



ARRL IARU HF World Championship 2020 Full Results

By Bob Raymond, WA1Z (bobraymondwa1z@gmail.com)

A record-breaking 5,684 logs were submitted for the 2020 IARU HF World Championship, a significant increase of 20.7 percent from 2019. The COVID-19 global pandemic is often cited as an underlying reason for an increase in submitted contest logs in 2020. However, IARU HF participation has grown steadily for many years and likely benefited this year from good high-band propagation as well. Nothing keeps people “in the chair” longer than good propagation!

We saw log submission increases in nearly all of the single operator categories. Unsurprisingly, there was a significant dip in Multioperator Single Transmitter logs.

2020 Log Submissions by Category			
Category	2019 Logs	2020 Logs	% Change
Single Operator	2,732	3,480	27.4%↑
Single Operator Unlimited	1,394	1,857	33.2%↑
Multioperator Single Transmitter	162	125	- 22.8%↓
HQ/Special Stations	66	68	3.0%↑

Geographically, there was a 48 percent increase in log submissions from North and South America combined. Oceania had a 55 percent increase. Indonesia continues to drive the rise in submitted logs from Oceania year-over-year from just a few dozen a couple years ago to well over one hundred submitted logs this year.

While the volume of activity has been up this year across the contesting landscape, travel restrictions have kept testers from going to typically inactive DX locations. However, the nature of IARU HF multipliers absorbs some of the impact of this unfortunate reality better than other DX contests. ITU Zones generally encompass multiple DX entities, lessening the impact of a specific entity going unrepresented, and most Headquarter stations tend to come from countries with active ham populations.

As a result, 2020 IARU HF activity produced about the same number of available multipliers as recent years. In 2020, at least one log was submitted in fifty-four ITU Zones matching the total from 2019. Two additional Headquarter and Special stations submitted logs compared to last year.



Max, VE6RST, guest operating from VE6SV in Alberta, finished ninth place in the W/VE Single Operator Unlimited, CW Only, High Power category. Photo courtesy Gord, VE6SV.

Propagation

There was a steady, wide-spread opening on 10 meters between Northeastern North America and most of Europe for several hours on Saturday. Some of the larger W/VE stations in the east worked as many as 100-200 QSOs with Europe.

While the rates were best on the East Coast, many stations across North America worked into Europe on 10 meters to some degree. In the interior, knowing where and when to point the antenna was important. A great example of this happened in Colorado, where Bill, KØUK, reported in his 3830scores.com post that he worked TMØHQ in France and 8N1HQ in Japan on 10 meters in a span of 23 minutes! Unfortunately, many in the Northwest reported no European propagation on 10 meters at all.

While those of us in the Northern Hemisphere were enjoying good east-west paths across the Atlantic on 10 meters, conditions from South America to the high-participation continents of North America and Europe were particularly abysmal. On the north coast island of Bonaire, PJ4A (operated remotely by John, K4BAI), was the only South American station able to make any traction in a short opening during the 1600Z hour.

While 20 meters remained the go-to daytime band and stayed open throughout the night for some, good

propagation on 15 and 10 meters gave many participants multiple band options evoking memories of winter DX contests in high sunspot years. There was even an interesting polar path between Alaska and Europe from 0800 to 1000Z when a few lucky folks worked Steve, KL7SB, on both 15 and 10 meters – in the middle of Steve’s night!

The 160-, 80-, and 40-meter bands present a challenge in the Northern Hemisphere in July. The shortened common paths of darkness and the seasonal increase in storm static make operating the low bands an exercise in persistence. Art, KZ5D, commented in his 3830scores.com post that he was dealing with “terrible noise” on the low bands on Saturday evening. Just as he was about to call it quits, he decided to take short break and then jumped back into the fray. Sometimes, a break from the noise for a few minutes can help keep you in the chair longer overall.

Single Operator

Dan, N6MJ, and Chris, KL9A, made the best of a disappointing situation when their trip to Costa Rica was canceled. Instead, the pair took part in a Single Operator, Mixed Mode, High Power competition among some of the biggest stations in the Western United States.

Dan secured a guest operating spot at N6WIN’s new station in Arizona while Chris was invited to operate from N9RV’s QTH in Montana. They were joined by Axel, KI6RRN, who operated as NO6T from WA6TQT’s QTH in southern California and Mitch, K7RL, in Washington, in the quest for Zone 6 bragging rights.

ITU Zone 6 covers a large area of the Western United States. Therefore, fairly different propagation opportunities existed for each operator. In the southern portion of the zone, Dan and Axel enjoyed working a handful of European stations on 10 meters during Saturday afternoon, but Mitch and Chris to the north were completely shut out of the opening.

Although all four competitors had fairly consistent QSO numbers to 5-point regions outside of Europe, Chris finished with the most contacts to Europe with 579 across all bands. However, it is often the volume of 3-point stations in Zones 7 and 8 to the east that becomes the deciding factor for competitive operations in this area of the country. It was in this 3-pointer battle where both Dan and Axel pulled away from their northern rivals finishing first and second, respectively. Dan capitalized early with great 20-meter phone runs that allowed him to

keep the rate up after spending the first few hours operating CW on 20 meters.

Dan earned new Southwestern Division and ITU Zone 6 Single Operator, Mixed Mode, High Power records. His 3,940 contacts is far and away the highest total by a North American single operator in IARU HF’s history.

While the “Zone 6 Big Guns” were preparing to fight for West Coast supremacy, Ron, N4XD, was in Utah, in the midst of a cross-country trip from Washington State back to his home in North Carolina.



The sun sets on the N4XD mobile station near Bryce Canyon National Park. Photo courtesy N4XD.

He decided to stop near Bryce Canyon National Park for the weekend and operate the contest from his RV. Ron picked a campsite about 7,400 feet above sea level and strung a wire from a 38-foot spider pole attached to the RV’s rear ladder. After adding a few radials for a counterpoise, Ron was on-the-air on 40 through 10 meters.

According to Ron’s report on 3830scores.com, this was the first real test of his mobile station, but he reported to be “pleasantly surprised with how well it worked.”

Ron entered the Single Operator, CW Only, Low Power category and worked “many more EUs than [he] expected along with lots of Zone 8 stations,” adding, “[Japanese stations] on 40 were plentiful, too.”

