,244	1300	174
SK0HQ/SK3HQ (SM0HQ,SM0JSM,SM0KCO,SM0TQX,SM3CER,SM3DMP,ops)	908,222	2769	203
EA4URE (EA4BPJ,EA4BT,EA4ECF,EA4ET,EA4EPJ,ops)	711,604	1598	146
TF3IRA (TF3HP,TF3GB,TF3DX,N6HR/TF,ops)	499,849	1493	101
PA0LOU	398,780	750	157
SV1SV	229,174	747	121
8J3JHQ (JA3MAU,JH3ERW,JH3JWR,J13ERI,JJ3WPF,JK3RXY,JL3MHD,JL3NEY,JE2PMC,JG2ONT,ops)	120,963	1203	61
W4RA	87,912	258	99
BV2Y (BV2TA,BV3FG,BV4ME,ops)	74,574	412	54
HC2EE	56,745	191	65
4Z1GY	54,355	334	35
OE1XHQ (OE1JNB,OE1TKW,ops)	41,108	168	86
VU2UR	29,810	144	55
VK3ADW	1,560	24	20
W1RU	1,356	25	12



The smiling faces of the second place W/VE multioperator group at N3BB included (clockwise from back left) N3BB, K5NA, WD5N, N5ZC and AB5EB.

With help from N6AA, N6TR and N6TW, log checking is much improved this year. Most competitors will find their scores reduced from their submitted claimed scores. The more extensive log-checking was able to identify numerous busted calls and exchanges, and also pinned down many of the dreaded “not in logs.” Many thanks to the volunteers who assisted with developing the more sophisticated log checking software. Their efforts have helped level the playing field even more, making the contest more competitive and fair for all participants.

One additional rule change will affect the 1999 IARU HF World Championship, which is scheduled to be contested July 10–11. Beginning in 1999, **all logs that are contenders for certificates or Top Ten rankings must be submitted in digital format conforming to ARRL specifications.** E-mail submissions to iaruhf@arrl.org are preferred. Also starting in 1999 any paper entry which was logged on a computer must include a copy of the log files or it will become a check log. Submissions on 3.5-inch floppy disk are also acceptable. You need to include the required summary sheet file and the log files generated by your logging program. Participants outside the US should use air mail for their entries, as many entries postmarked in time actually arrived in December, after a considerable amount of log processing was already completed. Entries must be post-marked or e-mailed no later than 30 days after the end of the contest.

Remember it is the responsibility of the participants to keep up-to-date on rule changes and log requirements. The rules are published in *QST* before the contest as well as at the ARRL Contest Branch homepage on the Web. By visiting <http://www.arrl.org/contests> you can access all of the forms, rules, and log sheets required for any ARRL contest. Make sure

you read the “General Rules for all ARRL Contests” as these contain the specific requirements for log submissions. If you have specific contest rules or inquiries, you can e-mail me at n1nd@arrl.org, or call or write to the phone and address in the front of each issue of QST. Good luck and see you in the IARU HF World Championships July 10-11!



JH3PJP putting Zone 45 on the air in the Phone Only category.



YT1AD with this station finished 7th worldwide in the Mixed-Mode category.

Uruguay					
CX3DAT	29,720	150	40	B	
Argentina					
LU7HN	231,334	541	94	A	
LW1DX	56,850	305	50	A	
LU9HO	412,960	759	116	B	
AY5E (LU5EWO,op)					

LU4FM	106,978	260	89	B	
LU2FT	104,877	572	43	B	
LU4FC	52,355	663	37	B	
LU9HOA	40,358	283	34	B	
LW1EGD	31,650	231	30	B	
LT1F	11,220	136	17	B	
L36E (LU7EE,op)	2,528,524	2644	212	C	

