Results of the 2021 CQWW DX SSB Contest

For me, working the world with 5 watts and a low dipole is only possible during a CQ WW weekend! – Jan, PG2AA.

BY JOHN DORR*, K1AR

Well, the 73rd running of the CQWW SSB contest is complete! There are very few contests with that legacy. Of greater note, however, is that the WW's popularity rose to all-time highs this time around. Having received 9,801 logs — a new record — nearly 1/3 of your submissions were received in the first 24 hours after the contest. Perhaps more amazing is that a staggering total of 4,313,558 QSOs were reported, representing an average of 440 QSOs/log. We have a lot to celebrate this year.

In the end, however, one of the best ways to measure popularity is in the comments you send to us. We literally receive thousands of emails, social media posts, and soapbox experiences from around the globe each year. The vast majority of your feedback praised the return of high-band conditions. Our patience paid off this year as propagation finally cooperated. Here's a just a few examples:

It felt like the good old days with 40M, 20M, and 15M packed with loud European callsigns and significant signs of life on 10M. It will only get better! – VC3X.

Wow, what a change from previous year! Great improvement in the numbers of worked zones and countries … – XE2B.

We achieved our goal of giving three rookies and new members of the club a taste for contesting and great conditions. We let them make use of most of the good openings (Solveig, JW5MUA; Kine, JW5IUA; and Joern, JW5LUA). Our Spanish visitor, Javier, EA1HEO, also significantly contributed. Old hands were JW6QIA Peter and JW6VDA Tom. Great fun as always! – JW5E.

*Email: <cqk1ar@gmail.com>

Years of friendship and lots of hard work yield results from PJ4K!

Perhaps of equal significance was the fact that the impact of COVID isolation began to subside. While contest DXpedition travel was still down, many of the multi-ops returned to the playing field. It was great to hear the large contest stations from around the world come back to life as well as a number of traveling contesters — both single operators and multi groups.

So, with a lot to report, let's get to the results.

How About Those Results!

Well, I predicted last year that the 2021 CQWW would be even better! And, by nearly every metric (logs received, hours operated, number of active multipliers, total QSOs in contest, etc.), that turned out to be true.

The world Single Operator race was dominated again this year by Juan, EA8RM, at 13.4 million (M), a score almost identical to last year — logging 8,173 QSOs. Juan's closest competitor was accuracy champion (See *Table 4*) Yuri, VE2IM (VE3DZ) who was nearly 4M points behind.

The U.S. Single Operator rankings were led this time around by Bob, KQ2M, with an impressive score of 6.7M dethroning Randy, K5ZD, who posted a respectable 6.3M while operating with a single radio in the Classic overlay. It took 4.3M to make it into the Top-10 this time around as was demonstrated by AB3CX's fine score.

Amongst the World QRP crowd, Willy, UA9BA, destroyed the competition with a huge 1.1M result, almost three times larger than his closest competitor, Vitas, LY5G. Working almost 1,100 QSOs from central Asia is something to marvel at by everyone.

There was a much closer horserace with the World Single Operator Assisted group as Sergio, PT5J (PP5JR) bested John, P4ØW (W2GD) by only 38,000 at about 12M. As an aside, the 2021 P4Ø operation by W2GD was his 156th trip to Aruba over 36 years beginning in 1986.

The single-band rankings demonstrated just how much propagation has improved as D4L (IZ4DPV) scored an amazing 2.4M (4028 / 36 / 136) on 10

meters. In sharp contrast, last year's winner (PY2YU) only made a winning score of 625 thousand (K) with E77A coming in second at 174K. It took a 431K score by CA4PSH to make the Top-10 this time around.

The multi-operator universe returned in force with P33W continuing their dominant multi-single position at 22M, beating #2 TM6M by almost 8M points. The emerging PJ4K team took the Multi-Two honors at 24.9M with perennial competitor, PJ2T, beating out the team at K3LR with a final score of 29.9M.

The popularity of overlays continues to grow as there was significant participation in both the Classic and Rookie categories. In the end, Yuri, VE2IM (VE3DZ) grabbed the top spot for his Classic overlay entry at 5.2M. Darko, YU3DKO, posted a leading Rookie score of 1.7M in the high-power group — very good work for a new contester. Aljaz, S55AL's, 400K score within the low-power Rookie participants was equally notable.

Speaking of overlays, this year's results include two new categories: Youth and Explorer. With a combined group of nearly 150 entries, there were a number of first-time submissions, as SO9I (SQ9ORQ – High Power) and DJ4MX (Low Power) won the Youth competition. while the Explorers were led by 9G5FI (Single Operator) and SX2I (Multi-Operator). It's going to be exciting to watch these overlay categories flourish in the years to come as the young guns and mad scientists show us what they can do.

The World is at Our Fingertips in the CQWW!

While we are still significantly below the numbers of the last decade, I'm happy to report that global activity is increasing again in the CQWW with a 6.2% increase in total worked entities this year (See *Table 1*). Of course, the contributing factors are both reduced travel restrictions and improved conditions.

Table 1

Year	# Entities Worked
2013	236
2014	235
2015	232
2016	224
2017	202
2018	199
2019	215
2020	193
2021	205

Table 1. Total number of entities submitting logs in the 2021 CQWW SSB Contest and previous years.

2021 CQWW DX SSB PLAQUE WINNERS AND DONORS

SINGLE OPERATOR

World
Juan Hidalgo, EA8RM
Donor: Southern California DX Club

World – Low Power
VP9I (Opr.: Jeff Kinzli, N6GQ)
Donor: Slovenian Contest Club

World – QRP
Willy Umanets, UA9BA
Donor: Jeff Steinman, N5TJ

World – Assisted
PT5J (Opr.: Sergio Almeida, PP5JR)
Donor: Chick Allen, NW3Y

World – Assisted Low Power
WP3C (Opr.: Yuri Rakushchynets, N2TTA)
Donor: Gail Sheehan, K2RED

U.S.A.
Robert L. Shohet, KQ2M
Donor: Potomac Valley Radio Club – KC8C Memorial

U.S.A. – Low Power
Terry Zivney, N4TZ
Donor: North Coast Contesters

U.S.A. – QRP
Randy M. Shirbroun, NDØC
Donor: Pat Collins, N8VW

U.S.A. – Assisted
Charles D. Fulp, K3WW
Donor: John Rodgers, WE3C

U.S.A. – Assisted Low Power
Jim Bowman, KS1J
Donor: LA8W / LN8W & LA Contest Club

U.S.A. Zone 3
ND7K (Opr.: John Colyard, W4IX)
Donor: Northern California Contest Club

U.S.A. Zone 4
George Fremin, III, K5TR
Donor: Kansas City DX Club

Europe
DM6V (Opr.: Felix Kuntzsch, DL7FER)
Donor: Potomac Valley Radio Club – W4BVV Memorial

Europe – Low Power
OK6T (Opr.: Martin Bohadlo, OK1WCF)
Donor: Tim Duffy, K3LR

Europe – QRP
Vitas Krasnickas, LY5G
Donor: Steve "Sid" Caesar, NH7C

Europe – Assisted
Jon Zumalabe, EA2W
Donor: Martin Huml, OL5Y

Europe – Assisted Low Power
TM3Z (Opr.: Dimitri Cosson, F4DSK)
Donor: HB9NE Doubs Contest Group

Africa
Antonio Betancor, EA8BQM*
Donor: Chris Terkla, N1XS

Asia
Oleg Shevtsov, RM9I
Donor: Nodir Tursun-Zade, EY8MM

Caribbean / Central America
KP2M (Opr.: Phillip Allardice, KT3Y)
Donor: John Rodgers, WE3C

Caribbean / Central America – Low Power
Ted Jimenez, HI3T
Donor: Albert Crespo, NH7A

Oceania
KH7M (Opr.: Jim Neiger, N6TJ)
Donor: Barbara Yasson, AC7UH

South America
Roberto Ramirez, CE3CT
Donor: Yankee Clipper Contest Club

Canada
CF3A (Opr.: Ron Vander Kraats, VE3AT)*
Donor: Contest Club Ontario –VE3WT Memorial

