



# IARU HF World Championship 2021 Full Results

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With 5,211 logs submitted this year, the 2021 edition of the IARU HF World Championship saw an eight percent drop from the all-time high achieved last year. Overall, it is only the third time in the history of the contest that more than 5,000 entries have been received.

The eight percent reduction is almost entirely attributed to twenty-four percent fewer logs received from North American stations. While that sounds significant, North American submissions were still on par with years prior to 2020. Log submissions throughout the rest of the world remained roughly the same.

Multiplier opportunities remained steady. Fifty-four ITU zones were activated, which is the same as 2020. IARU Headquarter operations increased from fifty-six to sixty-eight. Ten Administrative Council members and ITU Region representatives were active.

## Propagation

The geomagnetic field remained generally quiet with the planetary K index never rising above 2 during the 24-hour contest period. Quiet conditions meant an increased chance high latitude paths would provide openings between different parts of the world, such as the path between Europe and the Pacific.

Stan, AH6KO, and Kent, KH6CJJ, put in CW Only Low Power efforts and reported being quite satisfied with openings to Europe on 20 meters during their local evening hours. Stan, who used a newly-installed Spiderbeam® tri-bander, wrote in his [3830scores.com](https://3830scores.com) post, “great opening from Hawaii to EU on 20m after 0200Z ... it sure was fun!”

This polar path is generally not a source for many contacts, especially for low power stations, but Kent, who used a 3-element SteppIR at 35 feet, pointed out in his [3830scores.com](https://3830scores.com) post that the good 20 meter opening “really helped with mults!”

The Solar Flux Index (SFI) had risen into the nineties the week leading up to the contest, but fell back to the mid-seventies by the weekend. Without a strong Sporadic E opening, neither 15 nor 10 meters would likely challenge 20 meters as the high-rate “money band” at this point in the cycle. Regardless, one must never take their ears off



You may recognize Martin as LU9EFO, but he and his wife now reside in her home country of Brazil. Martin's Phone Only, Low Power entry was his first from PY-land with his new station and callsign, PT2ZDX. Photo courtesy Martin, PT2ZDX.

these two bands for too long. Fifteen and ten meters provide key, but fleeting, multiplier opportunities vital to a winning score.

“You never know what you will get for conditions in the Summer,” said Randy, K5ZD, in his post on [3830scores.com](https://3830scores.com). He reported from his QTH in Massachusetts, “hearing Europe on 10 meters at the start, in the afternoon until after sunset, and again on Sunday morning. Worked some Europeans on 15 meters at 4 am local time here!”

“It was so amazing to have 15m open at 5am,” said Ted, N9NB, who operated with Mike, W9RE, in Indiana, “I had

suggested to Mike that we try it, and sure enough, he was amazed and yelled out ‘Europe!’....and 10m open to EU at 6am, just incredible.”

Kevin, N5DX, who operated with N2QV in the multioperator category, noted in his [3830scores.com](https://3830scores.com) post, “10 was up and down throughout the contest, but it’s been down for so many years that just a peep out of EU is enough to make you sit up and get excited!”

### Single Operator

In the W/VE Mixed Mode, High Power category, Randy, K5ZD, and Ron, VE3AT, earned first and second place, respectively, distancing themselves from the rest of the pack with impressive scores that each exceeded two million points.

The battle for third place fell to Nate, N4YDU, operating as NR3X in North Carolina and Mike, N7MH, operating as W6YX from the Stanford University Amateur Radio Club in California. Nate finished ahead of Mike’s score by less than 0.5%, earning third place in the cross-country battle.

Dan, N6MJ, operating as ND7K from the Arizona QTH of N6WIN, took top honors in the W/VE CW Only, High Power category while resetting his own ITU Zone 6 record. Dan has long been known for pushing the limits of operating innovation to go along with his immense operating talent. While many of us are challenged enough with Single Operator Two Radio (SO2R) style of contesting, in recent years, Dan has worked hard to maximize the use of a third radio. According to his station host, Tim, N6WIN, Dan was able to monitor a third open band by keeping an eye on a waterfall display, picking-off stations to work in between operating the other two bands. Tim estimates that Dan was able to augment his log by about 200 QSOs with the third radio.

Jozef, OM3GI operating as CR3DX, set a new African Mixed Mode, High Power record on his way to winning first place in the category for the world nearly doubling the score of second-place finisher and top European scorer, Slava, US2YW, operating as UW5Y.

In his [3830scores.com](https://3830scores.com) report, Juan, EA8RM, shared news of significant antenna damage to his high band antennas and a 160 meter dipole due to bad weather a couple days before the contest. Juan would not be defeated, repairing as much as possible before the contest, and went on to break the CW Only, High Power World record.



The sun sets on the EA3X antenna farm, which includes a G3TXQ 6-band Hexbeam and rotatable dipole for 40 meters. Mia finished with the top score in Spain in the CW Only, Low Power category. Photo courtesy Mia, EA3X.

The Mixed Mode, Low Power race was a close one with Peter, KU2M, and Jeff, N8II, locked in battle, each putting in about ten hours of operating – just enough time in the chair to finish at the top of the category!

Peter reports in his [3830scores.com](https://3830scores.com) post to be in disbelief when he heard 10 meters open to Europe at 1857z from his New Jersey QTH musing, “I carefully checked the radio and antenna connections - was I on a different band?”

It was a 40 through 10 meters only affair for Jeff at his QTH in West Virginia as he fought to keep pace with Peter. Jeff caught the same 10 meter opening to Europe roughly around the same time as Peter as they both picked off mostly the large HQ stations running on the band.

Matteo, IZ3EYZ, used the contest as an opportunity to test out a new hilltop QTH with a completely temporary station that would still be impressive at any fixed station (a Force 12 tribander for 20 through 10 meters along with dipoles and verticals for the low bands). The result of his effort was a first-place finish in the World Mixed Mode, Low Power category with a good head-to-head match-up with runner-up, Oleg, MU2K.

