



IARU HF Championship

2012 Results

by Carl Luetzelschwab, K9LA (k9la@arrl.net)

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

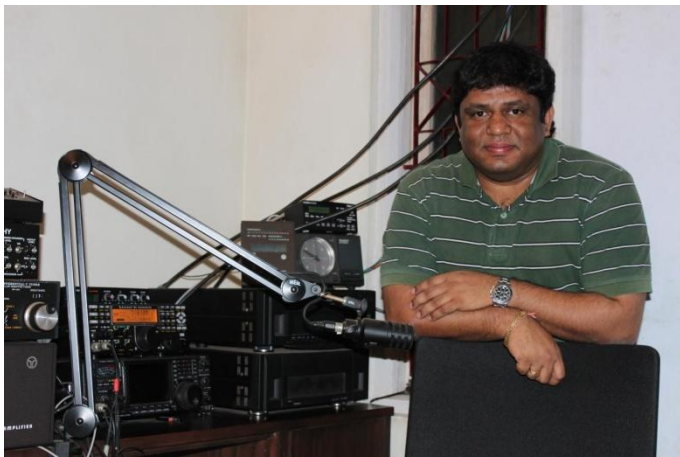
This is my first try at HF contesting I had a ton of fun hearing and talking to people all over the world.
KB3YSR

First IARU HF Championship!! Did pretty well with just 5W. And 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 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” section, you’re in good company if you operate “barefoot” with 100 watts or less. So plan on jumping in this July – and have fun!



Pai, VU2PAI operated on 40 meter SSB as part of the AT1HQ team representing the Amateur Radio Society of India. The team made nearly 2,500 QSOs and around 2.7 million points. (Photo by VU2PAI)

In addition to the QST writeup, additional material in this extended online version 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 about 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 – and there’s no reason to think it will stop.

The most popular category was Single-Op, CW, Low Power, followed closely by Single-Op, Phone, Low Power. Figure 2 identifies participation by category. Note that there were more HQ stations than those brave souls who weathered the Single-Op, Mixed, QRP category!

If you’re a single-op, the most popular mode was CW. Phone wasn’t too far down from CW, and likewise Mixed wasn’t too far down from Phone. Figure 3 shows participation by mode.

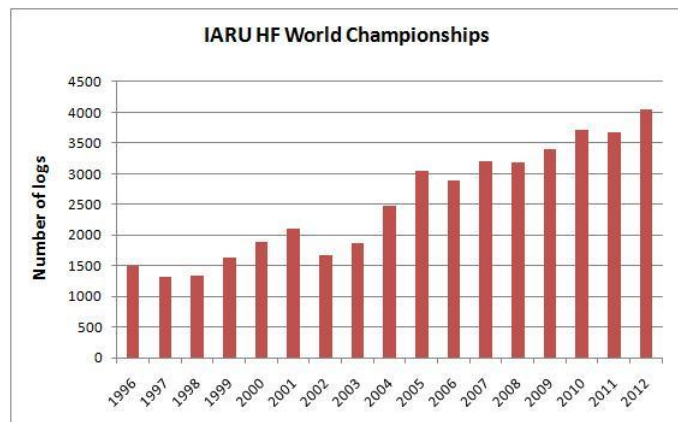


Figure 1 – Logs Received by Year

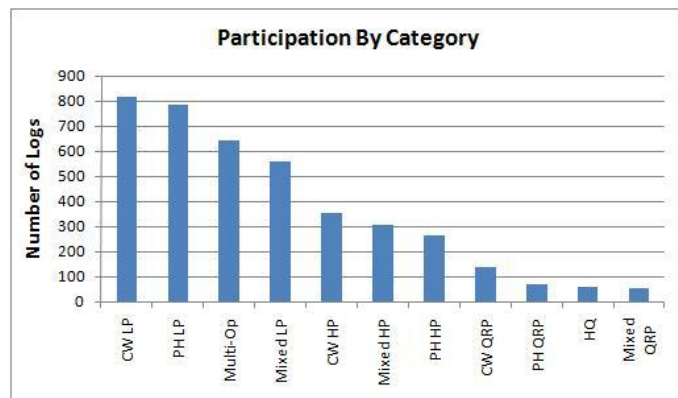


Figure 2

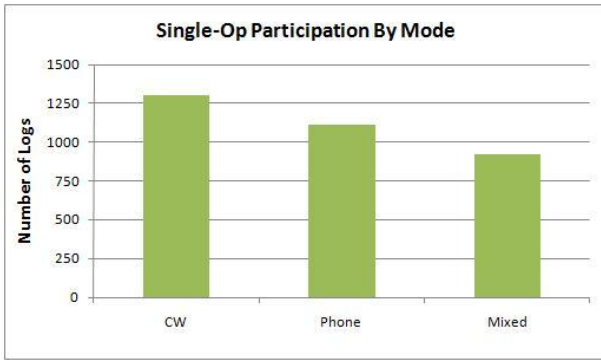


Figure 3

Also if you're single-op, the most popular power category was Low Power. The number of entries in 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. Figure 4 shows participation by power.

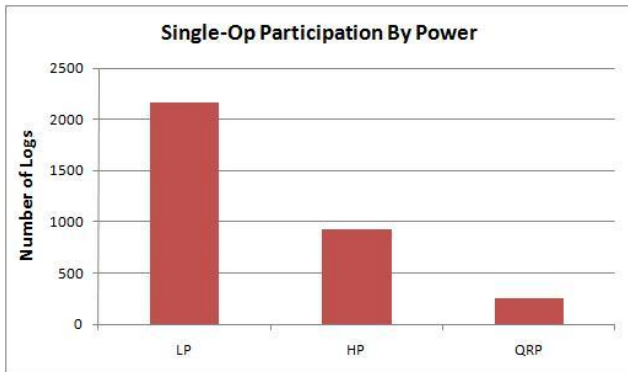


Figure 4

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. Figure 5 gives the top ten participation totals by zone.

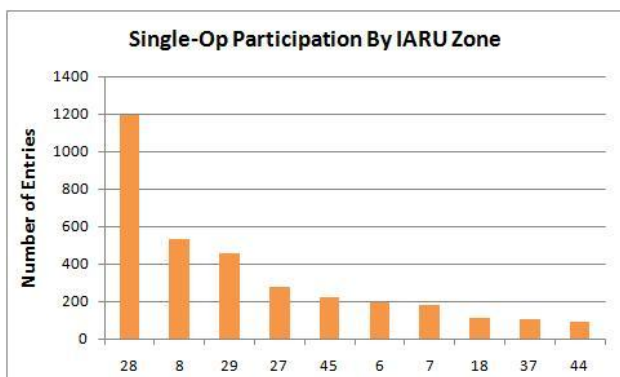


Figure 5

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. Figure 6 lists the number of QSOs by band.

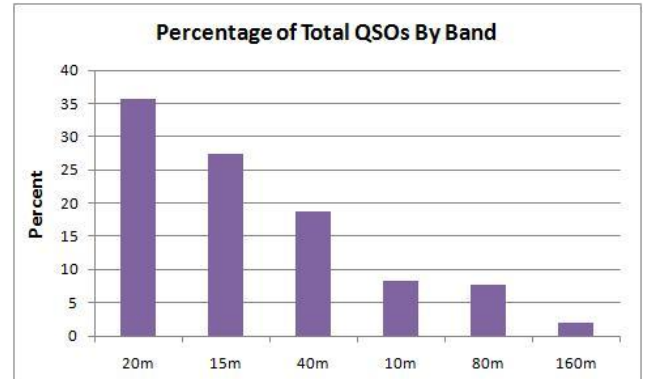


Figure 6

And The Winners Are . . .

Table 1 lists the winner and runner-up for the W/VE and Non-W/VE for all the Single-Op categories and the Multi-Op category, including QSOs and multipliers. The right-most column is the winning percentage – in other words by how much the winner beat the runner-up in terms of percentage.

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



(Left to right) Vinko, S53F; Karl, S52AW; and Igor, S57Z were part of the operator team at S5ØHQ. (Photo courtesy S5ØHQ)

The second closest competition was between UW2M (URØMC, op) and C4W (5B4WN, op) in the World Single-Op, Mixed, 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-Op, Mixed but this was 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 runners-ups – keep trying – your time may come.

Records

Four records were broken in the 2012 event: Single-Op, Mixed, Low Power and Multi-Op on the World side, and Single-Op, Phone, Low Power and Multi-Op on the W/VE side.

UT7DK at 4Z4AK bested the old World Single-Op, Mixed, Low Power record by over 10%, originally set by HG3M (HA3MY op) in 2005. The P33W Multi-Op group overtook their 2011 World record by 25.8%. Will they beat this new record in 2013?

The W/VE Single-Op, Phone, Low record of 633,060 set by W4SVO in 2011 was easily broken by N1UR with 1,004,036 and a new W/VE Multi-Op record was set by the KØDQ crew.