Indonesia
Yana Koryana, YB1AR
Donor: Karsono Suyanto, YBØNDT

Japan – High Power
Masa Okano, JH4UYB
Donor: Rush Drake, W7RM Memorial

ASEAN (XZ, HS, XW, XU, 3W, 9M, 9V, V85, YB, DU) – High Power
DY1T (Opr.: Thelma C. Pascua, DU1IVT)*
Donor: YB Land DX Club

ASEAN (XZ HS XW XU 3W 9M 9V V85 YB DU) – Assisted
Tim Seed, DU3TW
Donor: Champ C. Muangamphun, E21EIC – Siam DX Group

SINGLE OPERATOR, SINGLE BAND

World – 28 MHz
D4F (Opr.: Massimo Cortesi, IZ4DPV)
Donor: Joel Chalmers, KG6DX

World – 21 MHz
D4Z (Opr.: Piotr Majchrzak, SQ9D)
Donor: John Rodgers, WE3C

World – 14 MHz
CR3A (Opr.: Rastislav Hrnko, OM3BH)
Donor: North Jersey DX Assn. - K2HLB Memorial

World – 7 MHz
UP4L (Opr.: Valeriy Zhilyayev), UN7LZ)
Donor: Fred Laun, K3ZO – K7ZZ Memorial

World – 3.7 MHz
ISØ/OM2TW (Opr.: Richard Gasparik, OK8WW)
Donor: Family of Fred Capossela, K6SSS

World – 1.8 MHz
OK7W (Opr.: Stanislav Kostal, OK1CID)
Donor: OL7M Contest Group, QRO.cz, RemoteQTH.com

U.S.A. – 28 MHz
Jeff Stuparits, W4DD
Donor: John Rodgers, WE3C

U.S.A. – 21 MHz
Peter Bizlewicz, KU2M
Donor: 11 PM Dayton Pizza Gang

U.S.A. – 14 MHz
Ed Parish, K1EP
Donor: Yankee Clipper Contest Club – KC1F Memorial

U.S.A. – 7 MHz
Dan Handa, W7WA
Donor: Chuck Dietz, W5PR

U.S.A. – 3.7 MHz
Bud Governale, W3LL
Donor: John Rodgers, WE3C

U.S.A. – 1.8 MHz
Stephen Werner, AG4W
Donor: South Texas DX & Contest Club (STXDXCC)

Europe – 28 MHz
E7AA (Opr.: Slaven Galic, E77A)
Donor: John Rodgers, WE3C

Europe – 21 MHz
CR6T (Opr.: Antonio Rui Sousa Santos, CT1ESV)
Donor: OH-DX-Ring, OH2AM – OH2SB Memorial

Europe – 14 MHz
UA2FW (Opr.: Alex Orlov, RW4WR)
Donor: Charles Wooten, NF4A

Europe – 7 MHz
Ivo Jereb, S57AL
Donor: Central Texas DX and Contest Club – NT5C Memorial

Europe – 3.7 MHz
Ariel Vazquez, EE3M*
Donor: Friend of Klaus – DJ4PT Memorial

Europe – 1.8 MHz
SN7D (Opr.: Mateusz Pigon, SQ7D)*
Donor: Robert Kasca, S53R

Caribbean / Central America (7 MHz)
V31XX (Opr.: Bill Kollenbaum, K4XS)
Donor: Nate Moreschi, N4YDU

Oceania (28 MHz)
VK4A (Opr.: Andrew Munson, VK4NM)
Donor: Bruce D. Lee, KD6WW

Table 2

Category	AF	AS	EU	NA	OC	SA	ALL	% of total
ALL_H_A	5	90	548	692	37	47	1419	21.3%
ALL_H_U	6	143	346	393	58	27	973	14.6%
ALL_L_A	5	83	611	347	28	59	1133	17.0%
ALL_L_U	10	256	1190	697	172	108	2433	36.5%
ALL_Q_A		6	18	5	2	1	32	0.5%
ALL_Q_U		15	75	23	9	3	125	1.9%
EM			7	1			8	0.1%
ES	1		3	3		2	9	0.1%
M2	1	19	39	23	6	6	94	1.4%
MM		8	22	19	3	3	55	0.8%
MSH	5	28	132	50	8	10	233	3.5%
MSL	1	25	72	22	13	10	143	2.1%
ALL	34	673	3063	2275	336	276	6657	100.0%
% by Continent	0.5%	10.1%	46.0%	34.2%	5.0%	4.1%	100.0%	

*Single band entries not included in analysis.

Table 2. Received 2021 CQWW SSB Logs by Entry Class

Asia (21 MHz)
Alexander Krayzman, 4Z4AK
Donor: DFW Contest Group – W5PG Memorial

OVERLAY CATEGORIES

World – Classic
VE2IM (Opr.: Yuri Onipko, VE3DZ)
Donor: John Rodgers, WE3C

U.S.A. – Classic
Randy Thompson, K5ZD
Donor: BeLoud.US

Europe – Classic
Helmut Heinz, DK6WL
Donor: Steve Cole, GW4BLE Memorial

Asia – Classic
Yuri Kurinyi, RG9A
Donor: Willy Umanets, UA9BA

Japan – Classic
Koetsu Sato, JH7QXJ
Donor: Hajime Kato, JO1RUR

World – Rookie
Darko Vukojicic, YU3DKO
Donor: Tim Duffy, K3LR – N8SM Memorial

U.S.A. – Rookie
John Schroeder, K4QQG
Donor: Tim Duffy, K3LR – K3TUP Memorial

Europe – Rookie
Roberto Ursino, IUØOVB*
Donor: EA Contest Club

World – Youth
SO9I (Opr.: Przemyslaw Balcerzak, SQ9ORQ)
Donor: YOTA Camp

North America – Youth
Axel W. Bruderer, KI6RRN
Donor: Neil Rapp, WB9VPG

Europe – Youth
Ivan Zivcic, 9A2ZI*
Donor: IARU Region 1 Youth Working Group

South America – Youth
Nicolas Ribeiro Batistuti, PY2IG
Donor: IARU Region 2 for YOTA

Africa – Youth
No entries
Donor: IARU Region 1 Youth Working Group

Asia – Youth
JE2YRB (Opr.: Masahiro Tajima, JL8XSO)
Donor: YOTA Japan

Oceania – Youth
Karunya Saka Listianto, YD2UWF
Donor: IARU Region 3

Explorer – Single Operator
9G5FI (Opr.: Tom Hitzner, DL2RMC)
Donor: Worldwide Radio Operators Foundation

Explorer – Multi Operator
SX2I (Oprs.: SV2AEL, SV2BFN, SV2BXZ, SV7CLI, SV2GJV, SV2HTI, SV2HXV, SV2HXX, SV2JAO, SV2MHF)
Donor: Worldwide Radio Operators Foundation

MULTI-OPERATOR, SINGLE TRANSMITTER

World
P33W (Oprs.: RA3AUU, UA4FER, R3DCX, LZ2HM, R4FO, RK4FD, 5B4AIF, RN3QO)
Donor: Southern California DX Club – W6AM Memorial

World – Low Power
FY5KE (Oprs.: FY5FY, F1HAR, F4CWN, F5HRY, F5UII)
Donor: Tennessee Contest Group

U.S.A.
KC1XX (Oprs.: K1QX, KC1XX, KM3T, N1EZ, W1FV, WA1Z)
Donor: Carolina DX Assoc. – Ted Goldthorpe, W4VHF and Ken Boyd, K4DXA Memorial

U.S.A. – Low Power
W1QK (Opr.: W1QK, NG1R)
Donor: KZ5DX – DX HOGS

Africa
CQ9T (Oprs.: CT3HF, CT3KN, CT9ABC, CS9ABE)
Donor: WRTC 2Ø22

Asia
4X1DX (Oprs.: 4X6FR, 4X1DX)*
Donor: Willy Umanets, UA9BA

Europe
TM6M (Oprs.: F1AKK, F1UVN, F4DXW, F4FDA, F4FFZ, F8DBF, F8FKJ)
Donor: Gail Sheehan, K2RED