LU1FNH	496,248	772	138	C	
LU1EWL	209,620	596	94	C	
LU1FAM	179,418	295	102	C	
LU6N (LU2NI,LU9AY,LU8NA,LU1NDC,LU4NAZ,LU4NAS,ops)	20,130	289	22	C	
LT5Y (LU1UY,LU2YAX,LU6YAR,LU7YAP,LU8YAP,ops)	1,578,786	1853	209	D	
PAZQZ	353,184	777	96	D	

Paraguay					
ZP0Z	354,222	974	99	B	

Zone 15					
Brazil					
PY2NY	213,210	508	90	A	
PUI1KDR	73,568	352	44	A	
PY2ARF	67,896	224	69	B	
PY2MNL	63,080	350	38	B	
PY2RAF	56,160	213	65	B	
PT2ADM	18,392	130	44	B	
PY2DJ	13,684	79	44	B	
PY2OZF	3,960	44	22	B	
PY3MHZ (PU3AGP,PY3AFS,PY3BZA,PY3FOX,PY3MRZ,ops)	27,965	162	47	D	

Zone 16					
Argentina					
LU1VZ (LU1VK,LU4VEW,ops)	636,984	962	162	B	
LU1VZ	315,084	553	132	D	

Zone 18					
Norway					
LA7CL	88,880	298	88	B	
LA82JA	39,347	150	77	B	
LA2EIA	23,210	136	55	B	
LA7TN	11,445	113	35	B	
LA5VV	1,602	27	18	B	
LA1VKA	256	8	8	B	

Aland Islands					
OH0NA	12,597	103	51	B	
OH0DL4SDW	79,560	545	78	C	
OH0MD					
(OH1MA,OH1RY,OH2BH,OH2TA,ops)	1,383,810	2149	193	D	
OH0AA (OH0JJS,OH0LH,ops)	1,022,604	1678	183	D	

Finland					
OH1NIO	843,647	1228	191	A	
OH8MCT	760,725	1427	161	A	
OH6RC	13,440	80	42	A	
OH1UP	12,926	89	46	A	
OH7NLI	1,135,705	1587	197	B	
OH7LNI	1,103,216	1576	191	B	
OH5LF	987,344	1556	184	B	
OH5PA	9,016	70	46	B	
OH1NOR	1,380,496	1771	208	C	
OH9XD	969,606	1521	198	C	
OH2AO	966,930	1439	193	C	
OH8BQT	381,220	810	140	C	
OH2NFS	119,600	329	115	C	
OH3IR	93,799	298	97	C	
OH3NM	33,099	196	51	C	
OH2YL	16,309	111	47	C	
OH2DE	3,024	52	21	C	
OH2RL	1,496	32	22	C	
OH1EH (+ops)	1,214,494	1939	178	D	
OH4AB (OH4YR,OH4KBC,OH4JFN,ops)	1,042,918	1644	197	D	

Denmark					
OZ1PA	25,092	115	82	A	
OZ2EV	179,840	310	160	B	
OZ1ACB	110,300	333	100	B	
OZ5FDR (OZ1ELZ,op)	5,304	65	24	B	
OZ2FF	71,155	231	95	C	
OZ7NB	9,717	83	41	C	

Sweden					
SM0DJZ	815,142	1138	206	A	
SM3LIV	144,072	369	116	B	
SM7RZF	128,915	321	115	B	
SM2CEW	66,108	501	42	B	
SM7HSP	9,048	110	26	B	
SM6AHU	2,475	55	15	B	
SM5MO	422,086	912	118	C	
SM6BSK	241,794	521	133	C	
SM0BDS	127,925	325	119	C	
SK6HD (SM6FKF,op)	74,928	249	84	C	
SM5SJK	21,428	174	44	C	
SM3AVQ	17,696	111	56	C	
SM7BHM	15,620	145	44	C	
SM7EH	896	32	8	C	
SK33W (SM0GNU,SM3OSM,SM5TXX,ops)	1,425,000	1728	228	D	
SK3LH (SM3WMM,SM3WMM,ops)	93,520	508	70	D	

