

CW Results of the 2022 CQ World Wide DX Contest

The CQ WW Contest Continues to be Phenomenal!

"It still amazes me what fun you can have with just a piece of wire"—M6W (G3WW)

BY JOHN DORR,* K1AR

The U.S. Department of Commerce reports that in 1948, the average cost of a house in the United States was \$7,700. Gasoline averaged about 16 cents per gallon. A loaf of bread cost 14 cents. And you were a well-paid employee if you were making \$2950 per year. It turns out that on November 5-7, 1948, the first CQ WW CW contest also took place (ironically, now the scheduled weekend for the ARRL CW Sweepstakes contest). Like the price of bread, inflation has impacted the WW. In its first year, approximately 550 CW logs were received with the winning entry coming from GI6TK, who posted a final score of 452K (817 QSOs/31 Zones/66 countries). It is indeed amazing to examine our CQ WW roots in what most will agree is amateur radio's premier operating event.

Needless to say, today's CQ WW contest continues to fill the bands. And, with Cycle 25 well underway, that's especially the case on the high bands, including the favorite choice of many, ten meters! What a treat it was to return to the land of 28 MHz and hear signals filling the entire band from one end to the other.

Although the number of submitted logs was slightly down from last year, I'm pleased to report that we still received 7700 logs, representing 4.6M QSOs. The overall accuracy of your log submissions continues to hold steady with a median average error rate of about 2.7% resulting in reductions averaging about 8.8% after penalties. Yes, there's always room for improvement.

One area of the contest that I especially enjoy reviewing is the soapbox comments that many of you include with logs. You can see them for yourself at: <<https://cqww.com/soapboxcw.htm?yr=2022>>. Here's just a small sample of what you'll find:

"Didn't have the time, but, even 5 minutes of CQWW CW is worth it! Till the next year." — EA1PJ.

"This is my 1st CW try. Thank you." — JK3OTH.

"I even had a decent run on 15 Saturday morning. Who says an indoor mag loop doesn't work?" — KV8O

Let's get on with the results!

Another Year of Incredible CQ WW Contest Operating!

Producing a final score that makes the leader table in the CQ WW contest results is a tremendous achievement

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This is BD3TE operating from one of the three sites used in their BY3CQ Explorer multi-op effort in the 2022 CQ WW CW Contest.



Here is the innovative AA7JV "rig-in-a-box" technology used in the remotely-run C6AGU Multi-2 operation.

regardless of operating category. As we experienced in the 2022 contest, some of those scores simply boggle the mind. The World Single Op battle was won again by Juan, EA8RM, with a 14.6M point final result, beating out Andy, N2NT, who came in second at 13.3M. Losing by only 1.3M, however, from a “2-point” country is a significant achievement, nevertheless.

The U.S. Single Operator, All-Band results are perhaps the highlight of the 2022 contest. Kevin, N5DX, operating remotely from the N2QV superstation produced an incredible final score of 11.6M, racking in nearly 5900 QSOs, shattering the 8-year-old record of K3CR (operated by LZ4AX) by over 1 million points. Kevin averaged 123 QSOs/hour for the entire 48 hours of the contest, operating in every one

2022 CQWW DX PLAQUE WINNERS AND DONORS

SINGLE OPERATOR, ALL BANDS

World	Juan Hidalgo, EA8RM
Donor:	Vibroplex
World - Low Power	
V26K (Opr.: Bud Trench, AA3B)	
Donor:	Slovenia Contest Club
World - QRP	
PZ5CO (Opr.: Dlmitry Kryukov, RA3CO)	
Donor:	Bob Evans, K5WA
World - Assisted	
P44W (Opr.: John Crovelli, W2GD)	
Donor:	Robert McGwier, N4HY
World - Assisted Low Power	
Zvi Stessel, 4X6FR	
Donor:	Mike Charteris, VK4QS
World - Assisted QRP	
DM2M (Opr.: Pit Schmidt, DK3WE)	
Donor:	Steve "Sid" Caesar, NH7C
U.S.A.	
Kevin Stockton, N5DX	
Donor:	Frankford Radio Club
U.S.A. - Low Power	
Larry G Schimelpfenig, K7SV	
Donor:	North Coast Contesters
U.S.A. - QRP	
Doug Zwiebel, KR2Q	
Donor:	Andy Blank, N2NT - W3ZZ Memorial
U.S.A. - Assisted	
Randy Thompson, K5ZD	
Donor:	John Rodgers, WE3C
U.S.A. - Assisted Low Power	
Steve Sluz, NY3A	
Donor:	LA8W/LN8W & LA Contest Club
U.S.A. - Zone 3	
NO6T (Opr.: Axel W Bruderer, KI6RRN)	
Donor:	Arizona Outlaws Contest Club
U.S.A. - Zone 4	
Steve London, N2IC	
Donor:	Central Texas DX and Contest Club - K6RV Memorial
U.S.A. - Zone 5	
Greg Cronin, W1KM*	
Donor:	Carolina DX Association - N4ZC Memorial
Europe	
CR6K (Opr.: Filipe Lopes, CT1ILT)	
Donor:	Florida Contest Group - W3AU Memorial
Europe - Low Power	
IY3A (Opr.: Matteo Marzilli, IZ3EYZ)	
Donor:	Tim Duffy, K3LR
Europe - QRP	
Gediminas Lucinskas, LY9A	
Donor:	Sergio Cartoceti, IK4AUY - I4FAF Memorial
Europe - Assisted	
Jon Zumalabe, EA2W	
Donor:	IR4X Monte Capra Contest Team - I4IND Memorial
Europe - Assisted Low Power	
ES7A (Opr.: Kristjan Kaas, ES7GM)	
Donor:	John Rodgers, WE3C
Africa	
3B9KW (Opr.: Kazunori Watanabe, MØCFW)*	
Donor:	Ralph "Gator" Bowen, N5RZ - K5KA Memorial

Asia	
C4W (Opr.: Marius Nicolaou, 5B4WN)	
Donor:	DFW Contest Group - W5PG Memorial
Carib./C.A. - High Power	
V47T (Opr.: Andrew Blank, N2NT)	
Donor:	DFW Contest Group - W5PG Memorial
Carib./C.A. - Low Power	
VP2MJA (Opr.: Dennis Gasparotto, VA3WB)*	
Donor:	Albert Crespo, NH7A
Oceania	
9M6NA (Opr.: Saty Nakamura, JE1JKL)	
Donor:	Ken Hoppe, KH7R
Oceania - Assisted	
Ron Schitmans, DU3T	
Donor:	Koa Contest Club, Hawaii
South America	
Alexey Ogorodov, HC2AO	
Donor:	Dave Farnsworth, WJ2O
South America - Southern Cone (CE, CX, LU)	
LW1F (Opr.: Jesus Rubio, LU5FC)	
Donor:	Dale Long, N3BNIA
Scandinavia (LA, OH, OZ, SM)	
OH2Z (Opr.: Tomi Ylinen, OH6EI)	
Donor:	Chas Weir, Jr., W6UM - W3FYS Memorial
Baltic (ES, LY, YL)	
Agris Belasovs, YL2VW	
Donor:	Lithuanian Radio Sports Federation - LY2OO Memorial
Canada - High Power	
VE2IM (Opr.: Yuri Onipko, VE3DZ)	
Donor:	John Slaymer, VE3EJ & Jim Roberts, VE7ZO
Canada - Low Power	
VE3MIS (Opr.: John Rudy Koren, VA3JK)	
Donor:	Maritime Contest Club - VE1AL Memorial
Japan - High Power	
Masa Okano, JH4UYB	
Donor:	Phil Yasson, AB7RW
Japan - Assisted	
Hajime Hazuki, JR2GRX	
Donor:	Aki Nagi, JA5DQH
ASEAN (XZ, HS, XW, XU, 3W, 9M, 9V, V8, YB, DU)	
V85RH (Opr.: Hajime Kato, JC1RUR)*	
Donor:	Champ C. Muangamphun, E21EIC - SIAM DX GROUP
ASEAN (XZ, HS, XW, XU, 3W, 9M, 9V, V8, YB, DU) - Assisted	
Galih Suryananto, YC2VOC*	
Donor:	Champ C. Muangamphun, E21EIC - SIAM DX GROUP