Europe – Low Power
ED7O (Oprs.: EB1TR, EC1A, EC7MA, EA7EU, EC5AN)
Donor: EA Contest Club

Oceania
VK6N (Oprs.: VK6SJ, VK6VY, VK6NU, VK6MIT, VK6LIN, VK6BAP, VK6ML, VK6MAN, VK6BEC)
Donor: Junichi Tanaka, JH4RHF

South America
PJ4G (Oprs.: K2NG, K4NHW, KO8SCA, PJ4NX)
Donor: Victor Burns, KI6IM – The Cuba Libra Contest Club

Caribbean/Central America
ZF1A (Oprs.: NN1C, K1XM, KQ1F, K6JO, K7ZO)
Donor: Bob Raymond, WA1Z

Canada
VE3EJ (Oprs.: VE3EJ, VE3EK, VE3MM, VE3OI)
Donor: John Sluymer, VE3EJ

Japan
JA7ZFN (Oprs.: JA7NLW, JG7PSJ, JH7XMO, JP7DKQ, JA1CTB)
Donor: Arizona Outlaws Contest Club

ASEAN (XZ, HS, XW, XU, 3W, 9M, 9V, V8, YB, DU)
E2A (Oprs.: E25KAE, E24OYI, E29TGW, E2ØNKB, E21EIC)
Donor: Bruce Frahm, KØBJ

MULTI-OPERATOR, TWO TRANSMITTERS

World
PJ4K (Oprs.: DL8OBQ, K1XX, K3CT, N3RD, N4RV, N6KT, N7ZZ, PJ4DX, WA3LRO)
Donor: Array Solutions

U.S.A.
W3LPL (Oprs.: W3LPL, W3IDT, K3MM, N3QE, K3RA, WR3Z, KD4D)
Donor: Kimo Chun, KH7U & Mike Gibson, KH6ND - Dan Robbins, KL7Y Memorial

Europe
ES9C (Oprs.: ES1BVG, ES2ADO, ES2GW, ES2MC, ES4BO, ES5HTA, ES5QA, ES5RY, ES5TV, ES6QC, ES7GM, URØMC, US2YW, UW7LL, YL3DW, YL3JA)
Donor: D4C Monteverde Contest Team – IR4X Monte Capra Contest Team – I4EAT Memorial

South America
HD8R (Oprs.: EA1SA, EA5RM, EA7X, F2JD, F5CWU, F8ATS, IK5RUN, IN3ZNR)*
Donor: Worldwide Radio Operators Foundation

Japan
JR8VSE (Oprs.: JR8VSE, JE8KKX, JN2FCL)
Donor: Yokohama DX Club (YDXC)

ASEAN (XZ, HS, XW, XU, 3W, 9M, 9V, V8, YB, DU)
7A2A (Oprs.: YB1TJ, YB1RKT, YB2DX, YB2XVT, YB3KM)
Donor: Champ C. Muangamphun, E21EIC – Siam DX Group

MULTI-OPERATOR, MULTI-TRANSMITTER

World
PJ2T (Oprs.: WØCG, NN3W, KL2A, G4BVY, G4XUM, M5RIC, K8PGJ, N2BA, ND8L)
Donor: Dave Leeson, W6NL & Barb Leeson, K6BL

U.S.A.
K3LR (Oprs.: N2NC, N5UM, K3LR, N9RV, W2RQ, K3LA, N2NT, K1AR, N3SD, AA5B, K3UA, N3GJ, N3RA, WM2H)
Donor: Jim Lawson, W2PV Memorial

Europe
M6T (Oprs.: GØAEV, GØJJG, GØVJG, GØWCW, G2NF, G4ADM, G4BUO, G4MJS, G4PIQ, G4TSH, G7TWC, MØBCT, MØHKB, MØMDR, MØTGV, PT2F)
Donor: Finnish Amateur Radio League

CONTEST EXPEDITIONS

World – Single Operator
A47RS (Opr.: Efstathios Maliakis, SV5DKL)
Donor: National Capitol DX Association - Stuart Meyer, W2GHK Memorial

World Multi-Op
PYØF (Oprs.: PT2IC, PY4AZ, PY6RT, PY7RP)
Donor: Gail Sheehan, K2RED

**Awarded to second place finisher*

Will there be bigger numbers to come? I say that's a safe bet. There's more than one group setting their sights on working 200 countries on a single band. Will it ever be done?

Pick a Category, Any Category

There's good news this year. The number of multi-op entries — a wildly popular group of categories — was significantly higher (See *Table 2*). While the pandemic continued to keep many operators at home, we experienced a year-over-year increase of 140 multi-op entries (36%) spread equally across all categories. Was there pent-up demand to get back together? You bet there was!

How Many Hours Did You Operate in the CQWW?

Well, you had to admire consistency. Last year's analysis showed that the medium number of hours operated in the CQWW SSB contest for single operators was 10.5 hours. It turned out that this year's average is about the same (See *Table 3*) as about half of us are in this range (47.6%).

Looking at the data from another perspective, the single operator group invested an approximate cumulative total of

Juan, EA8RM, the SOAB champion has over 13 million reasons to be smiling!

2021 CQWW DX SSB TOP SCORES

WORLD
SINGLE OPERATOR
HIGH POWER
All Band

EA8RM 13,431,245
VE2IM (VE3DZ) .9,717,785
CF3A (VE3AT)...7,994,096
KQ2M 6,729,076
K5ZD 6,311,403
RM9I 5,994,040
C4W (5B4WN)....5,883,312
VY2TT (K6LA) 5,704,800
K4ZW.....5,661,114
N1UR.....5,410,820

28 MHz
D4F (IZ4DPV)....2,356,029
PY2YU.....1,764,828
CT9ABY
(OM2KW).....1,148,189

21 MHz
D4Z (SQ9D).....2,414,968
CR3DX (OM3RM)2,296,170
P43A.....1,422,745

14 MHz
CR3A (OM3BH) .2,175,460
D4L (IK2NCJ) 2,023,580
UA2FW
(RW4WR) 1,236,576

7 MHz
UP4L (UN7LZ).....952,055
V31XX (K4XS).....936,258
S57AL.....861,606

3.7 MHz
ISØ/OM2TW
(OK8WW) 331,655
CQ3J (CT3MD).....287,768
EE3M.....192,351

1.8 MHz
OK7W (OK1CID) ..118,548
SN7D (SQ7D).....77,376
NP2J (K8RF) 41,796

LOW POWER
All Band

VP9I (N6GQ) 3,585,504
OK6T
(OK1WCF).....2,121,010
HI3T.....1,791,049
N4TZ.....1,544,160
WW4XX (LZ4AX)..917,285
RG5A/6.....806,053
JH1EAQ.....788,322
IV3ZYB 753,424
OK2MBP.....740,484
TI2JS 699,489

28 MHz
EA8TX 728,218
CS9/PD3EM 465,500
CT3IQ 330,786

21 MHz
ZW2T (PY2RKG)..464,264
PY2QT.....344,487
JF3BFS.....225,456

14 MHz
4L2M.....565,508
PY2NY.....425,111
TG9ANF 203,228

7 MHz
4Z5UN 259,787
LA2AB (SP2ASJ)..184,080
UT3UOR.....128,810

3.7 MHz
CO2JD.....82,709
OU8A (5PØO) 64,032
W3LL 49,329

1.8 MHz
SNØR (SQ9IAU).....29,264
SP6LUV.....27,528
OK1LRD 23,618

QRP
All Band

UA9BA.....1,151,712
LY5G 426,408
LZ1DM.....389,628
JH1OGC.....241,824
NDØC.....230,426
K8ZT.....198,276
UR5FEO.....190,938
PY2BN.....181,470
IZ4AIF.....168,525
HG6C (HA6IAM)...151,074