Zone 19					
European Russia					
RN1AM	439,242	1285	114	A	
RU4ZMM	112,404	550	57	A	
R1BC	69,660	280	81	B	
RV1CC	330,310	664	170	C	
RA1ZF	41,445	305	45	C	
R21AO (RA1ARZ,KB2WKF,UJ1AAF,UJ1ACC,KB2WKD,KB2WKC,KB2WKE,ops)	737,810	1259	178	D	

Zone 20					
Asiatic Russia					
UA9XMG	483,352	914	124	A	
RA9XF	111,486	498	51	A	

UA9KM	80,640	274	70	A	
UA9XMC	1,106,272	1368	181	B	
RK9CVG (RV9CBT,RA9CGK,UA9-154-894,ops)	191,610	555	90	D	

Zone 21					
Asiatic Russia					
RA9WJ	157,340	393	91	B	
UA0BGZ	50,440	198	65	B	
RJ9J (RA9JR,op)					
RK9JVV (+ops)	831,252	1326	159	C	
	450,120	983	110	D	

Zone 22					
Asiatic Russia					
UA0SJ	91,235	324	71	B	

Zone 26					
Asiatic Russia					
UA0KCL	101,024	284	88	A	
UA0KA	18,018	110	39	B	

Zone 27					
Ireland					
EI2CH	10,908	91	36	B	
EI8GP	12,925	120	25	C	

France					
FBC5N8X	236,500	642	110	A	
FBC5OZF	30,024	168	54	A	
F6FT6	14,053	81	47	A	
F5HWW	1,225	25	25	A	
F5LBL	555,304	940	164	B	
F5AMH	61,424	222	88	B	
F8FIC	42,042	168	77	B	
F5BMK	24,346	220	37	B	
FL6DGCX	23,424	122	64	B	
F5JJK	21,888	114	57	B	
F5JBF/P	18,460	113	52	B	
F5MTH	9,542	111	26	B	
FBC8BDQ	7,134	90	29	B	
TM9C (F5IN,op)	796,374	1443	151	C	
TM6CMF (F6GIN,op)	174,069	672	81	C	
F5ROX	54,678	228	78	C	
F5JQH	53,612	283	52	C	
F5ICX	35,328	188	69	C	
FE1FY	15,826	96	41	C	
FK6PQ/P (F6ETI,F5FHW,ops)	1,071,158	1550	181	D	
TM9N (F5FLN,F4ARU,ops)	512,127	1287	99	D	
TM2OO (F5PFT,F5PAC,F5UII,F5SNY,ops)	136,188	377	108	D	

England					
G6GQ	22,194	131	54	A	
G3VAO	284,992	560	146	B	
(G4JWV,op)	243,000	515	120	B	
M0BEW	37,221	239	57	B	
G0WAX	31,689	157	63	B	
G8G (G0LLI,op)	860,816	1297	176	C	
G3TXF	577,348	913	188	C	
G3UFY	167,680	338	122	C	
G3ESF	160,310	430	115	C	
G3RSD	56,826	202	82	C	
G5MY	13,734	92	42	C	
G8A (G0KKX,G0IEQ,G1AOF,G4NXG,G3RTU,G0STU,G0DDBE,G4WSE,G0VBD,ops)	866,437	1722	143	D	
M8Q (G4BUO,G0AFH,ops)	296,604	553	132	D	
G0MTN (+M1BME)	96,560	360	85	D	
G0MWM (+NET)	36,960	169	70	D	
G0JQN (+NET)	18,330	156	39	D	