Ron finished with 413 QSOs, mostly on 20 and 40 meters, including 15 QSOs to Europe on 40 meters.

In the W/VE Single Operator, CW Only, High Power category, Greg, W1KM, achieved another first place finish – his third in a row and fifth in the last six years. In the Midwest Region, one of the contest’s more competitive races occurred between Dave, K5GN, operating from W5KU’s station in Texas, and Steve, N2IC, in New Mexico. Dave edged out Steve by a mere 1.1 percent margin. Both were suffering from heavy

summertime QRN, which made the low bands a bigger challenge than usual, particularly to multiplier-rich Europe.

Single Operator W/VE Division Records			
MIX: Mixed Mode; CW: CW Only; PH: Phone Only; HP: Over 150W; LP: 150W or less; QRP: 5W or less			
Division	Category	Callsign	Score
Atlantic	CW-QRP	N2WK	122,153
Dakota	CW-LP	KØAD	439,332
Midwest	MIX-LP	KXØC (IZ3EYZ, op)	768,040
New England	PH-HP	N1UR	1,264,224
New England	CW-HP	W1KM	2,631,980
Northwestern	MIX-HP	KM7W (KL9A, op)	2,538,032
Northwestern	MIX-LP	KU1CW	747,950
Rocky Mountain	PH-QRP	WWØWB	2,720
Rocky Mountain	CW-HP	N2IC	1,998,141
Southwestern	MIX-HP	ND7K (N6MJ, op @N6WIN)	2,818,446
West Gulf	CW-HP	K5GN	2,020,320



Ahn, YC7UVB, is among the increasing number of Indonesian hams entering the IARU HF contest. Ahn finished first place in Indonesia in the Single Operator, Phone Only, QRP category. Photo courtesy YC7UVB.

Ukrainian stations were well represented at the top of the World Single Operator categories. Roman, URØMC, operating as UW2M, finished first place in Mixed Mode, High Power. Slava, US2YW operating as UW5Y, edged-out Gediminas, LY9A, and Imanol, EC2DX, in a close three-way race in the Mixed Mode, Low Power category. Andriy, UW8SM, ran away with the Phone Only, QRP category and Daniil, UT5EO, produced a strong effort finishing first place in the CW Only, Low Power category.

With the EF8R Multioperator Single Transmitter operation on hold, Juan, EA8RM, operated from his home QTH in the CW Only, High Power category finishing first place in the World. Juan was completely shut-out of the 10-meter transatlantic propagation on Saturday, but caught a decent opening to Europe in the final hours of the contest. Juan's effort set a new African record with just over 4 Million points.

Several other CW Only, High Power continental records were set. Toivo, ES2RR, finished second in the World setting a new European record; last year's winner, Phil, KT3Y, operating from KP2M, set a new North American record; and Jacky, ZL3CW, operating as ZM1A, set a new Oceania record.

The CW Only, QRP category continues to have a dedicated group of European QRP enthusiasts spending long hours in the operating chair churning out QSOs. Harry, LZ6E, and Vitas, LY5G, were locked in a close race for first place trading leads a few times in the first half of the contest before Harry pulled ahead in the final hours.

Single Operator Unlimited

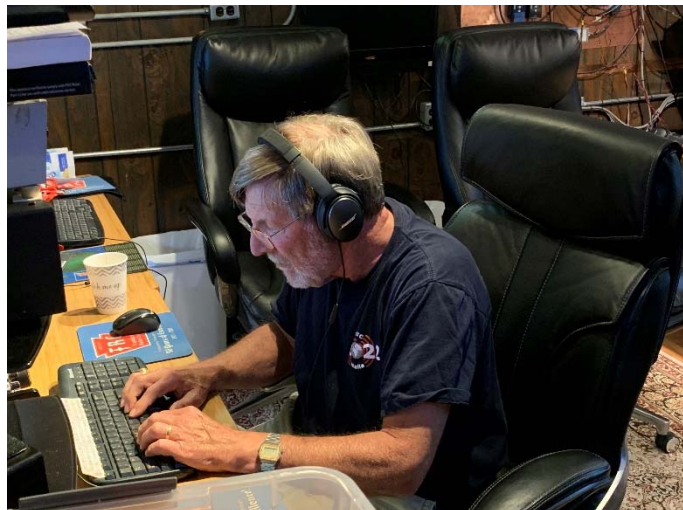
Significant W/VE Overall records were established this year as the six-year-old Single Operator Unlimited categories continue to mature. Single Operator Unlimited stalwarts, Victor, VA2WA, and Bud, AA3B, led the way with new benchmarks set in the Mixed Mode, High Power and CW Only, High Power categories, respectively.

New W/VE Single-Operator Unlimited Records		
Call	Category	Score
VA2WA	Mixed High Power	2,688,975
NN1C	Mixed Low Power	1,202,149
VE3PJ	Phone Low Power	219,687
AA3B	CW High Power	3,060,344
K1XM	CW Low Power	1,149,232

John, W2GD, was in the CW Only, High Power chase group operating from the Ohio QTH of Tom, K8AZ. Tom, whose Multioperator Single Transmitter team was unable to defend their 2019 W/VE victory, opened his QTH to John for a single operator effort. John, whose primary goal was to earn WRTC 2022 qualification points, had originally planned to travel to Aruba to operate as P44W, but had to abandon his travel plans due to COVID-19.

In a post-contest follow-up with John, he shared his approach of "aggressive search and pounce" over the

more traditional approach of trying to run as much as possible from a large station. Instead of focusing on running, he resisted the urge and used station spotting information to focus on maximizing the greatest number of points he could generate from available activity at any given moment. Ultimately, John ran approximately only eight of the twenty-three hours he operated.



John, W2GD, guest operating as K8AZ in Ohio, earned a Central Region first place finish in the Single Operator Unlimited, CW Only, High Power category. Photo courtesy W2GD.

IARU HF's QSO points rules are among the more complex in the family of worldwide DX contests. Intercontinental QSOs are worth five points each. QSOs on the same continent, but in different ITU Zones, are worth three points. QSOs within your own zone are worth just one point. Good strategy in IARU HF involves maximizing the QSO *points* you produce over a period time rather than your raw QSO *number*.

Operators who take advantage of spotting data can make a judgment call about which stations they should contact first. In some cases, running can actually work against you if you end up attracting lower-point contacts in your zone when there are plenty of higher point value contacts to be made by searching and pouncing on spots first.