SINGLE OPERATOR, SINGLE BAND	
World - 28 MHz	
D4L (Opr.: Luca Aliprandi, IK2NCJ)	
Donor:	Joel Chalmers, KG6DX
World - 21 MHz	
KH7Q (Opr.: Jim Neiger, N6TJ)	
Donor:	CWops
World - 14 MHz	
Brian Edward, N2MF	
Donor:	North Jersey DX Association - W2JT Memorial
World - 7 MHz	
Nick Hacko, VK9DX	
Donor:	John Rodgers, WE3C

World - 3.5 MHz	
4L/LY4ZZ (Opr.: Algirdas Sadauskas, LY2BMX)	
Donor:	Family of Fred Caposella, K6SSS
World - 1.8 MHz	
Ilya Semichastnov, 4L9M	
Donor:	Kenneth Byers, Jr., K4TEA
U.S.A. - 28 MHz	
Jay E. Carnac, N4OX	
Donor:	John Rodgers, WE3C
U.S.A. - 21 MHz	
Peter Bielewicz, KU2M	
Donor:	Adrian Ciuperca, KO8SCA
U.S.A. - 14 MHz	
Dan Handa, W7WA*	
Donor:	Northern Illinois DX Association
U.S.A. - 7 MHz	
Charlie Hansen, N2OTT	
Donor:	Gene Shablygin, W3UA
U.S.A. - 3.5 MHz	
Steven Sussman, W3BGN	
Donor:	Bill Feidt, NG3K
U.S.A. - 1.8 MHz	
Jeffrey T. Briggs, K1ZM	
Donor:	Jeffrey T. Briggs, K1ZM
Europe - 28 MHz	
YU0T (Opr.: Branko Vidakovic, YU1WS)	
Donor:	Jay Pryor, K4OGG
Europe - 21 MHz	
Leo N. Xhoko, S50JR	
Donor:	John Rodgers, WE3C
Europe - 14 MHz	
OH8X (Opr.: Pasi Luoma-aho, OH6UM)	
Donor:	John Rodgers, WE3C
Europe - 7 MHz	
Vladimir Pusec, OK1Z	
Donor:	Ivo Pezer, 9A3A
Europe - 3.5 MHz	
ISØ/OM2TW (Opr.: Richard Gasparik, OK8WW)	
Donor:	Frankford Radio Club - K3VW Memorial
Europe - 1.8 MHz	
Laci Nemeth, OM5NL	
Donor:	Pat Barkey, N9RV & Terry Zivney, N4TZ
Asia - 14 MHz	
Mamuka Kordzakhia, 4L2M	
Donor:	Ralph "Gator" Bowen, N5RZ - W5FO Memorial
Asia - 7 MHz	
P35A (Opr.: Roman Thomas, 5B4AQN)	
Donor:	Rich Gelber, K2WR
Carib./C.A. (21 MHz)	
WP4WW (Opr.: Jose A. Rivera-Salaman, KP4JRS)	
Donor:	David Hodge, N6AN
Canada (21 MHz)	
Michael Smith, VE9AA	
Donor:	John Slaymer, VE3EJ - VE3TA Memorial
Japan - 21 MHz	
Akito Negi, JA5DQH	
Donor:	Bob Wilson, N6TV
Japan - 14 MHz	
Syuchi Sato, JA7FTR	
Donor:	Charlie Morrison, N1RR - N1XS Memorial
OVERLAY CATEGORIES	
World - Classic	
KP2M (Opr.: Philip Allardice, KT3Y)	
Donor:	CWops

of them! The horserace was much closer for the remainder of the top-10 U.S. SOAB scores, with Greg, W1KM, delivering a second-place result of 7.5M, a huge increase from his first SOAB effort of 1.8M points back in 1979.

Domination is also the operative word for the World LP group, as Bud, AA3B demolished the competition with an amazing score of 12.9M. Perhaps more impressive about

Bud's result is that he would have placed #3 in the world amongst the high power entries, all with only 100 watts! Location, station design, and operating skill all contribute to these amazing numbers.

Speaking of amazing, how about that QRP score from PZ5CO, who managed to produce a dominating 6.3M tally, generating over 4400 contacts? That's a new record that's

U.S.A. – Classic Doug Grant, K1DG Donor: CWops	Asia UP2L (Oprs.: R9CM, R9HBA, R9IR, RM9I, RU9I, UA9MA, UC9A, UN9L, UN9LM, UN6LN, UN7LZ, UN9L, UN9LG)* Donor: Steve Merchant, K6AW
World – Rookie Justin Ogle, N9TTK Donor: CWops	Carib./C.A. ZF1A (Oprs.: NN1C, W9KKN, N5KO, N6MJ) Donor: CWops
U.S.A. – Rookie Dennis Ture, W9DCT* Donor: CWops	Europe LZ5R (Oprs.: LZ1NK, LZ1YQ, LZ1ZF, LZ2BE, LZ2PL, LZ2XA, LZ3ND, LZ3ZZ, LZ5DB, LZ5DD, YO9WF) Donor: Gail Sheehan, K2RED
Europe – Rookie Zdeslav Cerina, 9A5RTW Donor: EA Contest Club	Europe – Low Power IB9T (Oprs.: IT9BLB, IT9EW, IT9GAC, IT9RZU, IT9VDQ) Donor: Marco Holleyen, DJ4MH
ASEAN (XZ, HS, XW, XU, 3W, 9M, 9V, V8, YB, DU) – Rookie Manatchai Suwannasri, E25CRF Donor: Champ C. Muangamphun, E21EIC - SIAM DX GROUP	Oceania AH2R (Oprs.: NH2C, WI3O) Donor: Junichi Tanaka, JH4RHF
World – Youth Kees Van Oosbree, W0AAE Donor: Zoli Pitman, HA1AG	South America PJ4A (Oprs.: K4BAI, KU8E, N8VW, PJ4NX) Donor: Araucaria DX Group
North America – Youth Maria Polanska, VE3OMV* Donor: IARU Region 2 for YOTA	Japan JH8YOH (Oprs.: JR8VSE, JE8KKX) Donor: Madison Jones, W5MJ
Europe – Youth William Eustace, M0WJE Donor: IARU Region I Youth Working Group	ASEAN (XZ, HS, XW, XU, 3W, 9M, 9V, V8, YB, DU) 7A2A (Oprs.: YB0ECT, YC1SDL, YB2DX, YB2XVT) Donor: Bruce Frahm, K0BJ
South America – Youth Leonardo Timoteo Silva, PY2POA Donor: IARU Region 2 for YOTA	MULTI-OPERATOR, TWO-TRANSMITTER
Africa – Youth No Entries Donor: IARU Region I Youth Working Group	World CR3DX (Oprs.: HA3NU, OM2VL, OM3BH, OM3GI, OM3RM, OM7LW) Donor: Array Solutions
Asia – Youth Jian'ang Zhu, BD4VGZ Donor: YOTA Japan	U.S.A. W3LPL (Oprs.: W3LPL, NI1N, K3MM, N3OC, N3QE, K3RA, NN3W, WR3Z, KD4D) Donor: Robert Kasca, S53R
Oceania – Youth Karunya Saka Listianto, YD2UWF Donor: IARU Region 3	Europe TK0C (Oprs.: S53CC, S53F, S53MM, S53RM, S53WW, S53ZO, S55OO, S57AL, S57C, S57K, S57L, S57VW) Donor: D4C Montevideo Contest Team - IR4X Monte Capra Contest Team - 14EAT memorial
World Single-Operator – Explorer Oscar Vals, LU6OA Donor: World Wide Radio Operators Foundation	Carib./C.A. HQ9X (Opr.: K1TR, K1XM, KQ1F, SM7IUN, W1UE) Donor: South East Contest Club
World Multi-Operator – Explorer OT7T (Oprs.: OP4K, OP5T, OC4U, OT5Z, OR5T, OT6E, OQ5M, O07J, ON4CAU, ON4FI, ON4IT, ON4PQ, ON5JT, ON5NT, ON5OO, ON5XX, ON7MV, ON7TK, ON9EEE, ON5RA) Donor: World Wide Radio Operators Foundation	South America PJ4K (Oprs.: WA3LRO, K1XX, W4PA, W1MD, K3CT, G3NKC, GD4NKA, N3RD) Donor: PJ4A Team (Jeff Clarke, KU8E and John Laney, K4BAI)
MULTI-OPERATOR, SINGLE TRANSMITTER World P33W (Oprs.: RA3AUU, RW4WR, LZ2HM, LZ3SM, EW1NY) Donor: Friends of Rich - KL7RA Memorial	ASEAN (XZ, HS, XW, XU, 3W, 9M, 9V, V8, YB, DU) E2A (Oprs.: 5B4AGN, DL3DX, E209NB, E21EIC, E25KAE, E29TGW, HS3PK, HS4RAY, LA7JO, SM3DYU, VE3LA, W2YR) Donor: Champ C. Muangamphun, E21EIC - Siam DX Group
World – Low Power FY5KE (Oprs.: F4CWN, F5HRY, FY5FY, F6FVY) Donor: EA Contest Club	MULTI-OPERATOR, MULTI-TRANSMITTER
U.S.A. K1LZ (Oprs.: AC1NU, K1LZ, K2SSS, K3JO, NA1NA, W1ADI, W2ID) Donor: Douglas Zwiebel, KR2Q	World CN3A (Oprs.: OK1CZ, OK1FFU, OK1GI, OK1GK, OK1HGM, OK1JKT, OK1MV, OK1NY, OK1RI, OM6NM, CN8WK) Donor: The K2GL Operators - K2GL Memorial
U.S.A. – Low Power W4KZ (Oprs.: W9SN, W9RNY) Donor: CWops	U.S.A. K3LR (Oprs.: N8AMY, K3LR, WF7T, K3UA, N2NC, W2RQ, N3SD, N9RV, K4RO, N6TV, KG5HVO, N3GJ, VE3RA) Donor: Ham Radio Outlet - W6RJ & N6RJ Memorial
Africa TY5AF (Oprs.: OH2TA, OH5BM, OH5LLR) Donor: John Rodgers, WE3C	Europe 9A1A (Oprs.: 9A5W, 9A9A, 9A6A, 9A7R, 9A5E, 9A3SMS, 9A6A, 9A2EU, 9A6M) Donor: SRAL (Finnish Amateur Radio League - OH2SB Memorial)