Scotland					
GM3QF	70,224	269	66	B	
GM3CFS	73,087	396	53	C	

Luxembourg					
LX1EP	108,832	541	76	B	

Belgium					
ON5LL	503,546	934	158	A	
ON4CAS	179,214	450	119	A	
ON5CQ	365,645	671	155	B	
ON7YP	25,870	125	65	B	
ON7YA	24,222	129	66	B	
ON5CY	22,066	124	59	B	
ON4XG	159,152	384	116	C	
ON6CR	103,592	336	92	C	
ON6TG	96,210	301	90	C	
ON4ASW	69,432	248	88	C	
ON6CW	60,750	309	50	C	
ON6LO	56,280	280	70	C	
OT8P (ON4GO,ON4LAM,ON6AH,ON6MH,ON6VL,ON7PC,ops)	921,920	1364	172	D	

Netherlands					
PA0MIR	289,650	560	150	A	
PA0KHS	90,712	282	92	B	
PA0IJM	19,975	309	25	B	
PA3DWJ	15,200	121	40	B	
PA3EMN	104,754	331	102	C	
PA3BQ	56,445	305	53	C	
PA3HBI	37,568	193	64	C	
PA0JED	36,093	185	53	C	
PA3BEJ	9,718	80	43	C	

Zone 28					
Croatia					
9A5J	69,930	303	90	A	
9A2KO	61,586	265	83	B	
9A7A	1,497,890	2010	235	C	
9A9A	1,387,800	1862	225	C	
9A2OO	107,156	393	89	C	
9A3CY	60,732	303	84	C	
9A7P (9A6NH,9A6NP,9A4DO,ops)	523,517	953	151	D	

Fed. Rep. of Germany					
DL6FBL	2,277,587	2392	247	A	
DL0JFX (OE2VEL,op)	1,416,128	1673	232	A	
DZ1RMC	338,806	734	166	A	
DF1DV	224,049	547	141	A	
DK7ZH	134,865	403	111	A	
DL8ZAW	80,132	285	92	A	
DJ5WD	73,625	269	95	A	
DK2DQ	72,075	267	93	A	
DL8TWA (K3TW,op)	67,710	308	111	A	

DF6LQ	66,220	269	77	A	
DJ6DO	60,818	245	94	A	
DL0MFL	57,054	275	74	A	
DL4OCL	56,214	256	81	A	
DL1JPL	50,405	179	85	A	
DL2AY	49,812	212	84	A	
DL1ARJ	42,918	213	69	A	
DL4VAD	32,262	144	54	A	
DJ2IA	15,190	126	62	A	
DL2AWA	13,630	103	47	A	
DK7AN	576	15	12	A	
DL2ASK	224	16	7	A	
DL5AUJ	72	12	6	A	

Macedonia			
Z31GX	147,828	507	97 B

Zone 29 Armenia			
EK6CC	559,435	1089	127 B

Moldova			
ER11M	139,650	591	98 B
ER10A	226,920	318	122 C

Estonia			
ES2RR	153,573	525	103 A
ES1QD	127,880	300	139 A
ES1RA	16,560	97	80 A
ES1CH	15,540	132	42 B
ES4LO	5,538	72	39 B
ES1XT	114,948	344	103 C

Belarus (EU1FC,op)			
EW6TU	835,212	1455	183 A
EU1MM	1,122,525	1511	225 C
EU1DX	492,128	996	69 C
EU6DX	123,370	334	130 C
EU6AA	53,134	309	62 C
EW1ABA	21,232	259	82 C
EW5O (EW6DX,EW6MM,EW6OB,EW6OS,EU8DX,EU8FZ,ops)	55,286	244	77 C
	2,495,080	3283	280 D

Lithuania			
LY2VAD (LY1DS,op)	50,680	248	70 A
LY1DR	7,975	74	25 A
LY3BH	880,230	1205	195 B
LY2AE	65,416	265	74 B
LY3BA	45,018	383	41 B
LY3BY	12,060	107	36 B
LY2BTA	1,001,948	1460	214 C
LY4AA	961,515	1415	207 C
LY2BM	789,370	1330	193 C
LY6M (LY1DS,op)	399,000	767	152 C
LY2GV	351,090	806	141 C
LY2MM	234,232	518	134 C
LY2MK	129,875	343	125 C
LY1DD	55,286	244	77 C
LY1CY	25,830	124	70 C