Located on the northern side of ITU Zone 8, John often had openings to a good portion of the East Coast, which is full of lots of stations to work, but not for many points! Instead, he prioritized.

"The routine (while operating assisted) was work available [multipliers] first, then five pointers, then three pointers then finally one-pointers if needed to keep up the S/P rate," John reflected.

"Running isn't always the path when EUs are worth 5 points and [other stations in Zone 8] one point."

John says he had "rates as high as 145 when chasing spots," adding, "of course it really helps to have a station that is virtually producing 99% first call contacts."

Single Operator Unlimited W/VE Division Records			
MIX: Mixed Mode; CW: CW Only; PH: Phone Only; HP: Over 150W; LP: 150W or less; QRP: 5W or less			
Division	Category	Callsign	Score
Atlantic	MIX-LP	KE3X	539,742
Atlantic	PH-LP	KD2JOE	24,912
Atlantic	CW-HP	AA3B	3,060,344
Atlantic	CW-LP	W3KB	546,117
Central	MIX-LP	NE9U	807,428
Central	CW-HP	K9CT	1,797,476
Dakota	CW-HP	NØAT	487,445
Dakota	CW-LP	KØMPH	107,160
Great Lakes	CW-HP	K8AZ (W2GD, op)	2,306,739
Hudson	MIX-LP	WA2JQK	81,810
Hudson	CW-LP	W1UE	678,216
Midwest	CW-HP	NØAX	1,163,032
Midwest	CW-LP	KØVBU	199,888
New England	MIX-LP	NN1C	1,202,149
New England	CW-LP	K1XM	1,149,232
Northwestern	CW-HP	K4XU	709,440
Northwestern	CW-LP	K7TQ	345,740
Pacific	MIX-LP	K6GHA	141,501
Pacific	PH-LP	N5YJZ	1,653
Rocky Mountain	MIX-HP	W7CXX	347,184
Southeastern	PH-HP	NA4DA	256,920
Southwestern	PH-HP	KK6P (W7IV, op)	651,645
West Gulf	CW-HP	N5RZ	1,307,280
West Gulf	CW-QRP	K5NZ	19,788
Canada	MIX-HP	VA2WA	2,688,975
Canada	PH-LP	VE3PJ	219,687
Canada	CW-HP	VE9AA	1,764,720
Canada	CW-LP	VE3MGY	371,180

Vedran, 9A7DX, operating as 9A5Y, finished first in the World in Single Operator Unlimited, Mixed Mode, High Power. In what has become an uncommon feat, he managed to win while operating only one radio. Vedran reports in his 3830scores.com post that he utilized spotting information aggressively to keep himself busy through the full 24 hours alternating between short stints of running and periods of searching and pouncing. Similar to John's strategy, Vedran also prioritized his contacts working stations that provided the highest point value first. He estimates about 60 percent of his 2,923 QSOs were achieved via search and pounce.

Additional Single Operator Unlimited continental records fell in the Single Operator Unlimited categories with several sizeable scores added for 2020. Serge, UT5UDX, operating in Cyprus as P3X, finished first place in the CW Only, High Power category setting a new mark for Asia. He was followed by Krzysztof, SP7GIQ, operating as SN7Q, who finished in second place while setting a new European record.

Yarik, UW7LL, switched from unassisted Mixed Mode, Low Power in 2019 to the Unlimited side this year to capture first place (and a new European record) ahead of fellow countryman Sergei, UX1AA, operating as UZ3A.

Pit, DK3WE, set a new world record in the Unlimited Mixed Mode, QRP category with an impressive 957,390 points.

New South American records were set by Fabio, PP5BZ, operating as ZW5B, in the Mixed Mode, High Power category and Didier, FY5FY, in the CW Only, Low Power category. New North American records were set by Felipe, NP4Z, operating as KP3DX, in the Mixed Mode, Low Power category and Al, WP3C, in the CW Only, High Power category.

Multioperator Single Transmitter

While we saw a reduction in Multioperator Single Transmitter entries this year, many station owners spent time reconfiguring their stations for remote operation allowing teammates to continue to operate from the same station together without having to be physically present. Half of the top ten entries in W/VE reported some degree of remote operation.

Taking first place in W/VE Multioperator Single Transmitter is KØRF, a partnership between Chuck, KØRF, and George, WØUA. Chuck operated from his QTH while George used a remote desktop program to connect to one of Chuck's logging computers and operate one of the KØRF radios remotely.

Multioperator Single Transmitter W/VE Division Records		
MIX: Mixed Mode; CW: CW Only; PH: Phone Only; HP: Over 150W; LP: 150W or less; QRP: 5W or less		
Division	Callsign	Score
Pacific	K6EZ	1,293,672
Rocky Mountain	KØRF	1,927,884

The team at RM9A won the World Multioperator Single Transmitter title for the second time in three years with UP2L coming in second.

Headquarters and IARU Special Stations

Headquarters station teams are a critical component to this contest because they serve as multipliers. These operations involve several – often dozens – of operators who assemble at some of their country's largest stations to represent their national radio society. There were questions going into July regarding how local guidelines and restrictions were going to affect national societies' effectiveness in getting HQ stations on as many band-modes as possible.

One of the more impressive efforts by a Headquarters team comes from GR2HQ, a group of three dozen contesters who assembled a virtual team to represent the Radio Society of Great Britain (RSGB). Significant social gathering restrictions existed within the United Kingdom in July. As a result, everyone on the team operated from their home stations following a well-coordinated operating schedule of band-mode assignments. Despite the challenges, the RSGB team pulled together and produced a nearly identical result to their 2018 finish (18 Million points) and one of the best results by their team since 2014!

The Tennessee Contest Group and the Deep Dixie Contest Club banded together in another distributed multioperator operation to put W1AW/4 (ARRL) on the air. NU1AW (IARU) operations were distributed across the remote sites owned by Ray, W2RE, in Eastport, Lubec and Jonesport, Maine. Fourteen operators across twelve states remoted into the sites to keep the IARU HQ station active on almost all band-modes.

The head-to-head rivalry between the French and German national societies continued in full force in 2020 with DAØHQ (DARC) assuming the top spot while denying TMØHQ (REF) from finishing in first place for the third consecutive year. The Polish team operating SNØHQ (PZK) shot up the standings from eighth place in 2019 to third in 2020.