Table 1 - Category Winners and Winning Percentages

Call	Score	QSOs	Mults	Percent
SO Mixed QRP				
LZØM (LZ2SX, op)	510,068	908	221	41.7
HG6C (HA6IAM, op)	359,898	670	209	
KØOU	175,824	534	111	45.1
W1MR	121,164	302	138	
SO Mixed LP				
4Z4AK (UT7DK, op)	2,312,220	1946	267	14.5
LY9A	2,018,549	2283	299	
W4IX	793,084	1264	214	3.1
NR3X (N4YDU, op)	769,365	1471	205	
SO Mixed HP				
UW2M (URØMC, op)	3,979,660	3118	386	3.0
C4W (5B4WN, op)	3,864,230	3120	265	
XM3AT (VE3AT, op)	2,690,688	2628	273	1.8
VY2ZM	2,642,444	2500	266	
SO Phone QRP				
HG1W	233,508	494	183	14.6
HA5BKV	203,840	496	182	
N1YWB	108,120	307	136	105.7
W6QU (W8QZA, op)	52,569	207	81	
SO Phone LP				
KH6LC (NH6V, op)	1,490,580	1844	169	73.7
IB1B (IW1QN, op)	858,000	1130	275	
N1UR	1,004,036	1454	209	141.9
NV8N	415,140	1040	165	
SO Phone HP				
H2T (5B4XF, op)	2,792,829	2425	247	11.1
EA1FDI	2,514,822	2496	291	
K5TR	1,651,104	2279	224	9.5
W7WA	1,508,046	2095	222	

SO CW QRP				
OK3C (OK2ZC, op)	779,106	1066	267	20.0
UU2CW	649,495	931	241	
AA1CA	125,969	379	103	38.8
K8CN	90,725	395	95	
SO CW LP				
YT3M (YT6W, op)	1,760,525	1681	325	5.1
LZ8E (LZ2BE, op)	1,675,520	2118	308	
VA2WA (VA2WDQ, op)	1,055,640	1348	228	19.5
WA1Z	883,361	1515	199	
SO CW HP				
CR6K (CT1ILT, op)	3,461,080	2722	329	14.6
UW1M (UR5MW, op)	3,020,108	2569	364	
NN1N	2,239,050	2486	275	9.5
AA3B	2,045,463	2425	257	
Multi-Op				
P33W	9,104,094	4937	402	6.9
EF8M	8,515,608	4566	398	
KØDQ	2,988,014	2888	293	22.4
NN3W	2,440,508	2496	301	

Table 2 lists the IARU HF World Championships records, with this year's new records in bold. Way to go, guys! So peruse the records, set your goal, and I hope to see your call in next year's list of records.

Also be advised that I made two errors in last year's records table. I erroneously had KH6ND listed as the W/VE Single-Op, Phone, High Power record holder – KH6 is not W/VE in this contest. And I erroneously had W1AW/4 listed as the W/VE Multi-Op record holder – W1AW/4 was an HQ station. Sorry about that, guys.

Table 2 – Records by Category (bold – set in 2012)

World Records			
Category	Call	Score	Year
Single-Op HP Mixed	3V1A	4,414,517	2007
Single-Op LP Mixed	4Z4AK (UT7DK op)	2,312,220	2012
Single-Op QRP Mixed	HG5Y	1,067,647	2007
Single-Op HP Phone	CN2R (W7EJ op)	4,718,736	2005
Single-Op LP Phone	D4C	2,975,632	2008
Single-Op QRP Phone	HG1W (HA1WD op)	348,517	2007
Single-Op HP CW	5B/W2TAA (RV1AW op)	4,219,995	2010
Single-Op LP CW	HA8DU	2,278,782	2006
Single-Op QRP CW	HA5KDQ (HA7ANT op)	1,412,260	2006
Multi-Op	P33W	9,104,094	2012
W/VE Records			
Category	Call	Score	Year
Single-Op HP Mixed	VY2ZM (K1ZM op)	2,989,540	2011
Single-Op LP Mixed	VE3DZ	1,196,192	2011
Single-Op QRP Mixed	NØKE	187,590	2008
Single-Op HP Phone	K5TR	1,651,104	2012
Single-Op LP Phone	N1UR	1,004,036	2012
Single-Op QRP Phone	KC5R	172,080	2007
Single-Op HP CW	VY2ZM (K5ZD op)	2,631,694	2005
Single-Op LP CW	W1RM	1,135,630	2010
Single-Op QRP CW	W2GD	427,392	2009
Multi-Op	KØDQ	2,988,014	2012

Top Ten by Category – W/VE

Category	Power	Call	Score	Category	Power	Call	Score
Single-Op, Mixed	QRP	KØOU	175,824	Single-Op, CW	QRP	AA1CA	125,969
		W1MR	121,164			K8CN	90,725
		W6YX	77,448			K4MTI	71,344
		W4UT	43,500			K3TW	68,288
		KS4X	43,043			N5PJY	49,706
		W6AQ	38,367			WA6DBC	47,885
		ND3D	38,254			VE3MGY	39,600
		KU4A	27,360			N7IR	37,200
		K8ZT	25,134			AA4SD	31,135
		K1TW	1,330			KM6Z	28,512
	LP	W4IX	793,084		VA2WA (VA2WDQ, op)	1,055,640	
		NR3X (N4YDU, op)	769,365		WA1Z	883,361	
		K2PO	646,600		WXØB (AD5Q, op)	792,064	
		K9OM	552,951		K3EL	758,735	
		KØAD	401,718		W1NN	707,824	
		N2KW	387,940		AA4NC	666,302	
		VE6EX	307,781		VE1RGB	610,870	
		N9CM	274,446		N5DO	578,032	
		N8II	250,756		K7WP	566,202	
		N2ZN	206,448		W7YAQ	566,019	
	HP	XM3AT (VE3AT, op)	2,690,688		HP	NN1N	2,239,050
		VY2ZM	2,642,444			AA3B	2,045,463
		VE3EJ	2,639,990			N4AF	1,752,975
		N5DX	2,294,334			W9RE	1,648,861
		K1LZ	2,243,568			W3UA	1,601,775
		K5GN	1,948,960			N9RV	1,570,176
		N8OO	1,870,429			WØUA	1,467,252
		K2TJ	1,794,962			N8AA	1,444,860
		NK7U (N6MJ, op)	1,767,987			K9CT	1,321,493
		N2NT (W2GD, op)	1,670,214			N6TV	1,304,772
Single-Op, Phone	QRP	N1YWB	108,120	Multioperator	KØDQ	2,988,014	
		W6QU (W8QZA, op)	52,569		NN3W	2,440,508	
		KC8IMB	27,667		N2IC	2,201,620	
		NT4TS	24,150		K8AZ	2,157,705	
		W2TI	21,138		NX5M	1,776,060	
		KC5WA	19,415		N3AD	1,523,340	
		W2WGK	11,328		NR4M	1,311,960	
		N8XA	9,894		VE3YAA	1,255,093	
		N4ZAK	8,240		VE3UTT	1,237,110	
		KB1HNZ	4,026		N1LN	1,172,451	
	LP	N1UR	1,004,036		HP	K5TR	1,651,104
		NV8N	415,140			W7WA	1,508,046
		WB4OMM	214,704			W5WMU	1,189,377
		VE1WOW (K1WO,op)	182,268			W3LL	829,068
		NT8Z	172,291			W6AFA	525,480
		W4FT	150,750			WA5OYU	479,675
		KT4ZB	135,408			KØRH	441,189
		N3WD	133,950			K5ER	424,080
		N9LB	113,577			W2IRT	334,464
		K6GHA	112,350			K6AAX	277,065