In the Phone Only categories, frequent winner Dan, W7WA, ran away with the victory this year in W/VE High Power. A much closer race occurred between Fred, F5USK operating as F8KGM, who edged out Serge, EU1W, for first place in the World High Power category.

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
Northwestern	CW-HP	N9RV	1,876,350
Roanoke	CW-QRP	N4IJ	91,168
Rocky Mountain	PH-QRP	WWØWB	3,900
Southwestern	CW-HP	ND7K (N6MJ, op @N6WIN)	2,414,192
West Gulf	CW-QRP	NX5M	292,740

Single Operator Continental 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
Africa	MIX-HP	CR3DX (OM3GI, op)	5,877,186
Africa	CW-HP	EA8RM	4,949,913
Oceania	MIX-QRP	FK8IK	26,136

## Single Operator Unlimited

Record-breaking efforts continue to be the theme in the nascent Single Operator Unlimited categories – a trend likely to continue through Solar Cycle 25. Bud, AA3B, and Jack, R2AA, both reset their own records. Bud raised the W/VE CW Only, High Power bar to just under 3.5 million points while Jack nudged higher his 2018 World record in the Mixed Mode, High Power category with a score just shy of 4.3 million. Santiago, EA3O, also set a new world record in the Phone Only QRP category.

Ty, K3MM, led the pack in the W/VE Mixed Mode, High Power category with a decisive win after what he believes is a long absence from the contest. Ty reports in his [3830scores.com](https://3830scores.com) post his last effort “might be the '96 WRTC!”

Paul, UR6EA, finished first place in the World Mixed Mode, Low Power category after using the contest to play with his new Ukrainian-built SDR transceiver called the Epmax (Ermak).

Jon, EA2W, had an impressive result in the CW Only, High Power category, leading the World as the only other single operator other than CR3DX to break the 5-million-point threshold.

On his way to a first-place finish in the W/VE CW Only, Low Power category, Paul, K1XM, remained adaptable when he realized his initial strategy wasn't working. “I wasn't having much success running so I chased multipliers,” Paul said in his [3830scores.com](https://3830scores.com) post, “this seems to have been a good strategy this year.”

ARRL Division and continental records continue to fall with several major efforts across the world. Don't be left out of the fun in 2022! [Check out the records page on the Web](#); can you beat your division's record in your favorite category next year?

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-HP	K3MM	1,810,728
Atlantic	PH-LP	N3AAA	108,528
Atlantic	CW-HP	AA3B	3,493,216
Canada	CW-HP	VE3NNT	1,801,250
Canada	CW-LP	VE3MGY	676,172
Central	MIX-HP	WB9Z	1,414,842
Central	MIX-QRP	KD9LTN	1,236
Central	CW-LP	KG9X	569,350
Dakota	MIX-LP	K4IU	209,844
Dakota	PH-LP	KØTJT	10,080
Delta	MIX-QRP	AC5O	62,988
Delta	CW-HP	AD4EB	1,359,680
Delta	CW-LP	K3IE	628,728
Hudson	MIX-LP	KI2D	147,400
New England	MIX-QRP	W1WBB	1,066
New England	CW-HP	KO7SS	2,821,584
Northwestern	MIX-LP	KA6BIM	306,307
Northwestern	CW-HP	N7DX	853,335
Roanoke	CW-HP	N4AF	2,004,492
Rocky Mountain	MIX-HP	KEØUI	402,867
Rocky Mountain	MIX-LP	AD1C	147,320
Southeastern	MIX-HP	K4AB	1,419,330
Southwestern	MIX-HP	KK6P	747,648
Southwestern	CW-HP	NT6Q (N5ZO, op)	1,407,627
Southwestern	CW-QRP	W7JET	3,614
West Gulf	CW-HP	N5RZ	1,708,630

Single Operator Unlimited Continental 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
Africa	PH-LP	EC8AQQ	70,030
Asia	MIX-HP	4X6FR	3,898,782
Asia	CW-QRP	JH7VHZ	163,254
Europe	MIX-HP	R2AA	4,287,360
Europe	PH-HP	HA3NU	2,447,175
Europe	PH-LP	ES6RW	861,039
Europe	PH-QRP	EA3O	227,532
Europe	CW-HP	EA2W	5,015,544
North America	PH-LP	HI8RD	335,385
Oceania	MIX-LP	YB9UA	38,340
Oceania	PH-HP	DU1AV	109,979
Oceania	CW-LP	AH6KO	465,675
Oceania	CW-QRP	YD9UW	5,712
South America	CW-HP	P44W (W2GD, op)	3,461,120



## Multioperator

Many Multioperator stations reported getting teams back together in person in 2021. Log submissions rebounded from the COVID-19 induced dip in 2020 with a nearly fourteen-percent increase (141 entries, up from 124), but remain off pre-pandemic peaks above 160.

Congratulations to the N5DX team, a partnership between Kevin, N5DX and Tariq, N2QV, on their new W/VE Multioperator record. The pair joined forces at Tariq's QTH in central New York driving the N2QV station to a score of 3.4 million, besting the previous record by nearly 500,000 points.

The RM9A Multioperator team continued their dominance with their third World first place victory in four years while fending off a strong challenge by the RU1A team.



The DP7D Multioperator team hard at work – Holger, DF1QR; Marco, DJ4MH, and Holger, DL9EE – Photo courtesy Holger, DF1QR

## Headquarters and IARU Special Stations

After three consecutive first place finishes from 2017 through 2019, TMØHQ (REF) returned to the top spot in the Headquarters station battle after being knocked off by DAØHQ (DARC) in 2020.