Soren, OZ1SY, operating one of the bands for OZ1HQ, the EDR headquarters station in Denmark. Photo Courtesy Henning, OZ2I.

IARU Headquarters Stations	
Call	Score
DAØHQ	25,676,392
TMØHQ	25,163,538
SNØHQ	20,696,780
OLØHQ	20,654,988
S5ØHQ	20,502,514
EF4HQ	19,423,947
LYØHQ	18,930,807
OH2HQ	18,816,875
GR2HQ	18,179,000
IOØHQ	16,849,550
9AØHQ	16,566,036
YTØHQ	16,270,824
OPØHQ	13,326,984
YL4HQ	12,882,114
OEØHQ	12,085,929
YRØHQ	11,823,012
OZ1HQ	11,082,610
RØHQ	10,670,040
HGØHQ	9,058,688
E7HQ	7,713,345
PA6HQ	7,631,028
EM5HQ	7,326,475
NU1AW	6,847,566
LZØHQ	6,521,624
HB9HQ	6,060,430
W1AW	5,080,050
LX8HQ	4,596,584
LN2HQ	3,845,264
ER7HQ	3,317,311
Z3ØHQ	2,990,220
LR4HQ	2,917,472
SK9HQ	2,619,682
8NØHQ	2,576,665
VEØRAC	2,561,241

EIØHQ	1,968,918
UN1HQ	1,832,989
SXØHQ	1,625,025
DXØHQ	1,097,215
E2HQ	697,916
PWØHQ	573,835
7A1HQ	366,555
ES9A	352,800
CX1AA	321,958
ZL6HQ	197,808
CR5HQ	121,148
XE1LM	136,945
HCØT	109,905
A71HQ	109,858
LZØAA	94,696
Z6ØA	54,978
AT1HQ	31,070
VK3WIA	27,240
BVØHQ	12,580
9H1MRL	5,330
VR2HK	1,548
ZS95SARL	603

IARU Administrative Council Stations	
G5W	3,282,903
K1ZZ	2,901,984
LA2RR	2,004,600
VE6SH	29,541
IARU R1	
PB2T	146,740
DJ3HW	85,792
SM6EAN	47,502
IV3KKW	11,319
IARU R2	
XE1KK	23,280
PT2ADM	9,361
VE3YV	7,093
IARU R3	
JA1CJP	178,596

Thanks to the World Wide Radio Operators Foundation (WWROF, www.wwrof.org) for providing the log-scoring for the HQ station competition.

Golden Logs

A total of 109 logs with at least 100 QSOs were submitted with no errors found during log checking. Be sure to check out your own ARRL Log Checking Reports (LCR) by going to the [ARRL Contest Log Check Report](#) page to request your report via email.

Top 25 Golden Logs for 2020		
Call	QSOs	Score
JE1NVD	858	535,036
K2MK	611	150,300
WB4TDH	596	243,528
K1DJ	462	216,480
EW1EA	380	99,800
UA6YH	375	152,626
LZ1ZJ	350	61,256
OZ4NA	347	116,620
SE6N (SA6AXR, op.)	315	101,479
JF2FIU	311	70,812
W0VX	306	78,288
N4MM	304	119,472
DL5AWE	300	78,608
JQ1NGT	284	53,856
OK1DVA	283	64,376
DL6JZ	282	65,278
W7PU (N7EPD, op.)	277	50,286
RD3FT	274	75,756
R7MY	260	55,286
IU3LYJ	251	56,789
IU3GKJ	230	60,420
K9GY	225	23,409
NI7R	220	74,520
K5NA	216	40,704
OP4A/P	210	43,068
LZ5E	210	45,384

Top Ten Scores										
United States and Canada			World			United States and Canada			World	
Single Operator					Single Operator Unlimited					
Mixed-Mode, High Power					Mixed-Mode, High Power					
KC1XX (WA1Z, op)	3,547,530		UW2M (URØMC, op)	4,593,060	VA2WA	2,688,975		9A5Y (9A7DX, op)	4,122,108	
ND7K (N6MJ, op @N6WIN)	2,818,446		UB7K	4,210,956	VA2EW	2,673,160		ES7A (ES7GM, op)	3,646,692	
NO6T (KI6RRN, op @WA6TQT)	2,676,322		RL3A (RA3CO, op)	4,137,192	KO8SCA	1,161,000		IR1G (IZ1LBG, op)	3,615,093	
K5ZD	2,669,794		LY7Z	3,772,158	W1GD	901,544		OM3BH	3,588,530	
KM7W (KL9A, op)	2,538,032		E7DX (E77DX, op)	3,727,405	VE3RZ	823,284		HA3NU	3,535,068	
VE3EJ	2,462,888		DJ5MW	3,683,934	K1AR	747,383		9A3XV	3,284,512	
VE3AT	2,317,560		KC1XX (WA1Z, op)	3,547,530	N6AR	738,304		LY5E	3,126,870	
VE5MX	2,168,793		EI7M (GD4XUM, op)	3,523,632	WO4O	716,286		S53MM	3,078,560	
VE3DZ	2,094,357		RA9P	3,431,297	K9OM	669,088		EU1A	2,767,072	
KD4D	2,069,473		LZ5R (LZ1NK, op)	3,291,562	K3MD	667,656		VA2WA	2,688,975	
Mixed-Mode, Low Power					Mixed-Mode, Low Power					
NR4M (N9NB, op)	901,582		UW5Y (US2YW, op)	2,052,934	NN1C	1,202,149		UW7LL	2,292,930	
KXØC (IZ3EYZ, op)	768,040		LY9A	1,999,250	NE9U	807,428		UZ3A (UX1AA, op)	1,950,184	
KU1CW	747,950		EC2DX	1,989,750	KE3X	539,742		OMØR	1,851,560	
N8II	552,946		LY4L	1,802,560	N4XL	443,685		DL9EE	1,533,168	
W4KZ (KG5HVO, op)	488,474		S5ØW (S57K, op)	1,363,181	W1ARY	266,961		OR2F	1,505,412	
WW4XX (LZ4AX, op)	477,020		R8CT	1,294,600	W9AV	222,887		DQ5M (DK6SP, op)	1,382,566	
KØDI	268,940		LY9Y	1,238,445	K6GHA	141,501		PC3T	1,232,058	
VE3TG	234,569		NR4M (N9NB, op)	901,582	N5DO	140,778		NN1C	1,202,149	
N2EM	194,752		LZØM (LZ2SX, op)	851,250	VE3GFN	129,168		LZ3FN	1,155,635	
K4EJ	151,071		M3AWD (MM3AWD, op)	819,420	W4LT	107,272		RO7C (RG5A, op)	1,151,488	
Mixed-Mode, QRP					Mixed-Mode, QRP					
K5KJ	60,320		HA5BA	207,621	K8ZT	58,497		DK3WE	957,390	
W8UA	34,770		UT1DX	123,018				DDØVS	236,778	
D1WA	28,991		JH7UJU	83,678				YU1LM	159,082	
WO9S	19,844		K5KJ	60,320				LZ5Y (LZ1YE, op)	149,352	
K2GMY	19,584		UA6AK	49,691				YO8BSE	112,256	
W7LG	16,200		UT5EOX	48,200				K8ZT	58,497	
N7JI	14,514		OP4A/P	45,384				JK1TCV	27,780	
K8WU	3,234		RT5R	37,485				IZ3IBL	24,072	
AI6DO	1,800		JM1MTE	36,790				EW1FM	12,100	
N6HI	740		DF7XR	35,728				SP6EII	5,412	