European Russia			
UA3FAR	1,615,866	1784	237 A
RA3AUJ	1,259,968	1508	242 A
RX3DCX	670,440	1187	185 A
UX1UA	634,600	1012	190 A
UE6MAA (RA6LW,op)	594,972	1186	189 A
RZ6LG	323,628	582	181 A
RV6LFE	323,589	753	133 A
RA1ZZ3	315,904	830	128 A
RU3BK	91,134	505	61 A
UA4AO	51,051	561	91 A
RW3ZA	48,620	322	44 A
UA1ANA	31,707	269	39 A
UA3XB	26,730	144	55 A
UA0ZDA/6	29,224	222	52 A
RU3HD	1,009,945	775	163 B
UA3BL	359,344	735	158 B
UA3QNL	205,859	472	139 B
RU3WR	161,325	409	135 B
UT1WA	138,852	328	133 B
UA4NC	105,525	330	105 B
UA3LHL	95,370	290	102 B
UA3QOG	80,224	294	92 B
RZ3EC	80,224	294	92 B
UA1OMS	72,540	252	90 B
RU3WT	62,589	228	93 B
RV3LZ	47,736	204	78 B
UA4HAK	29,925	169	63 B
UA4ASE	18,700	184	34 B
UA4LDP	14,487	157	33 B
UA4AVN	12,420	94	30 B
RV4SBX	10,144	95	32 B
RT3A (RU3AA,op)	614,347	1165	163 C
RA1ACJ	406,263	904	143 C
RW3FO	338,688	815	147 C
RU4WE	303,972	718	146 C
RW1AI	239,148	528	146 C
UA4SS	188,711	593	119 C
RV6VY	167,140	438	122 C
RU3AQY	166,007	489	109 C
RK3UWZ	130,383	407	99 C
UA3LPF	91,549	348	83 C
RX3AP1	83,664	322	84 C
RA4FW	70,125	393	65 C
RA3XO	69,615	207	100 C
UA4AHT	57,035	295	55 C
RW6AVP	19,344	134	52 C
RW3WM	16,095	113	37 C
UA6ATG	9,636	84	33 C
RK3AWL (+UA3DVF,UA3QDX,RK3AW,RA3QFB,UA3ATP,RV3FF,RA3ATX,RK3AD,RV3BA)	2,266,250	2717	250 D
RZ3Q (RW3QC,RW3QNZ,RN3QO,UA3QOQ,ops)	2,184,744	2839	258 D
RZ6HWA (RA6FV,RW6HA,RZ6FA,ops)	1,406,916	1553	252 D
RK3AWE	725,958	1344	157 D
RK3SWX (RA35-367,UA3SEC,RA35-797,RA35-952,ops)	608,908	1017	191 D
RK1QXX (RA1QGO,RA1QF,ops)	234,438	663	123 D
RK3NWO (RA3NN,UA3NEA,UA3NFG,UA3NAM,ops)	232,050	639	130 D
RK3UWA (UA3UAW,UA3-123-000,UA3-123-444,ops)	105,768	352	104 D
RK3EZW (RA3EO,UA3EJN,R3E-9,R3E-19,ops)	56,082	269	78 D
RK3EWW (+ops)	53,157	262	87 D
RW6AWM (RU6BV,RV6AS,ops)	44,600	294	50 D

Latvia			
YL2MR	160,552	616	94 A
YL2PN	11,410	145	35 A
YL3DW	759,225	1245	191 C
YL2GN	457,585	935	173 C
YL2ZN	150,880	556	82 C
YL2PP	43,240	178	94 C
YL3RW	11,872	111	32 C
YL1ZF	5,994	133	18 C

