

Results, 5th IARU HF World Championship

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Contest Manager Assistant Contest Manager

The 1990 IARU HF World Championship was held the weekend of July 14-15. Although this year's contest didn't measure up to the 1989 contest when it came to propagation and band openings, every entry class crushed ITU-Zone records. Thirty-five records went by the wayside: five on mixed mode, 11 on phone, 11 on CW and eight multioperator.

This summertime contest is always fun and morale was as high as usual. John, WB6DFA, exclaims, "I had a great time! Band conditions on the West Coast weren't as good as last year, but I was still able to add five new countries to my totals." ZM2AGY conveys, "Conditions seemed a little spotty, but that's half the fun." WA6HRK claims, "Even though the solar flux was down from last year, I still made 50% more QSOs." Peter, WW2Y, reveals, "The high bands weren't as good as last year's contest, but 80 and 40 were in great shape this time around."

This year's contest attracted 1166 entries from 43 ITU zones. CW remains the most popular entry category in the 24-hour contest. Second on the list is phone-only, followed by mixed mode and multioperator.

Eleven IARU member-society HQ stations submitted their logs, with five breaking the

1-meg mark. Congratulations in particular to the MRASZ station HG90HQ, whose 8.7M score topped the list. They are followed by Y61HQ with 8.4M; YP0A with 3.5M; W1AW with 2.4M; and GB5HQ with 1.3M points. Thanks to all the HQ stations that participated and gave us those extra multipliers.

Tom, 5H3TW (K3TW, op), boosted his last year's second-place effort by 400k points, winning the world mixed-mode category for 1990 with 1.8M points. Great going, Tom! Ben, DL6FBL, finished in second-place world with an impressive 1.3M points. Rich, K1CC, moving up from sixth-place world last year, finished in third-place world and first-place W/VE, scoring 1.0M points. Fred, K3ZO, placed seventh in the world and second for W/VE, scoring 907k points. Howard, K4PQL, was tenth-place world and third-place W/VE with 716k points.

Serge, UT5DK, scored 845k points to take first-place world phone. Janez, YU3HR, moved up the ladder from eighth place in 1989 to second-place world phone this year, scoring 822k points. Jack, W1WEF, moved up a notch from sixth place last year to fifth-

place world and first-place W/VE phone, with 733k points. Bob, KW8N, finished eighth-place world and second-place W/VE, scoring 658k points.

On the CW-only front, Steven, WB2Q, moved up in the standings by seven notches to win first-place worldwide CW for 1990, scoring 1.2M points. Bill, KM9P, guest operating at N4RJ, finished second-place world CW with 1.0M points. Brass pounder Al, G3FXB, scored 974k points to finish third-place world. Dan, K1TO, finished sixth-place world and third-place W/VE, scoring 904k points. Ralph, N5RZ, was seventh-place world and fourth-place W/VE with 872k points. Dave, K5GN, scored 711k points, finishing eighth in the world and fifth for W/VE. In ninth-place world and sixth-place W/VE was Dave, K6LL, scoring 711k points.

In the multioperator category, there was a fierce battle for the world top spot between two Hungarian stations. When the dust settled, HG1S finished on top with 3.3M points, setting a new all-time score record. The crew at HG0X wasn't far behind with 3.2M points in second place. Last year's multiop winner, UC1OWA finished third with 2.7M points. The gang at K8AZ edged out K3EST and friends for first-place W/VE multiop.

IARU Headquarters Stations

HG90HQ (HA1YU, HA4s XT, ZZ, HA5s GF, IW, LN, MK, WE, HA6s NF, OQ, HA7JAO, HA8s FM, IE, ops)	8,740,732-	10,218-	259-D
Y61HQ (DF7RX, DK3EI, DL2NBU, DL3OI, DL4NAC, DL6RAI, Y21s EF, TL, Y23EK, Y24UK, Y24VF, Y32s NJ, QD, TK, VK, Y33VL, Y37XJ, Y42s IK, LK, MK, OK, PK, QK, Y58WA, Y77VH, ops)	8,404,968-	9891-	264-D
YP0A (YO2BV, YO3s APJ, FLI, YO4s AVR, BEX, BQV, FM, HW, UC, YO6AWR, YO7UP, YO8s AXP, BAM, DDP, EB, YO9s AGM, BEI, FE, ops)	3,558,126-	6082-	202-D
W1AW (KA2AEV, KQ2M, KR2J, KZ2S, N2KW, NQ2D, W6LC, N18L, ops)	2,439,500-	5169-	164-D
GB5HQ (G3OZF, G4s JUG, RTO, G0HSD, ops)	1,347,260-	2218-	155-D
4U1ITU (N6TR, op)	976,752-	2402-	126-C
JA3RL (JA3MAU, JG3s KUT, RPL, JI3ERV, JJ3WPF, JP3LKR, JR4ISF, JR5NMD, ops)	788,358-	2347-	118-D
SK3SSA (SM3s OSM, SGP, ops)	495,390-	1466-	105-D
EI0RTS (EI2s EZ, FN, GS, EI3GU, EI4s GK, HE, EI5CZB, EI7CX, EI9FL, ops)	469,371-	1471-	103-D
VE3QST (VE3XN, op)	163,785-	765-	81-A
SN9C (SP9s ADV, GDO, JPA, MZP, ops)	147,390-	976-	85-D



Operators at JARL headquarters station JA3RL in Osaka, Japan, are busy securing their seventh-place finish.



John Anderson, WB6DFA, of Laguna Hills, California, had a great time operating phone-only from the Orange Section in Zone 6.

