

2003 IARU HF World Championship Results

*Oh, conditions outside are frightful
And the rate is not delightful.
But despite the aurora's glow,
QSO, QSO, QSO!*

That little ditty, contributed by Ward, NØAX, and sung to the Christmas tune *Let It Snow*, summed up this year's IARU HF World Championship. Actually, Saturday was the problem day, with propagation pretty much returning to normal on Sunday. There's a short summary of propagation at the end of this article, with a plot on the Web version of the predicted response of the F region showing why Saturday wasn't too good.

The IARU Contest

There's no doubt that the IARU contest is a fun event. PAØMIR echoes this statement with "Always fun to participate in the IARU test. This year I even planned my holiday to start just a day after the contest, so really in a hurry to prepare the log." HA5X chimes in, "It was great fun! I used a new call sign and a brand new radio from my brand new apartment."

Another aspect of the IARU test is it's a great way to get back into contesting if you've been away for a while. For example, NR9A comments "After being off the air since 1997, it was great to be back in the contesting mode, even though it was a casual effort."

One more thing about IARU—it reminds everyone that the fall contest season is rapidly approaching.

Contest Summary

The number of logs received for this year's contest was up about 9% from last year. The largest increases in participation came from Poland (113 logs last year, 241 logs this year) and European Russia (87 logs last year, 116 logs this year).

This year 51 ITU zones (out of 90 total) sent in logs. That's one more zone than last year.

By continent, Europe led the pack with 1058 logs. By zone, zone 28 sent in the most logs—648. And by country

Expanded Results, Line-Score Printouts Available

For complete contest results online, please visit www.arrrl.org/contests/results. ARRL members without Internet access may obtain a printout of the complete line scores by sending a self-addressed, stamped envelope to ARRL Contest Results, 225 Main St, Newington, CT 06111. Please be sure to include the contest name and year.

(more properly *entity*), US stations submitted 394 logs. See the accompanying tables for a more detailed breakdown of these three categories.

Close Competitions

This year's results are broken out into World, Europe, North America W/VE, North America non-W/VE, Asia, South America, Oceania, and Africa by the four categories: Single Op Mixed, Single Op Phone, Single Op CW and Multiop.

Table 1

Top Scores

World	LY7Z (LY2TA, op)	2,038,462
Single Op Mixed	HA8DU	1,628,206
OL5Y		3,504,774
5B4AGM (RW3QC, op)		3,404,544
3V8BB (YT1AD, op)		3,394,912
EA8/OH4NL (OH2BYS, op)		3,315,312
RK4FF		2,783,048

Single Op Phone

FY5FY	2,792,467
ZX5J (PP5JR, op)	2,663,117
ZX2B (PY2MNL, op)	1,761,218
EA5DFV	1,680,200
S57UN	1,228,016

Single Op CW

PY0FF (YU1RL, op)	3,290,760
YT6A	2,511,486
TA2ZF	2,430,492
S58A	2,131,800
OH2BH (OH2UA, op)	2,038,462

Multiop

P3A	7,008,176
HG6N	3,574,831
HG1S	2,928,508
RT9W	2,650,673
RM6A	2,561,280

Europe

Single Op Mixed	
OL5Y	3,504,774
RK4FF	2,783,048
OR3T (RA3AUU, op)	2,505,594
UT5UGR	2,481,210
LY2FY	2,203,032

Single Op Phone

EA5DFV	1,680,200
S57UN	1,228,016
IO3P (IZ3EYZ, op)	1,170,350
LA9DFA	968,792
RN4LP	854,382

Single Op CW

YT6A	2,511,486
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S58A	2,131,800
OH2BH (OH2UA, op)	2,038,462
LY7Z (LY2TA, op)	2,038,462
HA8DU	1,628,206
Multiop	
HG6N	3,574,831
HG1S	2,928,508
RM6A	2,561,280
RL3A	2,166,570
OE2S	1,950,480

W/VE

Single Op Mixed	
VE3EJ	1,427,280
K4ZW	1,344,108
K3ZO	1,301,740
CK3AT	1,174,547
N1UR	945,567

