

The 2012 IARU World HF Championships

We've come a long way...

Carl Luetzelschwab, K9LA, k9la@arrl.net

My first IARU contest. Addictive. Will be back next year!
– K6JB

This is my first try at HF contesting. I had a ton of fun hearing and talking to people all over the world. – KB3YSR

First IARU HF Championship! Did pretty well with just 5W. Am very happy. – KJ6MQM

My first contest after getting my ticket two months ago. Thanks for all the fun! – VP9NNL

I am 14 years old. I got my license in December 2011. It is the first time that I am participating in your contest. – VU3TMO

These ARRL Soapbox comments and many more (www.arrl.org/soapbox) highlight that the IARU contest in July is a great way to get into contesting. There are lots of people to work — in fact, the number of logs ticked up nicely this year — whether on Phone or CW or both. As you'll see in the "participation stats," you're in good company if you operate "barefoot" with 100 watts or less. So plan on jumping in this July!

Online Extended Writeup

In addition to this *QST* writeup, visit the ARRL website for more information on the 2012 IARU HF World Championships (www.arrl.org/contest-results-articles). Additional material includes a W1AW/7 narrative by the Arizona Outlaws Contest Club, photos from several of the HQ stations (9A2ØHQ, LX75HQ, OHØHQ, S5ØHQ, and AT1HQ), and a story from UT7DK operating at 4Z4AK.

Participation Statistics

As mentioned above, the number of logs received this year (4054) increased by 10.3% over last year. This also sets the all-time record for the number of logs received (the previous record was 3714 logs in 2010). Figure 1 is the number of logs by year. This contest has shown, as have other contests, great growth over the years —



Pai, VU2PAI, operated on 20 and 40 meter SSB for the AT1HQ team.

and there's no reason to think it will stop.

The most popular category was Single Operator, CW Only, Low Power, followed closely by Single Operator, Phone Only, Low Power. There were more HQ stations than those brave souls who weathered the Single Operator, Mixed Mode, QRP category!

If you're a Single Operator, the most popular mode was CW. Phone wasn't too far down from CW, and likewise Mixed wasn't too far down from Phone. Also if you're single op, the most popular power category was Low Power. The number of entries in Single Operator, Low Power was more than twice the number of entries in High Power. This bodes well for those participants without amplifiers. In terms of percent, Low Power was 65% of all Single Ops, High Power was 27% of all single ops, and QRP made up the 8% balance.

With respect to single op participation by zone, ITU Zone 28 (eastern and southern Europe) continued its dominance in this event. But this year Zone 8 (East Coast US) participation edged out Zone 29 (old European Russia) participation — this has happened before, but it is rare.

Finally, 20 meters continued its first place finish for the band with the highest number

of QSOs. With Solar Cycle 24 on the upswing (at least back in July!), the number of QSOs on 15 meters topped the number of QSOs on 40 meters by a healthy amount. 10 meters had a decent showing for the summer, with 80 meters and 160 meters bringing up the rear.

And The Winners Are ...

A list of the winners and runner-ups for the World and W/VE for all the Single Operator categories and the Multioperator category can be found on page 88. The right-most column is the winning percentage — in other words by how much, in terms of a percentage, the winner beat the runner-up. This

table is a condensed version of the W/VE Top Ten and the Non W/VE Top Ten, but includes QSOs and multipliers.

The closest race was in W/VE Single Operator, Mixed Mode, High Power. VE3AT, using the call XM3AT, bested VY2ZM by only 1.8% by making both more QSOs and more multipliers.

The second closest competition was between UW2M (URØMC, op) and C4W (5B4WN, op) in the World Single Operator, Mixed Mode, High Power category. Both had about the same number of QSOs, but UW2M significantly won in the multipliers to win by 3.0%.

The third closest race was also in Single Operator, Mixed Mode but for Low Power in W/VE. W4IX had fewer QSOs but enough additional multipliers to beat NR3X (N4YDU, op). The winning margin was 3.1%.

Congratulations to all the winners! And all you runner-ups — keep trying — your time may come.

Records

Four records were broken in the 2012 event: Single Operator, Mixed Mode, Low Power and Multioperator on the World side, and

IARU Member Society Headquarters Stations

Headquarters and Administrative Council station scores were tabulated by the World Wide Radio Operator's Federation (www.wwrof.org) and are listed in *QST* as a courtesy to the Amateur Radio community.