Phone Only, High Power				Phone Only, High Power			
N1UR	1,264,224	ES6RW	1,731,772	KK6P (W7IV, op)	651,645	RA5A	2,368,996
W7WA	1,180,465	OR1X	1,448,072	NA4DA	256,920	PX2A (PY2LED, op)	1,235,392
W6AFA	182,804	N1UR	1,264,224	K2RD	244,644	CR6T	1,098,922
N3NR	155,325	W7WA	1,180,465	VE2NTT	235,081	SO7G	1,092,212
W2JV	147,108	EA3CI	1,048,128	W3LL	120,658	OL7T (OK2BXU, op)	789,447
W7VO	143,364	F8KGM	880,362	N5HC	116,014	S54ZZ	754,273
N4MM	119,472	4X1DX	862,750	WW5L	69,750	RM8A	727,814
KE8FT	84,525	PY4BZ	835,016	N7GCO	52,350	KK6P (W7IV, op)	651,645
K9MWM	79,020	US5D (UT7DX, op)	722,744	VA3WW	46,294	A42K (A41CK, op)	640,584
AB1EP	70,851	RM4HZ	718,148	K6JAT	37,895	G3Q	503,542
Phone Only, Low Power				Phone Only, Low Power			
K5DHY	52,437	IW1FRU	847,645	VE3PJ	219,687	HGØR (HAØNAR, op)	684,152
KM8AM	49,496	PA2TMS	493,810	KA2KON	43,935	IK4LZH	596,808
WA5FWC (NM5M, op)	45,252	MIØI	403,155	VE3XNS	41,316	HG6V (HA6IAM, op)	307,748
KW2J	32,651	OH6ECM	314,685	VE2CSM	29,360	EW7BA	298,584
WA3LXD	30,317	UA3BL	270,470	KD2JOE	24,912	UA9R	232,484
WZ8T	29,574	RC7KY	196,658	WB3BJU	20,104	YO7SR	229,146
N6OKU	26,036	OE1HHB	187,532	KM4IAJ	17,784	VE3PJ	219,687
NG1M	24,820	F4BIV	170,550	KD4LEM	12,054	SP6DVP	208,572
NC4MI	24,644	OK6AB	157,785	W4MTM	12,050	SQ3M	207,900
KS2G	24,570	SQ9LPO	146,550	KE4YOG	8,869	OK1K (OK1XOE, op)	187,017
Phone Only, QRP				Phone Only, QRP			
WWØWB	2,720	UW8SM	157,644			YP8A	39,243
WE6EZ	2,530	LZ1DM	94,809			YU3LAX	7,552
KJ5MA	621	UA3OQ	59,392			HA5BGG	5,100
AB3RW	546	HB9EGA	52,096			JG1LFR	4,452
WD4IYE	392	SP4LVK	47,502			IC8SCI	1,128
VA3MYC (VE3LJQ, op)	72	UR7TV	27,840			YD9UW	154
KK7VL	6	9A4OP	20,412			YD1DGG	11
		M6OXO	19,809				
		PAØAWH	18,954				
		HA1TI	17,010				

CW Only, High Power				CW Only, High Power			
W1KM	2,631,980	EA8RM	4,032,924	AA3B	3,060,344	P3X (5B4AMM, op)	5,917,230
VE3JM	2,428,790	ES5RR (ES2RR, op)	3,842,394	K8AZ (W2GD, op)	2,306,739	SN7Q (SP7GIQ, op)	4,344,384
K1KI	2,214,576	CR6K (CT1ILT, op)	3,539,424	K9CT	1,797,476	UA4W	3,563,648
K5GN	2,020,320	EA2W	3,484,500	VE9AA	1,764,720	SE5E (SM5AJV, op)	3,264,734
N2IC	1,998,141	UW1M	3,370,995	K9NW	1,457,393	AA3B	3,060,344
N4AF	1,648,212	KP2M (KT3Y, op)	2,859,643	K1MK (@K1TTT)	1,383,393	RT9A	2,926,506
N4OGW	1,235,376	RG6G	2,726,400	NT6Q (N5ZO, op)	1,312,790	LY6A	2,863,344
AB3CX	1,102,335	W1KM	2,631,980	N5RZ	1,307,280	OL8M	2,848,461
NA8V	1,042,587	R3ZZ	2,496,600	VE6SV (VE6RST, op)	1,176,496	LY5R	2,785,104
KZ5D	1,038,558	VE3JM	2,428,790	NØAX	1,163,032	YT6W	2,660,952
CW Only, Low Power				CW Only, Low Power			
K7SV	845,952	UT5EO	1,899,597	K1XM	1,149,232	HA1SN	1,785,564
AD5A	661,536	OL5Y	1,241,916	W1UE	678,216	SN7O (SP7IVO, op)	1,694,610
KØAD	439,332	UP7L (UN6LN, op)	937,848	W3KB	546,117	HG5D (HA8QZ, op)	1,589,046
WJ9B	366,156	UF5A	897,440	VE3MGY	371,180	HA1XU	1,488,080
W1QK	319,520	K7SV	845,952	WA1FCN	363,411	LY5W	1,458,185
W1NN	294,424	3V8SS	836,640	K7TQ	345,740	UR6EA	1,252,420
K3MSB	247,923	DM2I	811,155	K4OAQ	335,420	OM3RM	1,247,832
WB4TDH	243,528	4Z4AK	784,640	KM4SII	296,510	WP3C	1,227,534
KG5U	238,249	YL5W (YL2GN, op)	701,920	AA4LS	258,582	K1XM	1,149,232
VE3TM	225,885	OM7RU	697,918	VE3YT	257,527	OM7JG	1,062,324
CW Only, QRP				CW Only, QRP			
NX5M	150,156	LZ6E	466,089	K5NZ	19,788	YL2QN	562,010
N2WK	122,153	LY5G	442,444	KU4A	8,481	EA3O	277,573
K8CN	69,174	DK7HA	298,770	VE3GMZ	5,480	SFØA (SMØLPO, op)	256,284
N4IJ	48,000	EU8F	269,269	W3YJ	4,375	DM7AA	217,288
N7RCS	42,947	JA6GCE	210,210	KC2WUF	2,664	G4ZFE	130,060
KSØMO	41,904	HG3C	207,825	WØGJ	1,079	US5EFU	109,949
NE5TH	40,136	UR5FEO	203,196	AB8FJ	451	PE2K	95,064
WS1L	7,040	RM2D (SM6LRR, op)	176,220			HB9BXE	83,916
VE9BWK	4,625	OP6A (ON6PJ, op)	164,436			GW4W (GW4EVX, op)	80,598
W6GMT	4,218	US5VX	158,920			OK1NG	60,358