Africa CR3W (Oprs.: DJ2YA, DK7YY, DL1CW, DL5AXX, DL5CW, DL5LYM, DL7UGN)* Donor: EA9EO Memorial
Asia A44A (Oprs.: A41JZ, IK1YDB, IK2PFL, IK1HJS, SV5DKL, IK1QBT, A45TT, A45VU, A41CK) Donor: Nodir Tursun-Zade, EY8MM
CONTEST EXPEDITIONS
World Single Operator 3B9KW (Opr.: Kazuhori Watanabe, M0CFW) Donor: Friends of Phil - N6ZZ Memorial
World Multi-Operator K8H (Oprs.: W7YAQ, K7AR) Donor: CWops
SPECIAL AWARDS
World SSB/CW Combined Unassisted P40T/VE2IM (Opr.: Yuri Onipko, VE3DZ) 19,859,532 Donor: Hrane Milosevic, YT1AD
U.S.A. SSB/CW Combined Unassisted Ed Sawyer, N1UR 9,733,666 Donor: Bob Shohet, KQ2M
Europe SSB/CW Combined Unassisted OM7K (Opr.: Richard Tucek, OM7RU) 6,751,357 Donor: Marko Myllymaki, N5ZO
Europe SSB/CW Combined – Low Power Jiri Cernoch, OK2MBP 2,265,354 Donor: EU1AA Memorial
Triathlon Award - World RTTY/SSB/CW Combined VE3DZ/P40T/VE2IM (Opr.: Yuri Onipko, VE3DZ) 22,277,204 Donor: DX Lodge Roatan (HQ9X)
Triathlon Award - Europe RTTY/SSB/CW Combined Branislav Hacko, YT3D 6,682,943 Donor: Bavarian Contest Club - LX1WW Memorial
World Combined SSB/CW Score 160 Meters OK4U (Opr.: Tom Stepinicka, OK1TP) 63,891 Donor: Team IB9T/I9Y - IT9ZGY Memorial
World Combined SSB/CW Score – Multi-Operator, Multi-Transmitter
CN3A (Oprs.: IK2QE1, OK1RI, IK2SGC, IZ1LBG, IZ2Z0Z, OM6NM, OK1NP, OK1DO, OK6RA, OM1RI, OK1VVT, CN8WK, OK1CZ, OK1FFU, OK1GI, OK1GK, OK1HGM, OK1JKT, OK1MV, OK1NY) 91,428,337 Donor: Friends and Family of Gene - N2AA Memorial
CLUB SCORES
U.S.A. SSB/CW Frankford Radio Club 464,027,502 Donor: Northern California Contest Club
DX SSB/CW Bavarian Contest Club 347,677,055 Donor: John Rodgers, WE3C