Top World Scores

Mixed		CW	
Call sign	Score	Call sign	Score
5H3TW	1,859,822	WB2Q	1,270,820
DL6FBL	1,366,014	N4RJ	1,017,840
K1CC	1,057,383	(KM9P,op)	
FIW9WA	1,010,096	G3FBX	974,974
RH8E (RH8EA,op)	963,010	R29UA	947,525
EX3A (UW3AA,op)	917,769	UL7CW	913,116
K3ZO	907,531	K1TO	904,400
EX6S (UA8SAU,op)	808,119	N5RZ	872,395
RW4LYL	767,167	K5GN	747,826
K4PQL	716,001	K8LL	711,674
		OH1AD	693,852
Multioperator			
Call sign	Score		
HG1S	3,342,547		
HG9X	3,253,341		
UT5DK	845,427	UC1OWA	2,716,532
YU3HR	822,780	RT1U	2,517,972
LY2ZO (LY1R1-751,op)	800,640	FIQW	2,133,224
UA8TO	737,832	R1SL	2,118,741
W1WEF	733,134	4L4F	2,009,250
OH2BU (OH1EH,op)	721,358	UW2F	1,877,213
GM8ECO	686,488	UB3IWA	1,824,992
HA8NAR	674,576	P30S	1,424,970
KW8N	658,750		
LY3BH	632,672		

The IARU HF World Championship offers something for everyone. You have the choice of operating CW and phone or just one mode, if you like. Anyone, anywhere in the world can be contacted for contest credit, with a QSO point structure emphasizing contacts with stations in other continents, but not ruling out QSOs with colleagues in your own continent or country. Multipliers are the 90 ITU zones and IARU headquarters stations around the world. Almost any station can be competitive in the HF World Championship. It doesn't take big antennas or a lot of power to enjoy it, as Dan, AA6LM, expresses, "I didn't need anything fancy to join the fun!" You don't even have to win in your Section or country to qualify for "wallpaper" in this one. You can earn a contest certificate just by completing 250 QSOs or getting 50 multi-

pliers and submitting your entry. If you demand a more intense challenge, such as finishing in first place or making the top ten, the championship offers plenty of tough competition.

See you in next year's championship, the weekend of July 13-14, 1991.

SOAPBOX

I passed my Extra Class exam the day of the contest and decided to give my new privileges a new try, and I even worked some new countries (N6NMH). This wasn't much of an effort, but I had a lot of fun (WX0B). I enjoy the format of this contest! (W7YAQ). I'll be better prepared next year (N7LOX). Conditions were good, although not as good as last year (AD5Q). I always enjoy the contest (W5NR). It was a great contest, as always, but propagation was not as good as it was last year. Even though I was tired in the wee hours of the morning, I still wish the contest was longer than 24 hours (WB7EZD). I'll see you next year, the good Lord willing (W1CNU). I didn't pay much attention to last year's results until I got the certificate in the mail (KC2TA). The propagation on 10 and 15 wasn't as good as last year and it seemed that the participation was down (K3IXD). This was my first DX contest (W3NGO). These were the worst conditions I've ever seen in a contest. What happened to the sunspots? (KD3GC). Although conditions seemed much better this year than last year, I still came out with about the same score (W9HE). I was glad to be able to do it again (PP7JCO). This was my first IARU contest, but not my last (LA9DFA). I had a nice holiday with my XYL (OH8/OZ1JVN). This contest is one of our favorites (OH1EH). I enjoyed every minute of the contest (OH6YF). It's good this contest lasts only 24 hours (OH5NFS). It was an interesting contest (OH3YM). 10 meters was a disappointment (OZ7AX). It was an excellent contest, though conditions were not quite as good as last year. We're planning for next year already! (EJ1D). Conditions were not good on 10 or 15, but the QSO rate on 20 was better than usual (G4BKD). I enjoyed the contest, and hope to do better next year (GW0AJI). It was a good contest, but my going to bed at night cost me about 300 QSOs (PA0LJM). This is always the nicest contest of the year. I always anticipate it and the heat wave it brings with it (PA3EMN). It was hard to be active with the 35°C temperatures (PA0DOM). It was a pity that activity from Africa and Oceania on CW seemed so low

Top W/VE Scores

Mixed		CW	
Call sign	Score	Call sign	Score
K1CC	1,057,383	WB2Q	1,270,620
K3ZO	907,531	N4RJ	1,017,840
K4PQL	716,001	(KM9P,op)	
K25D	623,691	K1TO	904,400
WD8LLD (WDBAUB,op)	577,096	N5RZ	872,395
WA3LFY	352,704	K5GN	747,826
WF5E	312,067	N2BA	711,674
K8AQM	280,600	(K8HVT,op)	674,730
KY2J	261,970	N16W	659,475
WA5OYU	254,616	K8CC	646,668
		N6TV	579,852
Phone		Multioperator	
Call sign	Score	Call sign	Score
W1WEF	733,134	K8AZ	1,010,940
KW8N	658,750	K3EST	1,004,289
K6SVL	381,485	K4VX/0	960,480
WB2K	360,360	N8CXX	709,495
K4WSS	338,400	K6XT	680,218
AA9A	308,978	WW2Y	625,510
NGYKL	265,866	K4SW	600,288
KB2BF	227,664	K4ION	536,928
KA1ION	220,168	KR8B	496,496
WW6O	152,470	NF7P	462,840
		K9SD	

(PA0LOU). The power supply for my amplifier blew up at midnight (DL8PC). This is the best contest of all (DL2OBF). Two watts worked great from here (DL/WC6U). The bands weren't good. Starting the contest at 4 AM was a change (AL7CQ). It was a lot of fun to enter a contest from my home town, where I hadn't been active for 15 years (IX1MOL). It was a good experience (IK3ORD). The tower and 20-meter antenna were destroyed in a heavy storm 12 hours before the contest (IV3TQE). This was an interesting contest (SP3XR). I ran out of electricity! (SV1RP). Conditions were bad this year (Y21CL). This was my first try at this contest (Y05CTY). Although the propagation was poor, it was a nice contest (4N3AA). The contest was enjoyable in spite of the poor propagation (UA3DPX). It was an FB contest (UA3ID). We used four separate receivers coupled to a single exciter/PA (LY2WW). It was a nice contest! (YL2PJ). It was a good contest, but the conditions were bad here (ES4XB). The contest could have been great, as usual, if the propagation was as good as it should have been. I missed the skip to the Pacific on 10 meters, which cost me four multipliers (RV9CFA). This was my first contest! (UL7NEA).

Scores

Scores are listed by ITU zone and then by country within that zone. The line score indicates the call sign, final score, QSOs, multipliers and entry class. The entry class letters indicate the following: A = single operator, mixed mode; B = single operator, phone only; C = single operator, CW only; D = multioperator, single transmitter.