NU1AW (IARU) was activated by a nineteen-operator team (AD5XD, K5CD, K5DU, K5GN, K5NA, K5PI, K5RT, K5WA, KG5U, KG5VK, KI5MM, N5AUS, N5OT, N5TIT, NT5V, WØUO, W5PR, WA5FWC, and WA5RR) from the West Gulf Division manning thirteen stations across Oklahoma and Texas. The team dodged quite a bit of lightning activity throughout the night while trying to stay on the air and get the team over 8,000 QSOs.

W1AW/KL7 (ARRL) was operated by KLØR, KL7SB, KI6RRN, NL7S, KA1NCN, AL2F, AL1G, KTØR, N1TX/KL7, KL1JP, WB2TQE, and KL7TS.

IARU Headquarters Stations	
Call	Score
TMØHQ	25,640,388
DAØHQ	24,593,730
S5ØHQ	24,055,135
IOØHQ	22,407,660
SNØHQ	21,054,330
OL1HQ	20,973,210
GR2HQ	19,888,896
9AØHQ	19,634,912
YTØHQ	18,581,724
EF4HQ	17,380,254
LYØHQ	15,663,327
EM5HQ	14,700,303
E7HQ	14,538,802
OF2HQ	14,246,928
OPØHQ	14,245,147
OEØHQ	13,955,157
HGØHQ	10,866,746
YRØHQ	10,306,525
OZ1HQ	10,177,160
UN1HQ	10,165,950
YL4HQ	9,970,520
PA6HQ	8,985,480
SK9HQ	8,457,044
NU1AW	6,073,122
EW5HQ	5,482,026
A6ØHQ	4,778,576
RØHQ	4,745,472
EIØHQ	4,427,480
LX8HQ	3,968,259
W1AW/KL7	3,830,535
8NØHQ	3,584,008
ER7HQ	3,406,023
BØHQ	3,046,694
L21RCA	2,493,972
LZØHQ	2,267,065
VA2RAC	1,957,648
Z3ØHQ	1,730,702
DXØHQ	1,717,969
CR5HQ	1,565,840
SXØHQ	1,558,624
OM1HQ	1,472,196
CX1AA	1,439,018
ES9A	941,704
E2HQ	895,856
HZØHQ	762,840
OY1CT	532,608
9Y4HQ	526,218
T4ØHQ	479,050
TC3HQ	464,427
OFØHQ	414,182
OA4O	352,428

7A2HQ	304,048
PX2HQ	253,894
A71HQ	227,556
9M2A	175,010
9H1MRL	150,784
4LØG	145,770
LN2HQ	140,484
Z6ØA	116,686
BV3ØHQ	78,457
VK3WIA	32,650
VU2ZH	10,023
EX9HQ	9,724
HIØHQ	8,760
9V1HQ	8,352
YS1YS	8,300
VR2HK	4,290
HC2GRC	930

IARU Administrative Council Stations	
G5W	3,016,516
W5ZN	632,337
PB2T	158,935
YBØAZ	140,491
VE6SH	50,813
IARU R1	
SM6EAN	633,798
DJ3HW	609,756
IARU R2	
VE3YV	10,277
IARU R3	
JA1CJP	192,348
HS1FVL	45,594

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

### New Friends

It's always great to hear about first timers in the Soapbox comments. The following reported either operating for the first time ever in a contest or operating for the first time in IARU HF: 2EØSVO, IUØOVB, IU1MRH, IZ4GRP, OH8AH, PA2ADX, PA5UL, PA7TG, PDØGTO, and VY2DP.

Joao, PY2TI, also commented in his soapbox message that he and his 15-year-old son, Emmanuel, PU2VLI, did their first multioperator effort together!

Great job and welcome, all!



Jean-Marie, LX1JH, and Mendaly, LX2VY busy giving out the Radioamateurs du Luxembourg (RL) Headquarters multiplier from LX8HQ. Photo courtesy LX8HQ team.

### Getting Ready for the Next World Radiosport Team Championship

The next World Radiosport Team Championship (WRTC) would have been held in Italy concurrently with the 2022 IARU HF World Championship. Unfortunately, WRTC 2022 ([www.wrtc2022.it](http://www.wrtc2022.it)) has been pushed back one year.

With the qualification processing having been completed, qualifiers are now getting ready for the event. Under normal circumstances, we would have seen several "scouting trips" to Italy by a few competitors to operate the contest closer to where WRTC 2022 will be held. These trips allow competitors to get some practical experience operating this specific contest from the host country ahead of the real event. With travel restrictions due to Covid-19 being in place in most of the world, it is no surprise that we did not see such trips happen in 2021. However, that didn't stop many teams from practicing, albeit closer to home.

A scrimmage broke out among a group of WRTC competitors (and others interested in joining the fray) when two of the qualified North American teams, Scott, NE9U/Craig, K9CT and Mike, W9RE/Ted, N9NB announced on the CQ-Contest email reflector that they intended on having "a little competition for the fun of it following the WRTC rules."

WRTC 2022 will be a Multioperator, Two Radio (Multi-Two) competition with stations limited to 100 watts output. Multi-Two is not an official category in the IARU HF, but by the starting bell, at least four other qualified

Team Leaders joined up with a partner to operate the contest following (or close to following) WRTC rules:

- Todd, VE5MX, (Team Leader qualifier from North America Region 8) with John, VE3EJ, as his partner operated High Power from the VE3EJ QTH.
- Mathias, CE2LR, (South America Region 3) with Roberto, CE3CT, as his partner operated High Power from the CE3CT QTH.
- Gilles, VA2EW, (North America Region 2) with Victor, VA2WA, as his partner operated Low Power as VA2RAC from the VA2EW QTH.
- Francis, BA1RB, (Asia Region 4) with Dale, BA4TB, as his partner operated Low Power from the BA4TB QTH.