* Second Place

2022 CQWW DX CW TOP SCORES

WORLD	
SINGLE OPERATOR	
HIGH POWER	
All Band	
EA8RM.....14,633,647	
V47T (N2NT).....13,330,347	CR6K (CT1LT).....12,835,488
N5DX (@N2QV).....11,640,105	VE2IM (VE3DZ).....10,460,793
VY2TT (K6LA).....9,215,920	EF6T (EA3M).....9,008,166
T05Z (N6GQ).....8,092,887	W1KM.....7,496,808
XL3T (VE3AT).....7,468,593	
28 MHz	
D4L (IK2NCJ).....1,142,280	EF8BBM (EA4BQ).....989,050
LW1F (LU5FC).....934,362	OA0AO (EA7TN).....906,803
5Z4VJ.....667,183	JM6TSE
(JM1UWB).....495,992	KH7M (KH6ZM).....433,596
KH7M (KH6ZM).....433,596	YU0T (YU1WS).....397,578
LU2D (LU2DX).....394,130	YU7EE.....310,365
21 MHz	
KH7Q (N6TJ @KH6YY).....859,856	FR8UA.....456,710
VE9AA.....667,440	S50A.....375,804
KU2M.....658,360	EU8U.....369,895
K3RV.....633,840	YT9W.....330,625
S5ØR.....629,788	JA6WFM.....237,060
N5AW.....614,295	WB4TDH.....232,624
TM6X (F5VHY).....584,982	JR3EOI.....231,894
JA5DQH.....572,040	W6YX (N7MH).....221,186
WP4WW (KP4JRS).....557,190	OA4DX.....207,466
14 MHz	
RC3U.....550,246	PY2NY.....394,822
14 MHz	
N2MF.....930,560	DL9ZP.....191,565
OH8X (OH6UM).....846,612	DL4AAE.....175,336
DM0A (DK3DM).....764,005	EW1TZ.....174,432
4L2M.....586,432	IK4MTF.....140,049
JA7FTR.....458,234	ON3PAT.....130,416
W7WA.....406,262	N8UA.....118,854
JR2SCJ.....343,560	JHØEPI.....112,700
KW9A.....329,814	GD5F (GD4RFZ).....108,847
XE1CT.....324,736	R3AQ.....108,480
7 MHz	
YT7B.....322,344	OM3ZWA.....172,500
7 MHz <th data-kind="ghost"></th>	
VK9DX.....1,005,471	C56DF (G3XTT).....120,967
OK1Z.....791,700	IV3EAD.....118,762
P35A (5B4AQN).....756,069	OH9SE (OH9HDH).....104,412
OM2XW.....701,415	LZ1BP.....103,014
E8/AU/GYO4X (GU4YOX).....654,500	OK2HBR.....92,926
OM5R (OM5WW).....633,984	HA9RP.....89,712
JØVÑRN.....566,568	Y05ODT.....86,016
JA6SHL.....406,575	DK4LX.....81,002
R4SA.....194,292	JRØBQD.....69,445
3.5 MHz	
LZ7M (LZ5VK).....151,286	OK5D (OK1DTP).....135,072
3.5 MHz <th data-kind="ghost"></th>	
4L/LY4ZZ (LY2BMM).....520,498	OL5J (OK1RZ).....77,120
ISØ/OM2TW (OK8WW).....429,282	CO2AN.....77,117
G4FNL.....258,520	CO2J.....66,898
S53X.....252,700	SP3JUN.....62,694
W3BGN.....126,400	E77BW.....50,504
OK1TN.....118,141	DL6KWN.....42,490
K9ZO.....94,256	S57X.....35,280
DK2CF.....79,776	IK2ULV.....34,386
YL7A.....77,995	HB9CP.....33,924
3.5 MHz	
IR2R (IZ2EWR).....71,682	OM5NL.....57,304
1.8 MHz <th data-kind="ghost"></th>	
4L9M.....153,738	SM6CNN.....51,675
NP2J (K8RF).....101,844	LC9X (LA9XGA).....20,124
VE3ZI.....91,572	OK1MNW.....19,719
K1ZM.....48,807	HA4N.....19,656
VE3PN.....45,155	MØNDZ.....17,700
WF2W.....36,267	AE4IE.....14,310
OK4U (OK1TP).....36,167	DLØMCM (DL6KWN).....12,255
M6N (MØNPK).....29,610	RA3UAG.....11,825
Y03APJ.....27,880	UF5A.....10,545
QRP	
HL5IVL.....24,360	All Band
1.8 MHz <th data-kind="ghost"></th>	
V26K (AA3B).....12,962,248	PZ5CO.....6,335,373
LOW POWER	KR2Q.....1,375,470
All Band	LY9A.....1,078,742
V26K (AA3B).....12,962,248	DK7HA.....888,440
WU8DPM (LW8DQ).....935,887	JH1OGC.....576,232
LT6M (LU8MHL).....779,160	JR4DAH.....493,344
CX2BR.....762,669	DL1MAJ.....490,560
9A5Y (9A7DX).....648,200	HA5BA.....482,895
4L8A.....628,269	N8AA.....371,616
PY4BZ.....527,498	K8MR.....369,460
HA3LN.....518,064	
28 MHz	
9A5D (9A5DU).....517,820	BA5CW.....300,989
KV2K (K2NG).....478,950	JF3BFS.....276,479
Z35T.....477,795	OM5KM.....263,702
21 MHz	
V31CQ (K5PS).....942,704	W9XT.....256,452
XQ1KZ.....927,055	TA2DA.....250,070
4X1MM.....919,158	
HA5JJ.....848,144	
OM8CW.....845,920	
SSØK.....826,920	
YT0Z (YU1ZZ).....755,650	
YT9A.....753,666	
SN2M (SP2XF).....730,334	
RL3A (RL3FT).....675,078	
14 MHz	
DL6FBL.....1,002,840	
YT3X.....984,725	
HGØY (HA7GN).....921,519	
UB7K.....890,928	
HA8A (HA8DZ).....880,821	
K8CX.....854,712	
OMØM (OM3CGN).....849,680	
OL9Z (OK2PVF).....834,716	
S57Z.....819,408	
S57DX.....818,832	
14 MHz	
YT2AAA.....424,700	
YU7WW.....346,527	
EU2F.....336,746	
ESTGN.....325,304	
HA7I (HA7JTR).....312,002	
CO8ZZ.....276,471	
OM3TZ.....271,414	
VE9BK.....236,680	
OM5ALL.....194,951	
YT2B.....189,552	
7 MHz	
S57AW.....169,592	
4Z4KX.....147,760	
Y05AVN.....136,344	
E79D.....130,707	
YU1ED.....92,652	
S57WJ.....762,528	
KA1IS.....757,044	
R3ZZ.....729,570	
7 MHz	
SN3A (SQ2GXO).....1,233,900	
S53M (S51FB).....1,111,352	
OK6W (OK1MU).....1,069,752	
S51YI.....943,428	
S52AW.....916,994	
VE3VN.....896,124	
NH7T (@KH6YY).....875,550	
S57WJ.....762,528	
KA1IS.....757,044	
R3ZZ.....729,570	
3.5 MHz	
HA1TJ.....493,878	
MW5B (G3WVG).....478,682	
YL9W (YL3DW).....438,360	
LZ6Y (LZ1MC).....421,448	
SN2B (SP2MKI).....405,444	
OL3A (OK1DX).....361,383	
DJØMDR.....307,051	
PA1CC.....284,440	
9A8M (9A3XU).....267,159	
OM5CM.....247,200	
3.5 MHz	
S51V.....164,808	
YL3FT.....147,402	
S53O.....138,123	
R9PS.....126,522	
RX3APM.....113,565	
HA8BE.....86,480	
SP3HLM.....79,900	
S56X.....79,650	
RG2A.....76,077	
DM7C (DL6CX).....75,650	
1.8 MHz	
HAØHV.....70,933	
OK6Y (OK2PTZ).....53,058	
SNØR (SQ9IAU).....52,785	
G5Q (G3SVL).....28,182	
UR7MZ.....27,328	
DF7GG.....25,740	
DL5ANS.....10,123	
IH9YMC.....9,360	
R9LM.....8,976	
LZ7R.....7,938	
1.8 MHz	
HAØHV.....70,933	
OK6Y (OK2PTZ).....53,058	
SNØR (SQ9IAU).....52,785	
G5Q (G3SVL).....28,182	
UR7MZ.....27,328	
DF7GG.....25,740	
DL5ANS.....10,123	
IH9YMC.....9,360	
R9LM.....8,976	
LZ7R.....7,938	
QRP	
All Band	
DM2M (DK3WE).....2,312,442	
EF3O (EA3O).....1,519,600	
JA6GCE.....1,109,988	
KA4RRU.....985,226	
OMØRX.....880,400	
MW9W	
(GWØKRL).....723,247	
HG5O (HA5OB).....579,018	
K8ZT.....538,800	
G1G (G4KIV).....459,081	
YU1LM.....409,200	
28 MHz	
LT7D.....142,155	
EA3QP.....116,928	
DL1EFW.....97,080	
KS1J.....3,393,390	
OL5Y.....3,390,340	
OL9R (OK6RA).....3,357,746	
OHØV (OH6LI).....3,256,152	
28 MHz	
AH6KO.....391,482	
FR8TZ.....284,513	
EA6SX.....263,755	
XQ3WD.....261,600	
PY4XX.....256,891	
HK1N.....240,670	
HGØR (HAØNAR).....235,445	
4XØA.....228,872	
PY2RSA.....220,528	
PY7RP.....168,087	
21 MHz	
UN4L.....423,913	
V55Y (V51WH).....400,320	
CT7/DL6IAK	
(DL6IAK).....378,099	
E5EK (EA5DF).....329,935	
ED7O (EA7EU).....310,488	
PY4QB (ON4BHQ).....18,048	
ON/S58J (S58J).....16,758	
UY5LW.....16,697	
14 MHz	
HG5A (HA5IW).....222,358	
S58WW.....150,060	
DM7AA.....109,242	
14 MHz	
IIP9.....14,177,150	
MULTI-OP	
TWO-TRANSMITTER	
All Band	
CR3DX.....39,611,468	
PJ4K.....31,331,662	
TKØC.....24,525,288	
W3LPL.....19,462,500	
P44X.....19,119,034	
EF2X.....17,979,101	
HQ9X.....16,696,400	
ED1R.....16,422,876	
OL3Z.....14,245,326	
II9P.....14,177,150	
MULTI-OP	
MULTI-TRANSMITTER	
All Band	
CN3A.....44,014,817	
CR3W.....41,003,743	
PJ2T.....33,708,798	
3B8M.....29,016,903	
9A1A.....25,217,834	
K3LR.....23,705,156	
YT5A.....22,879,624	
M6T.....22,742,406	