28 MHz
VR2T (VR2ZQZ)...237,075
4I1EBC 60,610
LZ2RS 26,650

21 MHz
F8AKS 102,276
YBØSSF 57,681
TA2IB.....56,960

14 MHz
YU1NR 44,700
USØMS 43,008
HF5WIM 31,428

7 MHz
LY2NK 20,301
DL1BAX.....16,491
PG2AA.....11,183

3.7 MHz
OL4W (OK1IF).....13,248
UT4UBZ.....3,569
IZ5OVP.....1,260

1.8 MHz
HA1TI 5,904
HF7A 4,104

ASSISTED
HIGH POWER
All Band

PT5J (PP5JR)..12,001,288
P4ØW
(W2GD) 11,959,017
EA2W 8,470,308
KH7Q
(KU1CW) 7,925,904
OMØR
(OM3GI).....7,606,230
HG8R (HA8JV) ..7,565,566
ZF5T (K5GO/
ZF9CW).....7,533,535
SN7Q
(SP7GIQ).....6,870,082
LY7Z.....6,706,524
R2QA.....6,182,145

28 MHz
CX2DK.....1,327,183
LU6ETB
(LU7DW).....923,868
LR7D (LU9ESD) ...847,177

21 MHz
CQ3W (DF7EE) .1,488,792
9Y4D.....1,454,184
DL2ARD 1,452,752

14 MHz
DL6FBL 1,774,600
OK7K (OK1BN) .1,628,802
PP4T (PY4BZ)...1,508,925

7 MHz
US1Q
(UW2QU).....1,096,979
SN3A (SP3GEM)..930,411
YU7XX (YT1X) 734,240

3.7 MHz
OM6NM 325,584
HA1TJ.....271,600
VE9CB.....253,240

1.8 MHz
IZ5ICH 78,120
S56X.....65,860
GM4AFF 64,425

ASSISTED
LOW POWER
All Band

WP3C (N2TTA) .2,751,343
HI8RD.....2,320,782
TM3Z (F4DSK) ..2,221,184
HZ1TT 2,206,676
KS1J.....1,832,124
UP7L (UN6LN) ..1,571,253
PA9M.....1,530,397
WE9R 1,493,796
SQ6H
(SQ6PLH) 1,295,151
UA9R.....1,287,072

28 MHz
PY2EX.....639,850
ZV1T (PP1WW).....557,056
WP4SD.....407,712

21 MHz
IK4LZH 527,468
PY2CX.....385,728
EA8DED
(OH2BP) 297,000

14 MHz
PY4JW.....685,980
UR3GU 477,318
HGØR (HAØNAR) 441,842

7 MHz
VE2IDX (VE3ZF) ..359,840
OL9R (OK6RA).....271,128
G8X (G4FJK).....161,920

3.7 MHz
IH9/OK1M.....233,910
E73AA 66,378
OK1AY.....53,208

1.8 MHz
S54ZZ.....46,926
OK6Y (OK2PTZ).....35,100
YT8A.....34,112

ASSISTED
QRP
All Band

ED5R (EA5Z).....1,601,280
UZ7M (UT9MZ) 594,135
ON6NL.....460,332
JA6GCE.....334,508
IZ3NVR.....320,117
UN8PT.....237,986
SP5PDA 177,731
YU1LM.....102,858
IZ1ANK 95,520
OK1DMP 81,620

28 MHz
YP8A (YO8WW) 59,558
BA7CK.....22,843
SN5R (SP5XMU).....9,882

21 MHz
HG3C (HA3HX) 36,582
SV1NK.....26,257
KG1E.....14,022

14 MHz
EA5HJV 265,392
EA3O.....138,880
RT4W 53,466

7 MHz
OT6M (ON9CC).....13,560
PD2JM.....5,856
KP3ER (NP3V) 2,541

3.7 MHz
OMØA
(OMØAAO) 19,040
HF9CW.....8,695
SP5ES.....5,588

1.8 MHz
LY2OU.....6,004
YO8WW.....5,047

MULTI-OP
SINGLE TRANSMITTER
High Power

P33W.....22,422,596
TM6M 14,606,216
KC1XX.....14,560,432
IR4X.....13,906,971
E7DX 13,550,160
LZ5R.....13,441,288
VE3EJ.....13,214,691
PJ4G.....13,111,480
ZF1A.....13,011,800
KP3Z.....12,514,080

Low Power

FY5KE 10,901,754
V3A.....4,519,686
ED7O.....4,509,773
HZ1LG 4,509,756
DD4A.....4,158,960
IB9T 3,649,171
ED7B 3,410,676
VP5DX.....3,314,760
IQ3RK.....2,774,511
IR9R 2,757,900

MULTI-OP
TWO TRANSMITTER

PJ4K.....24,916,506
ES9C 18,602,780
EI7M 18,472,050
HD8R.....17,996,120
CR6K.....17,546,958
PX2A 15,951,068
II2S 14,661,120
ED1R.....14,299,362
IR6T.....14,214,200
9A7A.....13,411,518

MULTI-OP
MULTI-TRANSMITTER

PJ2T 29,985,664
K3LR.....27,941,270
A73A.....24,902,052
M6T 20,557,230
EW5A 19,500,560
DFØHQ.....18,698,750
LZ9W 18,465,060
YT5A.....17,055,180
KL7RA 14,364,000
DP7D.....11,945,140

EXPLORER
Single Operator

9G5FI.....3,401,025
RL6M.....1,254,829
K7RB 123,690
W2MRD 3,483
PY2MD 1,320

EXPLORER
Multi Operator

SX2I.....5,937,680
Z6ØA 4,110,700
9H6A.....3,611,520
IQ4RN.....2,236,416
EE7K 1,113,315
IB2C.....978,656
KP2B 648,324

ROOKIE
High Power

YU3DKO.....1,708,137
IUØOVB.....1,147,500
K4QQG.....686,092
AC3LZ 468,666
IU1NKS.....364,181
9M2TDX 363,312
ED2B (EA2ESB)...263,822
W3MAM.....246,280
LX1LC.....233,264
W4SSF 200,910

ROOKIE
Low Power

S55AL.....399,966

Table 3

op hours	AF	AS	EU	NA	OC	SA	ALL	% of All	Cum. %
0.1-5	5	164	635	546	75	35	1460	23.9%	23.9%
5.1-10	2	135	655	537	64	60	1453	23.8%	47.6%
10.1-15	9	86	495	389	64	45	1088	17.8%	65.4%
15.1-20	4	73	363	287	41	41	809	13.2%	78.7%
20.1-25	2	60	326	178	31	29	626	10.2%	88.9%
25.1-30	2	35	141	88	18	16	300	4.9%	93.8%
30.1-35		21	87	76	10	8	202	3.3%	97.1%
35.1-40	1	8	43	35	1	6	94	1.5%	98.6%
40.1-45	1	9	38	18	2	4	72	1.2%	99.8%
45.1-48		2	5	3		1	11	0.2%	100.0%
ALL	26	593	2788	2157	306	245	6115		
Median hours	13.9	9.9	10.8	9.9	10.7	12.8	10.5		

Median time: 10.5 hours

Table 3. Analysis of Operating Times for 2021 CQWW SSB Contest Single-Op All Band entries

N3GT.....356,425
EA4HKF.....294,690
2WØLKX.....271,152
EA5IXO.....231,594
SP3DAT.....209,965
4I1EBD.....197,166
PU5DPL.....188,604
VA3IDD.....186,245
KC3QVQ.....175,032

CLASSIC
High Power

VE2IM (VE3DZ).....5,264,064
K5ZD.....4,784,670
RG9A.....4,162,044
UA9MA.....3,806,075
WH7T (WH7W).....3,739,392
K1DG.....3,392,264
S53MM.....2,726,595
DL2CC.....2,682,548
EA4KD.....2,414,192
CE3CT.....2,372,210

CLASSIC
Low Power

WW4XX (LZ4AX)..917,285
RG5A/6.....772,686
EA8TX.....716,078
OL5Y.....631,350
K1HT.....616,641
3G1D (XQ1FM) 560,028
UA3BL.....541,310
DJ3HW.....540,592
AC4G.....536,568
PA2TMS.....529,320