Multioperator, Single Transmitter, High Power			
KØRF	1,927,884	RM9A	6,287,125
K1IR	1,717,264	UP2L	5,502,825
K1MM	1,336,392	RU1A	4,811,476
K6EZ	1,293,672	UA4M	4,608,640
N7AP	1,049,040	IR4M	4,231,626
N6WM	1,026,267	RT4G	3,377,715
W5EA	1,025,290	HG6N	3,184,689
WØNA	890,841	HG7T	2,955,399
NV9L	648,600	HG8A	2,725,478
N4IQ	547,060	RT2C	2,483,898

Regional Leaders

HP: Over 150W; LP: 150W or less; QRP: 5W or less; SO: Single Operator; MS: Multi-Single; MIX: Mixed-Mode

West Coast Region			Midwest Region			Central Region			Southeast Region			Northeast Region		
Pacific, Northwestern, and Southwestern ARRL Divisions; Alberta; British Columbia, and NT RAC Sections			Dakota, Midwest, Rocky Mountain and West Gulf ARRL Divisions; Manitoba and Saskatchewan RAC Sections			Central and Great Lakes ARRL Divisions; Greater Toronto Area, Ontario East, Ontario North, and Ontario South RAC Section			Delta, Roanoke, and Southeastern ARRL Divisions			New England, Hudson and Atlantic ARRL Divisions; Maritime and Quebec RAC Sections		
Call	Score	Cat	Call	Score	Cat	Call	Score	Cat	Call	Score	Cat	Call	Score	Cat
Single Operator														
ND7K (N6MJ, op @N6WIN)	2,818,446	MIX-HP	VE5MX	2,168,793	MIX-HP	VE3EJ	2,462,888	MIX-HP	K4AB	1,141,607	MIX-HP	KC1XX (WA1Z, op)	3,547,530	MIX-HP
NO6T (KI6RRN, op @WA6TQT)	2,676,322	MIX-HP	N5NU	1,174,240	MIX-HP	VE3AT	2,317,560	MIX-HP	AJ3AA	572,800	MIX-HP	K5ZD	2,669,794	MIX-HP
KM7W (KL9A, op)	2,538,032	MIX-HP	WØEWD	704,236	MIX-HP	VE3DZ	2,094,357	MIX-HP	AI4WW	67,689	MIX-HP	KD4D	2,069,473	MIX-HP
K7RL	1,679,940	MIX-HP	WØEA	125,952	MIX-HP	W9RE	1,470,184	MIX-HP	WA8KAN	36,000	MIX-HP	N2NT	1,834,784	MIX-HP
K6XX	1,619,808	MIX-HP	KVØI	102,196	MIX-HP	K9ZO	563,859	MIX-HP	W4BXI	5,713	MIX-HP	K3MM	590,248	MIX-HP
KU1CW	747,950	MIX-LP	KXØC (IZ3EYZ, op)	768,040	MIX-LP	VE3TG	234,569	MIX-LP	NR4M (N9NB, op)	901,582	MIX-LP	N2EM	194,752	MIX-LP
N2JNR	60,060	MIX-LP	KØDI	268,940	MIX-LP	VE3UZ	84,680	MIX-LP	N8II	552,946	MIX-LP	KE2I	30,478	MIX-LP
WA7BNM	38,416	MIX-LP	KØTRL	119,658	MIX-LP	VE3AQ	48,069	MIX-LP	W4KZ (KG5HVO, op)	488,474	MIX-LP	N3TE	22,458	MIX-LP
VE6TN	17,346	MIX-LP	NGØC	92,035	MIX-LP	ND3N	29,120	MIX-LP	WW4XX (LZ4AX, op)	477,020	MIX-LP	K3KU	13,846	MIX-LP
W7MTL	14,208	MIX-LP	KØHX	85,288	MIX-LP	W8KTQ	23,034	MIX-LP	K4EJ	151,071	MIX-LP	N1GSA	10,234	MIX-LP
K2GMY	19,584	MIX-QRP	K5KJ	60,320	MIX-QRP	W8UA	34,770	MIX-QRP				W7LG	16,200	MIX-QRP
N7JI	14,514	MIX-QRP	KJ5T	60	MIX-QRP	WO9S	19,844	MIX-QRP						
AI6DO	1,800	MIX-QRP				K8WU	3,234	MIX-QRP						
N6HI	740	MIX-QRP												
W6NCB	200	MIX-QRP												
W7WA	1,180,465	PH-HP	K9MWM	79,020	PH-HP	VA3ZNQ	63,546	PH-HP	N4MM	119,472	PH-HP	N1UR	1,264,224	PH-HP
W6AFA	182,804	PH-HP	AA5H	29,016	PH-HP	W9NZ	28,674	PH-HP	AA4CS	24,656	PH-HP	N3NR	155,325	PH-HP
W7VO	143,364	PH-HP	N5KWD	26,163	PH-HP	WB9ONU	7,068	PH-HP	AK4TC	19,500	PH-HP	W2JV	147,108	PH-HP
KE8FT	84,525	PH-HP	W5RJJ	19,136	PH-HP	VE3ETE	3,179	PH-HP	KA8Q	19,175	PH-HP	AB1EP	70,851	PH-HP
K6RO	60,784	PH-HP	N5DN	7,223	PH-HP	KE8NBC	2,599	PH-HP	W4ANT	19,062	PH-HP	KB3UVG	13,328	PH-HP
WZ8T	29,574	PH-LP	K5DHY	52,437	PH-LP	KM8AM	49,496	PH-LP	WA3LXD	30,317	PH-LP	KW2J	32,651	PH-LP
N6OKU	26,036	PH-LP	WA5FWC (NM5M, op)	45,252	PH-LP	VA3NW	22,650	PH-LP	NC4MI	24,644	PH-LP	NG1M	24,820	PH-LP
KL7HQR	23,659	PH-LP	N7MZW	21,528	PH-LP	VE3IDT	21,692	PH-LP	N1XL	21,294	PH-LP	KS2G	24,570	PH-LP