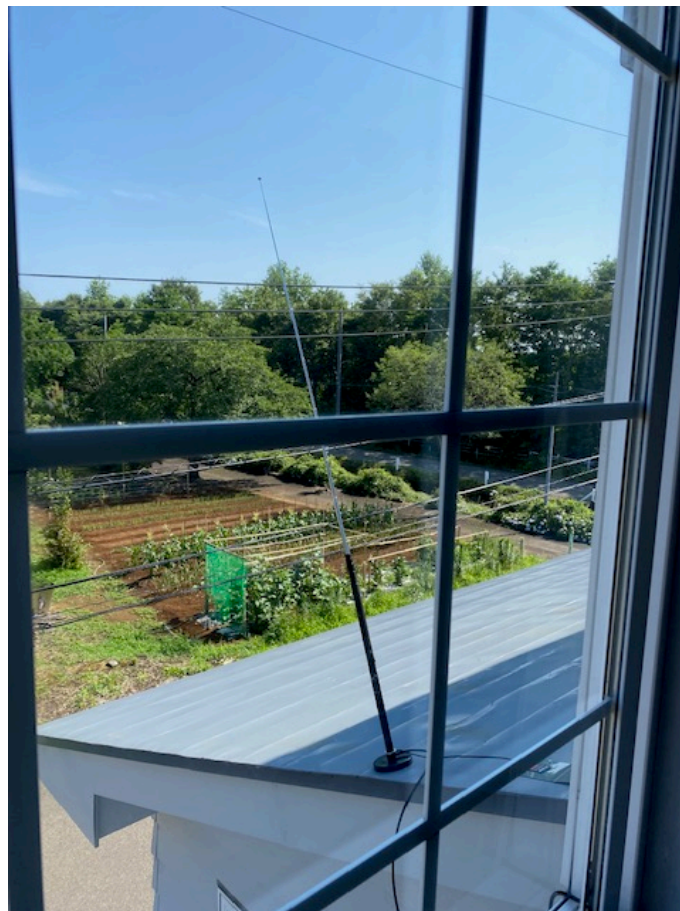
Even though WRTC stations are limited to 100 watts, the act of assembling a station is not an easy one from a technical standpoint. Mike, W9RE, reported unexpected issues with headsets and a bad computer network card while getting things set up. Having a chance to do a “dress rehearsal” of setting up a station with equipment teams intend to bring with them can reveal important issues that can be resolved before traveling to the event.

“It was great fun to be in competition with Scott and Craig and we all enjoyed the back and back forth in the scoring on the ‘Online scoreboard’,” said Mike, W9RE.

Ted, N9NB, noted, “We had fun learning how to talk in the mic without disturbing the other operator (e.g., not yelling too loud or turning our backs at just the right angle, especially when Mike called on 80m or me on 20).”

And while WRTC competitors take seriously the opportunity to participate in the event, Ted shared a comment that I believe highlights the most important part of any multi-op. When asked for his highlights of the weekend, the first thing Ted commented on had nothing to do with the contest itself. Rather, he said, “I cannot think of much to add except it was Dave (W9PA) and Diane’s 56<sup>th</sup> anniversary, and we all went out with W9RE and his XYL and [John] W9TC and his XYL!”

It’s a great reminder that *camaraderie* is an essential ingredient in what makes Radiosport so great. Even after all the great propagation, high rates, and exotic multipliers that give us that high we seek in every contest, sometimes the most enjoyable - and most important - parts of a contest weekend have nothing to do with radio itself.



There is always a way to get on the air, as proven in this photo by Aki, JJØSFV, who uses this mobile whip antenna mounted on his home’s metal roof to get on the air in Niigata Prefecture, Japan. Aki made 26 QSOs in the Single Operator, Mixed Mode, Low Power category. His best DX was with George, K5TR, in Texas on 40 meters! Photo courtesy JJØSFV.

## Onward to 2022

Save the date for the weekend of July 9-10, 2022 when the next IARU HF World Championship fills the airwaves. The contest always starts at 1200z on Saturday and runs a full 24 hours. Let’s hope for more sunspots and even more activity next year in this great contest!



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			
K5ZD	2,759,350	CR3DX (OM3GI, op)	5,877,186	K3MM	1,810,728	R2AA	4,287,360
VE3AT	2,275,254	UW5Y (US2YW, op)	2,960,640	K4AB	1,419,330	US1Q (UR5IFB, op)	4,088,144
NR3X (N4YDU, op)	1,279,680	K5ZD	2,759,350	WB9Z	1,414,842	4X6FR	3,898,782
W6YX (N7MH, op)	1,273,993	S53MM	2,458,638	W1GD	1,170,364	HA5JI	3,631,236
KØEJ	1,177,256	VE3AT	2,275,254	VA3DF	874,888	YT5A	2,808,157
WØEWD	809,424	TO5GR (UT5UGR, op)	1,757,154	K3WJV	791,536	K3MM	1,810,728
AJ6V	437,523	EA4KD	1,423,072	WO4O	786,546	RW9DX	1,712,430
WQ5L	421,502	JH4UYB	1,339,502	KK6P	747,648	RA6CA	1,565,550
K6XX	418,125	NR3X (N4YDU, op)	1,279,680	VE3RZ	648,613	K4AB	1,419,330
KR2Q	269,000	W6YX (N7MH, op)	1,273,993	WA3AAN	416,150	WB9Z	1,414,842
Mixed-Mode, Low Power				Mixed-Mode, Low Power			
KU2M	386,828	IY3A (IZ3EYZ, op)	1,955,573	VA2EBI	310,536	UR6EA	1,659,812
N8II	342,544	MU2K (RL5D, op)	1,832,952	KA6BIM	306,307	LZ3ZZ	1,581,250
VE3TG	230,184	RA3Y	1,101,260	K9OM	273,512	ED1R	832,284
N2EM	178,434	4U1A (HB9RB, op)	868,192	K4IU	209,844	SE4E (SM4DQE, op)	756,674
KØEA	116,768	RW4WA	622,750	KI2D	147,400	RW4W	716,870
K5XU	110,638	OM5WW	539,903	AD1C	147,320	R5AJ	640,343
VE5KS	89,280	PY2NY	518,869	VE3PJ	135,954	HA5PP	590,287
K5FUV	75,012	EU2F	458,887	VE3GFN	102,144	US7IY	587,799
KAØPQW	74,718	UT3SO	438,783	K1VU	95,370	HA6PJ	518,518
K6GHA	69,368	DL3RHN	435,296	WT8WV	67,490	DM7EE	502,605
Mixed-Mode, QRP				Mixed-Mode, QRP			
NE5TH	17,056	LY5G	474,100	AC5O	62,988	DK3WE	804,572
KKØU	3,795	HA7UI	308,464	K8ZT	17,679	DDØVS	110,387
K2GMY	854	HA5BA	273,792	KD9LTN	1,236	YU1LM	77,616
VE2SSS	228	UR5FEO	196,175	W1WBB	1,066	AC5O	62,988
N6HI	224	R2PU	193,590	AG4CC	440	IZ3NVR	62,424
KT3P	119	HG6C (HA6IAM, op)	177,177			DJ3EI	44,100
		OK7CM	136,948			PC5D	43,363
		PC2F	124,405			DKØRPO (DF7IS, op)	29,316
		9A2EY	80,625			K8ZT	17,679
		UT5EOX	64,752			SP9RQH	10,317
Phone Only, High Power				Phone Only, High Power			
W7WA	1,172,696	F8KGM (F5USK, op)	1,392,768	W3LL	557,842	HA3NU	2,447,175
W6AFA	192,100	EU1W	1,380,730	N8BI	143,472	OR1X	1,808,928
N4MM	97,240	W7WA	1,172,696	AEØMO	137,396	SO9I (SQ9ORQ, op)	1,806,931
AA8DC	80,984	EA3CI	1,141,077	N7ZUF	56,414	CR6K (CT1CJJ, op)	1,790,085