Call	Score	QSO	Mults
TM0HQ	28,025,946	17,048	507
EF0HQ	26,919,279	15,857	493
DA0HQ	25,279,410	21,485	530
GO2HQ	22,440,108	15,136	474
IOxHQ	22,379,979	17,031	503
R3HQ	22,312,448	13,889	512
OL2HQ	22,262,882	15,433	514
S50HQ	19,645,892	14,214	491
YT0HQ	19,591,882	14,580	491
SN0HQ	19,515,470	15,929	494
9A20HQ	17,200,566	13,518	457
YR0HQ	16,698,825	13,039	495
EM5HQ	16,600,064	11,636	464
LZ7HQ	14,594,342	11,492	469
LRxF	13,371,060	7,602	370
LX75HQ	12,713,736	10,008	399
LY0HQ	12,003,762	9,710	417
HG0HQ	11,397,320	9,801	440
LN2HQ	9,978,045	8,643	371
HB9HQ	9,878,762	9,679	394
OZ1HQ	9,149,870	7,620	383
OP0HQ	8,345,625	6,869	375
ER7HQ	8,019,935	7,491	385
W1AW/7	7,830,256	8,320	302
SX0HQ	7,823,765	8,227	395
E70ARA	7,518,592	6,884	389
YL4HQ	7,021,839	6,457	389
NU1AW/9	6,358,623	7,375	339
XR3HQ	6,285,160	4,759	280
OH0HQ	6,149,430	6,316	315
8NxHQ	6,137,523	7,301	333
BxHQ	5,224,240	4,738	280
SK9HQ	4,887,240	5,270	293
UN1HQ	4,649,084	3,514	314
CX1AA	4,422,744	3,066	318
9K9HQ	4,358,720	3,544	265
ZZ7HQ	4,302,432	3,199	288
OE1A	3,985,820	3,953	340
ZL6HQ	3,296,345	2,933	235
TC50HQ	2,779,616	2,675	224
AT1HQ	2,460,772	2,385	236
9Y4HQ	1,689,852	1,743	212
HD2A	1,658,426	2,257	154
YE0HQ	1,543,310	2,070	157
VY2RAC	978,310	1,489	190
HL0HQ	746,595	1,609	141
DX0HQ	738,000	1,260	123
6D0LM	477,202	1,340	109
ZF1A	470,372	1,310	107
ZS9HQ	347,420	590	145
PI4HQ (PG2AA, op)	281,070	698	135
TG0AA (TG9ANF, op)	257,796	1,136	66
HS0AC (OZ1HET, op)	144,256	364	112
JU1HQ	121,662	641	54
YV5AJ (YV5JBI, op)	118,650	356	75
9M4DXX	106,500	368	75
ZP5AA	82,404	332	54
HB0HQ	54,963	241	93
VR2HK	21,300	119	60
E8AKN	50	10	5

IARU Administrative Council Stations

Call	Score	QSO	Mults
SM6CNN	1,704,048	1,982	262
NB2T	1,422,450	2,019	218
YV5AM	1,010,844	1,269	172
XE1KK	833,248	1,218	208
G3PSM	243,300	558	150
JA1CJP	223,392	472	156
HB9JOE	150,054	369	178
PT2ADM	124,841	265	127
9A5W	111,312	530	72
CE3PG	93,176	296	76
VE6SH	39,292	292	47
LA2RR	20,056	108	92
9Y4X	18,424	102	49
VU2GMN	12,985	77	53
DL9KCE	6,288	67	48
LZ50US (LZ1US, op)	3,096	68	18
JE1MUI	4	2	2

Winning Percentages in Each Category

Category	Call	Score	QSO	Mults	Winning Percentage
SO Mixed QRP	LZ0M (LZ2SX, op) HG6C (HA6IAM, op)	510068 359898	908 670	221 209	41.7
SO Mixed QRP	K0OU W1MR	175824 121164	534 302	111 138	45.1
SO Mixed LP	4Z4AK (UT7DK, op) LY9A	2312220 2018549	1946 2283	267 299	14.5
SO Mixed LP	W4IX NR3X (N4YDU, op)	793084 769365	1264 1471	214 205	3.1
SO Mixed HP	UW2M (UR0MC, op) C4W (5B4WN, op)	3979660 3864230	3118 3120	386 265	3.0
SO Mixed HP	XM3AT (VE3AT, op) VY2ZM	2690688 2642444	2628 2500	273 266	1.8
SO Phone QRP	HG1W HA5BKV	233508 203840	494 496	183 182	14.6
SO Phone QRP	N1YWB W6QU (W8QZA, op)	108120 52569	307 207	136 81	105.7
SO Phone LP	KH6LC (NH6V, op) IB1B (IW1QN, op)	1490580 858000	1844 1130	169 275	73.7
SO Phone LP	N1UR NV8N	1004036 415140	1454 1040	209 165	141.9
SO Phone HP	H2T (5B4XF, op) EA1FDI	2792829 2514822	2425 2496	247 291	11.1
SO Phone HP	K5TR W7WA	1651104 1508046	2279 2095	224 222	9.5
SO CW QRP	OK3C (OK2ZC, op) UU2CW	779106 649495	1066 931	267 241	20.0
SO CW QRP	AA1CA K8CN	125969 90725	379 395	103 95	38.8
SO CW LP	YT3M (YT6W, op) LZ8E (LZ2BE, op)	1760525 1675520	1681 2118	325 308	5.1
SO CW LP	VA2WA (VA2WDQ, op) WA1Z	1055640 883361	1348 1515	228 199	19.5
SO CW HP	CR6K (CT1ILT, op) UW1M (UR5MW, op)	3461080 3020108	2722 2569	329 364	14.6
SO CW HP	NN1N AA3B	2239050 2045463	2486 2425	275 257	9.5
SO Multi-Op	P33W EF8M	9104094 8515608	4937 4566	402 398	6.9
SO Multi-Op	K0DQ NN3W	2988014 2440508	2888 2496	293 301	22.4