Turkmenistan			
EZBCW	14,250	101	38 B

European Russia			
UA4LU	1,045,856	1556	196 A
UA4HTT	958,000	1390	200 A
UA4PFO	77,280	438	56 C
RU4HH	56,259	291	57 C
RK4WUA (UA4WA,RW4WA,UA4WAN,ops)	875,735	1427	191 D

Asiatic Russia			
RK9CWA (RW9CF,op)	535,068	1215	167 A
RA9AA	157,300	533	65 A
UA9SG	121,374	295	98 A
RA9AB (op)	93,800	258	110 A
RX9WN	84,621	308	67 A
RW9AY	50,556	267	44 A
RW9QA	21,497	125	37 A
RA9AUH	18,202	115	38 A
RX9CAP	16,072	90	49 B
RZ9PW	345,780	709	113 B
RW9AB	300,424	528	136 B
UA9ACJ	162,504	352	122 B
RZ9SR	93,840	252	102 B
RW9MBC	32,928	170	49 B
RW9SW	651,040	927	160 C
RA9SO	315,225	557	135 C
UA9BS	161,882	583	62 C
RA9AJN	126,655	412	70 A
UA9AJD	100,607	357	109 C
RU9TO	96,600	287	70 C
RU9CZ	87,495	324	95 C
UA9AB	82,173	431	39 C
RA9DL	74,256	252	68 C
RZ9AZA (UA9BA,UN4L,UN7LEB,RA9AB,RA9CT,RU9AN,RZ9AR,RA9AZ,ops)	2,552,657	2593	213 D
RK9CWM (RZ9CO,RA9CMM,UA9CDD,RA9CKQ,RW4WR,ops)	2,062,104	2106	214 D
RK9AWN (RZ9AW,RA9AX,ops)	795,945	1310	141 D

Kazakhstan			
UN6P	625,488	972	157 A
UPOF	38,016	194	48 A
UN9PQ	5,746	45	26 B
UN8RA	326,888	656	116 C
UPOI (UN9LW,UN7LAN,UN7LZ,ops)	1,831,748	2164	194 D

Zone 31 Asiatic Russia			
RZ9OU	282,112	504	128 A
RX9UKF	12,307	99	31 B

Kazakhstan			
UP6F (UN7FZ,op)	342,990	699	111 C

Zone 32 Asiatic Russia			
UA0ACG	128,044	450	68 A
UA0AY	59,752	187	88 A
UA0APP	8,181	67	27 B
RW0A (RA0AM,RA0ALM,RU0AB,UA0AM,RU0AT,RV0AM,RV0AEV,RV0AR,RV0AU,RV0AR,UA0AGJ,UA0ANW,ops)	1,493,471	2021	203 D

Zone 33 Asiatic Russia			
UA0ZBK/0	415,400	873	124 B
RA0JX	154,140	413	105 C
UA0UAG	20,194	120	46 C

Zone 34 Asiatic Russia			
UA0FDX	281,466	661	114 A
RA0FU	110,088	317	88 C
RU0LL	156,950	541	86 C

Zone 36 Madeira Islands			
CT3HF	172,782	432	87 B

Canary Islands			
EA8/OH2BYS	2,268,344	2170	221 A
EA8BQ	67,525	311	39 B
EA8AD	45,480	239	40 B
EA8ASJ	306,081	1047	71 C
EA8ABF	13,200	118	24 C