N6PGQ	19,008	PH-LP		N5DTT	18,283	PH-LP		VA3TPS	18,460	PH-LP		WC4Y	12,804	PH-LP		VE1SQ	14,400	PH-LP
NF7E	18,486	PH-LP		NØYO	12,330	PH-LP		VE3RVZ	18,090	PH-LP		KB8VND	11,988	PH-LP		N1GB	13,260	PH-LP
KK7VL	6	PH-QRP		WWØWB	2,720	PH-QRP		WD4IYE	392	PH-QRP						AB3RW	546	PH-QRP
								VA3MYC (VE3LIQ, op)	72	PH-QRP								
				WE6EZ	2,530	PH-QRP												
				KJ5MA	621	PH-QRP												
K6NA	896,714	CW-HP		K5GN	2,020,320	CW-HP		VE3JM	2,428,790	CW-HP		N4AF	1,648,212	CW-HP		W1KM	2,631,980	CW-HP
N7ZG	833,004	CW-HP		N2IC	1,998,141	CW-HP		NA8V	1,042,587	CW-HP		N4OGW	1,235,376	CW-HP		K1KI	2,214,576	CW-HP
W7YAQ	629,460	CW-HP		N3BB	716,688	CW-HP		K8GL	684,854	CW-HP		KZ5D	1,038,558	CW-HP		AB3CX	1,102,335	CW-HP
W6AYC	622,859	CW-HP		KØNM	372,790	CW-HP		WI9WI	369,152	CW-HP		NN7CW	1,008,351	CW-HP		K3ZO	746,550	CW-HP
N7WA	586,560	CW-HP		N5AW	320,460	CW-HP		VA3AR	287,205	CW-HP		N4CW	547,785	CW-HP		KU2M	614,601	CW-HP
WJ9B	366,156	CW-LP		AD5A	661,536	CW-LP		W1NN	294,424	CW-LP		K7SV	845,952	CW-LP		W1QK	319,520	CW-LP
W6ZL	74,334	CW-LP		KØAD	439,332	CW-LP		VE3TM	225,885	CW-LP		WB4TDH	243,528	CW-LP		K3MSB	247,923	CW-LP
K7SS	57,610	CW-LP		KG5U	238,249	CW-LP		VA3FF	207,348	CW-LP		W4YE	125,618	CW-LP		WT3K	211,836	CW-LP
												AA4XG (W4ATL, op)						
N7UVH	56,856	CW-LP		N5JR	93,696	CW-LP		K4YJ	171,600	CW-LP			118,146	CW-LP		KA1IS	163,944	CW-LP
W6JTI	53,466	CW-LP		AAØAW	89,557	CW-LP		KV8Q	142,800	CW-LP		WN4AFP	115,960	CW-LP		W1FJ	153,162	CW-LP
VE6EX	2,928	CW-QRP		NX5M	150,156	CW-QRP		VE3IGJ	3,900	CW-QRP		N4IJ	48,000	CW-QRP		N2WK	122,153	CW-QRP
AA6OC	459	CW-QRP		K5ØMO	41,904	CW-QRP		W8DXU	3,740	CW-QRP		N7RCS	42,947	CW-QRP		K8CN	69,174	CW-QRP
NN7SS (K6UFO, op)	69	CW-QRP		NE5TH	40,136	CW-QRP		K8RJW	1,034	CW-QRP		KC4IM	2,780	CW-QRP		WS1L	7,040	CW-QRP
W4FLL	6	CW-QRP		W6GMT	4,218	CW-QRP		VE3GTC	282	CW-QRP		K2EKM	2,227	CW-QRP		VE9BWK	4,625	CW-QRP
				AEØEE	9	CW-QRP		N8VWY	18	CW-QRP		KH6KG/W5	850	CW-QRP		WA2NYY	176	CW-QRP
Single Operator Unlimited																		
W6SX	263,424	MIX-HP		W7CXX	347,184	MIX-HP		VE3RZ	823,284	MIX-HP		N6AR	738,304	MIX-HP		VA2WA	2,688,975	MIX-HP
W6TK	225,834	MIX-HP		KEØUI	274,964	MIX-HP		K9OM	669,088	MIX-HP		WO4O	716,286	MIX-HP		VA2EW	2,673,160	MIX-HP
WC6H	151,146	MIX-HP		KØBJ	258,492	MIX-HP		N2BJ	168,480	MIX-HP		N1RM	599,130	MIX-HP		KO8SCA	1,161,000	MIX-HP
NK6A	127,309	MIX-HP		K8TE	177,371	MIX-HP		WT2P	144,540	MIX-HP		NO9E	473,025	MIX-HP		W1GD	901,544	MIX-HP
N9NA	99,484	MIX-HP		K7UT	172,608	MIX-HP		KV8O	80,372	MIX-HP		NF4A	266,913	MIX-HP		K1AR	747,383	MIX-HP
K6GHA	141,501	MIX-LP		N5DO	140,778	MIX-LP		NE9U	807,428	MIX-LP		N4XL	443,685	MIX-LP		NN1C	1,202,149	MIX-LP
N7ZUF	44,352	MIX-LP		KI5MM	57,552	MIX-LP		W9AV	222,887	MIX-LP		W4LT	107,272	MIX-LP		KE3X	539,742	MIX-LP
W7ZRC	6,930	MIX-LP		KE5LQ	10,263	MIX-LP		VE3GFN	129,168	MIX-LP		WA4IPU	46,574	MIX-LP		W1ARY	266,961	MIX-LP
VE7LIO	5,060	MIX-LP		KS5Z	7,638	MIX-LP		AB8OU	62,300	MIX-LP		WT8WV	38,817	MIX-LP		AA1SU	99,412	MIX-LP
N7MU	1,717	MIX-LP		KJØP	3	MIX-LP		WD8S	56,420	MIX-LP		K1KNQ	23,556	MIX-LP		WA2JQK	81,810	MIX-LP
								K8ZT	58,497	MIX-QRP								
KK6P (W7IV, op)	651,645	PH-HP		N5HC	116,014	PH-HP		VA3WW	46,294	PH-HP		NA4DA	256,920	PH-HP		VE2NTT	235,081	PH-HP
K2RD	244,644	PH-HP		AG5RR	10,438	PH-HP		VA3LR	8,688	PH-HP		WW5L	69,750	PH-HP		W3LL	120,658	PH-HP