KE8FT	77,616	RA3OA	1,099,400	W9NZ	54,740	LY5W	1,345,508
K9MWM	76,980	ED3C (EA3IBV, op)	1,026,640	K2ANZ	42,039	ED8W (EA8DO, op)	1,205,184
VE3BFU	51,680	A65BB	664,960	KC3D	39,185	OH6LI	1,149,320
WW5L	42,624	RW9LL	600,903	VA3LR	31,570	IKØPHY	1,101,600
VA3ZNQ	42,458	DF2F (DF2SD, op)	552,948	VA3WW	29,670	DL7BC	843,840
ND1X	32,897	F5LIW	470,400	N5GI	28,770	OL7T	734,048
<b>Phone Only, Low Power</b>				<b>Phone Only, Low Power</b>			
VA3NW	94,000	9A3B (9A2VR, op)	647,942	N3AAA	108,528	ES6RW	861,039
WZ8T	67,628	EA8AM	431,028	VA3IDD	48,545	HGØR (HAØNAR, op)	845,614
NG1M	53,268	PA2TMS	426,312	W4BTW	29,520	UR2Y	680,175
K5DHY	52,622	TA3DE	256,207	VE3HZ	24,616	YO7SR	587,664
KS2G	46,371	EA6AMM	254,016	KM4IAJ	20,475	SV3RPQ	348,096
KJ4UBL	33,516	OE1HHB	251,738	KA2KON	18,240	HI8RD	335,385
VA3TPS	32,832	IV3ZYB	220,761	KD2JOE	15,635	SOØN (SQ9CNN, op)	288,708
N6OKU	32,643	RC7KY	217,128	KØTJT	10,080	EW7B	270,930
VE2HIT	27,324	DM2BR	198,562	KC3RGK	9,744	UA9R	257,920
WA4JA	26,740	CT2IMG	197,284	WS6K	9,010	SO7E	239,259
<b>Phone Only, QRP</b>				<b>Phone Only, QRP</b>			
WWØWB	3,900	DL8LR	137,104	<i>No Entries</i>		EA3O	227,532
VA3MYC (VE3LJQ, op)	2,093	OM3KHT (OM7ANT, op)	67,716			UZ7M (UT9MZ, op)	227,180
		HB9EGA	67,365			YO8WW	209,032
		TG9ANF	40,491			HG6V (HA6IHA, op)	112,413
		SP4LVK	37,944			LY2BGP	4,263
		OZ/SO2U (SP2UUU, op)	30,885			IW3GST	2,080
		HA1TI	28,320			SY2COB	1,188
		UR7TV	27,579			EA5JDG	198
		9A4OP	25,026				
		DKØBM (DK7CH, op)	21,185				
<b>CW Only, High Power</b>				<b>CW Only, High Power</b>			
ND7K (N6MJ, op @N6WIN)	2,414,192	EA8RM	4,949,913	AA3B	3,493,216	EA2W	5,015,544
W1KM	2,117,920	EA6FO (EA3M, op)	3,527,619	KO7SS	2,821,584	ES5RR	3,869,383
K2ZW	1,936,512	RT5Z (RA3CW, op)	2,793,380	K3WW	2,277,330	IR2Q (IK2PFL, op)	3,763,766
N9RV	1,876,350	KP2M (KT3Y, op)	2,484,075	NY3A	2,057,370	AA3B	3,493,216
N3AD	1,734,853	ND7K (N6MJ, op @N6WIN)	2,414,192	N4AF	2,004,492	P44W (W2GD, op)	3,461,120
K1KI	1,615,075	W1KM	2,117,920	VE3NNT	1,801,250	UW1M	3,396,096
KØRF (WØUA, op)	1,559,180	K2ZW	1,936,512	N5RZ	1,708,630	RT9A	3,194,016
N2IC	1,541,722	N9RV	1,876,350	K3JO (AE2W, op)	1,664,230	YU5R (YT2AAA, op)	2,947,200
NA8V	1,194,184	N3AD	1,734,853	N3RS	1,450,592	P3X (5B4AMM, op)	2,914,051
AD5A	1,147,192	K1KI	1,615,075	NT6Q (N5ZO, op)	1,407,627	S53A	2,852,345