Top Ten by Category – Non-W/VE

Category	Power	Call	Score	Category	Power	Call	Score
Single-Op, Mixed	QRP	LZØM (LZ2SX, op)	510,068	Single-Op, CW	QRP	OK3C (OK2ZC, op)	779,106
		HG6C (HA6IAM, op)	359,898			UU2CW	649,495
		US2IZ	349,662			UX9Q (UR9QQ, op)	582,192
		JR3RWB	206,067			HA6NL	557,760
		OK7CM	168,902			UW5M (UT7MA, op)	474,237
		UT5DJ	150,087			F5VBT	432,718
		IZ8JFL/1	148,827			EU1AA	354,750
		G4DBW	132,174			SP9NSV/7	286,221
		HA6PJ	116,850			YL2CV	257,152
		UA1CUR	111,244			DD1IM	256,477
	LP	4Z4AK (UT7DK, op)	2,312,220		YT3M (YT6W, op)	1,760,525	
		LY9A	2,018,549		LZ8E (LZ2BE, op)	1,675,520	
		IO4T (IK4VET, op)	1,727,100		LY6A	1,420,668	
		RV9UP	1,375,311		UW5Q (UR3QCW, op)	1,362,396	
		LY4L	1,332,114		OK2ZI	1,302,300	
		RT9S	1,257,538		C4Z (5B4AIZ, op)	1,148,350	
		7Z1SJ	1,225,736		LY3B	1,040,480	
		RWØA (RAØAM, op)	1,220,334		RW9C	1,017,450	
		R7MM	1,203,398		EA5AER	1,015,322	
		S53MM	1,078,650		S51F	980,280	
	HP	UW2M (URØMC, op)	3,979,660		HP	CR6K (CT1ILT, op)	3,461,080
		C4W (5B4WN, op)	3,864,230			UW1M (UR5MW, op)	3,020,108
		UP2L (UA9BA, op)	3,856,736			OM3BH	2,854,028
		RG9A	3,842,450			UT5UGR	2,588,105
		E7DX (E77DX, op)	3,722,579			DJ5MW	2,523,618
		9A5X	3,352,365			UA5F	2,460,708
		3V8BB (KF5EYY, op)	3,340,763			OL8M	2,383,740
		ES5RR (ES2RR, op)	3,127,183			RT5Z	2,374,984
		YL4U	2,956,728			4O3A (E73A, op)	2,247,654
		OE3K (OE2VEL, op)	2,914,070			YL8M (YL2KL, op)	2,246,864
Single-Op, Phone	QRP	HG1W	233,508	Multioperator	P33W	9,104,094	
		HA5BKV	203,840		EF8M	8,515,608	
		USØMS	157,620		C4N	5,573,800	
		R2AD	133,950		RF9C	4,256,647	
		CT2JBG	120,132		PS2T	4,086,720	
		SP8LXE	100,305		RM5A	3,966,012	
		YO9FTN	65,670		OHØX	3,683,311	
		SQ8MFB	53,568		CR3T	3,412,320	
		HB9EGA/P	34,560		HG6N	3,310,200	
		CT2KFA	32,930		LT1F	2,954,518	
	LP	KH6LC (NH6V, op)	1,490,580				
		IB1B (IW1QN, op)	858,000				
		UV8M (UX3MR, op)	765,576				
		KP2/AA1BU	731,590				
		DF2DJ	700,570				
		RV9CBW	683,696				
		USØHZ	673,502				
		ZZ2T (PY2MNL, op)	649,066				
HP	EA8MT	622,980					
	EA2DT	600,667					
	H2T (5B4XF, op)	2,792,829					
	EA1FDI	2,514,822					
	PP5JD	2,252,868					
	EA4KD	2,078,004					
	IR2M	2,054,360					
	ES5RW	1,963,086					
	EA5DFV	1,701,366					
	RT4RO	1,493,263					
YO3CZW	1,483,218						
US5D (UT7DX, op)	1,434,928						

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

Top Ten by Category – Worldwide

Category	Power	Call	Score	Category	Power	Call	Score
Single-Op, Mixed	QRP	LZØM (LZ2SX, op)	510,068	Single-Op, CW	QRP	OK3C (OK2ZC, op)	779,106
		HG6C (HA6IAM, op)	359,898			UU2CW	649,495
		US2IZ	349,662			UX9Q (UR9QQ, op)	582,192
		JR3RWB	206,067			HA6NL	557,760
		KØOU	175,824			UW5M (UT7MA, op)	474,237
		OK7CM	168,902			F5VBT	432,718
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		G4DBW	132,174			YL2CV	257,152
		W1MR	121,164			DD1IM	256,477
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		LY9A	2,018,549		LZ8E (LZ2BE, op)	1,675,520	
		IO4T (IK4VET, op)	1,727,100		LY6A	1,420,668	
		RV9UP	1,375,311		UW5Q (UR3QCW, op)	1,362,396	
		LY4L	1,332,114		OK2ZI	1,302,300	
		RT9S	1,257,538		C4Z (5B4AIZ, op)	1,148,350	
		7Z1SJ	1,225,736		VA2WA (VA2WDQ, op)	1,055,640	
		RWØA (RAØAM, op)	1,220,334		LY3B	1,040,480	
		R7MM	1,203,398		RW9C	1,017,450	
		S53MM	1,078,650		EA5AER	1,015,322	
	HP	UW2M (URØMC, op)	3,979,660		CR6K (CT1ILT, op)	3,461,080	
		C4W (5B4WN, op)	3,864,230		UW1M (UR5MW, op)	3,020,108	
		UP2L (UA9BA, op)	3,856,736		OM3BH	2,854,028	
		RG9A	3,842,450		UT5UGR	2,588,105	
		E7DX (E77DX, op)	3,722,579		DJ5MW	2,523,618	
		9A5X	3,352,365		UA5F	2,460,708	
		3V8BB (KF5EYY, op)	3,340,763		OL8M	2,383,740	
		ES5RR (ES2RR, op)	3,127,183		RT5Z	2,374,984	
		YL4U	2,956,728		4O3A (E73A, op)	2,247,654	
		OE3K (OE2VEL, op)	2,914,070		YL8M (YL2KL, op)	2,246,864	
Single-Op, Phone	QRP	HG1W	233,508	Multioperator	P33W	9,104,094	
		HA5BKV	203,840		EF8M	8,515,608	
		USØMS	157,620		C4N	5,573,800	
		R2AD	133,950		RF9C	4,256,647	
		CT2JBG	120,132		PS2T	4,086,720	
		N1YWB	108,120		RM5A	3,966,012	
		SP8LXE	100,305		OHØX	3,683,311	
		YO9FTN	65,670		CR3T	3,412,320	
		SQ8MFB	53,568		HG6N	3,310,200	
		W6QU (W8QZA, op)	52,569		KØDQ	2,988,014	
	LP	KH6LC (NH6V, op)	1,490,580				
		N1UR	1,004,036				
		IB1B (IW1QN, op)	858,000				
		UV8M (UX3MR, op)	765,576				
		KP2/AA1BU	731,590				
		DF2DJ	700,570				
		RV9CBW	683,696				
		USØHZ	673,502				
		ZZ2T (PY2MNL, op)	649,066				
		EA8MT	622,980				
	HP	H2T (5B4XF, op)	2,792,829				
		EA1FDI	2,514,822				
		PP5JD	2,252,868				
		EA4KD	2,078,004				
		IR2M	2,054,360				
		ES5RW	1,963,086				
		EA5DFV	1,701,366				
		K5TR	1,651,104				
		W7WA	1,508,046				
		RT4RO	1,493,263				

Continental Leaders

SO – Single Op, MO – Multioperator, MIX – Mixed Mode, PH – Phone Only, CW – CW Only

Africa		Asia			Europe			
EA8AQV	60,444	SO, MIX, LP	JK3RWB	206,067	SO, MIX, QRP	LZØM (LZ2SX, op)	510,068	SO, MIX, QRP
ZS2NF	6,478	SO, MIX, LP	JK1TCV	93,906	SO, MIX, QRP	HG6C (HA6IAM, op)	359,898	SO, MIX, QRP
EA8BQM	2,982	SO, MIX, LP	JM1RPV/1	60,809	SO, MIX, QRP	US2IZ	349,662	SO, MIX, QRP
EA8CST	35	SO, MIX, LP	RAØAY	49,302	SO, MIX, QRP	OK7CM	168,902	SO, MIX, QRP
3V8BB (KF5EYY, op)	3,340,763	SO, MIX, HP	7K1CPT	44,583	SO, MIX, QRP	UT5DJ	150,087	SO, MIX, QRP
EA8ZS	12,690	SO, MIX, HP	4Z4AK (UT7DK, op)	2,312,220	SO, MIX, LP	LY9A	2,018,549	SO, MIX, LP
EA8MT	622,980	SO, PH, LP	RV9UP	1,375,311	SO, MIX, LP	IO4T (IK4VET, op)	1,727,100	SO, MIX, LP
EA8ADL	73,437	SO, PH, LP	RT9S	1,257,538	SO, MIX, LP	LY4L	1,332,114	SO, MIX, LP
D2QMN	1,003	SO, PH, LP	7Z1SJ	1,225,736	SO, MIX, LP	R7MM	1,203,398	SO, MIX, LP
ZS6ELI	36	SO, PH, LP	RWØA (RAØAM, op)	1,220,334	SO, MIX, LP	S53MM	1,078,650	SO, MIX, LP
EA8CYQ	25	SO, PH, LP	C4W (5B4WN, op)	3,864,230	SO, MIX, HP	UW2M (URØMC, op)	3,979,660	SO, MIX, HP
CT3HF	297,405	SO, PH, HP	UP2L (UA9BA, op)	3,856,736	SO, MIX, HP	E7DX (E77DX, op)	3,722,579	SO, MIX, HP
ZS3Y	186,677	SO, PH, HP	RG9A	3,842,450	SO, MIX, HP	9A5X	3,352,365	SO, MIX, HP
ZS5NK	11,800	SO, PH, HP	RC9O	2,394,112	SO, MIX, HP	ES5RR (ES2RR, op)	3,127,183	SO, MIX, HP
EA8DP	408,342	SO, CW, HP	UA9MA	1,727,730	SO, MIX, HP	YL4U	2,956,728	SO, MIX, HP
V51YJ	229,296	SO, CW, HP	JA2MWV	25,092	SO, PH, QRP	HG1W	233,508	SO, PH, QRP
EA8DA	220,605	SO, CW, HP	JI3CJO	2,310	SO, PH, QRP	HA5BKV	203,840	SO, PH, QRP
EF8X (EA8AY, op)	188,870	SO, CW, HP	JO7FGZ/1	230	SO, PH, QRP	USØMS	157,260	SO, PH, QRP
EA8AVK	37,952	SO, CW, HP	JR2EKD/9	0	SO, PH, QRP	R2AD	133,950	SO, PH, QRP
EF8M	8,515,608	Multioperator	RV9CBW	683,696	SO, PH, LP	CT2JBG	120,132	SO, PH, QRP
CR3T	3,412,320	Multioperator	HZ1BW	463,344	SO, PH, LP	IB1B (IW1QN, op)	858,000	SO, PH, LP
EC8AFM	3,683	Multioperator	A61ZX	188,194	SO, PH, LP	UV8M (UX3MR, op)	765,576	SO, PH, LP
ZS2EC	1,972	Multioperator	TA1CR	170,905	SO, PH, LP	DF2DJ	700,570	SO, PH, LP
EA8RY	720	Multioperator	JM1UTT	128,010	SO, PH, LP	USØHZ	673,502	SO, PH, LP
			H2T (5B4XF, op)	2,792,829	SO, PH, HP	EA2DT	600,667	SO, PH, LP
			HZ1TT	520,245	SO, PH, HP	EA1FDI	2,514,822	SO, PH, HP
			RA9SK	305,943	SO, PH, HP	EA4KD	2,078,004	SO, PH, HP
			VR2XMT	299,052	SO, PH, HP	IR2M	2,054,360	SO, PH, HP
			HZ1TL	295,355	SO, PH, HP	ES5RW	1,963,086	SO, PH, HP
			JR1NKN	79,672	SO, CW, QRP	EA5DFV	1,701,366	SO, PH, HP
			BA4II/QRP	76,560	SO, CW, QRP	OK3C (OK2ZC, op)	779,106	SO, CW, QRP
			JG1EIQ	61,321	SO, CW, QRP	UU2CW	649,495	SO, CW, QRP
			JH1GNU	26,156	SO, CW, QRP	UX9Q (UR9QQ, op)	582,192	SO, CW, QRP
			UI8CM	18,432	SO, CW, QRP	HA6NL	557,760	SO, CW, QRP
			C4Z (5B4AIZ, op)	1,148,350	SO, CW, LP	UW5M (UT7MA, op)	474,237	SO, CW, QRP
			RW9C	1,017,450	SO, CW, LP	YT3M (YT6W, op)	1,760,525	SO, CW, LP
			RA9DZ	949,620	SO, CW, LP	LZ8E (LZ2BE, op)	1,675,520	SO, CW, LP
			RA9MX	491,721	SO, CW, LP	LY6A	1,420,668	SO, CW, LP
			RD9CX	440,365	SO, CW, LP	UW5Q (UR3QCW, op)	1,362,396	SO, CW, LP
			RT9A	2,105,904	SO, CW, HP	OK2ZI	1,302,300	SO, CW, LP
			RM9I	1,522,787	SO, CW, HP	CR6K (CT1ILT, op)	3,461,080	SO, CW, HP
			R9DA	1,324,372	SO, CW, HP	UW1M (UR5MW, op)	3,020,108	SO, CW, HP
			RUØFM	1,032,468	SO, CW, HP	OM3BH	2,854,028	SO, CW, HP
			JF1SQC	572,600	SO, CW, HP	UT5UGR	2,588,105	SO, CW, HP
			P33W	9,104,094	Multioperator	DJ5MW	2,523,618	SO, CW, HP
			C4N	5,573,800	Multioperator	RM5A	3,966,012	Multioperator
			RF9C	4,256,647	Multioperator	OHØX	3,683,311	Multioperator
			9V1YC	1,955,066	Multioperator	HG6N	3,310,200	Multioperator
			RTØC	1,454,744	Multioperator	IR4M	2,684,673	Multioperator
						SN3R	2,649,486	Multioperator