YOUTH
High Power

SO9I (SQ9ORQ).....5,263,831
9A2ZI.....2,326,753
JE2YRB (JL8XSO).....1,788,830
YU3AWA.....1,466,465
KI6RRN.....1,409,580
DL3ON.....1,083,013
NTØK (K6BFL) 760,767
PY2IG.....563,563
KD9V.....224,238
DK5AV.....204,336

YOUTH
Low Power

DJ4MX.....654,150
YP1EX (YO9LIG)..232,427
DL3MLA.....196,128
DB5DY.....180,752
SP5PDA.....177,731
OE9SEV.....164,424
YU3LAX.....113,600
N4WLL.....100,646
KE8HBV.....97,865
YD2UWF.....76,076

UNITED STATES

SINGLE OPERATOR
HIGH POWER
All Band

KQ2M.....6,729,076
K5ZD.....6,311,403
K4ZW.....5,661,114
N1UR.....5,410,820
K5TR.....5,006,144
W9RE.....4,845,002
K1DG.....4,665,320
K3ZO.....3,718,080
ND7K (@N6WIN).....3,036,215
K5GN.....2,978,531

28 MHz

W4DD.....252,416
W5PR.....219,744
K1WHS.....138,516

21 MHz

KU2M.....705,962
KØEJ.....623,664
N4OX.....556,308

14 MHz

W6AFA.....159,104
N5CR.....146,388
KE8FT.....93,002

7 MHz

W7WA.....442,382
K9CJ.....26,492
WDØBGZ.....24,273

3.7 MHz

WA2BCK.....33,810
K9ZO.....28,194
W1FQ.....18,368

1.8 MHz

AG4W.....3,774

LOW POWER
All Band

N4TZ.....1,544,160
WW4XX (LZ4AX).....917,285
K8ZM.....624,325
K1HT.....616,641
N1DD.....592,812
K5FUV.....574,128
AC4G.....536,568
N7IR.....442,260
NGØC.....392,042
WA3LXD.....348,096

28 MHz

N8II.....170,558
W8TWA.....63,440
N1WRK.....44,354

21 MHz

WA5SOG.....70,785
NF7E.....64,647
W8JGU.....62,208

14 MHz

K1EP.....159,936
WA7BNM.....59,843
WB2KHO.....35,721

7 MHz

NY1E.....33,040
N8VW.....18,088
W4GDV.....2,052

3.7 MHz

W3LL.....49,329
KS3F.....4,550

QRP
All Band

NDØC.....230,426
K8ZT.....198,276
W6QU (W8QZA)...113,373
N4WLL.....100,646
K4WY.....36,570
N8LJ.....35,200
W7FS.....20,384
N3CI.....11,480
W7LG.....7,750
N7JI.....6,579

ASSISTED
HIGH POWER
All Band

K3WW.....5,592,496
W3PP (AA1K)....5,073,630
AA3B.....4,950,540
AB3CX.....4,703,658
K4AB.....4,046,868
N3RS.....3,999,816
N2SR.....3,772,240
W2MKM.....3,462,674
NW3Y.....3,426,947
KK6P (W7IV).....3,271,334

28 MHz

K1MM.....475,344
WV4P.....191,352
WO4O.....177,480

21 MHz

WW4LL.....479,100
NR4L.....259,992
W6PH.....214,650

14 MHz

KVØQ.....454,905
K1JB.....302,784
N7DD.....263,835

7 MHz

W9PA.....88,206
N9LR.....15,833
K2LE.....14,694

3.7 MHz

W3NO.....84,482
KN2M.....13,862
AI6Z.....2,139

1.8 MHz

K5UR.....2,975

ASSISTED
LOW POWER
All Band

KS1J.....1,832,124
WE9R.....1,493,796
W3KB.....1,196,685
N4XL.....1,191,265
W1NT.....1,169,299
N3AAA.....618,184
WO1N.....515,520
W2YR.....476,392
KC1SQ.....429,275
AD1C.....421,940

28 MHz

N3UA.....195,939
N4IJ.....86,456
W9XT.....49,998

21 MHz

W6NCB.....48,685
K2SQS.....40,474
W9QL.....30,108

14 MHz

N9TGR.....132,258
W4LC.....70,252
KC1G.....3,564

7 MHz

W3CC.....2,232

3.7 MHz

K7LU.....1,638

ASSISTED
QRP
All Band

WB4OMM.....3,150
WO7T.....2,596
N6AN.....1,680
NO5V.....1,184

21 MHz

KG1E.....14,022
K2GMY.....8,084

MULTI-OP
SINGLE TRANSMITTER
High Power

KC1XX.....14,560,432
K1LZ.....7,849,968
NV9L.....5,978,412
K8AZ.....5,181,780
W2A.....4,345,230
W8PR.....2,805,115
K9RS.....2,783,231
KC3R.....2,729,090
N4SS.....2,666,122
K1KP.....2,470,404

Low Power

W1QK.....1,396,395
W3ZGD.....611,340
W1FM.....591,374
WA1F.....483,218
NN6P.....345,800
KT4XA.....177,822
KT3T.....149,079
K4CBW.....64,170
AD4XT.....56,168
W8AJT.....41,100

MULTI-OP
TWO TRANSMITTER

W3LPL.....11,708,631
K1RX.....10,437,328
K9CT.....7,757,400
K1CC.....7,533,834
K2AX.....6,709,300
W2CG.....6,017,270
AA4VT.....4,324,023
W6YX.....2,986,284
NJ3I.....2,496,945
N7DX.....2,274,612

MULTI-OP
MULTI-TRANSMITTER

K3LR.....27,941,270
K1TTT.....10,253,024
WX3B.....10,232,750
N1RR.....5,289,424
K3EST.....5,150,697
K1KI.....3,117,994
WA3EKL.....2,699,880
W3MF.....2,258,308
NE3F.....2,106,473
W1AW.....1,327,435

EXPLORER
Single Operator

K7RB.....123,690
W2MRD.....3,483

ROOKIE
High Power

K4QQG.....686,092
AC3LZ.....468,666
W3MAM.....246,280
W4SSF.....200,910
KJ8H.....171,051
AA5H.....140,400
K7WXB.....81,450
KC3RDV.....38,280
N7RBL.....18,564
KX7TL.....11,900

Low Power

N3GT.....356,425
KC3QVQ.....175,032
K1MWH.....135,744
K3KDX.....134,568
N3AML.....111,384
K4LEN.....110,400
W9TCV.....101,598
N8CWX.....55,900
KD9RPB.....53,010
KI2D.....51,136

CLASSIC
High Power

K5ZD.....4,784,670
K1DG.....3,392,264
N2IC.....1,911,429
K3AJ.....1,569,067
K2SSS.....1,108,282
W1JQ.....1,006,542
W3KL.....996,130
K1RM.....984,718
KD7RF.....783,696
W4KW.....754,725

Low Power

WW4XX (LZ4AX)..917,285
K1HT.....616,641
AC4G.....536,568
N8II.....469,588
N7IR.....442,260
WA3LXD.....348,096
NØUR.....315,100
W6DVS.....262,548
K4DR.....214,376
N1DC.....204,670

YOUTH
High Power

KI6RRN.....1,409,580
NTØK (K6BFL).....760,767
KD9V.....224,238

YOUTH
Low Power

N4WLL.....100,646
KE8HBV.....97,865
W8UA.....61,087
KE8RJU.....35,258
N8AJM.....12,551
W8MTB.....2,345

Table 4

Call	Cont	Cat	Raw QSOs
VE2IM	NA	High Power	6483
K5ZD	NA	High Power	3844
EA4KD	EU	High Power	2473
OK6T	EU	Low Power	2364
VC3X	NA	High Power	2334
FG5GP	NA	High Power	1412
R3OM	EU	High Power	1296
K6NA	NA	High Power	1229
OE1HHB	EU	Low Power	1185
UA9BA	AS	QRP	1083
DU7JAY	OC	High Power	1049
PZ5RA	SA	Low Power	1003

(99%+ callsign accuracy with >1000 QSOs)

Table 4. Most accurate 2021 CQWW SOAB Unassisted entries

78,500 hours of operating time in last year's WW. That equals 3,271 days or 62.9 years. Those numbers make me tired just looking at them. My advice is to keep this data to yourself (that's a hint to those of you with spouses or significant others).