CW Only, Low Power				CW Only, Low Power			
K7SV	825,286	4Z4AK	1,650,068	K1XM	876,360	R8CT	2,125,508
W1QK	448,818	K7SV	825,286	VE3MGY	676,172	HG5D (HA8QZ, op)	1,942,500
W7YAQ	428,940	OM7RU	714,611	K3IE	628,728	RG5A	1,795,842
KØAD	378,500	YL5W (YL2GN, op)	714,175	KG9X	569,350	UT4LW	1,761,420
KM6Z	357,750	OK1CZ	695,019	W3KB	537,522	SN7O (SP7IVO, op)	1,684,980
WJ9B	331,062	UF5A	693,966	N2YO	402,417	UT5EO	1,665,990
W1NN	288,000	LB6GG	650,540	N4XL	373,320	DL3JAN	1,586,410
VE3TM	269,205	HB9ARF	626,628	WA1FCN	349,408	RC9A	1,578,006
VE3MA	212,238	RA3YDA	592,900	VE3YT	296,296	OL5Y	1,572,826
N8NA	201,695	OK2MBP	575,824	VE1ANU	276,374	HA6NL	1,079,262
CW Only, QRP				CW Only, QRP			
NX5M	292,740	DK7HA	400,338	KJ5T	11,359	RM5F	628,506
K8CN	91,471	NX5M	292,740	KU4A	4,495	LZ6E	543,095
N4IJ	91,168	DL8MBS	203,448	WB4OMM	4,356	G4ENZ	461,244
N7RCS	67,450	LZ2RS	199,100	W7JET	3,614	HG5O (HA5OB, op)	203,476
AI9K	20,787	HG3C (HA3HX, op)	170,800	KW2A	364	JH7VHZ	163,254
K2EKM	6,372	YL3FW	151,164	KC1DVT	168	PE2K	101,152
AC2YD	5,876	OZ7BQ	132,125			US5EFU	57,820
VE3HG	5,642	K8CN	91,471			DJ7PRM	48,980
KD8DNS	4,730	N4IJ	91,168			RT4W	38,985
KC4IM	3,256	ON6PJ	87,854			OK2TSG	33,567
Multioperator, Single Transmitter, High Power							
N5DX	3,443,553	RM9A	6,233,612				
K5TR	2,408,970	RU1A	5,578,804				
W3UA	2,201,670	LZ5R	4,875,600				
K1MM	1,824,999	UA4M	4,760,484				
W7RM	1,752,336	HG6N	3,746,580				
K8AZ	1,232,036	UA4S	3,583,205				
W2Z	886,665	N5DX	3,443,553				
WW4XX	788,172	IR4M	3,442,069				
N5LCC	659,018	RT2C	3,377,920				
WØECC	644,680	R8IZ	3,189,984				

## 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														
W6YX (N7MH, op)	1,273,993	MIX-HP	WØEWD	809,424	MIX-HP	VE3AT	2,275,254	MIX-HP	NR3X (N4YDU, op)	1,279,680	MIX-HP	K5ZD	2,759,350	MIX-HP
AJ6V	437,523	MIX-HP	KVØI	84,084	MIX-HP	K9ZO	189,975	MIX-HP	KØEJ	1,177,256	MIX-HP	KR2Q	269,000	MIX-HP
K6XX	418,125	MIX-HP	KØNM	43,924	MIX-HP	KØPJ	98,384	MIX-HP	WQ5L	421,502	MIX-HP	WA2CP (KC2GOW, op)	129,584	MIX-HP
KS7T	73,780	MIX-HP	KØVG	23,896	MIX-HP	KW8N	69,760	MIX-HP	WS7X	203,770	MIX-HP	N1RR	27,144	MIX-HP
N7RK	35,496	MIX-HP	WØMAR	8,676	MIX-HP	VE3BR	37,422	MIX-HP	N4CF	168,099	MIX-HP	AC3LZ	20,705	MIX-HP
K6GHA	69,368	MIX-LP	KØEA	116,768	MIX-LP	VE3TG	230,184	MIX-LP	N8II	342,544	MIX-LP	KU2M	386,828	MIX-LP
KA7T	52,982	MIX-LP	VE5KS	89,280	MIX-LP	K8RGI	61,490	MIX-LP	K5XU	110,638	MIX-LP	N2EM	178,434	MIX-LP
WA7BNM	40,690	MIX-LP	KAØPQW	74,718	MIX-LP	N8TFD	32,620	MIX-LP	K5FUV	75,012	MIX-LP	WA2JQK	57,148	MIX-LP
WN6W	20,900	MIX-LP	KA8HDE	42,625	MIX-LP	W8UA	23,424	MIX-LP	KB4CG	61,664	MIX-LP	KA2FIR	50,687	MIX-LP
W7WSV	15,510	MIX-LP	WA5LFD	32,800	MIX-LP	AA8OY	19,850	MIX-LP	AC4G	57,165	MIX-LP	W1NU	33,735	MIX-LP
K2GMY	854	MIX-QRP	NE5TH	17,056	MIX-QRP							VE2SSS	228	MIX-QRP
N6HI	224	MIX-QRP	KKØU	3,795	MIX-QRP							KT3P	119	MIX-QRP
W7WA	1,172,696	PH-HP	K9MWM	76,980	PH-HP	AA8DC	80,984	PH-HP	N4MM	97,240	PH-HP	ND1X	32,897	PH-HP
W6AFA	192,100	PH-HP	N5KWD	18,315	PH-HP	VE3BFU	51,680	PH-HP	WW5L	42,624	PH-HP	AD2BO	30,260	PH-HP
KE8FT	77,616	PH-HP	W5GFI	15,136	PH-HP	VA3ZNQ	42,458	PH-HP	WA9TTC	16,236	PH-HP	KZ3P	21,294	PH-HP
AI6LY	9,384	PH-HP	AG5MS	1,512	PH-HP	W9AMV	22,400	PH-HP	W4BBT	13,224	PH-HP	WO2Y	20,060	PH-HP
N7WS	7,425	PH-HP	KDØJLE	848	PH-HP	KE8NBC	20,410	PH-HP	N4CZ	3,434	PH-HP	K1GMM	10,608	PH-HP
WZ8T	67,628	PH-LP	K5DHY	52,622	PH-LP	VA3NW	94,000	PH-LP	KJ4UBL	33,516	PH-LP	NG1M	53,268	PH-LP
N6OKU	32,643	PH-LP	KØSCO	5,709	PH-LP	VA3TPS	32,832	PH-LP	WA4JA	26,740	PH-LP	KS2G	46,371	PH-LP
K7HKR	7,194	PH-LP	W5JEF	5,394	PH-LP	N9EAX	25,012	PH-LP	NC4MI	23,892	PH-LP	VE2HIT	27,324	PH-LP
N7ESU	2,688	PH-LP	KØOP	3,810	PH-LP	VE3RVZ	21,373	PH-LP	KA4FVE	18,496	PH-LP	K3URT	17,050	PH-LP
NS7U	1,740	PH-LP	KF5KWO	3,390	PH-LP	VA3KRT	18,734	PH-LP	KB8VND	17,550	PH-LP	AB2TC	13,110	PH-LP
			WWØWB	3,900	PH-QRP	VA3MYC (VE3LJQ, op)	2,093	PH-QRP						