the participation by contesters who were evaluating station setups for the forthcoming 2014 WRTC. The calls used were K1GO, K1RQ, K1ZD, N2KW, N9NB, N1IL, W1HH, W1MA, W1MJ, W1SJ, W1UE, W1UJ, and WB1Z. For information about this interesting experiment, visit www.wrtc2014.org/competition/2012-station-test.

Propagation

The Sun did not cooperate this year — but it's still my favorite star! The 10.7 cm solar flux was certainly high enough for good propagation on 20 meters (the 10.7 cm solar flux was around 150 for the contest week-end), but an X1 X-ray flare on July 12 also triggered a CME (coronal mass ejection) that elevated the K indices later in the day on the first day of the contest (July 14) and into the second day of the contest. Figure 2 plots the eight daily mid-latitude K indices for July 11-15. Another great way to see the effect of the elevated K indices is to look

at the output of the STORM Time Empirical Ionospheric Correction Model (offered by the Space Weather Prediction Center at www.swpc.noaa.gov/storm/index.html).

The ionosphere began to react early on July 15 with a reduction in electron density at all latitudes in the northern hemisphere. Nevertheless, IARU 2012 dodged a major bullet as the biggest effect of the elevated K indices was on Monday, July 16 (not shown in the graph — but you can see where things were headed).

Disqualification

HG7T (HA7TM, op) was disqualified from the 2012 IARU HF Championship for submitting a log deemed incompatible with the category entered.

This Year's Event

You have several months to get your station and antennas ready for this year's event, which will be the weekend of July 13 and 14. I hope to meet you on the air!

W/VE Region Leaders

Table shows Call, Score, Class and Power. For class: A=Mixed Mode, B=Phone Only, C=CW Only, D=Multioperator. For Power, A=QRP, B=Low Power, C=High Power.