N7GCO	52,350	PH-HP		K5AVY	2,014	PH-HP		KG9Z	4,329	PH-HP		K4ELI	27,240	PH-HP		KA2K	26,062	PH-HP
K6JAT	37,895	PH-HP		K9TWW	90	PH-HP		N8DXR	3,440	PH-HP		K4VTE	17,952	PH-HP		K2ANZ	21,645	PH-HP
W7ZZ	29,000	PH-HP						VA3ROC	3,094	PH-HP		KD4RH	17,272	PH-HP		W3JJL	20,460	PH-HP
VE7JMN	7,029	PH-LP		KEØITC	7,875	PH-LP		VE3PJ	219,687	PH-LP		KM4IAJ	17,784	PH-LP		KA2KON	43,935	PH-LP
K7VAP	6,192	PH-LP		KØFJ	5,202	PH-LP		VE3XNS	41,316	PH-LP		KD4LEM	12,054	PH-LP		VE2CSM	29,360	PH-LP
N5YJZ	1,653	PH-LP		KBØHP	5,190	PH-LP		NR9K	6,336	PH-LP		W4MTM	12,050	PH-LP		KD2JOE	24,912	PH-LP
WA7YXY	1,196	PH-LP		NAØED	2,074	PH-LP		WS6K	5,780	PH-LP		KE4YOG	8,869	PH-LP		WB3BJU	20,104	PH-LP
N6ABT	1,140	PH-LP		KJ4EBE	1,650	PH-LP		VA3AUW	5,250	PH-LP		WUØB	4,884	PH-LP		W2MSA	4,814	PH-LP
NT6Q (N5ZO, op)	1,312,790	CW-HP		N5RZ	1,307,280	CW-HP		K8AZ (W2GD, op)	2,306,739	CW-HP		N4BP	735,878	CW-HP		AA3B	3,060,344	CW-HP
VE6SV (VE6RST, op)	1,176,496	CW-HP		NØAX	1,163,032	CW-HP		K9CT	1,797,476	CW-HP		N1LN	659,475	CW-HP		VE9AA	1,764,720	CW-HP
W6RW	1,013,376	CW-HP		NØAT	487,445	CW-HP		K9NW	1,457,393	CW-HP		N4EEB	598,272	CW-HP		K1MK (@K1TTT)	1,383,393	CW-HP
K4XU	709,440	CW-HP		K5CM (W5CW, op)	436,406	CW-HP		VE3NNT	1,092,372	CW-HP		W4PM	469,273	CW-HP		N3AD	1,111,908	CW-HP
K7QA	546,206	CW-HP		W5GN	407,305	CW-HP		W8CAR	812,910	CW-HP		N2YO	422,966	CW-HP		N3RS	1,060,000	CW-HP
K7TQ	345,740	CW-LP		KØVBU	199,888	CW-LP		VE3MGY	371,180	CW-LP		WA1FCN	363,411	CW-LP		K1XM	1,149,232	CW-LP
K6WSC	136,944	CW-LP		KØMPH	107,160	CW-LP		VE3YT	257,527	CW-LP		K4OAQ	335,420	CW-LP		W1UE	678,216	CW-LP
AK6A	108,928	CW-LP		WØVX	78,288	CW-LP		VE3UTT	240,149	CW-LP		KM4SII	296,510	CW-LP		W3KB	546,117	CW-LP
K7GS	85,840	CW-LP		K5TA	71,071	CW-LP		AB9YC	233,632	CW-LP		AA4LS	258,582	CW-LP		WO1N	234,630	CW-LP
VE7XT	60,198	CW-LP		N5NAA	62,025	CW-LP		N8VV	214,416	CW-LP		K2SX	205,296	CW-LP		VE1RSM	230,144	CW-LP
				K5NZ	19,788	CW-QRP		KU4A	8,481	CW-QRP						W3YJ	4,375	CW-QRP
				WØGJ	1,079	CW-QRP		VE3GMZ	5,480	CW-QRP						KC2WUF	2,664	CW-QRP
								AB8FJ	451	CW-QRP								
Multioperator Single Transmitter																		
K6EZ	1,293,672	MSHP		KØRF	1,927,884	MSHP		NV9L	648,600	MSHP		K1MM	1,336,392	MSHP		K1IR	1,717,264	MSHP
N7AP	1,049,040	MSHP		KG5VK	144,480	MSHP						W5EA	1,025,290	MSHP		K3CCR	415,719	MSHP
N6WM	1,026,267	MSHP										WØNA	890,841	MSHP		W2Z	259,280	MSHP
NX6T	495,672	MSHP										N4IQ	547,060	MSHP		K1RQ	180,796	MSHP
KT7E	468,718	MSHP										N4UU	173,524	MSHP		WA2CP	142,008	MSHP