Zone 1				
Alaska		K6SVL	381,485	977- 87-B
		N6RVZ	148,434	505- 78-C
		W6FA	2,277	29- 23-C
		Orange		
		N8TIB	144,387	670- 61-A
		NX6M	19,584	179- 36-A
		N6WK	10,881	103- 27-A
		NGYKL	285,866	972- 73-B
		WB6DFA	42,030	292- 45-B
		N18W	659,475	1235- 135-C
		W6SX	95,275	301- 55-C
		AAGLM	1,785	39- 15-C
		Santa Barbara		
		WA6FGY	121,408	658- 56-A
		W6BKY	11,760	137- 28-C
		NGNMH	8,568	65- 24-D
		(+WABIE)		

Zone 4				
Ontario		Santa Clara Valley		
		NGIP	109,344	378- 67-A
		N6JM	64,340	210- 65-A
		N8NF	14,582	210- 23-A
		K6RZE	119,968	416- 77-B
		WABIE	21,462	151- 42-B
		N6TV	579,852	1178- 126-C
		AD6E	91,016	400- 62-C
		Zone 6		
		W6		
		East Bay		
		K6OY	1,108	27- 14-B
		N6EK	277,276	742- 103-C
		NF8S	277,090	513- 110-C

Los Angeles				
		K6ZH	39,219	213- 51-B



The operators of MRASZ headquarters station HG90HQ celebrate their first-place finish. Pictured (l-r) standing: Peter, HA5WE; Tibor, HA5LN, and his wife, Eva, HA5YN; and Tomi, HA7RY; sitting: Simon, HA5IW; Peter, HA5MK; Zoli, HA5ML; Sanyi, HA5GF in front.