A44A.....	20,965,527	YD2UWF.....	134,820	AB1J.....	.61,290	K1ZZ.....	.8,631,612	21 MHz	KT4XA.....	604,116							
LZ9W.....	20,944,836	YL3JA.....	119,528	W4RYW.....	.58,996	N3RS.....	.6,928,620	W9XT.....	.256,452								
EXPLORER																	
SINGLE-OP																	
HIGH POWER																	
All Band																	
LU6OA.....	1,053,592	DS1TUW.....	102,227	N4NM.....	.44,620	W8FJ.....	.6,698,250	WA1FCN.....	.178,553								
SP5ATO.....	290,920	BI4MPH.....	.39,697	W8JGU.....	.34,408	AB3CX.....	.6,593,694	N5JR.....	.148,626								
C6AZT.....	258,336	DK1YH.....	.36,372	KD2P.....	.29,308	N2YO.....	.6,471,840	W2UP.....	.123,625								
S53K.....	211,024	NIØG.....	.26,980	AA1K.....	.6,379,416	WV7S.....	.21,574	W3IDT.....	.14,000								
WX8S.....	189,666	WNØL.....	.13,293	K1AR.....	.6,214,725	WØBF.....	.11,375	N2BEG.....	.8,100								
OH2XX.....	38,872	K2CS.....	.12,300	N2SR.....	.5,889,646	N3TTT.....	1,000										
NØUJT.....	31,824	W2YK.....	.12,208	28 MHz													
K7RB.....	18,715	UNITED STATES															
YO2GL.....	15,714	SINGLE OPERATOR															
HIGH POWER																	
All Band																	
OT7T.....	16,360,290	N5DX.....	11,640,105	N8II.....	.503,276	KV2K (K2NG).....	.478,950	14 MHz	W1ZZ.....	.64,414							
ZM1A.....	14,301,232	W1KMM.....	.7,496,808	WB4TDH.....	.232,624	N6SS.....	.252,453	W3EIM.....	.38,064								
C6AGU.....	12,615,785	N2IC.....	.5,956,685	W6YX (N7MH).....	.221,186	N4ZR.....	.222,080	K1IG.....	.33,250								
EA4URE.....	9,150,408	NOG (K16RRN).....	.5,767,692	WA7BNM.....	.115,696	K5KG.....	.218,694	N7ESU.....	.5,311								
YPOK.....	3,758,307	@ WA6TQT).....	.5,697,900	K4AMC.....	.65,320	K4WI.....	.204,378	NNOJS.....	.20								
ZL3X.....	3,553,658	N1UR.....	.5,697,900	WB9HFK.....	.59,994	NE8P.....	.148,953										
BY3CQ.....	1,232,763	NR3X (N4YDU).....	.5,681,766	W8AV.....	.135,346	W8AV.....	.135,346	MULTI-OP									
EA6URL.....	534,567	W9RE.....	.5,346,486	AF8A.....	.49,364	N2OO.....	.113,088	TWO-TRANSMITTER									
EXPLORER																	
MULTI-OP																	
HIGH POWER																	
All Band																	
OT7T.....	16,360,290	K1DG.....	4,278,254	N9QL.....	.25,050	28 MHz											
ZM1A.....	14,301,232	28 MHz															
C6AGU.....	12,615,785	N4OX.....	.275,709	NU8A.....	.118,854	WB9Z.....	.571,704	7 MHz	AA4NP.....	.112,980							
EA4URE.....	9,150,408	N5YT.....	.109,383	W8GOC.....	.33,930	A7A.....	.490,889	K9JY.....	.55,120								
YPOK.....	3,758,307	AH2O.....	.39,600	N8ET.....	.30,342	N7AT (K8IA).....	.459,669	K1IM.....	.44,270								
ZL3X.....	3,553,658	AF2F.....	.36,210	K1EFI.....	.29,835	N9CO.....	.438,353	W1FIF.....	.35,520								
BY3CQ.....	1,232,763	K4RD.....	.35,752	W2TZ.....	.27,542	N7DD.....	.427,000	K3ORC.....	.19,604								
EA6URL.....	534,567	W9OP.....	.35,700	NW4V.....	.16,100	W7RN (K5RC).....	.383,396	N1RR.....	.15,246								
ROOKIE																	
HIGH POWER																	
All Band																	
N9TTK.....	2,770,979	K7IU.....	.324	AA1ZX.....	.510	21 MHz											
9A5RTW.....	1,051,050	21 MHz															
W9DCT.....	723,976	KU2M.....	.658,360	K9UIY.....	.61,812	K8CX.....	.854,712	14 MHz	K3LR.....	.23,705,156							
E16LA.....	.637,096	K3RV.....	.633,840	W4TJM.....	.25,661	N7TU.....	.116,348	K1TTT.....	.16,173,416								
K3AK.....	266,485	N5AW.....	.614,295	AC8CE.....	.11,172	K7PI.....	.56,854	K1RX.....	.14,347,200								
EA4HQV.....	181,300	W6YA.....	.480,240	W8NNC.....	.2,232	WA5YOM.....	.39,144	KØRF.....	.9,555,724								
HA5MIG.....	143,312	N6KN.....	.198,153	K9A9.....	.725	K46BIM.....	.26,574	N1RR.....	.8,576,325								
EA5JDN.....	44,400	K7OYK.....	.171,308	WT5LA.....	.660	N6RO.....	.6,739,395										
KD2UBH.....	7,107	K4KS.....	.165,792	K15PED.....	.598	K9MCK.....	.2,414										
JK1BAB.....	.238	K5QR.....	.155,477	KW4FAB.....	.104	N4ELC.....	.1,247										
LOW POWER																	
KY4ID.....	710,973	N1OK.....	.44,088	K6AUS.....	.48	KE4KDY.....	.756	NS5S.....	.405								
VA3OKG.....	689,913	K7NT.....	.15,890	WS5D.....	.12	3.5 MHz											
EA4HKF.....	.596,755	14 MHz															
KY4GS.....	.573,016	N2MF.....	.930,560	KC4WQ.....	.814	KA1IS.....	.757,044	QRP	KØKT.....	.14,012							
AEØDX.....	.443,368	W7WA.....	.406,262	KE6GLA.....	.112	K7NJ.....	.423,500	K7LU.....	.5,125								
VE3KOT.....	.359,968	KW9A.....	.329,814	W7UT.....	.47,430	WK1O.....	.399,355	KTØP.....	.434								
KD2ZEL.....	204,930	W3AKD.....	.12,675	WD8DSB.....	.1,704	W9PA.....	.340,650	NR1K.....	.132								
UBØAZR.....	.201,894	KØQEI.....	.8,517	N8UX.....	.70	N7KU (NJ6D).....	.261,513	ROKIE									
4X6FB.....	.170,841	WØTY.....	.2,812	1.8 MHz													
JK1AUY.....	.155,220	AK5Y.....	.204	KD1VDT.....	.12,036	K4RVRU.....	.985,226	KY4GS.....	.573,016								
CLASSIC																	
HIGH POWER																	
All Band																	
NØTT.....	.111,320	KR2Q.....	.1,375,470	K9GS.....	.225,375	K3TW.....	.63,420	CLASSIC									
WO3Z.....	.51,709	N8AA.....	.371,616	W3NO.....	.132,374	KO1H.....	.33,580	HIGH POWER									
K8GU.....	.49,708	K8MR.....	.369,460	K3MM.....	.80,928	W1IE.....	.33,535										
NØC.....	.21,462	W6JTI.....	.357,744	W4PK.....	.27,335	W2VRK.....	.31,980										
N7RK.....	.10,498	AC2YD.....	.285,056	W5JMW.....	.7,008	K9AXT.....	.6,975										
K2AF.....	.5,967	WB2CPU.....	.209,520	1.8 MHz													
W7ID.....	.2,310	W6QW (WQZA).....	.160,461	K5UR.....	.12,749	K5UR.....	.12,749										
AA8BV.....	.1,593	NDØC.....	.156,891	K2KW.....	.11,387	K2KW.....	.11,387										
OHØZ (OH6EI).....	.3,143,880	K4PQC.....	.152,342	N9AW.....	.3,040	N9AW.....	.3,040										
DL2CC.....	.3,121,938	N7RCS.....	.123,402	W6XI.....	.966	W6XI.....	.966										
YT3D.....	.3,085,780	3.5 MHz															
LOW POWER																	
K1BX.....	.2,798,455	W3BGN.....	.126,400	W7USA.....	.9,947	NY3A.....	.4,856,628	MULTI-OP									
VP5M (K4QPL).....	.2,610,374	K9ZD.....	.94,256	K51J.....	.3,393,390	K1HT.....	.894,704	SINGLE-TRANSMITTER									
9A1AA.....	.1,748,028	W1HI.....	.55,250	W3KB.....	.2,286,526	W1NN.....	.859,527	HIGH POWER									
K3AU (K2YWE).....	.1,324,632	W6RKC.....	.663	W1QK.....	.1,957,005	NØUR.....	.747,994										
DL2NB.....	.1,272,866	K5IB.....	.627	KG9X.....	.1,949,480	K40.....	.620,961										
CR50 (CT7AJL).....	.1,189,875	1.8 MHz															
EA8CN.....	.1,180,098	K1ZM.....	.48,807	KEØTT.....	.13,195	K9RS.....	.8,034,042	WØAAE	.2,272,125								
HA5PP.....	.1,171,698	WF2W.....	.36,267	N1EN.....	.1,946,819	K5TR.....	.7,530,566										
EA4KD.....	.1,166,241	W1HIS.....	.3,552	WE9R.....	.1,794,654	W7RM.....	.5,193,500										
4U1UN.....	.1,136	WA1BXY.....	.2,430	NS3T.....	.1,549,776	W9VW.....	.4,599,000										
(KO8SCA).....	.1,146,831	LOW POWER															
YOUTH																	
HIGH POWER																	
WØAAE.....	.2,272,125	K7SV.....	.3,507,995	N5GSG.....	.32	N1DG.....	.138,861	YOUTH									
MØWJE.....	.341,880	K1BX.....	.2,798,455	WA2NYY.....	.1,917	N3UA.....	.101,673	HIGH POWER									
SA6NIA.....	.163,780	K1VUT.....	.2,140,261	W9ILY.....	.63,852	WØAAE.....	.4,119,580										
E18KW.....	.133,575	N4TZ.....	.2,078,676	AA4LS.....	.62,062	W4KZ.....	.5,619,065										
HA3MAR.....	.13,132	WW4XX (LZ4AX).....	.1,884,008	KK0L.....	.60,096	AD4ES.....	.3,517,458										
LOW POWER																	
BD4VGZ.....	.571,200	K3AU (K2YWE).....	.1,324,632	K6AAM.....	.29,388	K3AJ.....	.2,725,236										
VE3OMV.....	.268,641	N1DC.....	.1,063,474	K1NY.....	.16,920	W3ZGD.....	.1,634,886										
IUØLJD.....	.220,884	W1NN.....	.859,527	K3STX.....	.9,536	NX6T.....	.1,504,413										
DL7PIA.....	.180,400	AA8CA.....	.823,768	AB8DF.....	.2,310	W4TG.....	.732,672										
BH2SWB.....	.159,274	28 MHz															
EXPLORER																	
SINGLE-OP																	
HIGH POWER																	
All Band																	

likely to stand for some time (replacing the 1999 5.0M point effort of P40W (W2GD operator).