ND7K (N6MJ, op @N6WIN)	2,414,192	CW-HP	KØRF (WØUA, op)	1,559,180	CW-HP	NA8V	1,194,184	CW-HP	KØZR	1,010,988	CW-HP	W1KM	2,117,920	CW-HP
N9RV	1,876,350	CW-HP	N2IC	1,541,722	CW-HP	K8GL	786,450	CW-HP	K4BAI	693,810	CW-HP	K2ZW	1,936,512	CW-HP
K6NA	806,547	CW-HP	AD5A	1,147,192	CW-HP	K8MP	334,524	CW-HP	K3JT	430,155	CW-HP	N3AD	1,734,853	CW-HP
N6AA	687,352	CW-HP	N5AW	999,785	CW-HP	VE3VN	313,018	CW-HP	NN7CW	385,322	CW-HP	K1KI	1,615,075	CW-HP
N6TV	412,563	CW-HP	N3BB	145,976	CW-HP	KG9N	285,064	CW-HP	N4OX	274,320	CW-HP	K3ZO	632,052	CW-HP
W7Yaq	428,940	CW-LP	KØAD	378,500	CW-LP	KM6Z	357,750	CW-LP	K7SV	825,286	CW-LP	W1QK	448,818	CW-LP
WJ9B	331,062	CW-LP	WØTG	109,554	CW-LP	W1NN	288,000	CW-LP	K4EJ	157,344	CW-LP	N8NA	201,695	CW-LP
N6ZFO	165,321	CW-LP	NN5T	89,664	CW-LP	VE3TM	269,205	CW-LP	WN4AFP	148,364	CW-LP	N1QY	134,351	CW-LP
WN6K	103,972	CW-LP	WØZW	85,946	CW-LP	VE3MA	212,238	CW-LP	NK4O	131,856	CW-LP	KB3AAY	122,616	CW-LP
VA6WWW	65,440	CW-LP	KD2KW	71,328	CW-LP	N8VW	164,101	CW-LP	W4YE	112,056	CW-LP	W3WHK	76,285	CW-LP
WO7T	820	CW-QRP	NX5M	292,740	CW-QRP	AI9K	20,787	CW-QRP	N4IJ	91,168	CW-QRP	K8CN	91,471	CW-QRP
			KIØG	803	CW-QRP	VE3HG	5,642	CW-QRP	N7RCS	67,450	CW-QRP	AC2YD	5,876	CW-QRP
						KD8DNS	4,730	CW-QRP	K2EKM	6,372	CW-QRP	W1UU	660	CW-QRP
						KF4AV	2,352	CW-QRP	KC4IM	3,256	CW-QRP	W1TW	400	CW-QRP
						WB9AYW	1,530	CW-QRP	AA2MA	1,786	CW-QRP	W7LG	56	CW-QRP
Single Operator Unlimited														
KK6P	747,648	MIX-HP	KEØUI	402,867	MIX-HP	WB9Z	1,414,842	MIX-HP	K4AB	1,419,330	MIX-HP	K3MM	1,810,728	MIX-HP
N9NA	193,960	MIX-HP	W7CXX (WA7LNW, op)	277,608	MIX-HP	VA3DF	874,888	MIX-HP	WO4O	786,546	MIX-HP	W1GD	1,170,364	MIX-HP
K2RD	96,048	MIX-HP	N5HC	112,710	MIX-HP	VE3RZ	648,613	MIX-HP	NF4A	195,517	MIX-HP	K3WJV	791,536	MIX-HP
AI6Z	84,537	MIX-HP	N5WNG	70,983	MIX-HP	N2BJ	223,608	MIX-HP	AF4T	54,112	MIX-HP	WA3AAN	416,150	MIX-HP
N7UJJ	80,850	MIX-HP	KØTRL	27,352	MIX-HP	VE3TW	169,176	MIX-HP	NN4NT	39,442	MIX-HP	K3MD	300,321	MIX-HP
KA6BIM	306,307	MIX-LP	K4IU	209,844	MIX-LP	K9OM	273,512	MIX-LP	WT8WV	67,490	MIX-LP	VA2EBI	310,536	MIX-LP
WB6JJ	11,703	MIX-LP	AD1C	147,320	MIX-LP	VE3PJ	135,954	MIX-LP	WA4IPU	56,280	MIX-LP	KI2D	147,400	MIX-LP
VE6AX	11,309	MIX-LP	KE5LQ	34,020	MIX-LP	VE3GFN	102,144	MIX-LP	KN4GDX	14,127	MIX-LP	K1VU	95,370	MIX-LP
VA7DXC	6,233	MIX-LP	KØKX	12,688	MIX-LP	N9SE	17,199	MIX-LP	K4VBM	13,122	MIX-LP	K3HW	35,275	MIX-LP
KC7SVI	4,608	MIX-LP	KØMPH	10,150	MIX-LP	W9YK	12,972	MIX-LP	WN8Y	11,521	MIX-LP	NN2NN	26,197	MIX-LP
						K8ZT	17,679	MIX-QRP	AC5O	62,988	MIX-QRP	W1WBB	1,066	MIX-QRP
						KD9LTN	1,236	MIX-QRP	AG4CC	440	MIX-QRP			
N7ZUF	56,414	PH-HP	AEØMO	137,396	PH-HP	N8BI	143,472	PH-HP	KC3D	39,185	PH-HP	W3LL	557,842	PH-HP
N7GCO	18,154	PH-HP	N5GI	28,770	PH-HP	W9NZ	54,740	PH-HP	WJ2D	13,560	PH-HP	K2ANZ	42,039	PH-HP
			KØEGL	12,375	PH-HP	VA3LR	31,570	PH-HP	W4KW	13,014	PH-HP	KA2K	26,956	PH-HP
			W5ABA	8,404	PH-HP	VA3WW	29,670	PH-HP	K4SBZ	7,240	PH-HP	N2NKX	11,868	PH-HP
						N9RMB	1,624	PH-HP	KE4YOG	6,815	PH-HP	KC2OSR	3,225	PH-HP
KØNG	4,023	PH-LP	KØTJT	10,080	PH-LP	VA3IDD	48,545	PH-LP	W4BTW	29,520	PH-LP	N3AAA	108,528	PH-LP
W7NIK	1,037	PH-LP	AEØLR	8,064	PH-LP	VE3HZ	24,616	PH-LP	KM4IAJ	20,475	PH-LP	KA2KON	18,240	PH-LP
VA6AGR	328	PH-LP	W5IOH	3,366	PH-LP	W5GK	9,010	PH-LP	WA4AH	6,888	PH-LP	KD2JOE	15,635	PH-LP
			K5LGX	1,080	PH-LP	W9PI	6,018	PH-LP	WD4FMG	2,408	PH-LP	KC3RGK	9,744	PH-LP
			NAØED	240	PH-LP	N9VPV	2,134	PH-LP	K4LDC	1,444	PH-LP	K3JSJ	4,059	PH-LP