WB6YA	577,870-	1181-	122-C	K9MWMØ	56,540-	358-	44-B	W2HCA	38,857-	225-	48-C	WB	Zone 9			
AA4M	353,174-	811-	118-C	KD9NB	14,212-	112-	38-B					Michigan	VE			
WG6QF	302,876-	711-	118-C	WB6Z	3,654-	54-	21-B	KB2BF	227,664-	778-	72-B	KBAQM	280,600-	674- 115-A		
KIRY	5,616-	60-	24-C	WB6WJ	2,808-	32-	26-B	KC2TA	10,152-	125-	27-C	KF8DF	22,074-	410- 39-A		
AA6EE	168-	8-	7-C	AC9S	41,889-	251-	47-C	K2MK	7,756-	71-	28-C	KBDD	124,968-	420- 82-B		
K6XT (+K6JYQ,KI6ZH)	680,218-	1159-	154-D	WB6KEA (+W1KE,KF8U)	379,500-	99-	100-D	WW2Y (+K2WL,N2NU)	625,510-	1185-	142-D	KD8PF	27,120-	163- 48-B		
San Joaquin Valley				Iowa				Southern New Jersey				KGCC	Zone 10			
WW6GO	152,470-	530-	79-B	NE6P	40,137-	258-	51-A	KJ8A	17,540-	110-	45-C	K8CV	8,896-	88- 32-C		
KD6VV	582,950-	1066-	135-C	WB6PP	22,237-	151-	37-B	N8CXX (+KJ8M,KC9OC,NE8T,WB8VMS)	709,496-	1404-	131-D					
N6SUZ	53,361-	357-	48-C	KF6KY	10,974-	114-	31-B									
Sacramento Valley				Kansas				Western New York				US Virgin Islands	Zone 11			
WB6NKR	4,428-	52-	18-C	WB6YIT	5,712-	53-	21-B	KD2YP	105,939-	179-	79-A	WA9SQN/KP2	61,480-	447- 35-C		
K3EST (+K6EZ,N6RO,JH4RHF, JR4DUW)	1,004,289-	1787-	143-D	N6FMR	25,065-	158-	45-C	W2T2Z	89,404-	386-	62-C	Turks & Caicos	Zone 12			
K6FO (+NW6R)	2,684-	403-	68-D					KB4VL (+N2JYC)	13,600-	114-	34-D	VP5JM	289,641-	1315- 67-B		
W7				Minnesota				W3				Bolivia	Zone 13			
Arizona				N6HQU	24,477-	183-	41-B	KV3U	3,880-	61-	20-B	CP1FF	39,270-	230- 35-B		
K97EM	2,680-	38-	20-A	KE8UI	20,736-	150-	36-C					Peru	Zone 14			
K6LL	711,674-	1375-	134-C	KF6T	7,372-	98-	19-C	WA3LFY	352,704-	868-	96-A	OA4ZV	211,600-	534- 80-C		
KC7V	1,980-	50-	10-C	KR6B (AF9T,K8I,IJL,KJ6B,KSDT,N8S BIL,BKL,ops)	536,928-	1222-	118-D	NM3E	107,620-	438-	60-A	Venezuela	Zone 15			
Eastern Washington				N5SB	60,568-	260-	87-A	N9SHHE	74,088-	269-	72-B	4M1E	23,184-	198- 24-B		
K7WA	7,062-	69-	33-A	KC8LX	68,103-	285-	63-B	KA1CLH	14,884-	564-	26-B	YV5KWS	19,514-	186- 22-B		
Montana				K4VXØ (+AG9A,WOBG)	900,480-	1547-	160-D	K3ZPG	10,868-	66-	38-B					
K5TT	26,936-	222-	37-A					NN3Q	91,478-	502-	44-C	KB8Z (+ K8Bs BL,NZ,KQ8M,N8s ATTR, DMM,W8KIC,W8TC)	1,010,940-	1522- 174-D		
Nevada				K8SW	21,378-	111-	42-A	W8BGN	41,872-	218-	38-C	WB8L (N24K,KUE8,ops)	441,220-	996- 130-D		
WB7VHH	1,744-	31-	16-B					K3WW	3,072-	56-	12-C	N8BD (+N8FR)				
K24H7	25,425-	215-	45-C	South Dakota							403,425- 1115- 99-D					
NF7P (+NC7K,WX7WV)	496,496-	1400-	104-D	WD6BMA	90,610-	435-	65-B	K3ZD	907,531-	1591-	139-A	WD8INF (+KB8HAE,W8IQ,WABZZA)	400,980-	922- 123-D		
Oregon				K1CC	1,057,383-	1719-	153-A	K3EKA	31,880-	156-	55-B	WA8OSE (+N8JEC)	156,434-	360- 107-D		
WR7E	46,748-	238-	58-B	K1ISSN (WB7EZO,op)	178,224-	758-	79-A	K3IXD	31,185-	141-	83-B					
W/YAQ	280,721-	669-	119-C	N7OZ	22,872-	182-	52-A	KA3QER	2,568-	54-	12-B	Argentina	Zone 16			
KA7PEF	8,034-	91-	28-C	W1WEF	73,134-	1571-	118-B	N3GOF	39,167-	201-	53-C	LU1ICX	52,205-	249- 42-A		
Utah				K4ION	220,188-	559-	104-B	W3GG (+KD3JH)				LU8ESU	146,034-	470- 63-B		
K6XO	83,448-	380-	76-A	NY1V	25,494-	179-	42-B	KD3I (+NET)	382,374-	1026-	97-D	LR2D	132,600-	464- 80-B		
W7HS	80,754-	239-	85-A	NF1J	9,660-	111-	28-B	WD3PR	67,396-	224-	83-D	LP3F	118,833-	723- 33-B		
Western Washington				N1FGX	1,309-	31-	11-B	W3VEY	39,300-	211-	50-B	LU1EWL	86,118-	287- 62-C		
NX7K	158,100-	491-	93-A	KA1MIS	1-	1-	1-B	N3GSC	35,990-	160-	59-B	Brazil	Zone 17			