While on the subject of Aruba, perennial CQ WW operator, W2GD, won the assisted SOAB category from P44W, racing to a 13.5M point win, beating out 1410 other competitors in that operating class. Randy, K5ZD, delivered a #2 World result at 11.1M, from his improved Uxbridge, MA, station.

The Classic overlay continues to grow in popularity, largely in keeping with the overall advancement of our communities' average age! Phil, KT3Y, beat them all with an outstanding 24-

hour result of 5.1M. There's a lot to be enjoyed from an investment of only 24 hours in operating time. As a reminder, you can continue to operate beyond the 24-hour period, while still submitting a valid Classic score. You'll note in the results that many Classic entries are also listed elsewhere in the line scores with higher numbers, reflecting this operating approach.

The titans of contesting, multi-op stations, continued to populate the bands. The P33W team showed everyone how to effectively run a Multi-Single operation, delivering a 25.5M final result. The Multi-Two race was also an impressive display of talent as the CR3DX team handily beat out the emerg-

Table 1

Op Hrs	AF	AS	EU	NA	OC	SA	ALL	% of all	Cum %
0.1 - 5	9	133	342	293	24	18	819	16.5%	16.5%
5.1-10	2	140	478	389	23	18	1050	21.1%	37.6%
10.1-15	6	102	437	340	18	17	920	18.5%	56.0%
15.1-20	4	121	350	227	15	16	733	14.7%	70.8%
20.1-25	3	82	276	217	10	15	603	12.1%	82.9%
25.1-30	-	59	160	118	9	6	352	7.1%	90.0%
30.1-35	-	32	98	95	3	3	231	4.6%	94.6%
35.1-40	1	27	63	50	3	1	145	2.9%	97.5%
40.1-45	-	12	39	36	1	5	93	1.9%	99.4%
45.1-48	2	5	16	4	3	1	31	0.6%	100.0%
ALL	27	713	2259	1769	109	100	4977	100.0%	
Median Hours	10.7	13.8	13.6	12.9	10.9	14.3	13.3		

Table 1. Operating Time by Continent in the 2022 CQ WW CW Contest

2022 CQWW DX CW 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	288/10/47	943/20/70	1721/29/83	1344/26/82	2186/31/95	2113/32/98
V47T	268/13/47	947/20/73	1953/32/91	1868/31/94	2188/32/94	1702/24/82
*V26K	154/9/23	896/17/68	1901/31/96	1616/29/89	2516/32/96	1758/24/84
CR6K	533/16/59	1218/25/84	2338/32/99	1846/31/94	2175/29/98	1443/28/86
N5DX	99/16/56	703/18/76	1859/34/110	1274/34/110	1127/28/99	809/24/96

USA TOP SINGLE OPERATOR ALL BAND

Station	160	80	40	20	15	10
N5DX	99/16/56	703/18/76	1859/34/110	1274/34/110	1127/28/99	809/24/96
W1KM	85/12/45	704/18/74	1067/26/83	1002/27/92	932/24/86	699/21/76
N2IC	26/10/16	133/22/51	1166/36/92	569/33/93	1252/33/108	536/28/71
NO6T	19/9/10	215/22/41	1173/35/97	811/34/99	962/34/101	662/28/67
N1UR	68/11/34	436/17/66	857/24/87	774/28/95	591/24/91	790/22/86

WORLD SINGLE OPERATOR ASSISTED ALL BAND

Station	160	80	40	20	15	10
P44W	174/15/42	619/23/86	1222/32/112	1069/36/114	1394/33/118	1776/30/114
K5ZD	88/15/51	501/22/87	1446/32/118	1097/38/127	1110/31/121	753/28/110
EA2W	87/14/55	687/26/90	1501/36/124	1201/36/119	1076/37/129	732/37/122
VA2WA	354/15/58	616/21/86	1201/29/105	1043/36/118	1028/29/114	601/29/104
K3WW	42/13/25	369/20/82	1164/29/113	1036/36/118	1111/29/118	685/25/101

USA SINGLE OPERATOR ASSISTED ALL BAND

Station	160	80	40	20	15	10
K5ZD	88/15/51	501/22/87	1446/32/118	1097/38/127	1110/31/121	753/28/110
K3WW	42/13/25	369/20/82	1164/29/113	1036/36/118	1111/29/118	685/25/101
K1ZZ	67/14/49	342/22/88	1140/34/119	964/35/123	819/31/123	487/28/115
N3RS	60/13/42	224/19/77	849/33/112	818/36/122	646/31/118	699/29/108
W8FJ	73/16/50	353/21/83	1007/33/115	791/35/121	697/30/120	251/27/99

WORLD MULTI-OPERATOR SINGLE TRANSMITTER

Station	160	80	40	20	15	10
P33W	380/21/77	1112/33/112	2283/39/133	2166/38/140	1917/39/142	1755/36/141
ZF1A	251/18/60	836/24/89	2465/36/127	2097/37/127	2126/36/130	1614/31/117
LZ5R	100/24/82	1150/35/119	2515/38/135	2306/38/136	1630/37/141	1172/36/135
PJ4A	185/16/55	282/25/86	2566/36/123	1303/37/124	1404/35/123	1621/34/114
UP2L	261/15/60	1233/32/109	2358/38/133	1360/38/130	1280/36/128	961/28/100

USA MULTI-OPERATOR SINGLE TRANSMITTER

Station	160	80	40	20	15	10
K1LZ	161/20/71	899/30/108	2016/37/132	1462/38/140	1195/34/129	984/29/120
KC1XX	93/21/71	838/27/103	1902/36/131	1046/38/135	997/31/127	898/28/120
W2FU	60/16/58	546/26/94	1446/36/120	1141/35/128	999/32/123	724/26/107
K8AZ	50/15/48	343/23/86	1080/35/121	1042/36/125	943/29/120	448/28/106
K9RS	45/15/44	456/22/85	890/33/110	1159/35/127	722/30/123	536/28/106

WORLD MULTI-OPERATOR TWO TRANSMITTER

Station	160	80	40	20	15	10
CR3DX	462/18/73	1671/33/107	3377/36/130	2646/38/135	3557/37/139	3068/36/141
PJ4K	198/17/48	1293/27/93	3374/36/128	2678/39/136	3297/36/130	2133/33/119
TK0C	967/20/78	2325/33/108	3471/37/133	2688/37/129	3005/37/140	1776/35/131
W3PL	107/19/62	1101/28/103	2195/37/132	1839/35/137	1113/29/116	
P44X	65/15/33	754/24/87	1657/32/111	2088/36/119	2524/35/124	1772/32/110

USA MULTI-OPERATOR TWO TRANSMITTER

Station	160	80	40	20	15	10
W3LPL	107/19/62	1101/28/103	2195/37/132	1839/35/137	1113/29/116	
N4WW	76/14/49	560/25/92	1277/36/128	1103/37/131	1505/34/127	654/30/119
K9CT	65/16/36	507/26/82	1542/36/127	1428/36/129	1316/32/126	541/29/103
N2AA	59/14/41	423/21/87	1360/33/115	1130/33/117	1225/29/121	692/28/102
K2AX	76/14/43	462/21/85	883/29/109	1007/35/123	1066/31/123	826/26/109