Continental Leaders

SO – Single Op, MO – Multioperator, MIX – Mixed Mode, PH – Phone Only, CW – CW Only

North America			Oceania			South America		
KP4CPC	18,540	SO, MIX, QRP	YB2LSR	107,640	SO, MIX, LP	PY2NY	823,446	SO, MIX, LP
HR2/NP3J (JA6WFM, op)	90,972	SO, MIX, LP	YB3IZK	22,770	SO, MIX, LP	YV8AD	89,376	SO, MIX, LP
FM5CD	438,472	SO, MIX, HP	DU7RH	16,826	SO, MIX, LP	PP2RON	74,955	SO, MIX, LP
XE1V	24,054	SO, MIX, HP	VK3YR	9,000	SO, MIX, LP	YV5NWX	74,448	SO, MIX, LP
AL1G	16,796	SO, MIX, HP	DU7HF	48	SO, MIX, LP	PY2TEL (PY2AXH, op)	24,832	SO, MIX, LP
CL8AKY	1,888	SO, PH, QRP	VK4CT (VK4EMM, op)	1,519,658	SO, MIX, HP	CW5W (CX6VM, op)	2,774,250	SO, MIX, HP
KP2/AA1BU	731,590	SO, PH, LP	DU1EV	6,555	SO, MIX, HP	PY1NX	2,278,290	SO, MIX, HP
CO2CW	217,152	SO, PH, LP	VK2ACC	1,840	SO, MIX, HP	LU5FC	2,041,224	SO, MIX, HP
WP3GW	137,995	SO, PH, LP	VK4ATH	6,747	SO, PH, QRP	LV5V (LU5VV, op)	177,548	SO, MIX, HP
CO6LC	96,949	SO, PH, LP	YB0MZI/4 (YB0MZI/4, op)	2,856	SO, PH, QRP	PY5KC	36,225	SO, MIX, HP
HI3K	80,256	SO, PH, LP	KH6LC (NH6V, op)	1,490,580	SO, PH, LP	LU6FHO	48	SO, PH, QRP
CO2GG	292,701	SO, PH, HP	KH6CJJ	141,204	SO, PH, LP	ZZ2T (PY2MNL, op)	649,066	SO, PH, LP
XE2URF	51,528	SO, PH, HP	YB0MWM	128,440	SO, PH, LP	PY1ZV	193,356	SO, PH, LP
WP4WW (KP4JRS, op)	10,545	SO, PH, HP	DV1JM	88,075	SO, PH, LP	HK6F	186,528	SO, PH, LP
WP4BL	728	SO, PH, HP	YC6JRT	74,528	SO, PH, LP	CP1FF	98,868	SO, PH, LP
CO2IZ	28,710	SO, CW, QRP	VK7ZX (VK7ZE, op)	985,800	SO, PH, HP	PY8WW	65,664	SO, PH, LP
HI8A	192,768	SO, CW, LP	E51TAI (W6TAI, op)	671,145	SO, PH, HP	PP5JD	2,252,868	SO, PH, HP
J35X	169,624	SO, CW, LP	KH6/AA1LC	325,808	SO, PH, HP	CE3EEA	788,754	SO, PH, HP
CO8ZZ	99,403	SO, CW, LP	DU1IVT	237,846	SO, PH, HP	PY2LED	441,456	SO, PH, HP
CO2MS	81,833	SO, CW, LP	VK6NC (VK6WX, op)	228,816	SO, PH, HP	PR7AP	407,988	SO, PH, HP
KP3W	51,191	SO, CW, LP	KH6CS	3,247	SO, CW, QRP	HK3C	397,575	SO, PH, HP
KP2MM (N2TTA, op)	1,761,844	SO, CW, HP	DX1X (DV1UD, op)	94,500	SO, CW, LP	LU7HZ	147,340	SO, CW, QRP
TO5U	1,153,409	SO, CW, HP	YB7XO	79,872	SO, CW, LP	LU8EHR	4,672	SO, CW, QRP
KL2R (N1TX, op)	140,104	SO, CW, HP	YC1BTJ	74,428	SO, CW, LP	HK3TU	831,616	SO, CW, LP
NP4Z	2,539,064	Multioperator	YC2YTH	72,592	SO, CW, LP	LU8QT	351,344	SO, CW, LP
FP/KV1J	331,401	Multioperator	VK8AV	45,117	SO, CW, LP	PY3OZ	349,700	SO, CW, LP
V47JA	205,568	Multioperator	WH7M (K1YR, op)	1,667,079	SO, CW, HP	CX9AU	297,345	SO, CW, LP
XE2B	161,096	Multioperator	VK2IM	1,061,948	SO, CW, HP	PY4XX	204,368	SO, CW, LP
YS1GR	104,601	Multioperator	VK6DXI	1,001,870	SO, CW, HP	PY2EX	700,946	SO, CW, HP
			ZL3TE (W3SE, op)	538,704	SO, CW, HP	PP1CZ	314,047	SO, CW, HP
			DV1/JO7KMB	264,160	SO, CW, HP	PY3AU	20,900	SO, CW, HP
			YB1C	825,988	Multioperator	LU1DZ	15,394	SO, CW, HP
			ZL1T (ZL1ANH, op)	175,489	Multioperator	LU3DAT	6,270	SO, CW, HP
			9M6SDX	118,342	Multioperator	PS2T	4,086,720	Multioperator
			AH6RR	28,840	Multioperator	LT1F	2,954,518	Multioperator
			ZL3PAH	26,065	Multioperator	PY2PT	2,701,860	Multioperator
						CE3CT	2,425,670	Multioperator
						LS1D	2,158,569	Multioperator

Headquarters Stations			
Call	Score	QSOs	Mults
TMØHQ	28,025,946	17,048	507
EFØHQ	26,919,279	15,857	493
DAØHQ	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
S5ØHQ	19,645,892	14,214	491
YTØHQ	19,591,882	14,580	491
SNØHQ	19,515,470	15,929	494
9A2ØHQ	17,200,566	13,518	457
YRØHQ	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
LYØHQ	12,003,762	9,710	417
HGØHQ	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
OPØHQ	8,345,625	6,869	375
ER7HQ	8,019,935	7,491	385
W1AW/7	7,830,256	8,320	302
SXØHQ	7,823,765	8,227	395
E7ØARA	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
OHØHQ	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
TC5ØHQ	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
YEØHQ	1,543,310	2,070	157
VY2RAC	978,310	1,489	190
HLØHQ	746,595	1,609	141
DXØHQ	738,000	1,260	123
6DØLM	477,202	1,340	109
ZF1A	470,372	1,310	107
ZS9HQ	347,420	590	145
PI4HQ (PG2AA, op)	281,070	698	135
TGØAA (TG9ANF, op)	257,796	1,136	66
HSØAC (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
HBØHQ	54,963	241	93
VR2HK	21,300	119	60
EA8AKN	50	10	5

Administrative Council Stations			
Call	Score	QSOs	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
LZ5ØUS (LZ1US, op)	3,096	68	18
JE1MUI	4	2	2

Note – Call signs with lower-case “x” indicate multiple station calls combined into a single score, such as 8N1HQ, 8N2HQ, etc.