There is Accuracy, Then There is ACCURACY!

We have amongst us an elite group of operators that regularly demonstrate outstanding skills, especially in log accuracy. Leading the pack was Yuri, VE2IM (VE3DZ) who only busted 14 calls out of 6,483 QSOs an error rate of 0.2%. This is in sharp contrast to the average for all logs of 1.8%. Randy, K5ZD, was not far behind with only 13 busted calls (0.3%). The remainder on this list (See *Table 4*) share in our well-deserved accolades. While there is a natural skill in achieving these results, the other key point is in how intentional each of these operators are in "getting it right." It takes work, concentration, experience, and even a little bit of luck. Congratulations to each of you.

Celebrating our Youth Operators

As reported earlier, we launched a new Youth Overlay category in this year's CQWW contest. The goal was simply to offer well-deserved visibility to the youngest operators (in our case, 25 years old or less) in our contest community and hopefully provide an incentive for more to participate. With over 100 logs received, I'm happy to report the initial launch was successful.

Not surprisingly, over half of the Youth logs came from Europe, who are leading the world in recruitment and growth. But, with entries from every major continent, the opportunity for future growth abounds. My thanks go to Philipp, DK6SP, and Luc, LU6FAM, who spearheaded this effort as well as the many new sponsors of CQWW Youth plaques (14 in total). Next year will be even better.

Some Thoughts from the Director

I'm happy to report that after hours of extensive log checking, using some of contesting's most advanced resources,

2021 CQWW DX SSB BAND-BY-BAND BREAKDOWN — TOP ALL BAND SCORES

Number groups indicate: QSOs/Zones/Countries on each band

WORLD SINGLE OPERATOR ALL BAND

Station	160	80	40	20	15	10
EA8RM	134/6/37	428/15/61	1309/25/84	1599/27/79	1434/26/82	3269/28/99
VE2IM	186/10/29	779/17/74	1472/27/91	2000/32/99	1624/26/103	364/20/59
CF3A	217/10/34	661/17/58	969/26/95	1800/35/99	1255/26/100	485/19/64
KQ2M	28/9/23	422/15/65	372/22/75	1474/38/112	1527/29/96	653/21/73
K5ZD	63/9/31	240/14/61	300/21/75	1563/35/109	1160/31/102	493/18/75

USA TOP SINGLE OPERATOR ALL BAND

Station	160	80	40	20	15	10
KQ2M	28/9/23	422/15/65	372/22/75	1474/38/112	1527/29/96	653/21/73
K5ZD	63/9/31	240/14/61	300/21/75	1563/35/109	1160/31/102	493/18/75
K4ZW	28/8/20	292/20/72	570/27/83	987/33/99	1041/28/102	576/21/69
N1UR	74/9/34	283/18/65	510/22/79	848/35/99	1051/26/98	608/21/74
K5TR	26/11/18	111/17/47	1004/28/74	815/34/87	1611/34/104	664/25/68

WORLD SINGLE OPERATOR ASSISTED ALL BAND

PT5J	14/6/10	239/24/66	597/34/102	1365/38/115	1689/33/116	2327/31/116
P4ØW	58/8/17	442/18/71	1457/26/104	1150/31/95	1626/30/109	2096/26/78
EA2W	61/9/42	500/18/76	1113/30/104	1536/37/116	1505/38/117	977/34/100
KH7Q	15/10/8	168/24/32	1408/31/77	1338/36/98	2184/33/89	386/24/42
OMØR	171/9/48	577/19/80	1000/34/104	1093/36/107	1509/37/113	612/33/90

USA SINGLE OPERATOR ASSISTED ALL BAND

K3WW	40/10/28	221/15/71	395/27/91	1068/32/113	883/29/115	583/22/91
W3PP	45/10/29	196/18/71	156/26/79	994/36/110	1004/32/121	413/26/97
AA3B	33/7/20	272/16/73	421/24/87	739/32/110	860/27/106	498/27/101
AB3CX	61/9/32	252/18/72	270/27/91	773/34/104	663/27/111	578/25/91
K4AB	24/7/15	198/17/64	254/26/82	551/35/101	934/32/113	597/26/88

WORLD MULTI-OPERATOR SINGLE TRANSMITTER

P33W	229/13/57	745/20/84	1634/35/114	2298/38/138	2577/39/136	2171/36/116
TM6M	172/9/46	481/20/86	1615/34/118	2208/38/130	2258/39/141	1111/34/113
KC1XX	45/11/43	719/22/92	1777/31/121	1468/37/131	1921/32/132	618/28/116
IR4X	50/8/49	679/19/94	1329/36/117	1512/38/137	2516/40/147	945/35/123
E7DX	129/10/62	799/21/88	1854/37/126	1654/39/139	2286/38/140	938/36/124

USA MULTI-OPERATOR SINGLE TRANSMITTER

KC1XX	45/11/43	719/22/92	1777/31/121	1468/37/131	1921/32/132	618/28/116
K1LZ	73/13/52	348/20/82	591/29/108	1375/36/116	1258/31/120	378/25/100
NV9L	17/8/16	336/19/70	338/30/99	814/35/116	1059/37/126	598/28/98
K8AZ	21/8/19	213/17/69	228/29/94	901/36/118	772/32/123	683/25/100
W2A	1/1/1	137/16/65	355/26/97	1177/35/114	906/28/113	84/22/83

WORLD MULTI-OPERATOR TWO TRANSMITTER

PJ4K	155/14/33	1007/23/81	3057/29/110	1661/34/116	3982/32/113	2600/28/85
ES9C	523/14/65	1566/25/99	2205/37/126	2985/39/142	3529/39/150	1019/33/121
EI7M	370/12/57	1200/20/87	2183/33/115	2808/36/124	3245/40/136	1454/33/117
HD8R	10/7/7	588/22/51	1552/27/93	1630/34/105	3549/34/109	3023/29/102
CR6K	292/11/53	1048/20/91	2159/32/112	2677/38/136	2921/37/129	1744/29/114

USA MULTI-OPERATOR TWO TRANSMITTER

W3LPL	43/11/41	721/21/88	912/30/111	1601/38/131	1448/34/132	876/28/108
K1RX	63/10/31	436/17/80	1137/24/98	1942/36/123	1575/33/119	623/23/88
K9CT	31/9/15	312/22/65	732/31/99	1318/37/121	1504/36/132	693/30/103
K1CC	45/7/28	261/19/78	650/27/102	1223/34/120	1129/33/130	514/26/105
K2AX	47/9/29	236/17/70	242/27/90	1234/37/118	1033/31/120	827/26/102

WORLD MULTI-OPERATOR MULTI-TRANSMITTER

PJ2T	196/13/31	1084/21/88	3027/33/122	2880/33/120	4195/35/119	3152/29/95
K3LR	600/16/60	888/25/94	2687/34/133	3259/39/148	3326/38/151	1577/31/120
A73A	252/8/48	789/19/73	2215/35/121	3017/37/133	3184/39/124	2263/35/114
M6T	664/10/58	2175/22/97	3905/36/135	2341/39/140	2008/38/133	1678/35/127
EW5A	981/15/68	1760/24/101	2696/37/127	3554/38/137	2451/38/139	1264/34/107

USA MULTI-OPERATOR MULTI-TRANSMITTER

K3LR	600/16/60	888/25/94	2687/34/133	3259/39/148	3326/38/151	1577/31/120
K1TTT	211/12/45	536/22/87	1012/27/102	2141/37/129	1325/31/122	731/26/106
WX3B	38/8/20	470/19/78	534/28/95	2002/37/118	1800/34/118	975/24/92
N1RR	37/6/25	182/17/66	303/24/82	625/29/90	1772/26/105	436/23/76
K3EST	123/12/13	223/21/42	749/33/80	922/37/117	1182/34/98	708/26/60

the CQWW Contest Committee can declare that the overwhelming majority of log submissions are truthful and honest. Just to be clear, our primary role is to produce results that are accurate and reflect what really happened in the contest. Contrary to the opinion of a few folks, we do not set out each year to determine ways to disqualify competitors. In that context the results speak for themselves with only 13 logs eliminated from the results out of 9,801 received entries (0.13% of the total).