K1GNT	6,916-	100-	28-B	K1TO	904,400-	1588-	136-C	WB3COA	8,990-	86-	29-B	PP5JD	176,120-	566- 40-B		
N7LOX	62,776-	353-	56-C	N8RA (NJ2L,op)	560,458-	1341-	106-C	W3NGO	3,744-	54-	18-C	PY1CE	48,564-	366- 27-C		
K7RA	55,460-	288-	59-C	K2SX	420,736-	1011-	128-C	KA3RRF	2,873-	49-	17-C	PY1AJK	35,198-	175- 42-C		
W7QN	21,356-	140-	38-C	K1TN	111,300-	510-	70-C	KK4SM	61,560-	198-	76-C	PY2ORF	366-	19- 6-C		
Zone 7				AB1IU	40,500-	245-	60-C	K4NNQ	51,243-	323-	57-C					
W5				W1CNU	27,931-	195-	31-C	AA4XM	8,050-	106-	23-C	Zone 18	Svalbard			
Arkansas				W1KKF	8,530-	78-	15-C	KD3GC (KM9P,op)	54,925-	227-	65-A	JW1DL3LAB	9,288-	150- 24-B		
A6VBE	17,438-	131-	37-A	KA1QAS (+KA1TMV,NR1L)	188,240-	1156-	80-D	N4RJ (KM9P,op)	1,017,640-	1653-	152-C	JW1DK2OY	50,715-	425- 49-C		
AA5CV	13,062-	85-	42-B					NBLM	41,258-	214-	49-C	Norway	Zone 19			
W5EU	14,405-	109-	43-C					AA4VD	6,540-	118-	20-C	LA9DFA	131,128-	582- 74-B		
Louisiana				W82DND	56,148-	200-	67-A	W4AQL (N4VMD,K0DI,ops)	73,740-	353-	60-D	LA4KGA	33,040-	210- 56-B		
KZSD	623,691-	1285-	131-A	NB1B	149,224-	468-	92-B	KB0C	96,714-	358-	81-B	LA2AD	17,131-	147- 37-B		
W5GAD (AASP,NKG5Q,KG5XV,N5s NBC,OGW,RDL,WF5C,WB9VTN,ops)	67,520-	312-	64-D	KT2E	21,840-	138-	42-C	K9JS	27,380-	161-	48-B	LA6PB	1,162-	28- 12-C		
Mississippi								Wisconsin				Finland	Zone 20			
WA5OYU	254,618-	710-	103-A	K1NA	125,205-	446-	85-B	KT9W	113,772-	499-	76-A	OH1AF	690,846-	1788- 102-A		
North Texas				K1NA1 (+K1RQ,K1APR,KB1U,KY1K, N1s AFC,FHS,FZL,W1OOI)	29,280-	148-	48-D	W9XT	108,282-	447-	74-A	OH2BLF	97,601-	385- 73-A		
KD5GD	84,942-	347-	66-B	K1PLX	127,280-	543-	80-B	WB9C	85,152-	376-	64-A	OH7NW	39,672-	214- 58-A		
N5PZ	872,395-	1496-	149-C	N1FWC	1,547-	33-	13-B	WD8EGC	1,638-	153-	9-A	OH6NBJ	12,750-	119- 34-A		
WSUDA	175,040-	566-	80-C					AA9A	308,876-	820-	123-B	OH2BU (OH1EH,op)	721,356-	1359- 141-B		
KA5W (+KS1G)	600,288-	1372-	111-D	N2BA (KB8HT,op)	143,000-	544-	65-D	W9HE	54,320-	260-	56-C	OH3OJ	257,383-	695- 63-B		
Oklahoma				K1CC	38,164-	225-	47-C	W2								
NW5H	20,079-	263-	23-B	W12N (+W1E2)	377,410-	934-	110-D	Eastern New York								
WM4Z	5,980-	95-	20-C					KO4J	136,032-	456-	78-A	Western Massachusetts				
KF5DA (+KG5TO)	47,142-	250-	54-D					WASDTK	80,247-	293-	69-A	K1AJT				
South Texas				KY2J	261,970-	850-	85-A	KW4AF	35,370-	180-	45-B	K2J4T				
KG5VA	138,600-	578-	67-A	WT2F	7,475-	55-	25-A	WD4AHZ	287,438-	758-	102-C	WA8WAU				
KARWSS	338,400-	1008-	100-B	KB2JBL	784-	50-	8-B	N4ES (+KB4YA,KK4QN,WA4CVC,K8RY)	239,904-	658-	102-D	K4PFF				
WA5IYK	93,480-	286-	60-B	WB2Q	1,270,620-	1751-	180-C				W4XD	27,429-	205-	41-C		
KSGN	747,826-	1154-	167-C	N2BA (KB8HT,op)	674,730-	1326-	126-C	W2HCA	38,857-	225-	48-B					
AD5Q	575,236-	1149-	124-C													
K3L/S5	136,192-	588-	64-C	N1CC	38,164-	225-	47-C									
W5NR	30,856-	144-	51-C	W12N (+W1E2)	377,410-	934-	110-D									
N5EA (+KSGA,W5s ASP,PW6,NB9T)	430,008-	1394-	82-D													
West Texas				KY2J	49,500-	255-	60-A	AA4NU	137,200-	525-	80-B	NYC-Long Island				
WF5E	312,067-	743-	109-A	W12N (+W1E2)	377,410-	934-	110-D	K4JHT	39,960-	200-	54-B	K2KTT				
NSNA	18,410-	166-	36-C					K52X	8,586-	116-	27-B	W2GKZ				
W9																
Illinois																
N8FFZ/Q	10,120-	99-	47-C													
W0																
Colorado																
N8ZA	209,070-	658-	90-A													