Division Winners

Category	Division	Call	Score	Category	Division	Call	Score
SO, MIX, QRP	Atlantic	ND3D	38,254	SO, CW, QRP	Atlantic	K3TW	68,288
SO, MIX, QRP	Central	AF9J	1,064	SO, CW, QRP	Central	N1RU	16,808
SO, MIX, QRP	Delta	W4UT	43,500	SO, CW, QRP	Dakota	KA8HDE	17,892
SO, MIX, QRP	Great Lakes	KU4A	27,360	SO, CW, QRP	Delta	NU4B	20,658
SO, MIX, QRP	Midwest	KØOU	175,824	SO, CW, QRP	Great Lakes	N8XX	11,972
SO, MIX, QRP	New England	W1MR	121,164	SO, CW, QRP	Hudson	NQ2W	7,770
SO, MIX, QRP	Pacific	W6YX	77,448	SO, CW, QRP	Midwest	KKØG	6,006
SO, MIX, QRP	Southwestern	W6AQ	38,367	SO, CW, QRP	New England	AA1CA	125,969
SO, MIX, QRP	West Gulf	WA5DSS	477	SO, CW, QRP	Northwestern	NX1P	513
SO, MIX, QRP	Canada	VA2SG	125	SO, CW, QRP	Pacific	WB6BDD	1,456
SO, MIX, LP	Atlantic	N2ZN	206,448	SO, CW, QRP	Roanoke	AA4SD	31,135
SO, MIX, LP	Central	K9OM	552,951	SO, CW, QRP	Rocky Mountain	K9JWV	3,912
SO, MIX, LP	Dakota	KØAD	401,718	SO, CW, QRP	Southeastern	K4MTI	71,344
SO, MIX, LP	Delta	WA5SOG	100,580	SO, CW, QRP	Southwestern	WA6DBC	47,885
SO, MIX, LP	Great Lakes	AI4BJ	127,832	SO, CW, QRP	West Gulf	N5PJY	49,706
SO, MIX, LP	Hudson	WA2JQK	73,188	SO, CW, QRP	Canada	VE3MGY	39,600
SO, MIX, LP	Midwest	AAØFO	155,794	SO, CW, LP	Atlantic	K3EL	758,735
SO, MIX, LP	New England	N2KW	387,940	SO, CW, LP	Central	K9QVB/9	172,272
SO, MIX, LP	Northwestern	K2PO	646,600	SO, CW, LP	Dakota	KØPK	149,930
SO, MIX, LP	Roanoke	W4IX	793,084	SO, CW, LP	Great Lakes	W1NN	707,824
SO, MIX, LP	Rocky Mountain	N5AW/Ø	169,719	SO, CW, LP	Hudson	N2GA	435,312
SO, MIX, LP	Southeastern	N9CM	274,446	SO, CW, LP	Midwest	NØAX	194,361
SO, MIX, LP	Canada	VE6EX	307,781	SO, CW, LP	New England	W7YAQ	566,019
SO, MIX, HP	Atlantic	K2TJ	1,794,962	SO, CW, LP	Pacific	N6EE	114,908
SO, MIX, HP	Central	K9CU (KB9UWU, op)	393,120	SO, CW, LP	Rocky Mountain	WØETT	202,027
SO, MIX, HP	Dakota	KØSR	1,179,684	SO, CW, LP	Southeastern	WD4AHZ	522,063
SO, MIX, HP	Delta	N5DX	2,294,334	SO, CW, LP	Southwestern	K7WP	566,202
SO, MIX, HP	Great Lakes	N4QS	162,316	SO, CW, LP	West Gulf	WXØB (AD5Q, op)	792,064
SO, MIX, HP	Hudson	N2NT (W2GD, op)	1,670,214	SO, CW, LP	Canada	VA2WA (VA2WDQ, op)	1,055,640
SO, MIX, HP	Midwest	WØEWD	1,293,796	SO, CW, HP	Atlantic	AA3B	2,045,463
SO, MIX, HP	New England	K1LZ	2,243,568	SO, CW, HP	Central	W9RE	1,648,861
SO, MIX, HP	Northwestern	NK7U (N6MJ, op)	1,767,987	SO, CW, HP	Dakota	K9DU	313,313
SO, MIX, HP	Pacific	K6XX	1,493,063	SO, CW, HP	Delta	N4OGW	1,275,513
SO, MIX, HP	Roanoke	K4OV	671,814	SO, CW, HP	Great Lakes	N8AA	1,444,860
SO, MIX, HP	Rocky Mountain	K7IA	319,088	SO, CW, HP	Hudson	NX2X	558,486
SO, MIX, HP	Southeastern	AD4Z	1,441,763	SO, CW, HP	Midwest	NCØO	100,340
SO, MIX, HP	Southwestern	W6YI (K6AM, op)	1,426,095	SO, CW, HP	New England	NN1N	2,239,050
SO, MIX, HP	West Gulf	K5GN	1,948,960	SO, CW, HP	Northwestern	N9RV	1,570,176
SO, MIX, HP	Canada	XM3AT (VE3AT, op)	2,690,688	SO, CW, HP	Pacific	N6TV	1,304,772
SO, PH, QRP	Atlantic	W2TI	21,138	SO, CW, HP	Roanoke	N4AF	1,752,975
SO, PH, QRP	Central	KC9AMM	308	SO, CW, HP	Southeastern	K5KG	1,292,936
SO, PH, QRP	Delta	KC5WA	19,415	SO, CW, HP	Southwestern	K6NA	1,188,556
SO, PH, QRP	Great Lakes	KC8IMB	27,667	SO, CW, HP	West Gulf	K5WA	1,161,215
SO, PH, QRP	Hudson	W2WGK	11,328	SO, CW, HP	Canada	VA7ST	363,580
SO, PH, QRP	New England	N1YWB	108,120	Multioperator	Atlantic	NN3W	2,440,508
SO, PH, QRP	Pacific	KJ6MQM	1,482	Multioperator	Central	N2BJ	377,566
SO, PH, QRP	Roanoke	N4ZAK	8,240	Multioperator	Dakota	NØAT	855,768
SO, PH, QRP	Southeastern	NT4TS	24,150	Multioperator	Delta	K4EDI	145,740
SO, PH, QRP	Southwestern	W6QU (W8QZA, op)	52,569	Multioperator	Great Lakes	K8AZ	2,157,705
SO, PH, LP	Atlantic	N3WD	133,950	Multioperator	Hudson	K2QMF	272,025
SO, PH, LP	Central	N9LB	113,577	Multioperator	Midwest	KØCA	75,145
SO, PH, LP	Dakota	WBØTSR	105,374	Multioperator	New England	KØDQ	2,988,014
SO, PH, LP	Delta	KE5UTN	29,835	Multioperator	Northwestern	W7IJ	504,431
SO, PH, LP	Great Lakes	NV8N	415,140	Multioperator	Pacific	K6MMM	404,192
SO, PH, LP	Hudson	NT2I	62,060	Multioperator	Roanoke	NR4M	1,311,960
SO, PH, LP	Midwest	NØHTV	26,063	Multioperator	Rocky Mountain	W7CT	644,324
SO, PH, LP	New England	N1UR	1,004,036	Multioperator	Southeastern	N2IC	2,201,620
SO, PH, LP	Northwestern	W7WEC	14,326	Multioperator	Southwestern	NX6T	833,831
SO, PH, LP	Roanoke	W4FT	150,750	Multioperator	West Gulf	NX5M	1,776,060
SO, PH, LP	Rocky Mountain	N7MZW	95,535	Multioperator	Canada	VE3YAA	1,255,093
SO, PH, LP	Southeastern	WB4OMM	214,704				
SO, PH, LP	West Gulf	KE5OG	66,339				
SO, PH, LP	Canada	VE1WOW (K1WO,op)	182,268				
SO, PH, HP	Atlantic	W3LL	829,068				
SO, PH, HP	Central	NN9M	3,172				
SO, PH, HP	Dakota	KØBUD	61,344				
SO, PH, HP	Delta	W5WMMU	1,189,377				
SO, PH, HP	Great Lakes	K8ZZU	71,160				
SO, PH, HP	Hudson	W2IRT	334,464				
SO, PH, HP	Midwest	KØRH	441,189				
SO, PH, HP	New England	W1PL	105,141				
SO, PH, HP	Northwestern	W7WA	1,508,046				
SO, PH, HP	Pacific	K6AAX	277,065				
SO, PH, HP	Roanoke	N4LA	263,331				
SO, PH, HP	Rocky Mountain	K9MWM	224,016				
SO, PH, HP	Southeastern	NJ2F	172,620				
SO, PH, HP	Southwestern	W6AFA	525,480				
SO, PH, HP	West Gulf	K5TR	1,651,104				
SO, PH, HP	Canada	VA3XH	114,625				