However, it is also noteworthy that each year there are a few logs that are reclassified — ranging from moves to Assisted or Checklogs. Sometimes this is done at the competitor's request; in other situations, it's to accommodate what we have discovered during the log checking process. It's important to note that some of this year's changes took place because requested audio recordings were not supplied, which is outlined in the rules. As a reminder, it will be very rare for us to ask for your recording. However, rather than view this rule as a punitive strategy, it can be a helpful tool for you — both in terms of confirming our analysis or providing self-discovery on ways to improve your operating skills.

On another subject, the CQWW continues to disallow self-spotting. While there appears to be a movement to allow this practice in other contests, we will likely maintain our position for the foreseeable future. Fortunately for all, the word is getting out that self-spotters will be caught, as the number of violators has significantly dropped in recent years. This is particularly true on CW, where the effectiveness of reverse beacon network (RBN) spotting has rendered the notion of self-spotting to be largely redundant.

EUROPE TOP SINGLE OPERATOR ALL BAND

Station	160	80	40	20	15	10
DM6V	51/7/29	494/12/54	859/23/73	1173/31/87	1106/29/75	734/26/60
EA3QP	59/6/26	400/11/51	779/19/62	1327/27/70	1314/25/66	1037/29/62
DK6WL	135/9/42	519/14/61	607/27/81	803/27/91	636/32/91	576/31/72
4O3A	23/4/15	183/7/41	840/29/88	690/26/73	1651/30/90	645/25/62
TM2Y	181/6/39	612/14/57	421/15/64	697/27/68	880/30/71	556/27/59

EUROPE SINGLE OPERATOR ASSISTED ALL BAND

EA2W	61/9/42	500/18/76	1113/30/104	1536/37/116	1505/38/117	977/34/100
OMØR	171/9/48	577/19/80	1000/34/104	1093/36/107	1509/37/113	612/33/90
HG8R	224/9/44	672/19/71	1071/32/95	1413/37/118	1188/38/117	561/33/105
SN7Q	137/5/38	437/18/73	560/29/91	880/33/107	1415/34/102	969/32/112
LY7Z	243/10/55	602/17/74	1189/38/117	1324/38/127	1243/38/128	307/31/86

EUROPE MULTI-OPERATOR SINGLE TRANSMITTER

TM6M	172/9/46	481/20/86	1615/34/118	2208/38/130	2258/39/141	1111/34/113
IR4X	50/8/49	679/19/94	1329/36/117	1512/38/137	2516/40/147	945/35/123
E7DX	129/10/62	799/21/88	1854/37/126	1654/39/139	2286/38/140	938/36/124
LZ5R	72/10/53	848/23/93	1793/36/121	2294/38/134	2051/38/138	1183/35/114
SP8R	187/12/59	745/20/90	1651/37/123	1944/38/128	1765/37/139	491/33/114

EUROPE MULTI-OPERATOR TWO TRANSMITTER

ES9C	523/14/65	1566/25/99	2205/37/126	2985/39/142	3529/39/150	1019/33/121
EI7M	370/12/57	1200/20/87	2183/33/115	2808/36/124	3245/40/136	1454/33/117
CR6K	292/11/53	1048/20/91	2159/32/112	2677/38/136	2921/37/129	1744/29/114
II2S	222/10/57	1079/21/93	1862/37/124	2199/38/131	2362/39/139	889/34/107
ED1R	286/12/57	1195/21/93	2067/32/108	2179/37/130	2144/38/124	1534/35/111

EUROPE MULTI-OPERATOR MULTI-TRANSMITTER

M6T	664/10/58	2175/22/97	3905/36/135	2341/39/140	2008/38/133	1678/35/127
EW5A	981/15/68	1760/24/101	2696/37/127	3554/38/137	2451/38/139	1264/34/107
DFØHQ	951/15/67	1909/23/100	3448/36/123	2383/39/138	2020/38/143	1075/33/120
LZ9W	689/11/62	1922/24/101	3297/35/127	3464/38/136	2392/37/136	1127/34/101
YT5A	714/14/63	1830/24/94	2935/35/121	3407/38/132	2372/38/130	1015/32/99

Table 5

Country	AS	EU	NA	OC	SA	Grand Total
9A		3				3
9M6				1		1
BY	10					10
CM			1			1
CT		1				1
DL		13				13
DU				2		2
E7		1				1
EA		1				1
EI		2				2
F		1				1
G		4				4
IT9		1				1
JA	5					5
K			13			13
LY		1				1
LZ		1				1
OE		2				2
OK		2				2
PY					3	3
S5		1				1
SP		11				11
SV		1				1
TA	1					1
UA		3				3
UR		1				1
VE			1			1
VK				2		2
VU	2					2
YB				4		4
YL		1				1
YO		4				4
YT		2				2
ZL				1		1
Summary	**18**	**57**	**15**	**10**	**3**	**103**

Table 5. Breakdown of Youth entries by geography

TOP SCORES IN VERY ACTIVE ZONES

Zone 3

ND7K (@N6WIN) 3,036,215
K6XX.....1,939,200
K6NA 1,352,184
VA7RR.....858,108
VA7DX.....744,504

Zone 4

CF3A (VE3AT).....7,994,096
K5TR.....5,006,144
W9RE 4,845,002
K5GN 2,978,531
VC3X (VE7VR) 2,464,398

Zone 5

KQ2M.....6,729,076
K5ZD.....6,311,403
VY2TT (K6LA) 5,704,800
K4ZW.....5,661,114
N1UR.....5,410,820

Zone 14

DM6V (DL7FER).....4,926,416
EA3QP.....4,419,236
DK6WL 3,724,054
TM2Y (N5ZO) 3,237,876
DL2CC.....2,701,604

Zone 15

4O3A (4O4A).....3,660,790
S53MM 2,726,595
OM7RU.....2,485,615
*OK6T (OK1WCF) 2,121,010
OH2PQ 1,277,772

Zone 16

R8WF.....3,043,425
EW2A.....1,808,733
UT5EL.....1,575,520
R2ARR.....1,440,193
RM4HZ 1,022,352

Zone 20

C4W (5B4WN).....5,883,312
YPØC (YO3CZW).....2,572,453
4Z4AK.....946,810
YO8BDW 831,448
4X1MM 830,109

Zone 25

JH4UYB.....3,599,750
JF2QNM 2,400,000
JH7QXJ 1,422,949
JR1GSE.....1,090,144
JA2AXB 914,373

*Low Power

Celebrating Our Youth Operators!

Here's a youthful 15-year-old Emilio, OA4CBU, hard at work from OA4O!

A very enthusiastic Youth operator, Marija, YU3AWA, right before the CQWW.

Hello from Peru – OA4CBU/OA4O!

Hi! I am Emilio, OA4CBU, and am 15 years old, having just received my ham radio license in May 2021. I've recently started to get interested in amateur radio contests and finally had the opportunity to participate in 2021 the CQWW SSB contest. Joining the Radio Club Peruano (RCP) team, I was able to quickly learn more about this wonderful contesting activity as well as ham radio overall and its possibilities.

My first experience in a major contest was very interesting, operating from the headquarters of the Radio Club Peruano. From the first moment I called CQ, I experienced some difficulties such as the constant "pile up" or high levels of QRM. However, for me it has been a very rewarding and fun. I expect to participate in more contests in 2022. Many thanks to my colleagues and RCP team who gave me this opportunity and to the stations that contacted OA4O while I was operating! 73!

Operating from Serbia – YU3AWA!

Hello, my name is Marija, YU3AWA. I've been waiting for the new Youth category for a long time. I am glad that I had the opportunity to participate in the CQWW SSB 2021 competition submitting my log as a Youth operator. Operating as a high power, all band entry, I enjoyed working so many different DX stations! My thanks to Aleksandar, YT3H, for allowing me to operate from his ham shack.