WORLD MULTI-OPERATOR MULTI-TRANSMITTER

Station	160	80	40	20	15	10
CN3A	931/21/75	2206/30/102	3453/36/130	3561/38/137	3290/38/139	3267/37/130
CR3W	816/22/71	1946/29/104	3265/36/130	3439/39/139	2975/37/143	2849/35/128
PJ2T	575/18/66	1450/30/97	3251/33/121	3129/37/125	3533/36/125	2242/32/109
3B8M	305/14/53	719/32/94	1859/36/118	2900/38/130	3212/38/135	2985/33/122
9A1A	1385/28/94	2058/32/113	3570/39/142	2777/38/139	2179/38/143	1129/36/132

USA MULTI-OPERATOR MULTI-TRANSMITTER

Station	160	80	40	20	15	10
K3LR	223/23/70	1229/29/100	2403/38/137	2642/37/144	2076/35/139	1201/30/126
K1TTT	226/19/66	897/26/93	1698/34/115	2044/36/130	1629/31/118	1055/28/116
K1RX	267/14/52	799/24/91	1245/30/109	1947/37/136	1497/32/122	989/29/108
K0RF	71/14/29	311/25/71	1294/35/124	1425/37/125	1213/33/125	686/32/101
N1RR	37/11/21	405/21/80	594/30/110	1102/34/119	1433/29/114	822/27/109

ing PJ4K group with a final tally of 39.6M. In the U.S., Frank, W3LPL's team, has joined the ranks of the Multi-Two competition, placing #4 in the world at 19.4M.

The World Multi-Multi battle was intense this year as the head-to-head battle between CN3A and CR3W continued. The gang at CN3A took top honors this year with an amazing result of 44M, representing over 16,700 QSOs! CR3W

was indeed on their heels but falling just short at 41M. The team at K3LR won the U.S. fight, also placing #6 in the world with 23.7M points.

Our enthusiastic Youth and Explorer groups continued to enjoy their newfound status in the results. While youth activity on CW was relatively low, it continued to grow as word spreads about the availability of awards and other incentives

Table 2

Category	AF	AS	EU	NA	OC	SA	ALL	% of Total
SOAB High (A)	6	127	557	689	13	19	1,411	26.8%
SOAB High (U)	7	137	193	249	27	4	617	11.7%
SOAB Low (A)	4	147	645	371	20	39	1,226	23.3%
SOAB Low (U)	9	271	727	402	39	31	1,479	28.1%
SOAB QRP (A)	1	10	49	14	2	2	78	1.5%
SOAB QRP (U)	-	21	88	44	8	5	166	3.1%
Explorer-Multi	-	1	4	1	2	-	8	0.2%
Explorer-Single	-	2	4	4	-	1	11	0.1%
Multi-2	1	5	27	18	2	3	56	1.1%
Multi-Multi	4	8	11	12	4	1	40	0.8%
Multi-Single High	1	18	66	29	3	9	126	2.3%
Multi-Single Low	-	7	34	11	1	1	54	1.0%
ALL	33	754	2,405	1,844	121	115	5,272	100.0%
% by continent	0.6%	14.3%	45.6%	35.0%	2.3%	2.2%	100.0%	

Single band entries not included in analysis

Table 2 – Entry Category Analysis by Continent for 2022 CQ WW CW

Our enthusiastic Youth and Explorer groups continued to enjoy their newfound status in the results.

EUROPE TOP SINGLE OPERATOR ALL BAND

Station	160	80	40	20	15	10
CR6K	533/16/59	1218/25/84	2338/32/99	1846/31/94	2175/29/98	1443/28/86
EF6T	459/12/51	1385/24/77	2065/28/86	1541/31/76	1994/31/89	938/24/60
EB7A	165/11/45	721/19/70	1840/24/82	1493/28/73	1351/25/69	862/23/63
YR8D	251/11/45	1026/21/74	1295/28/81	1598/28/82	1471/32/89	265/24/65
G9W	142/8/37	654/17/67	1315/33/86	1298/31/81	1026/33/95	591/30/80

EUROPE SINGLE OPERATOR ASSISTED ALL BAND

EA2W	87/14/55	687/26/90	1501/36/124	1201/36/119	1076/37/129	732/37/122
SN7Q	299/18/67	833/32/98	1182/36/119	1016/35/109	1113/36/123	427/36/119
UW1M	109/11/44	635/15/70	2526/35/119	1434/34/117	1120/34/113	820/32/115
I2S	196/15/62	583/27/92	1067/37/126	1039/35/117	589/35/114	526/36/118
HG8R	236/16/62	693/24/86	1441/34/111	1019/33/113	672/33/105	206/33/97

EUROPE MULTI-OPERATOR SINGLE TRANSMITTER

LZ5R	100/24/82	1150/35/119	2515/38/135	2306/38/136	1630/37/141	1172/36/135
OM7M	228/25/85	1051/31/113	2357/39/136	2011/38/137	1370/36/136	946/37/128
TM6M	198/17/70	836/29/103	2356/39/132	2087/38/134	1596/38/138	959/35/129
IR4M	133/18/73	977/34/109	2034/37/128	1790/38/130	1171/36/131	959/37/131
E7DX	237/21/80	708/32/108	2371/37/132	1529/37/133	1904/35/135	752/37/133

EUROPE MULTI-OPERATOR TWO TRANSMITTER

TK0C	967/20/78	2325/33/108	3471/37/133	2688/37/129	3005/37/140	1776/35/131
EF2X	411/17/70	1581/31/107	2483/38/127	1863/38/131	2428/38/139	1202/36/127
ED1R	446/19/76	1321/27/95	2575/36/124	2048/37/131	2217/38/134	1160/34/122
OL3Z	329/16/62	1601/32/109	2109/38/132	1852/37/120	1131/36/133	813/36/123
II9P	295/19/68	1326/30/100	2402/36/122	1504/38/110	1809/37/130	1099/35/125

EUROPE MULTI-OPERATOR MULTI-TRANSMITTER

9A1A	1385/28/94	2058/32/113	3570/39/142	2777/38/139	2179/38/143	1129/36/132
YT5A	1071/22/81	2204/36/119	3451/39/141	2619/38/133	1998/36/136	1292/37/135
M6T	991/20/78	2181/35/119	3755/38/139	2588/39/142	1781/36/136	1443/35/137
LZ9W	1053/16/72	1986/34/121	3304/37/133	2718/39/126	2138/36/134	1238/36/124
DFOHQ	1010/22/81	1982/33/116	2892/37/138	2042/36/138	1302/37/138	829/36/139

TOP SCORES IN VERY ACTIVE ZONES

Zone 3	G9W (MØDXR)	6,439,264	
NO6T (KI6RRN @WA6TQT).....	5,767,692	GM5X (GM4YXI)	5,227,544
K6XX	3,127,850	Zone 15	
K6NA	2,228,208	*IY3A (IZ3EYZ).....	5,079,492
WJ9B	1,669,910	OM7K (OM7RU)	3,716,190
K6NR	1,099,185	9A2AJ	3,342,054
Zone 4	OHØZ (OH6EI)	3,143,880	
XL3T (VE3AT)	7,468,593	YT3D	3,085,780
Zone 20			
YR8D (YO8TTT)	6,494,840	C4W (5B4WN)	5,985,396
N2IC	5,956,685	*YR2X (YO2LEA)	986,870
W9RE	5,346,486	LZ7J (LZ1CI)	940,005
NA8V	4,876,106	P35A (5B4AQN)	756,069
WXØB (AD5Q)	4,041,994	Zone 25	
Zone 5	JH4UYB	4,296,240	
N5DX (@N2QV)	11,640,105	JF2QNM	2,183,103
VY2TT (K6LA)	9,215,920	DS4EOI	1,969,034
W1KM	7,496,808	*JA1BJI	1,839,410
N1UR	5,697,900	*JI1RXQ	1,816,920
NR3X (N4YDU)	5,681,676	*Low Power	
Zone 14			
CR6K (CT1ILT)	12,835,488		
EF6T (EA3M)	9,008,166		
EB7A	6,719,692		



Ben Buettner, DL6RAI (P44X), John Crovelli, W2GD (P44W), and Wolf Klier, OE2VEL (P44X) meeting (l-r) at Linda's Dutch Pancake House in Aruba for breakfast after the 2022 CQ WW CW contest.