Regional Leaders														
Northeast Region			Southeast Region			Central Region			Midwest Region			West Coast Region		
(New England, Hudson and Atlantic Divisions; Maritime and Quebec Sections)			(Delta, Roanoke and Southeastern Divisions)			(Central and Great Lakes Divisions; Ontario Section)			(Dakota, Midwest, Rocky Mountain and West Gulf Divisions; Manitoba and Saskatchewan Sections)			(Pacific, Northwestern and Southwestern Divisions; Alberta, British Columbia and NWT Sections)		
W1MR	121,164	SO, Mix, QRP	W4UT	43,500	SO, Mix, QRP	KU4A	27,360	SO, Mix, QRP	KØOU	175,824	SO, Mix, QRP	W6YX	77,448	SO, Mix, QRP
ND3D	38,254	SO, Mix, QRP	KS4X	43,043	SO, Mix, QRP	K8ZT	25,134	SO, Mix, QRP	WA5DSS	477	SO, Mix, QRP	W6AQ	38,367	SO, Mix, QRP
K1TW	1,330	SO, Mix, QRP				AF9J	1,064	SO, Mix, QRP						
VA2SG	125	SO, Mix, QRP												
N2KW	387,940	SO, Mix, LP	W4IX	793,084	SO, Mix, LP	K9OM	552,951	SO, Mix, LP	KØAD	401,718	SO, Mix, LP	K2PO	646,600	SO, Mix, LP
N2ZN	206,448	SO, Mix, LP	NR3X (N4YDU, op)	769,365	SO, Mix, LP	AI4BJ	127,832	SO, Mix, LP	N1CC	181,830	SO, Mix, LP	VE6EX	307,781	SO, Mix, LP
KA1WIF	111,320	SO, Mix, LP	N9CM	274,446	SO, Mix, LP	WD8S	92,610	SO, Mix, LP	N5AW/Ø	169,719	SO, Mix, LP	N6MI	188,980	SO, Mix, LP
KB3LIX	79,929	SO, Mix, LP	N8II	250,756	SO, Mix, LP	N9LYE	67,803	SO, Mix, LP	AAØFO	155,794	SO, Mix, LP	WA6FGV	176,995	SO, Mix, LP
WA2JQK	73,188	SO, Mix, LP	WA5SOG	100,580	SO, Mix, LP	W8KNO	59,878	SO, Mix, LP	N5ZC	155,244	SO, Mix, LP	NN6CH	170,000	SO, Mix, LP
VY2ZM	2,642,444	SO, Mix, HP	N5DX	2,294,334	SO, Mix, HP	XM3AT (VE3AT, op)	2,690,688	SO, Mix, HP	K5GN	1,948,960	SO, Mix, HP	NK7U (N6MJ, op)	1,767,987	SO, Mix, HP
K1LZ	2,243,568	SO, Mix, HP	N8OO	1,870,429	SO, Mix, HP	VE3EJ	2,639,990	SO, Mix, HP	WØEWD	1,293,796	SO, Mix, HP	K6XX	1,493,063	SO, Mix, HP
K2TJ	1,794,962	SO, Mix, HP	AD4Z	1,441,763	SO, Mix, HP	K9CU (KB9UWU, op)	393,120	SO, Mix, HP	KØSR	1,179,684	SO, Mix, HP	W6YI (K6AM, op)	1,426,095	SO, Mix, HP
N2NT (W2GD, op)	1,670,214	SO, Mix, HP	K4AB	1,207,991	SO, Mix, HP	W9IU	265,200	SO, Mix, HP	K5RX	445,985	SO, Mix, HP	W6NV	1,417,725	SO, Mix, HP
K3ZO	1,352,328	SO, Mix, HP	K4OV	671,814	SO, Mix, HP	VE3CR	252,650	SO, Mix, HP	K5RT	392,754	SO, Mix, HP	K7RL	1,286,734	SO, Mix, HP
N1YWB	108,120	SO, Ph, QRP	NT4TS	24,150	SO, Ph, QRP	KC8IMB	27,667	SO, Ph, QRP				W6QU (W8QZA, op)	52,569	SO, Ph, QRP
W2TI	21,138	SO, Ph, QRP	KC5WA	19,415	SO, Ph, QRP	N8XA	9,894	SO, Ph, QRP				KJ6MQM	1,482	SO, Ph, QRP
W2WGK	11,328	SO, Ph, QRP	N4ZAK	8,240	SO, Ph, QRP	KC9AMM	308	SO, Ph, QRP						
KB1HNZ	4,026	SO, Ph, QRP	K2FF	3,519	SO, Ph, QRP									
KC2JRQ	40	SO, Ph, QRP	KG4IGC	2,178	SO, Ph, QRP									
N1UR	1,004,036	SO, Ph, LP	WB4OMM	214,704	SO, Ph, LP	NV8N	415,140	SO, Ph, LP	WBØTSR	105,374	SO, Ph, LP	K6GHA	112,350	SO, Ph, LP
VE1WOW (K1WO, op)	182,268	SO, Ph, LP	W4FT	150,750	SO, Ph, LP	NT8Z	172,291	SO, Ph, LP	N7MZV	95,535	SO, Ph, LP	K7XE	51,350	SO, Ph, LP
N3WD	133,950	SO, Ph, LP	KT4ZB	135,408	SO, Ph, LP	N9LB	113,577	SO, Ph, LP	KE5OG	66,339	SO, Ph, LP	VE7NS	30,780	SO, Ph, LP
W2TF	105,183	SO, Ph, LP	KD4LYS	95,375	SO, Ph, LP	K8PGJ	107,625	SO, Ph, LP	K5RDO	32,453	SO, Ph, LP	AG6AN	22,344	SO, Ph, LP
KA2KON	62,445	SO, Ph, LP	K4WES	82,544	SO, Ph, LP	W9KVR	60,372	SO, Ph, LP	N5DTT	26,390	SO, Ph, LP	KJ6HBY	22,344	SO, Ph, LP
W3LL	829,068	SO, Ph, HP	W5WUU	1,189,377	SO, Ph, HP	VA3XH	114,625	SO, Ph, HP	K5TR	1,651,104	SO, Ph, HP	W7WA	1,508,046	SO, Ph, HP
W2IRT	334,464	SO, Ph, HP	WA5OYU	479,675	SO, Ph, HP	VA3YQJ	101,038	SO, Ph, HP	KØRH	441,189	SO, Ph, HP	W6AFA	525,480	SO, Ph, HP
W1PL	105,141	SO, Ph, HP	K5ER	424,080	SO, Ph, HP	K8ZZU	71,160	SO, Ph, HP	K5RZA	251,988	SO, Ph, HP	K6AAX	277,065	SO, Ph, HP
NW3H	102,500	SO, Ph, HP	N4LA	263,331	SO, Ph, HP	K8MJZ	19,200	SO, Ph, HP	AD5XD	250,560	SO, Ph, HP	K6JAT	113,876	SO, Ph, HP
AD1DX	97,686	SO, Ph, HP	NN4F	240,986	SO, Ph, HP	KT8D	6,348	SO, Ph, HP	K9MWM	224,016	SO, Ph, HP	W7PU	40,782	SO, Ph, HP
AA1CA	125,969	SO, CW, QRP	K4MTI	71,344	SO, CW, QRP	VE3MGY	39,600	SO, CW, QRP	N5PJY	49,706	SO, CW, QRP	WA6DBC	47,885	SO, CW, QRP
K8CN	90,725	SO, CW, QRP	AA4SD	31,135	SO, CW, QRP	VA3RKM	27,189	SO, CW, QRP	KA8HDE	17,892	SO, CW, QRP	N7IR	37,200	SO, CW, QRP
K3TW	68,288	SO, CW, QRP	NU4B	20,658	SO, CW, QRP	VE3IGJ	17,028	SO, CW, QRP	W5GAI	9,660	SO, CW, QRP	KM6Z	28,512	SO, CW, QRP
W2JU	18,720	SO, CW, QRP	KI4FW	11,622	SO, CW, QRP	N1RU	16,808	SO, CW, QRP	KKØG	6,006	SO, CW, QRP	WB6BDD	1,456	SO, CW, QRP
NQ2W	7,770	SO, CW, QRP	KD4NEM	9,139	SO, CW, QRP	AI9K	15,720	SO, CW, QRP	K9JVV	3,912	SO, CW, QRP	K6MI	819	SO, CW, QRP
VA2WA (VA2WDQ, op)	1,055,640	SO, CW, LP	AA4NC	666,302	SO, CW, LP	W1NN	707,824	SO, CW, LP	WXØB (AD5Q, op)	792,064	SO, CW, LP	K7WP	566,202	SO, CW, LP
WA1Z	883,361	SO, CW, LP	WD4AHZ	522,063	SO, CW, LP	NA8V	535,458	SO, CW, LP	N5DO	578,032	SO, CW, LP	W7YAQ	566,019	SO, CW, LP
K3EL	758,735	SO, CW, LP	WB4TDH	485,472	SO, CW, LP	KV8Q	494,320	SO, CW, LP	W5RYA	222,885	SO, CW, LP	WJ9B	363,465	SO, CW, LP
VE1RGB	610,870	SO, CW, LP	WA1FCN	398,752	SO, CW, LP	VE3KI	361,200	SO, CW, LP	WØETT	202,027	SO, CW, LP	VE7JH	293,436	SO, CW, LP
N2GA	435,312	SO, CW, LP	N5CW	266,336	SO, CW, LP	K8AJS	246,189	SO, CW, LP	NØAX	194,361	SO, CW, LP	N6EE	114,908	SO, CW, LP
NN1N	2,239,050	SO, CW, HP	N4AF	1,752,975	SO, CW, HP	W9RE	1,648,861	SO, CW, HP	WØUA	1,467,252	SO, CW, HP	N9RV	1,570,176	SO, CW, HP
AA3B	2,045,463	SO, CW, HP	K5KG	1,292,936	SO, CW, HP	N8AA	1,444,860	SO, CW, HP	K5WA	1,161,215	SO, CW, HP	N6TV	1,304,772	SO, CW, HP
W3UA	1,601,775	SO, CW, HP	N4OGW	1,275,513	SO, CW, HP	K9CT	1,321,493	SO, CW, HP	N5RZ	446,732	SO, CW, HP	K6NA	1,188,556	SO, CW, HP
N2MM	1,161,702	SO, CW, HP	KØEJ	1,119,309	SO, CW, HP	N8BJQ	867,024	SO, CW, HP	K9DU	313,313	SO, CW, HP	AK6W	1,030,380	SO, CW, HP
K1IMI	839,679	SO, CW, HP	KZ5D	938,067	SO, CW, HP	K8GL	844,032	SO, CW, HP	K6XT	249,340	SO, CW, HP	K9YC	635,828	SO, CW, HP
KØDQ	2,988,014	Multioperator	N2IC	2,201,620	Multioperator	K8AZ	2,157,705	Multioperator	NX5M	1,776,060	Multioperator	NX6T	833,831	Multioperator
NN3W	2,440,508	Multioperator	NR4M	1,311,960	Multioperator	VE3YAA	1,255,093	Multioperator	NØAT	855,768	Multioperator	W7IJ	504,431	Multioperator
N3AD	1,523,340	Multioperator	N1LN	1,172,451	Multioperator	VE3UTT	1,237,110	Multioperator	W7CT	644,324	Multioperator	K6MMM	404,192	Multioperator
N1TA	916,479	Multioperator	VW4LL	1,077,536	Multioperator	VE3MIS	769,700	Multioperator	NR5M	501,294	Multioperator	N6QQ	393,624	Multioperator
N1TB	684,388	Multioperator	W4MYA	886,240	Multioperator	N2BJ	377,566	Multioperator	KØKX	403,949	Multioperator	W1SRD	282,897	Multioperator