Northeast Region (New England, Hudson and Atlantic Divisions; Maritime and Quebec Sections)	Southeast Region (Delta, Roanoke and Southeastern Divisions)	Central Region (Delta and Great Lakes Divisions; Ontario Section)	Midwest Region (Dakota, Midwest, Rocky Mountain and West Gulf Divisions; Manitoba and Saskatchewan Sections)	West Coast Region (Pacific, Northwestern and Southwestern Divisions; Alberta, British Columbia and NWT Sections)
W1MR 121,164 A A	W4UT 43,500 A A	KU4A 27,360 A A	K0OU 175,824 A A	W6YX 77,448 A A
ND3D 38,254 A A	KS4X 43,043 A A	K8ZT 25,134 A A	WA5DSS 477 A A	W6AQ 38,367 A A
K1TW 1,330 A A	W4IX 793,084 A B	AF9J 1,064 A A	K0AD 401,718 A B	K2PO 646,600 A B
N2KW 387,940 A B	NR3X (N4YDU, op) 769,365 A B	K9OM 552,951 A B	N1CC 181,830 A B	VE6EX 307,781 A B
N2ZN 206,448 A B	N9CM 274,446 A B	WD8S 92,610 A B	N5AW/Ø 169,719 A B	N6MI 188,980 A B
KA1WIF 111,320 A B	N5DX 2,294,334 A C	XM3AT (VE3AT, op) 2,690,688 A C	K5GN 1,948,960 A C	NK7U (N6MJ, op) 1,767,987 A C
VY2ZM 2,642,444 A C	N8OO 1,870,429 A C	VE3EJ 2,639,990 A C	W0EWD 1,293,796 A C	K6XX 1,493,063 A C
K1LZ 2,243,568 A C	AD4Z 1,441,763 A C	K9CU (KB9UWU, op) 393,120 A C	K0SR 1,179,684 A C	W6YI (K6AM, op) 1,426,095 A C
K2TJ 1,794,962 A C	NT4TS 24,150 B A	NV8N 415,140 B B	WBØTSR 105,374 B B	W6QU (W8QZA, op) 52,569 B A
N1YWB 108,120 B A	KC5WA 19,415 B A	NT8Z 172,291 B B	N7MZW 95,535 B B	KJ6MQM 1,482 B A
W2TI 21,138 B A	N4ZAK 8,240 B A	N9LB 113,577 B B	KE5OG 66,339 B B	K6GHA 112,350 B B
W2WGK 11,328 B A	WB4OMM 214,704 B B	VA3XH 114,625 B C	K5TR 1,651,104 B C	K7XE 51,350 B B
N1UR 1,004,036 B B	W4FT 150,750 B B	VA3YOJ 101,038 B C	K5RZA 251,988 B C	VE7NS 30,780 B B
VE1WOW (K1WO, op) 182,268 B B	KT4ZB 135,408 B B	K8ZZU 71,160 B C	N5PJY 49,706 C A	W7WA 1,508,046 B C
N3WD 133,950 B B	W5WU 1,189,377 B C	VE3MGY 39,600 C A	KA8HDE 17,892 C A	W6AFA 525,480 B C
W3LL 829,068 B C	WA5OYU 479,675 B C	VE3IGJ 17,028 C A	W5GAI 9,660 C A	K6AAX 277,065 B C
W2IRT 334,464 B C	K5ER 424,080 B C	W1NN 707,824 C B	WXØB (AD5Q, op) 792,064 C B	WA6DBC 47,885 C A
W1PL 105,141 B C	K4MTI 71,344 C A	NA8V 535,458 C B	N5DO 578,032 C B	N7IR 37,200 C A
AA1CA 125,969 C A	AA4SD 31,135 C A	KV8Q 494,320 C B	W5RYA 222,885 C B	KM6Z 28,512 C A
K8CN 90,725 C A	NU4B 20,658 C A	W9RE 1,648,861 C C	W0UA 1,467,252 C C	K7WP 566,202 C B
K3TW 68,288 C A	AA4NC 666,302 C B	N8AA 1,444,860 C C	K5WA 1,161,215 C C	W7YAQ 566,019 C B
VA2WA (VA2WDQ, op) 1,055,640 C B	WD4AHZ 522,063 C B	K9CT 1,321,493 C C	N5RZ 446,732 C C	WJ9B 363,465 C B
WA1Z 883,361 C B	WB4TDH 485,472 C B	K8AZ 2,157,705 D	NX5M 1,776,060 D	N9RV 1,570,176 C C
K3EL 758,735 C B	N4AF 1,752,975 C C	VE3YAA 1,255,093 D	NØAT 855,768 D	N6TV 1,304,772 C C
NN1N 2,239,050 C C	K5KG 1,292,936 C C	VE3UTT 1,237,110 D	W7CT 644,324 D	K6NA 1,188,556 C C
AA3B 2,045,463 C C	N4OGW 1,275,513 C C			NX6T 833,831 D
W3UA 1,601,775 C C	N2IC 2,201,620 D			W7IJ 504,431 D
KØDQ 2,988,014 D	NR4M 1,311,960 D			K6MMM 404,192 D
NN3W 2,440,508 D	N1LN 1,172,451 D			
N3AD 1,523,340 D				

Sean's Picks

Sean Kutzko, KX9X, kx9x@arrl.org

- **State QSO Parties this month:** Idaho, North Dakota, Oklahoma, Virginia, Wisconsin.
- **QRP Contests this month:** ARS Spartan Sprint (March 5), AGCW QRP Contest (March 9), QRP ARCI HF Grid Square Sprint (March 9), Flying Pigs Run for the Bacon (March 18), NAQCC Monthly QRP Sprint (March 21)
- **ARRL DX Contest — Phone (March 2-3):** Can you work 100 DXCC

entities in a weekend? Many have done it; see if you can, too! US & Canada works only DX, DX works only US & Canada.

- **North American Sprint — RTTY (March 10):** Do you love RTTY? If so, this 4 hour contest is for you! A limit of no more than two QSOs on the same frequency will keep all RTTY ops intensely busy.
- **Russian DX Contest (March 16-17):** Everybody works everybody in this event,

which is fast becoming a must on the contesting calendar. Emphasis is on working Russian stations and oblasts (districts). Work as many oblasts as you can.

- **CQ WPX Contest — Phone (March 30-31):** Prefixes are the multipliers in this everybody-works-everybody contest. A WD4 is just as valuable as a P29! This event offers lots of activity and plenty of fun.

Strays

Tuskegee Airman in Pompano Beach

The Gold Coast Amateur Radio Association in Pompano Beach, Florida was fortunate to have as their special guest and keynote speaker US Air Force Lieutenant Colonel Leo R. Gray at their meeting last November. Colonel Gray is one of the original Red Tail pilots of the famous Tuskegee Airmen who distinguished themselves as combat pilots during World War II. [N4ZUW photo]