You may have noticed that there were many active youngsters participating from many DX locations in this year's CQWW contest. I am proud to be one of them! In my short amateur radio career, I experienced amazing band conditions on both 10 and 15 meters for the first time. I didn't want to miss the opportunity to work many new DXCC entities which were plentiful, especially the islands in the Caribbean. I "lost" a lot of time as a station hunter, but it was a unique opportunity for me to log new countries. It's very possible that I did not have the best strategy for this 48-hour contest, so next time I plan to call CQ more frequently, racking up more points and multipliers!

Although I worked the competition as a high-power entry, I used rather modest equipment that cannot be compared to other "big gun" contest locations. Nevertheless, I was very satisfied with my results. This was my best CQWW SSB contest to date!

I am completely convinced that the new Youth category will encourage and incentivize many young people to participate in future CQWW contests. It will give the new young operators a chance to stand out and achieve respectable scores and rankings. For me, this new category was one of the best things that's been done to benefit new amateur radio operators and the youth community.

– 73/88, Marija, YU3AWA

Greetings from Canada – VE3OMV

Hello from Ontario, Canada. My name is Maria Polyanska, VE3OMV. The CQWW events are truly amazing contests. From the excitement of experimenting with antennas in anticipation of being able to hear DX, to the thrill of hearing

A proud Youth operator, Maria, VE3OMV, showing off her newly installed vertical antenna.

a new station, these contests offer memorable experiences while allowing me to put contacts in the log.

I first discovered the CQWW contest from members of my CWOps CW Academy class. The CQWW contests were the first that I operated using my own callsign, VE3OMV, having been just licensed in September 2021.

The most interesting area that I dedicated my time towards was the 15-meter band. When I was learning to acquire my license, an instructor would tell me something about propagation. To be honest, I didn't totally understand all of his points. In particular, I didn't really think that a band could quickly change — I simply thought it was just an exaggeration. However, I was able to experience that myself! I saw how 15 meters was not limited to one part of the world because the conditions are constantly changing. In the morning from my part of the world, the band is open to much of Europe, slowly progressing towards the African region around noon. In the afternoon, I would usually hear South and Central America and then Japan and North America in the evening. It was a fascinating discovery. I cannot wait to learn more! If I had not participated in these contests, I do not believe that I would have seen this. It is not every day that the band is packed with stations from so many diverse places.

As I was still a new operator and this being my first big contest, one contact really surprised me. It was a friendly operator from Japan on 15 meters in the late evening. I had barely ever heard any stations from Japan from my location, so I was excited to potentially have this contact in my log. It was easy at first — but then there was so much QSB! At any moment the signal would alternate between being loud and drifting away to be extremely faint. I tried calling the station but they could not hear me. I tried again in about 15 minutes and they were so loud. It sounded as if he was not a DX at all. We finally made a successful contact.

Not only did I really enjoy the 2021 CQWW SSB contest; I cannot wait to do it again next year!

– 73/88, Maria, VE3OMV

Youth operator, Mily, YS1YXI, operating in her first CQWW contest.

Greetings from El Savador – YS1YXI!

My name is Mily Erazo, YS1YXI. During 2020, I was present during the CQWW contest, but only as an SWL because I still did not have my amateur radio license to be able to operate. Nevertheless, I joined a YS contest team anyway. I really loved the intensity of the CQWW SSB Contest, which takes place every year during the last weekend of October. It wasn't until last year (2021) that I was finally able to operate.

El Salvador was present for another year in the CQWW 2021 contest from the *Club de Radio Aficionados de El Salvador* (CRAS). Our pre-contest strategy required that each individual operator considered: Food, sleep management, rest times, equipment, and other resources to guarantee the best individual and collective results.

In the end, my first CQWW was a great experience for me, I was able to enjoy amazing pile-ups and share the weekend with some great radio amateurs: Mario Giolitti (YS1TG), José Arturo (YS1MS), and my dad Juan (YS1JFE) — all part of what we called Team YS!

73, from the City of Ilopango,

– Mily, YS1YXI

Exploring in the CQ WW from EE7K

BY JUAN DE LAS CUEVAS, EA7AKK

Background

Upon hearing the news of a new Explorer overlay category in the CQWW, the EE7K team was excited to participate. Some of the operators had significant experience, having participated in MS, SOSB, and SOAB operations. In addition, a few team members had already implemented remote radios and we were aware that, sooner or later, advanced use of this option had to be considered by the CQWW committee — especially considering the growing use of remote stations and the state-of-the-art IP technologies.

One of the recurring problems we have experienced while operating MS stations is the breakdown of our receivers due to the presence of high RF currents and / or mistakes while switching filters. In addition, we usually had to erect several antennas for low bands, always right before the contest. For these reasons, EA7FUN and I started to improve our own remote stations. Moreover, as a result of an agreement with the *"Union de Radioaficionados de Sevilla"* we managed to install a new remote site at a TV broadcast center at 932 meters above sea level, 100 kilometers from our city, using a 4G router connection and a wire multi-band dipole for 40 / 80 / 160 meters.

In the end, we implemented four, single-radio amateur stations located within Seville's province limits, without using any SDR receivers, as we thought that this would not be fair to other participants.

Victor, EA7FUN, having fun "Exploring" from EE7K.

Operation

In some ways, this year's installation seemed to be simpler considering we didn't need to deploy RF devices. However, as usual, challenges arose in our operation — computing. It seemed we had countless PCs to control everything: Radios, antenna rotators, power amplifiers, as well as contest logging (using the newest version of Wintest™). Once we finally had everything working and were on-the-air, operating remained challenging. Everyone across our network had to be aware of multiple configuration parameters and be ready to solve any difficulty but in a remote way. Of course, we experienced the usual problems when using computers, including blue screens, lack of connectivity, and network overloading. Some latency was found transmitting with the ICOM 7610. And, we couldn't find a way to connect a PTT pedal to drive this particular radio, so we implemented a keyboard shortcut to switching TX/RX.

In the end, however, we intended to simply enjoy this new category and that goal was accomplished. We have tested new techniques as well as a different approach to radio contesting. Of course, our goal was making a high score, but we also learned a lot and plan to try again in the coming years because we think this category is going to become a even more popular in the future.

Finally, there is the on-going debate of combining Single Operator Assisted and Unassisted categories. Again, while the legitimate use of assistance continues to grow, we are maintaining the position that these two categories should remain separate in the CQWW.

The Final Curtain

One of my greatest privileges in contesting is to closely work with the dedicated CQWW Contest Committee team. The effort this group puts forth into producing the results that you are reading is simply amazing, with some members having been with us for decades. For this year's effort and all the other ones from the past, I simply want to say, "thank you!" Thanks to: CT1BOH, José Nunes; EA4KD, Pedro Vadillo; ES5TV, Tonno Vahk; F6BEE, Jacques Saget; GØMTN, Lee Volante; HA1AG, Zoli Pitman; IK2QEI, Stefano Brioschi; JH5GHM, Katsuhiro (Don) Kondou; K1DG, Doug Grant; K1EA, Ken Wolff; K3LR, Tim Duffy; K3WW, Charles Fulp; K3ZO, Alfred A. (Fred) Laun, III; K5ZD, Randy Thompson; KR2Q, Doug Zwiebel; LA6VQ, Frode Igland; LU5DX, Martin Monsalvo; MØDXR, Mark Haynes; OH6LI, Jukka Klemola; PA3AAV, Gert Meinen; RA3AUU, Igor (Harry) Booklan; S5ØA, Tine Brajnik; S5ØXX, Kristjan Kodermac; UA9CDC, Igor Sokolov; VE3EJ, John Sluymer; VK2IA, Bernd Laenger; and YO3JR, Andrei (Andy) Ruse. Lastly, a special shout-out goes to Steve Bolia, N8BJQ, who stepped down after many years of dedicated committee service.

I know that many of you are already preparing for the next CQWW. See you in October!

– 73, John, K1AR
CQWW Contest Director

(Scores begin on page 91)