Gary Hammond, VE3XN, operated CRRL headquarters station VE3QST in London, Ontario.

OH6SU	14,534-	90-	43-B	TMSM (F1s JT1,MFI,FA1MX1,FD1s MXH,MYH,ops)	Italy	German Democratic Republic	YU7KM	39,300-	274-	50-C	
OH3TZ	5,020-	80-	23-B	538,991- 1538- 91-D	I00KHP I1KAR (IK1GDE,ops)	Y32KE	444,708- 1053- 132-A	YU1GN	19,620-	108- 45-C	
OH4MCV	936-	34-	9-B	F1HWB (+FD1ONJ)	230,178- 755- 78-B	Y32TD	287,547- 1014- 101-A	Y27V (+ops)	749,320- 1805- 130-D		
OH3MIG	95-	7-	5-B	44,850- 220- 55-D	IK2LOL/90	59,482- 354- 49-B	Y32WF	234,210- 620- 111-A	Y23A (YU3AJK,WE,ops)	540,640- 1351- 124-D	
OH7AD	693,852-	1454-	134-C	18QOO	IK3ORD	26,330- 173- 34-B	Y44NO	194,718- 651- 102-A			
OH8YF	604,758-	1349-	119-C	IK2KW	7,025- 85- 25-B	Y26DM	77,900- 282- 76-A				
OH8OS	350,056-	1058-	94-C	IK1NDB	92,960- 80-C	Y67UL	44,545- 215- 59-A				
OH8NFS	238,392-	765-	88-C	IK2EGL (+IV2XJ,IK2CFH)	2,704- 59- 18-C	Y72SL	41,391- 181- 63-A	Zone 29			
OH8YM	46,892-	323-	44-C	GWMO	353,704- 915- 104-A	Y15FI	35,262- 245- 54-A	Kalininograd			
OH8MCE	11,288-	204-	33-C	GWKTN	21,630- 146- 42-B	Y38ZB	25,598- 302- 54-A	UA2EC	35,742- 158- 68-C		
OH8YL	7,898-	91-	22-C	G3ESF	974,974- 1621- 143-C	Y25IA/4a	11,834- 334- 34-A	UA2FB	5,378- 77- 21-C		
OH8MIL	1,755-	29-	15-C	G4BSF	115,924- 440- 73-C	Y34TH	9,363- 99- 47-A	UA2WF (UA2s FF,FJ,FM,ops)	1,877,213- 2419- 187-D		
OH8WM	920-	25-	8-C	G3DE	48,336- 210- 48-C	Y24SH/a	9,216- 112- 32-A				
OH8NIO (+DH6MFN)	435,180-	1038-	110-D	G4ZME	24,785- 198- 34-C	Y21CL	8,668- 74- 44-A	European Russian RSFSR			
OH3SWL (OH2BVM,OH3s GZ,MIG, NDH,ops)	4,077-	62-	27-F	GWNGLO	23,050- 250- 25-C	Y612M	8,382- 95- 33-A	EX3A (UW3AA,ops)			
				GX3CSR (G1CYB,G3XWK,ops)	52,030- 278- 55-D	Y23HJ	7,840- 90- 40-A	917,759- 1767- 141-A			
Aland Island				IV3TQE (+IV3KYQ)	713,830- 1353- 130-D	Y77YH	7,337- 111- 29-A	HW4LYL	767,167- 1490- 136-A		
OHNOZIJVN	82,895-	438-	59-C	GM9ECO	688,488- 1520- 116-B	Y25IJ/a	5,425- 49- 35-A	UA3RAR	581,064- 1137- 132-A		
				GM3CFS	70,148- 276- 71-C	Y23JA	4,395- 146- 15-A	RW3AU	333,438- 866- 119-A		
Denmark				IK2GAU (+IK2s GAU,HNU,IKT,MMF, NVU,OFR,CHG)	151,250- 358- 50-D	Y54TO	3,220- 71- 20-A	UA1ANA	308,358- 963- 111-A		
				ONAH (ONs AV,IO,ON6s AH,MM,QR, VL,DN7PC,ops)	514,008- 1314- 99-D	Y53CD	2,186- 38- 19-A	UW3AB	207,460- 639- 92-A		
Sweden				Y55SC	184,857- 707- 128-B	Y55ZC	177,280- 568- 86-A				
				Y25KA	94,686- 386- 88-B	Y68TH	54,362- 272- 77-B	U43RJ	150,920- 511- 88-A		
				Y52WB	33,656- 248- 56-B	Y82WN	24,300- 206- 46-B	U43SBW	135,458- 424- 89-A		
				Y22OE	16,912- 104- 56-B	U44LCO	107,325- 486- 81-A				
				Y31NB	5,194- 84- 54-B	Y38WE	2,875- 41- 23-B	RA3ACD	100,604- 363- 82-A		
				Y27BG	1,840- 35- 20-B	UW6LIX	71,981- 444- 49-A				
				Y44UO	820- 40- 10-B	RA3VR	61,420- 269- 98-B				
				Y45JA	600- 40- 15-B	RW3WX	51,788- 297- 54-A				
				Y50ZP	311,400- 877- 120-C	UZ3DWZ	50,630- 270- 82-A				
				Y26TF	190,460- 693- 88-C	U28LU	36,176- 477- 88-A				
				Y217Y	191,460- 693- 88-C	U24AXN	31,856- 217- 32-A				
				Y71ZA	117,014- 388- 82-C	U48DQ	19,545- 288- 29-A				
				Y23AA	18,700- 106- 55-C	Y23TL	01,820- 417- 70-C	U44PDX	15,470- 178- 35-A		
				Y21OJ	16,830- 208- 22-C	Y23GB	45,140- 245- 61-C	U26AZ	591,856- 1256- 142-B		
				Y21RN	140,154- 463- 94-C	Y66YF	39,265- 363- 58-C	UA3MDV	303,240- 744- 114-B		
				Y22TF	86,824- 431- 84-C	Y12QA	38,048- 237- 58-C	UA3V	175,134- 565- 102-B		
				Y21MG	25,941- 400- 71-C	Y22UB	31,926- 192- 51-C	U43ZB	172,800- 462- 98-B		
				Y23AA	18,700- 106- 55-C	Y49RF	18,497- 147- 53-C	UA4NC	79,079- 315- 77-B		
				Y21OJ	16,830- 208- 22-C	Y23VB	19,288- 104- 52-C	U10QM	72,491- 303- 71-B		
				Y22TU	24,520- 985- 80-C	Y23CM	15,042- 89- 46-C	U24AWB	69,450- 278- 75-B		
				Y21RN	140,154- 463- 94-C	Y37ZM (Y21NM,ops)	61,083- 349- 59-B	U23RBT	61,083- 349- 59-B		
				Y22TF	86,824- 431- 84-C	Y23LJ/a	8,160- 92- 24-C	UA4CQ	57,753- 260- 89-B		
				Y217Y	190,460- 693- 88-C	Y38ZM	6,200- 48- 40-C	U46HON	37,188- 281- 36-B		
				Y22OE	303,584- 1013- 108-D	Y47VL	5,106- 54- 23-C	RA3ONC	24,864- 222- 32-B		
				Y22TF	303,584- 1013- 108-D	Y23RJ	2,197- 47- 13-C	U44LAF	606,350- 366- 60-C		