WRTC-2014 Station Evaluations

An interesting aspect of the 2012 event was the participation by testers who were evaluating station set-ups for the forthcoming 2014 WRTC. The calls used were K1GO, K1RQ, K1ZD, N2KW, N9NB, N11L, W1HH, W1MA, W1MJ, W1SJ, W1UE, W1UJ, and WB1Z. For information about this interesting experiment, visit www.wrtc2014.org/competition/2012-station-test.



Paul, LX1HP was one of the LX75HQ operators. (Photo courtesy LX75HQ team)

Contest University of Finland Practical Lab — Mens et Manus

The first ever Finnish Contest University (OH CTU) was held in July 2012 just prior to the IARU HF Championship. It was a huge success with a full house of 80 new and seasoned testers attending. To cap the success story, the professors and their associates put theory to work and traveled to the Aland Islands the following day to air a five-station OH Headquarters contest machine, OHØHQ. No, it was not a turnkey business — it included all elements of a serious effort from hoisting towers to making five stations operational. All of the tricks were employed including having two signals on the same band and power splitting, resulting in multiple-direction beaming.

The battlefield was set up Field Day style at the OHØZ super station. While the CTU itself was conducted with a well defined curriculum, the participants split into groups both seasoned and new testers. It also involved well-tuned lectures aimed at a top university ranking in our field. The "Nothing more, Nothing less" — approach resulted in high evaluations.



OHØHQ ops (left to right) Kari, OH2XX; Juha, OH2N; Bob, K3EST; Timo, OG9X; Martti, OH2BH; Juha, OH6XX; Tomi, OH6EI; Harri, OH6VM; Pekka, OH2TA; Peter, OHØJFB. (Photo by Peter, OHØJFB)

The OHØHQ practical lab was more of a leisure exercise, focusing on fun in Finland's Midnight Sun, while still providing a full offering of OH HQ multipliers from the semi-rare Aland Islands. We were delighted to host CQWW Contest Director, Bob Cox, K3EST who came to experience the Finnish summer at its best. He witnessed the camaraderie of the young and the old alike working together in the spirit of the fair play, in a mission for safeguarding the future of the CQWW Contest, World and Europe categories, currently in turbulence.

The aim is to make contesting better than it was when we picked it up, leading us toward an ever-growing competitive lifestyle with the right values. The Contest University Finland and IARU Championship projects were organized by the Finnish Amateur Radio League (SRAL) with the help of Contest Club Finland (CCF), OH-DX-Foundation, CQ Communications Inc, Radio Arcala (OH8X) and Wintel Finland, Ltd.



This is the 20 meter CW team of 9A2ØHQ that operated at 9A3B. (Photo courtesy 9A2ØHQ team)

Alex, UT7DK at 4Z4AK

While in Israel for six months I managed to get a little experience on the air from this region and no clear conclusion that this is the geographical place where you can win a majority of Amateur Radio competitions. After receiving permission from the leaders of 4X4REM about the opportunity to work at their station, I began preparations for the IARU HF Championship.

After analyzing the results from the past few years and evaluating the technical capabilities of the station, I decided to operate in the category Single-Op, Mixed, Low Power. The main tactical plan was the maximum use of the high bands for more QSO and focus on CW.



Propagation did not disappoint. During the whole competition the high bands were open, making it possible to CQ. Especially worth mentioning was 21 MHz where I managed to keep pace at the beginning and the end of the contest.

This is my first IARU Championship and I am happy that we managed a good result. I want to thank the leadership of the 4X4REM club station of IARC and personally 4X1JT-Israel and 4Z5MU-Slava for this opportunity and to all who called and responded in the contest.

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 weekend), 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 7 plots the eight daily mid-latitude K indices for July 11 – 15.

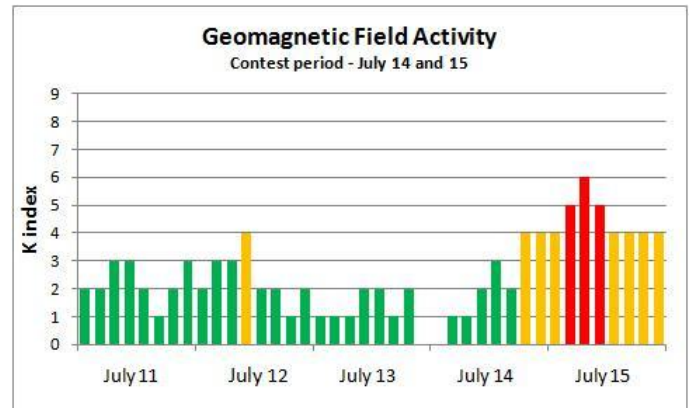
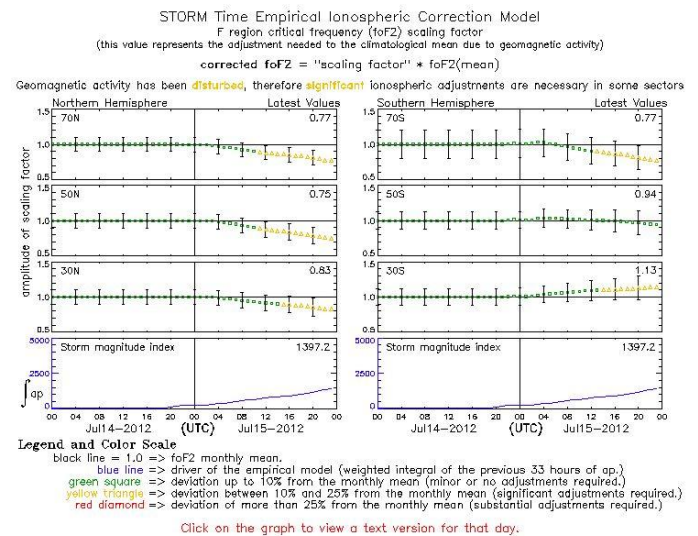


Figure 7

One 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). Figure 8 shows the data for July 14 and 15. 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).