Single Op Phone

VE3EY	627,750
K9SD	598,416
K6XX	511,836
N9AG	423,640
K6NR	414,194

Single Op CW

W1WFEF	1,312,170
K5GN	1,183,930
WC1M	974,592
K4VX (AG9A, op)	960,375
AA3B	917,800

Multiop

KH7X	1,905,930
K4JA	1,287,516
NØNI	978,267
K5KG	869,302
NA5S	852,432

North America non-W/VE

Single Op Mixed	
ZF2AH	354,203

Single Op Phone

6Y4Y	58,432
T12KAC	21,358
HP3XBS	15,312

Single Op CW

VP9/K1YR	371,070
XE2AC	84,750

Multiop	
TG9ADV	44,775

Asia

Single Op Mixed	
5B4AGM (RW3QC, op)	3,404,544
RG9A (UA9AM, op)	2,277,633
UA9ZZ	1,446,564
UA9CLB	1,404,271
RM0A (UA0ANW, op)	1,337,777

Single Op Phone

JA6GCE	637,777
JE2HCJ	553,700
RA0AM	552,906
JM1LPN	532,167
YM0T (TA2RC, op)	512,732

Single Op CW

TA2ZF	2,430,492
UP4L (UN7LZ, op)	1,203,018
RW9TA	1,158,840
UA9YAB	1,119,807
TA3DD	874,692

Multiop

P3A	7,008,176
RT9W	2,650,673
RF9C	2,144,645
RK0AXX	1,189,377
JH4UTP	513,825

South America

Single Op Mixed	
PY2NY	1,156,064
LU5FF	234,728
PY2OMS (PY5EG, op)	192,072
PY1NB	183,134
PY8AZT	119,070

Single Op Phone

FY5FY	2,792,467
ZX5J (PP5JR, op)	2,663,117
ZX2B (PY2MNL, op)	1,761,218
ZW5B (PT2FM, op)	1,073,518
AY8A (LU8ADX, op)	653,744

Single Op CW

PY0FF (YU1RL, op)	3,290,760
LU7EE	612,612
LU1EWL	522,879
PY2EMC	493,584
PY2NDX	412,104
Multiop	
LT1F	2,112,750
LV0N	1,321,173
LR7A	1,238,952
LO7H	1,097,980
PQ2Q	974,482

Oceania

Single Op Mixed	
YB0WWW	13,464
DU1EV	6,486
VK7GN	5,444

Single Op Phone

DU9RG	436,020
DU1UTD	108,071
VK4DMP	44,138

Single Op CW

VK1AA	1,047,654
VBNT	253,456
ZL1AIH	94,080

Multiop

KH0NX	209,628
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Africa

Single Op Mixed	
3V8BB	3,394,912
EA8/OH4NL (OH2BYS, op)	3,315,312
ZS4TX	2,125,893
CT3KN	61,659

Single Op Phone

SU7JB	938,994
CT3FQ	178,267
8Q7LC (VK6LC, op)	123,938

Single Op CW

SU9US	560,367
ZS1EL	50,297
CN8YR	20,384

Multiop

ZS0M	542,260
ZS5NK	282,982



A group of tired, weary, warriors...Under normal circumstances they masquerade as K3LR. In this year's IARU HF Championship they morphed themselves into W1AW/3. Seated: K8NZ, N3GJ, K3UA, K8AZ, K8MR. Standing: K3LR, N3RA, W9ZR, W9RE, N9RV.

Table 2
Logs Received by Continent

EU	1058
NA	448
AS	242
SA	79
OC	26
AF	19
AN	1

Table 3
Logs Received by Country (Top 5)

US	394
Poland	241
Germany	143
Japan	117
European Russia	116

Table 4
Logs Received by Zone (Top 5)