				Y22OE	310,800- 863- 115-D	Y22HF	1,840- 43- 18-C	UA4ED	300,875- 1118- 95-C		
				Y22TF	310,800- 863- 115-D	Y22PE/a	234- 39- 9-C	U43DPX	293,846- 979- 109-C		
				Y22OE	310,800- 863- 115-D	Y41CM (Y21RM,Y41s NM,YM,ops)	144,144- 530- 88-C	RZ3AW	144,144- 530- 88-C		
				Y22TF	310,800- 863- 115-D	Y41CM (Y21RM,Y41s NM,YM,ops)	144,144- 530- 88-C	UA4YS	128,100- 508- 84-C		
				Y22OE	303,584- 1013- 108-D	Y37I (Y26YI,Y62s UI,Y1s,ops)	127,537- 481- 85-C	UA3YAO	127,537- 481- 85-C		
				Y22TF	303,584- 1013- 108-D	Y1ATAF	114,032- 526- 71-C	RA3RN	105,700- 302- 100-C		
				Y22OE	314,160- 1018- 112-D	Y43CQ (Y43G, Y56RJ,ops)	105,412- 458- 73-C	U66HRZ	102,715- 470- 77-C		
				Y22TF	310,800- 863- 115-D	Y43CQ (Y30QJ,Y56RJ,ops)	102,715- 470- 77-C	RA3PP	97,800- 494- 75-C		
				Y22OE	310,800- 863- 115-D	Y33CC (Y33s VC,ZC,ops)	96,368- 444- 78-C	U1AUUA	96,906- 481- 65-C		
				Y22TF	303,584- 1013- 108-D	Y41CL (Y42VE,Y41s FL,HL,ops)	74,356- 505- 54-C	U43RO	74,356- 505- 54-C		
				Y22OE	303,584- 1013- 108-D	Y41CL (Y42VE,Y41s FL,HL,ops)	74,356- 505- 54-C	U46EDW	74,356- 505- 54-C		
				Y22TF	273,912- 884- 101-D	Y56CE/p (Y26AD,Y56s UE,ZE,ops)	67,146- 438- 53-C	U3JD	67,146- 438- 53-C		
				Y22OE	273,912- 884- 101-D	Y56CE/p (Y26AD,Y56s UE,ZE,ops)	67,146- 438- 53-C	U43VLO	64,874- 270- 73-C		
				Y22TF	147,478- 592- 92-D	Y33CJ (Y33s PJ,UJ,WJ,ops)	64,874- 270- 73-C	UW3DW	62,444- 367- 67-C		
				Y22OE	310,800- 863- 115-D	Y33CJ (Y33s PJ,UJ,WJ,ops)	64,874- 270- 73-C	RA3NB	62,433- 334- 63-C		
				Y22TF	303,584- 1013- 108-D	Y66CA (Y66s OA,HA,KA,ops)	62,433- 334- 63-C	UA6AJU	47,091- 437- 35-C		
				Y22OE	303,584- 1013- 108-D	Y66CA (Y66s OA,HA,KA,ops)	62,433- 334- 63-C	RA4Y	45,864- 265- 52-C		
				Y22TF	273,912- 884- 101-D	Y65CH (Y65s KN,LN,Y4XN,ops)	65,480- 433- 77-D	U1V3ABN	44,544- 234- 84-C		
				Y22OE	273,912- 884- 101-D	Y65CH (Y65s KN,LN,Y4XN,ops)	65,480- 433- 77-D	U3JCJ	43,088- 168- 52-C		
				Y22TF	273,912- 884- 101-D	Y39CH (Y24GH,Y39s SH,ZH,ops)	67,166- 304- 66-D	U18BBN	43,088- 168- 52-C		
				Y22OE	273,912- 884- 101-D	Y39CH (Y24GH,Y39s SH,ZH,ops)	67,166- 304- 66-D	U1AT	40,885- 294- 47-C		
				Y22TF	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	U28AFN	39,364- 263- 52-C		
				Y22OE	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	U44YG	34,680- 292- 34-C		
				Y22TF	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	RA3EF	28,608- 1665- 54-C		
				Y22OE	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	UW6AU	26,620- 266- 50-C		
				Y22TF	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	Y02CTY	22,156- 352- 57-C		
				Y22OE	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	Y02CTY	22,156- 352- 57-C		
				Y22TF	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	Y02LEF	21,436- 321- 42-A		
				Y22OE	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	Y02CJX	5,622- 136- 22-A		
				Y22TF	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	RA4CD	15,588- 167- 28-C		
				Y22OE	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	Y02BYT	5,622- 136- 22-A		
				Y22TF	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	U13TM	30,198- 148- 44-C		
				Y22OE	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	Y02CJX	5,622- 136- 22-A		
				Y22TF	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	RA4CD	15,588- 167- 28-C		
				Y22OE	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	Y02CJX	5,622- 136- 22-A		
				Y22TF	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	U13TM	30,198- 148- 44-C		
				Y22OE	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	Y02CJX	5,622- 136- 22-A		
				Y22TF	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	RA4CD	15,588- 167- 28-C		
				Y22OE	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	Y02CJX	5,622- 136- 22-A		
				Y22TF	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	RA4CD	15,588- 167- 28-C		
				Y22OE	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	Y02CJX	5,622- 136- 22-A		
				Y22TF	11,687- 131- 31-D	Y62CJ (Y62s TJ,WJ,ops)	39,450- 266- 50-C	RA4CD	15,588- 167- 2		