Zone 37 Spain			
EA3KU	1,895,517	2461	221 A
EA3ALV	208,875	513	125 A
EA7GTF	151,018	901	49 A
EC5AEB	104,130	700	45 A
EA1FB	102,030	450	57 A
EA1MK	69,722	305	71 A
EA7CWW	22,800	106	60 A
EA4AHJ	21,514	245	31 A
EC7ADS	7,125	87	25 A
EA3BXO	488,345	953	143 B
EA1EB	164,630	466	101 B
EA3OP	137,862	559	74 B
EA1BLX	95,052	320	89 B
EA7ALO	70,224	254	77 B
ED5JOE (EA5EJ,op)	60,261	333	53 B
EA1FDG	44,070	300	59 B
EA7BJV	28,575	196	45 B
EA1CJH	25,477	123	73 B
EA1BLI	18,262	136	46 B
EA1AUT	10,556	101	28 B
EA2SN	6,864	76	26 B
EA3AMV/5	4,611	55	29 B
EC3ALV	4,480	71	20 B
EA1AAW	3,219	41	29 B
EA5DIT	3,100	36	31 B
EA5FV	638,182	1592	122 C
EA3AR	175,028	448	98 C
EA7CA	87,435	252	87 C
EA1FBJ	32,025	179	61 C
EA1VM	4,704	45	32 C
EA5URP (EA5DFV,EC5CPL)	863,298	1618	146 C
ED5URN (EA5AN,EA5CKP,EA5EOC,EA5GPP,EC5ALM,ops)	427,679	1111	107 D
EA5BY (EA5ABE,EA5BY,EA5PID,EA5GRV,EA5KW,ops)	243,522	964	83 D

Balearic Islands			
EA6ACF	66,263	311	67 B
EC6PG (EA6GP,EC6GP,ops)	30,712	249	44 B

Zone 39 Israel			
4X1VF	338,352	676	106 A
4Z5FW	108,680	300	76 A
4X4KYT	92,530	260	95 A
4X2F (4Z5JK,op)	2,450,553	2850	183 B
4X0F (4Z5FL,op)	247,940	514	110 B
4Z5FI	203,915	535	85 B
4Z5FU	146,625	1725	85 B

Cyprus			
C40M (5B4FM,op)	2,415,276	2792	207 B
P3P (5B4LP,op)	1,815,220	2182	185 B
H22H (5B4MF,op)	1,456,218	1577	202 B
C4A (5B4ADA,op)	2,768,640	2705	224 C
H20A (YL2KL,YL3CW,YL2BU,RZ3BW,RZ3BY,RA3CQ,RA3CV,RX3APM,RZ4HF,UA4HTX,ops)	5,481,752	4301	289 D
P3A (RA9JX,RZ3TX,RZ9UA,UA3DPX,UA9ND,UA9NN,ops)	5,451,576	4007	312 D

Kuwait			
9K2HN	585,120	1054	120 B
Jordan	959,680	1288	160 A
JY9QJ	916,178	1555	127 B

Zone 41 Pakistan			
AP2TJ	96,531	323	69 B

India			
VU2ABE	45,720	238	60 B
VU3DJQ	13,596	114	33 B

Zone 42 Nepal			
9N1UD	65,820	309	60 A

Zone 44 Taiwan			
BP0RIW (UP1RIW,op)	98,840	550	56 B

China			
BD4DW	84,632	344	71 C
BA4TB	11,916	331	36 C

South Korea			
HL1SQQ	2,760	43	20 B
DS4CNB	146,316	458	89 C
HLOK (-+ops)	62,928	262	69 D

Hong Kong			
VR98BG	484,092	1038	113 C

Zone 45 Japan			
JH7PKU	768,672	1210	157 A
JA6ZL (JJ6WYS,op)	623,760	1063	138 A

Zone 46 Nigeria			
JH7XGN	606,208	962	148 A
JF1SQC	586,000	1043	125 A
JR4GPA	357,552	788	104 A
JA1ZLO	329,238	666	117 A
JA6BK	328,596	580	139 A
JL4IUU	184,230	411	115 A
JY1VJL	127,306	287	106 A
JR9NBV	101,782	344	68 A
JH5OXF	95,186	281	91 A
JQ6NAW	74,976	262	71 A
JA1BUI	65,919	216	73 A
JH2AMH	61,952	292	44 A
JQ1NGT	51,100	270	50 A