Zone 28	648
Zone 29	224
Zone 8	219
Zone 45	117
Zone 27	103

Table 5
IARU Officials

G3BJ	1,553,930
K1ZZ	1,222,604
PT2ADM	425,964
PA7BT	150,629
9V1UV	29,205
LA2RR	25,665
VK3ADW	14,760
LZ1US	3,375

From February 2004 QST © ARRL

Table 6
Headquarters Stations

Call	Score	Call	Score
R7HQ	20,817,380	SK9HQ	3,892,030
IUxHQ	17,824,836	PJ2HQ	3,650,725
DA0HQ	16,507,800	CT1REP	2,448,459
GB5HQ	15,705,914	B4HQ	2,302,128
TM0HQ	15,394,425	LZ0HQ	2,184,028
SN0HQ	14,483,480	OZ1HQ	2,019,580
EM5HQ	13,425,363	ZA1A	1,922,032
9A0HQ	13,085,082	4L0HQ	1,405,170
YT0HQ	11,662,121	EI0HQ	1,100,284
S50HQ	11,311,048	YM0KA	1,024,200
OL3HQ	11,254,590	HB9A	904,720
OH2HQ	10,880,332	YE0HQ	821,289
PA6HQ	10,689,448	VA3RAC	717,576
OExXHQ	10,651,968	4X4ARC	675,750
YL4HQ	10,625,768	CX1AA	655,020
LY0HQ	9,721,125	YV5AJ	606,152
YR0HW	9,081,457	P40HQ	368,198
ES9A	7,950,063	HS0AC	341,582
W1AW/3	7,778,210	ZL6A	302,562
T90HQ	7,420,350	LN2HQ	268,332
HG0HQ	7,143,168	EW5HQ	189,290
JY6ZZ	6,229,730	AT0HQ	61,857
NU1AW	4,954,896	ZS6SRL	12,636
ER7HQ	4,784,976	HR2RCH	2,354
8NxJHQ	4,368,462	ZW2HQ	1,080

There were several tight races in this year's event.

The closest race was between OL5Y, 5B4AGM (RW3QC, op) and 3V8BB, in the World Single Op Mixed category. OL5Y took the winner's honors from 5B4AGM by only 2.9%. YT1AD operating 3V8BB was only 0.3% out of second place!

The next closest race was between FY5FY and ZX5J (PP5JR, op) in the South America Single Op Phone category. FY5FY ended up on top by 4.8%. These two stations also placed first and second



Dave, BA4RF, busily operating the B4HQ Headquarters station.



Gianni, IT9ORA, relaxes at his station after the contest.

in the World Single Op Phone category.

The closest race in North America was between VE3EJ and K4ZW in the W/VE Single Op Mixed category. VE3EJ took first place from K4ZW by 6.2%, with K3ZO not too far behind in third place.

This year's contest also had a couple repeat winners. The multi-op team at P3A repeated in the World Multi-Op and Asia Multi-Op categories. Their score this year was up 40% from last year. And the HG6N team repeated in the Europe Multi-Op category. Good show, guys!

IARU Officials

A big "thanks" to all the IARU officials who participated in this year's event. G3BJ came out on top, followed by K1ZZ and PT2ADM. See Table 5 for all the IARU Officials.

HQ Stations

As expected, the battle between the

Headquarters Stations was intense. The R7HQ team ended up on top by a nice margin. Second place went to the Italian team, with DAØHQ holding down third place. See Table 6 for the scores from these true multi-multis.

WRTC-Style Operating

A new twist to this year's contest was the addition of WRTC-style team competition. This idea came directly from WRTC 2002 in Finland, and it attracted 18 teams—8 from Europe, 1 from South America, and 9 from North America. I suspect that next year's contest will add even more WRTC-style teams to the competition. See NØAX's story about this aspect of this year's contest on the Web version of this article.

Other Stories on the Web

For interesting narratives of IARU operations, please go to the Web version of this article. There you'll find links to the W1AW/3 effort (told by K3LR), the GB5HQ effort (told by G4BUO), the four WRTC-style Slovenia/Croatia entries (told by 9A6XX), the SNØHQ effort (told by SP5UAF), the N3BB effort (told by N3BB and K5PI), the W5KFT effort (told by WM5R), and the B4HQ effort (told by BD5RV).

Propagation

I was a bit disappointed in band conditions during the first 12 hours of the contest but things did manage to pick up during the last half.—K6WC

When I started to work the contest on Saturday around 9AM PST, I wasn't sure if the propagation conditions were bad or if I had just done a bad job fixing the R7!—KG6RJ

Poor start on Saturday, but conditions improved during the contest.—DH5ST

We didn't even hear a European for the first six hours of the contest.—NØAX

With Cycle 23 in its decline, the smoothed sunspot number was around 60 for this year's contest. That's a far cry from the peak of 121 in April 2000 (which was followed by a great second peak of 116 in November 2001). This level of solar activity took its toll on the higher bands, with 10 meters suffering the most.

And if a low number of sunspots keeping the higher bands marginal wasn't enough, a coronal hole high-speed stream began on July 11 (the day before the contest). This drove the planetary Ap index to 46, and caused a reduction in the F region ionization at all latitudes on the first day of the contest. Fortunately, the F region recovered on the second day.