NT6Q (N5ZO, op)	1,407,627	CW-HP		N5RZ	1,708,630	CW-HP		VE3NNT	1,801,250	CW-HP		N4AF	2,004,492	CW-HP		AA3B	3,493,216	CW-HP
VE7CC	1,221,415	CW-HP		NØAV	803,117	CW-HP		WI9WI	599,829	CW-HP		AD4EB	1,359,680	CW-HP		KO7SS	2,821,584	CW-HP
N7DX	853,335	CW-HP		K5CM (W5CW, op)	788,865	CW-HP		K9NW	496,908	CW-HP		N4UU	1,107,795	CW-HP		K3WW	2,277,330	CW-HP
K7QA	391,718	CW-HP		K5QR	266,008	CW-HP		KE4KY	342,630	CW-HP		W4NZ	749,612	CW-HP		NY3A	2,057,370	CW-HP
W6SX	262,449	CW-HP		K7UT	265,966	CW-HP		W9PA	236,412	CW-HP		K2SX	431,376	CW-HP		K3JO (AE2W, op)	1,664,230	CW-HP
K7TQ	239,800	CW-LP		N5JR	221,650	CW-LP		VE3MGY	676,172	CW-LP		K3IE	628,728	CW-LP		K1XM	876,360	CW-LP
W6TK	165,249	CW-LP		KØVBU	189,357	CW-LP		KG9X	569,350	CW-LP		N2YO	402,417	CW-LP		W3KB	537,522	CW-LP
K6WSC	112,144	CW-LP		K8LS	117,481	CW-LP		VE3YT	296,296	CW-LP		N4XL	373,320	CW-LP		VE1ANU	276,374	CW-LP
WAØWVW	64,200	CW-LP		N5NAA	60,120	CW-LP		AB9YC	223,836	CW-LP		WA1FCN	349,408	CW-LP		KA1YQC	204,546	CW-LP
K7JQ	19,610	CW-LP		NØEO (AAØAW, op)	57,086	CW-LP		VE3MV	221,652	CW-LP		K2MK	144,095	CW-LP		WO1N	181,577	CW-LP
W7JET	3,614	CW-QRP		KJ5T	11,359	CW-QRP		KU4A	4,495	CW-QRP		WB4OMM	4,356	CW-QRP		KW2A	364	CW-QRP
																KC1DVT	168	CW-QRP
Multioperator Single Transmitter																		
W7RM	1,752,336	MSHP		K5TR	2,408,970	MSHP		K8AZ	1,232,036	MSHP		K1MM	1,824,999	MSHP		N5DX	3,443,553	MSHP
NX6T	599,950	MSHP		WØECC	644,680	MSHP		N4QS	220,604	MSHP		WW4XX	788,172	MSHP		W3UA	2,201,670	MSHP
VE7KW	505,809	MSHP		NØAX	621,920	MSHP		KA9VVQ	51,392	MSHP		N5LCC	659,018	MSHP		W2Z	886,665	MSHP
KT7E	485,072	MSHP		KØG	176,267	MSHP						AD4ES	539,645	MSHP		K3AJ	526,889	MSHP
K7BTW	290,280	MSHP		W7SU	132	MSHP						K4RM	419,216	MSHP		K3CCR	394,476	MSHP