UZBEFWF (UA6EN,UA1-109-33/U6E,ops)	RC8I/UC1WWO (+ops)	UI4L/JA4AO	33,080-	256-	30- A	Cyprus	JH9CAU	1,089-	23-	11- C
44,856- 220- 55- D	100,380- 366- 79- D	UI9ACQ	24,492-	214-	26- A	P18S (5B4s MF,WN,XF,XN,ops)	JG2IGY	889-	20-	12- C
UZBLBW (RABLW,U6E,LMK,LRL,LRW,	UC1WXE (+ops)	UI9AWX (RI8AK,UI8ACI,ops)	141,470-	468-	70- D	1,424,970- 2111- 142- D	JL1EUP/1	810-	36-	9- C
ops)	11,658- 171- 29- D					JAY/AA (JJ3CNL,JY7E,JED/WL,ops)	JAY/AA	781,592-	1338-	13B- D
42,240- 290- 56- D						JAYBY (J01DPG,JE8-BRD,KLL,IF86	JAYBY			
UZ3AXK (UV3AHY,UV3FT,UA3-170- 997,ops)	24,881- 420- 51- D					BNZ,LP8,JG8NFE,JH8s PNE,WBR,	BNZ,LP8,JG8NFE,JH8s PNE,WBR,			
UZ3GX1 (+ops)	21,032- 145- 44- D					JR88DHA,TON,ops)	JR88DHA,TON,ops)	773,415-	1353-	135- D
						JA1ZLO (JF2ILW,JQ1FO,JO1BTP,	JA1ZLO (JF2ILW,JQ1FO,JO1BTP,	756,608-	1327-	128- D
						JRSKDR,JR8MF,ops)	JRSKDR,JR8MF,ops)			
Ukraine										
UBSFAN	196,420- 700- 92- A	UD6DFF	79,164-	266-	98- A	Tadzhikistan	UL7LBI	27,475-	296-	25- A
R6510V	178,192- 635- 86- A	UD8DWC	287,080-	249-	40- A	UT4UK/JR5J	60,419-	469-	31- A	
UY5TE	161,767- 652- 83- A	UD6DKW	35,728-	168-	58- C	UJ8JA	257,085-	646-	24- C	
R6511U	160,380- 546- 90- A	UD700WU (ZA3YBA,UD6s DCA,GFZ,ops)	130,510-	716-	82- D	Kazakhstan	UL7TCW	913,116-	1393-	141- C
RB5EX	166,150- 588- 90- A					UL8LWU (UL7s 026-703,026-704,ops)	121,664-	458-	84- D	
R651CCP	124,640- 498- 82- A									
RB5VT	99,838- 474- 77- A	UF6CBA	48,237-	524-	33- C	Kirghizia	UMBMFO	12,663-	148-	21- B
UB4JUXM	84,845- 322- 71- A									
UB3MIN	48,508- 240- 67- A									
UB4DYA	40,755- 172- 67- A	RH8E (RH8EA,ops)	963,010-	1821-	115- A	Zone 31	UZ9YXI (+ops)			
UB4AR	29,205- 263- 53- A									
UB4LAT	18,603- 211- 27- A									
UB5FSK	17,267- 208- 31- A									
UB5IPN	6,308- 182- 19- A	RO5OI	27,262-	212-	43- B	Asiatic RSFSR	EK9ZAA	95,874-	740-	29- A
UT5DK	845,427- 1887- 121- B	UJOSDN	71,866-	499-	53- C	RA9UKM	148,852-	625-	68- B	
UB5CC	112,641- 393- 69- B	UOSOLW	13,572-	184-	29- C	RZ9UA	947,525-	1423-	151- C	
UB4TXN	101,866- 474- 73- B	UO4OXA (+ops)	116,686-	569-	77- D	UA9OPI	71,280-	308-	55- C	
UB5MAF	34,086- 251- 46- B					UA9URF	41,097-	179-	57- C	
RB5UZQ	26,760- 213- 40- B					RA9HO	288,860-	129-	60- C	
RB5QF	13,392- 184- 27- B					UZ9YXI (+ops)				
UB7VA	446,942- 1211- 122- C	Lithuania	LY2OU	334,910-	939-	107- A	UZ9OJX (UA9s OGL,145-283,ops)	226,395-	639-	81- D
305,980- 975- 130- C	LY2BTA	230,775-	890-	85- A		184,420-	604-	72- D		
UT5IAJ	328,988- 1042- 108- C	LY3BP	181,142-	681-	74- A	Kazakhstan	UL7FCW	98,250-	451-	50- A
RB4JF	325,844- 1050- 106- C	LY2BLA	88,595-	513-	66- A	UL7NEA	39,072-	392-	22- C	
RB5BA	112,641- 393- 69- C	LY2BTD	85,820-	523-	70- A					
UB4TQN	101,866- 474- 73- B	LY1B1	38,998-	283-	47- A					
UB5AF	34,086- 251- 46- B	LY2ZG (LY175,ops)								
RB5QH	189,063- 689- 93- C									
UB4XK	171,598- 603- 93- C									
RB5H5	98,552- 375- 72- C									
UB4FWW	89,094- 530- 62- C									
UB5IDG	78,870- 530- 69- C									
UB5SEF	76,452- 393- 69- C									
RB5CL	75,554- 344- 74- C									
UB5BCJ	70,609- 285- 77- C									
UB5FZH	59,400- 274- 80- C									
RB4INP	47,124- 275- 63- C									
UB5MCS	47,034- 218- 54- C									
UB5LAL	45,440- 200- 80- C									
UB4LCB	44,858- 281- 54- C									
UB4HZ	39,974- 254- 46- C									
UB5ANK	38,872- 302- 43- C									
UB4UK	36,149- 297- 37- C									
UB4MTJ	35,532- 270- 42- C									
UB5INW	32,440- 329- 32- C									
UY5WA	27,105- 305- 39- C									
UB4LSS	26,504- 254- 32- C									
UB4BF	25,279- 147- 31- C									
UB3MP	21,822- 171- 31- C									
RB5VW	19,800- 146- 33- C									
UB5FZF	19,459- 265- 29- C									
UB5NBW	18,038- 194- 29- C									
UB5GLX	13,828- 65- 62- C									
UB4GU	11,067- 261- 17- C									
UB4YJN	8,910- 166- 18- C									
UB5VK	4,028- 77- 17- C									
UB5LFG	3,388- 81- 12- C									
UB5SSR	836- 32- 11- C									
UB52ME	152- 12- 4- C									
RT1U1 (RB5MF,RT4U,M,UT3UA,										
UT4UZ,UT5US,GR,ops)	2,917,972- 3492- 204- D									
UB3IWA (RB5U,UB5FZ,MLM,										
IKQ,IRZ,-073-151,ops)	1,824,932- 2241- 208- D									
4K6ZI (RB5s FF,FT,RO4E,UB5FAK,										
FBV,UB5OB,ops)	1,212,405- 2965- 131- D									
UB4CWW (RB5s QRO,GRW,UB4QW,										
UB5s QLR,-084-866,ops)	525,266- 1262- 119- D									
4K4BW/R4H (RA4HMZ,UA4HKS,										
4K4GA,ops)	13,572- 115- 39- D									
Zone 30										
European Russian RSFSR										
UZ4WWQ	22,622- 422- 70- A									
UJ4FL	43,000- 307- 43- C									
RA4HKS	24,682-	162-	43- C							
UZ4WZA (RW4s WR,W,Z,UA4s W,										
WI,WW,ops)	704,462-	1391-	142- D							
UZ4WWA (RW4s WA,UA4s WA,-095-729,										
-095-789,ops)	409,532-	1130-	88- D							
Estonia										
ES4XB (+ops)	181,052-	503-	128- D							
Zone 30										
European Russian RSFSR										
UZ4WWQ	22,622-	422-	70- A							
UJ4FL	43,000-	307-	43- C							
RA4HKS	24,682-	162-	43- C							
UZ4WZA (RW4s WR,W,Z,UA4s W,										
WI,WW,ops)	704,462-	1391-	142- D							
UZ4WWA (RW4s WA,UA4s WA,-095-729,										
-095-789,ops)	409,532-	1130-	88- D							
Zone 33										
Asiatic RSFSR										
UA9BK	27,534-	260-	32- B							
UA9QFA	231,100-	739-	75- C							
UA9JB	89,888-	378-	53- C							
RA9JD	66,665-	288-	67- C							
Zone 33										
Asiatic RSFSR										
UA9BK	27,534-	260-	32- B							
UA9QFA	231,100-	739-	75- C							
UA9JB	89,888-	378-	53- C							
RA9JD	66,665-	288-	67- C							
Zone 34										
Asiatic RSFSR										
UA9LQZ	79,730-	296-	70- A							
RA9FA	244,398-	616-	77- C							
UA9LH	134,672-	486-	76- C							
RA9FD	7,220-	90-	38- C							
UZCWU (UA8CHW,UB5s CF,CQ,										
CR,ops)	718,750-	1380-	125- D							
Zone 36										
Canary Islands										
EA8BDR	49,147-	212-	49- B							
EA8BURL (EA8s BEE,BEZ,BIK,BVH,ops)	403,214-	982-	83- D							
Zone 37										
Portugal										
CT1QF	28,888-	160-	46- B							
CT1AHU	14,430-	92-	37- B							
EA7QZ	35,136-	203-	48- C							
EA7AAW	21,866-	229-	26- C							
EA5CHT	13,520-	102-	40- B							
EA1AHA	6,440-	70-	28- B							
EA7BYM	3,770-	41-	26- B							
EA9GKM	2,660-	47-	14- B							
EA2BUZ	1,348-	48-	14- B							
EA6CCK	68,944-	604-	31- B							
EA3GCJ	31,871-	313-	29- B							
EA0VJU	18,816-	140-	42- B							
EA5CJ	14,430-	102-	40- B							
EA7QY	4,020-	24-	12- C							
EA7AAW	2,186-	96-	10- C							
EA5GFA	15,301-	252-	30- C							
EA7CA	12,644-	136-	28- C							
EA6YU	8,242-	97-	26- C							
RA9EY	3,536-	38-	26- C							
EA2ATN	2,892-	71-	12- C							
EA2BJ	2,440-	83-	10- C							
Byelorussia										
UC2D0	150,777- 483-	99- A								
RC2CO	81,720-	348-	72- A							
UC1LWN	189,945-	696-	81- C							
UC2WEL	36,990-	471-	95- C							
RC2AY	30,500-	713-	60- C							
UC2LN	26,531-	267-	43- C							
UC2AQF	13,138-	286-	42- C							