Latest Values at: 2012 Jul 15 2300 UTC (DOY = 197)
Updated: 2012 Jul 15 2330 UTC

NOAA/SWPC Boulder, CO USA

Figure 8

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!

With this article, author Carl Luetzelschwab, K9LA is retiring from writing up the results of the IARU HF Championship. Thanks, Carl, for your years of service to the contest and contesting community!

W1AW/7 - The Arizona Outlaws Contest Club in the 2012 IARU HF Championship

Bob Epstein K8IA
President, Arizona Outlaws Contest Club, N7AT

Summary

During the 2012 IARU HF Championship, the Arizona Outlaws Contest Club (AOCC) had the honor of being selected to use the W1AW/7 call sign, becoming the only station in the world to give out the "ARRL" multiplier. This brief article will take you from the inception of the idea, through the organizational effort, and to the final product itself: 38 Arizona Outlaws, 16 member stations, the W1AW/7 call sign, 8,461 QSOs, and 8,318,205 points in the 24-hour 2012 IARU HF Championship.

Bold Move By An Infant Contest Club

The Arizona Outlaws Contest Club was formed in June 2009. We quickly attracted 60 members including many of the significant testers in the 7th call area. By the first year we had grown to 105 members and we were getting noticed.

After the 2010 IARU HF Championship, I had entertained an idea, "Why couldn't AOCC host a W1AW/7 headquarters operation". Never mind that no club with such a short history had ever been so honored. It was worth a shot. I sent off an email to ARRL CEO and old friend Dave, K1ZZ asking what AOCC would have to do to be considered for a W1AW/7 or NU1AW/7 operation.

Initial Response from K1ZZ

Dave responded within a few hours. His email said, "Bob, the procedures are rather informal: expression of interest along with description of the station and operator resources available." He also added, "W1AW and NU1AW are already committed for 2011 but there's at least one opening for 2012."

Who in AOCC Would Be Interested?

Now, unlike most contest clubs, AOCC is not blessed with more than a small handful of above-average contest stations and nothing even remotely approaching "superstation" status. We'd have to do this with "above average" contest stations only. I was not discouraged though, as we do have our share of really good operators that can make up the difference. We did want a decent signal on each band and mode, as we would be representing the ARRL.

I then surveyed the owners of the better-equipped stations in AOCC to see who would be interested in hosting at least a band-mode for a future effort. I composed an email to about 20 members that had above-average stations on at least one band. I had to be careful to include only those stations within ITU Zone 6, since the eastern boundary of Zone 6 runs through the eastern half of the state.

"Applying" For the Job - K1ZZ Response

When we had the stations picked, I then made an "informal expression of interest" as Dave calls it. That was done in late July 2010. This email included the stations interested organized on the basis of the best antenna system on each band and mode. It was essentially, "Here is what AOCC has.....is it good enough?" We were hoping it was!

Dave's response was quick and concise. He replied "Thanks, Bob. That's an impressive inventory. The stations for 2011 are pretty well set but I'll put you on the list for consideration in 2012." That was great news!

Fast Forward to July 2011

After the 2011 IARU HF Championships, it was again time to query K1ZZ on where AOCC stood for a future HQ call sign assignment. Dave responded quickly again, "I have you down for W1AW/7 in 2012. It's in ink."

Whoo-hoo.....it's official, the infant Arizona Outlaws Contest Club would be W1AW/7 for the 2012 IARU HF Championship and give out the "ARRL" multiplier! We are the youngest club ever to be chosen for this honor.

Now the real work began.

Preliminary Organization

The first thing accomplished after the announcement was to appoint a "W1AW/7 Committee" among the Outlaws. Internationally well-known tester Mike, KC7V (Voodoo Contest Group, WRTC Referee, etc) was picked to chair the four member committee. Others on the Committee included Guff, KS5A; John, K7WP; and Bob, K8IA. Weekly breakfast meetings were planned and for the most part, carried out.

Who We Gonna Put Where?

The Committee re-contacted those who had expressed an interest in hosting a band-mode. With an active contesting core of 50-60 Arizona Outlaws (out of 140 members) and a large part of Arizona within ITU Zone 6, we had a lot of station location options.

In addition to having an above-average signal on a band, another primary requirement was that a station owner be willing to open his home to other Arizona Outlaws. This was to be a club event first and allowing as many Arizona Outlaws the chance to operate as W1AW/7 as possible was very important to us.

After much thought and juggling band-mode assignments of the prospective participants (and eliminating several of the bigger stations who had to drop out), we came up with the following by February 2012 and firmed it up in May 2012.

160M CW and SSB: N5IA - 120' vertical (Rohn 25) built specifically for the contest at Milt's new QTH

80 CW: AA7A – Three-element vertical phased array

80 SSB: N6VR - ¼-wave vertical with many radials

40 CW: N6SS – 4-el Yagi at 70' (and possibly another 4-el at 130' by contest time). Nice quiet rural location.

40 SSB: N7RT – 4-el full sized homebrew (OWA) Yagi at 130'

20 CW: W8AEF - 4-el Yagi at 70' and good location

20 SSB: K7FA – 6-el monobander at 155', TH7 at 85', 4-el monobander at 52'

15 CW early (EU) hrs: AB7E - OB16-3 at 72' (and best HFTA EU profile in AOCC but blocked to JA/VK)

15 CW later (JA/VK) hours: K8IA - 3-el SteppIR at 78', 5-el monobander fixed JA at 62', Bencher Skyhawk fixed east at 45'

15 SSB: N7DD - 5-el monobander at 75' at excellent low noise location

10 CW: N7CW - C31XR at 105' (the chosen location, but had to bow out due to last minute emergency health problem with his father)

10 CW emergency subs: AA7V C3S at 35' with good location and K8IA 3-el SteppIR at 78'

10 SSB: K7KR - two stack of C31XR's at 80' and 45'

We also solicited members who wanted to be "emergency/standby stations" in case of weather-related issues or equipment malfunctions at the main stations. Since Arizona in the summer is monsoon season, some really nasty and unpredictable weather does occur. We wanted to be ready. In this regard, the following stations were activated for short periods:

20M SSB: KY7M - 3-el SteppIR at 66'

40M CW: W6XI - 3-el Yagi at 70'

So, as you can see, we had some big antennas and some very average antennas. But we knew we would have fun!

The Operators

We had an "open enrollment" period for operator staffing. Anyone wanting to operate with the W1AW/7 call sign in the 2012 IARU HF Championship event was encouraged to contact the station owner(s) of his choice for assignment. This was one area of the event that the Committee took a hands-off approach. We felt it was great that station owners opened their homes/shacks for other Arizona Outlaws but we were not going to micro-manage their guest choices.

The final operator count showed 38 different Arizona Outlaws, distributed as follows:

160 CW/SSB: N5IA, W5CF, WA5Y, WD5COV, NI5L

80 CW: AA7A, KY7M

80 SSB: N6VR, N6KZ

40 CW: N6SS, KS5A, W6XI

40 SSB: N7RT, K7JQ, KE7DX, NA2U, W2AJW

20 CW: W8AEF, K6WSC, KC7V, NI7R

20 SSB: K7FA, K7LY, KD6GHX, KY7M, W4LSC, W7ZR, WA7LNV

15 CW: AB7E, K8IA

15 SSB: N7DD, KE2VB, KFØX, W8TK

10 CW: AA7V, K8IA

10 SSB: K7KR, N4TLO, N7AZ, N7RQ

The Contest

IARU HF Championship is always 24 hours of fun. This year was no exception and our fun was heightened by our members using the W1AW/7 call and being the only station in the world giving out the ARRL multiplier. What a great time!

There were some downside periods, though. A CME hit and its effects were noted in Arizona beginning about 1800Z. Fortunately that is after the peak EU openings on the high bands. It did hit us fairly hard, though, and made very heavy QSB to some areas and near blackout to others. 10 meters was poor regardless of the CME.

In addition, we had the usual summer Arizona monsoon weather – lots of winds, lightning and rain all through the day. Mike, KC7V coordinated all of the station assignment movement during these periods. Having a

huge area (most of Arizona) to play with really helped our efficiency, since not all of the state was affected by the weather at the same time.

What a wonderful opportunity for experienced and inexperienced contesters alike. Ditto for those of our members who are limited by HOA rules or otherwise antenna-restricted. Everyone I talked to had a great time.

Results

Our score was better than I thought it would be. After all, this wasn't a full blown "take no prisoners" contest for us. It was a club operating event, but clearly, everyone "got it" when realizing that representing the ARRL properly to an international audience meant doing their best. Congrats to everyone involved, the operators, and especially to the station owners who made this happen!

Our claimed score breakdown was as follows:

BAND	CW QSOs	SSB QSOs	ITU Zones	Headquarters Stations
160	177	45	9	3
80	488	385	23	13
40	779	892	34	29
20	1323	1456	40	39
15	1116	1348	47	40
10	233	219	25	13
TOTALS	4116	4345	178	137
FINAL SCORE: 8,318,205				

The [AOCC webpage](#) has additional information and pictures. Click on a station, operator, or score to learn more and see exclusive photos!