The predicted response of the F region

to this high-speed stream is shown in the plot in the Web version of this article. The plot comes from the SEC (Space Environment Center) STORM model. The data is in the format of a scaling factor that is to be applied to the quiet time F region critical frequency for F2. For more information about the STORM model, see sec.noaa.gov/storm.

Decline in W/VE Top Scores

Among US and Canadians, scores as a whole tended to be lower in 2003 compared to 2002. VE3EJ's Mixed Mode score of 1.4 megs, while good enough to take top honors in 2003 would have only placed eighth last year, while K5TR's Phone Only winning score of 959k would only have placed sixth in 2002. In CW only, W1WEF's 1.3 Megs would not have cracked last year's Top Ten. The KH7X 1.9 Meg Multioperator score was the only winning W/VE score that would have also taken the category in 2002. Don't get us wrong—winning any category in the contest is tough. It just goes to show how much difference in propagation and conditions a year can make.

John, VE3EJ held off a tough challenge from runner-up Ken, K4ZW, in the Single Operator Mixed Mode category. Fred, K3ZO, and Ron, CK3AT, were the only other W/VE entries to top the 1 million point barrier in 2003. Top Ten scores in the category were posted from the ON, VA, MDC, WMA, IL, SCV, OH and ORG sections.

In the Single Operator Phone Only category there was George, K5TR, then there were the rest of the operators, as George managed to post the largest margin of victory among W/VE stations in his category. Dan, W7WA put up a valiant challenge to hold onto second place while Ken, K6HNZ, operated from VE1JX and placed third. The sections of STX, WWA, MAR, MDC, SFL, NH, GA and WI appear in the category Top Ten.

Jack, W1WEF in CT, and David, K5GN in STX, duelled to a one-two finish in the Single Operator CW Only category. These were the only two stations to top the 1 megapoint barrier in 2003. Dick, WC1M, and Mark, AG9A operating from the K4VX station, finished less than 15,000 points apart to take the next two places. Ten different sections—CT, STX, NH, MO, EPA, TN, IN, ON, EB and WMA—are represented in this particular Top Ten.

While the top three Multioperator entries in 2003 would have made the Top Ten last year, the rest of the 2003 Top Ten box residents would have come up a bit short. The KH7X team in the PAC section continued to roll right along, post-

ing another great effort while winning among W/VE multioperator entries. K4JA placed second and NØNI followed up their 2002 win with a strong third place show. The category also featured 10 different sections—PAC, VA, IA, WCF, NM, VT, CT, IL, SFL and STX—among the Top Ten entries.

On the Other Hand...Worldwide Winners

While W/VE scores tended to decline, the top World scores did not. In fact 30 of the 40 Top Ten World scores in 2003 would have appeared in the 2002 boxes, including all 10 of the Single Operator Mixed Mode scores.

Martin, OL5Y, was the winning score among the Single Operator Mixed Mode entries in 2003. Jack, RW3QC, operating the 5B4AGM station was second, only 10,000 points ahead of Hrane, YT1AD, operating the 3V8BB station. Ten different DXCC entities appear in this category Top Ten. No W/VE stations appeared in this category's worldwide box.

South Americans led the way in the Single Operator Phone only category with Didier, FY5FY, heading the list. Next was a pair of Brazilians—Sergio, PP5JY, using ZX5J, and Wanderly, PY2MNL, using ZX2B. Eight DXCC countries are represented in this category Top Ten, with George, K5TR, being the only W/VE station to make the worldwide category box.

Sasa, YU1RL, ventured down to PYØFF and brought home top honors in the Single Operator CW only worldwide box score. Ranko, YT6A, finished a strong second about 80,000 points ahead of Sergiy, TA2ZF. You will find 10 different DXCC entities among this Top Ten, with Jack, W1WEF, representing the W/VE stations.

Seven DXCC countries are found among the Top Ten Multioperator category scores. Cyprus again was a hot spot of operations, as the P3A station showed location and skill can be a powerful combination. A pair of Hungarian multis—HG6N and HG1S—took second and third. The KH7X multi was the only W/VE Top Ten in the category, with no mainland multi being able to crack the box.

2004 Contest

The 2004 IARU HF World Championship will be held the weekend of July 10-11. The announcement will be published in the April 2004 issue of *QST* (and the full rules will be found on-line at www.iaru.org/contest.html). Hope to see you in the 2004 event!

QST