Table 3

Call (Operator)	Continent	Power	Raw QSOs
ZD7BG	AF	HIGH	1410
ED8M (EA8DIG)	AF	HIGH	3623
J11RXQ	AS	LOW	1601
9N7AA (S53R)	AS	HIGH	2811
JS1OYN	AS	LOW	1306
F5SGI	EU	LOW	1207
OZ8AE	EU	LOW	1103
YL2VW	EU	HIGH	2132
OK2MBP	EU	LOW	1854
DL8ULF	EU	LOW	1129
DL2NBU	EU	LOW	1690
EU4E	EU	HIGH	2282
LY9A	EU	QRP	1819
HB9ARF	EU	LOW	1615
LN3C (LB8DC)	EU	HIGH	2226
KR2Q	NA	QRP	1064
N2GC	NA	HIGH	1558
WW4XX (LZ4AX)	NA	LOW	1426
N2IC	NA	HIGH	3710
NB1N	NA	HIGH	1432
K1BX	NA	LOW	2181
K6NA	NA	HIGH	1664
K1DG	NA	HIGH	3395
VA1MM	NA	HIGH	1633
K4ZW	NA	HIGH	1631
V85RH (JO1RUR)	OC	HIGH	3060
WH7T (WH7W)	OC	HIGH	2308

SOAB Unassisted only

99% callsign precision w/ >1000 QSOs, listed in order of accuracy

Table 3 – Single Op Accuracy Champions (>1000 QSOs) for the 2022 CQ WW CW Contest

for this important part of our contest community. Congratulations to Kees, W0AAE, for powering his way to a 2.3M youthful World High victory. The innovation of the Explorers is also impressive as this small group of creative contestants demonstrate what can be done with emerging technologies and new approaches to operating.

Lastly, a shoutout goes again to the Frankford Radio Club and Bavarian Contest Club who continued their multi-year domination (7 straight years for FRC and 16 for the BCC) in the U.S. and DX club competitions.

Spending Time in the CQ WW CW Contest

The overwhelming majority of participants in the CQ WW do not operate a full weekend in the contest. In fact, that's one of the aspects of the event that make it special. Many of you simply operate as time allows, while you go up against different competitor – the demands of weekend life. On average, 13 hours appears to be the magical median number of operating time with over a third of you investing less than 10 hours. There's no doubt that age is also a factor as well. In the end, however, there were 9 "iron men" who operated for the entire 48 hours: HG8R, JH4UYB, N5DX, OL9R, RM5F, UW1M,

Table 4

Year	# DX Entities Active
2022	178
2021	177
2020	166
2019	198
2018	194
2017	201
2016	260
2015	248
2014	263

Table 4 – Number of Active DX Entities in the 2022 CQ WW CW Contest

Table 5

Continent	# Logs Received
EU	20
AS	8
NA	5
OC	3
SA	1
ALL	37

Table 5 – Total Number of Youth Entries Received by Continent in 2022 CQ WW CW Contest

V47T, YR8D, and YT7R. For the rest of us, that achievement is a distant memory, if having ever been achieved. Congrats to all, whether you worked 10 or 48 hours. As EA1PJ aptly stated in his soapbox comments, "...even 5 minutes of the CQ WW is worth it!"

Categories, Categories, Categories

In developing the analysis being reported in Table 2, one conclusion can be made: considerable support remains for both the assisted and unassisted single operator categories. A review of the data shows that 51.6% of all SOAB operators entered the assisted category while 42.9% chose to go without assistance (Note: This data does not reflect single-band entries). It's interesting to report that this split was not the case on SSB, where the Unassisted crowd won that battle. For now, the debate about combining single operators into one assisted/unassisted group will continue.

This Year's Accuracy Champions

The callsigns identified in Table 3 represent a list you want to be on. Each one of these operators achieved a major contest milestone – greater than 99% callsign accuracy in their submitted logs for the 2022 CQ WW CW Contest. Put another way, if you logged 3000 QSOs, your log had to have less than 30 busted calls to be included. That's a fantastic accomplishment and one that demonstrates why each operator is consistently at the top of their game. Congratulations!

There's a Lot of DX to Work in the WW!

For reasons that no one fully understands, there has been a drop-off in total country participation in the CQ WW over the past decade. This statistic is in sharp contrast to the number of logs received and total active contest participants, which has steadily grown over the same period. In Table 4, you can see the impact from the COVID pandemic as most operators chose to stay home in 2020. And, while we are steadily coming back, there is a long way to go to reach the heydays of ten years ago. Perhaps, it a combination of economics and our aging population? No matter what, the heartbeat of the WW remains strong when one looks at activity overall.

The CQ WW Fountain of Youth!

Last year, we introduced a new overlay for the CQ WW, recognizing Youth oper-

ators that were 25 years old or younger. While the numbers are not large, Europe stands out as the leader of the global youth movement on CW (the same was true for SSB as well) as seen in Table 5. Keep spreading the word as we hope this opportunity for our youth continues to take off in future WW contests.

Some Speedy Operators!

In days gone by, we used to brag about our hard-earned ability to work 100 QSOs in one hour of the CQ WW. It was

one of those milestones that made you feel like you've graduated to a new level of operating skill. Now, with the advent of two-radio operating for many single operators, the numbers are now simply off the charts (see Table 6)! It's hard to say whether K3WW's 271 hourly rate or that of V47T (N2NT operator) working 345 QSOs in 60 minutes is the most impressive – one from the US and other from Zone 8. Or, perhaps that of PJ2T, who reigned in 638 contacts in one hour as a multi-multi operation. Regardless of

Table 6

Category (High)	CALL	Highest Hour	Category (High)	CALL	Highest Hour
SOAB (A)	K3WW	271	SOAB (U)	V47T	345
SOAB (A)	UW1M	264	SOAB (U)	CR6K	345
SOAB (A)	P44W	259	SOAB (U)	EF6T	321
SOAB (A)	ER1KAA	253	SOAB (U)	SOAB (U)	285
SOAB (A)	EA2W	252	SOAB (U)	N5DX	281
Category (Low)	CALL	Highest Hour	Category (Low)	CALL	Highest Hour
SOAB (A)	NY3A	193	SOAB (U)	V26K	296
SOAB (A)	OH0V	187	SOAB (U)	HC2AO	247
SOAB (A)	4X6FR	184	SOAB (U)	6Y6N	185
SOAB (A)	TA7I	183	SOAB (U)	K1BX	181
SOAB (A)	KP3N	182	SOAB (U)	VP5M	178
Category (QRP)	CALL	Highest Hour	Category (QRP)	CALL	Highest Hour
SOAB (A)	PC5Q	84	SOAB (U)	PZ5CO	255
SOAB (A)	SF0A	73	SOAB (U)	LY9A	107
SOAB (A)	IZ8JFL	73	SOAB (U)	FG/VE3RSA	81
SOAB (A)	DL1YAW	72	SOAB (U)	RZ4AZ	75
SOAB (A)	DM2M	71	SOAB (U)	OP4F	74
Category	CALL	Highest Total Hour	Category	CALL	Highest Total Hour
Multi-2	TK0C	592	Multi-M	PJ2T	638
Multi-2	CR3DX	488	Multi-M	CR3W	599
Multi-2	PJ4K	426	Multi-M	CN3A	581
Multi-2	HQ9X	395	Multi-M	M6T	549
Multi-2	W3LPL	393	Multi-M	3B8M	514
Category (High)	CALL	Highest Total Hour	Category (Low)	CALL	Highest Total Hour
MSH	P33W	419	MSL	FY5KE	231
MSH	LZ5R	402	MSL	9H6WW	202
MSH	ZF1A	390	MSL	WP3C	189
MSH	TM6M	370	MSL	IB9T	175
MSH	E7DX	322	MSL	W4KZ	167

Table 6 - High Hourly QSO Rates for the 2022 CQ WW CW Contest

how you view this data, there is one thing we is obvious – we have some amazing operators in our midst. Rate records for previous years are available on the cqww.com Web site.

Some Thoughts from Your Director

Well, another CQ WW contest is in the books. As with every year, incremental progress continues to be made in our log

checking capabilities although we are a long way from simply pushing a button to pop out the results. Our post-contest SDR recording capabilities have grown to the point that we can find and listen to virtually any QSO in the contest. Log checking software continues to advance, resulting in our ability to crosscheck nearly 94% of all submitted QSOs in the contest. A significant number beyond that can be verified with

Youthful Experiences in the CQ WW



Here is the smiling face of Youth operator Pia Wurster, DL7PIA, from her station in southern Germany.

My name is Pia (DL7PIA). I am 16 years old, having passed my Class A amateur radio license in July 2019, at the age of 12 years old. From the very first moment, I was fascinated and enchanted by amateur radio's exciting way of communications and the wide range of possibilities it offers (e.g., portable operations, different modes, building your own antennas, contests, etc.). Just a few months before the CQ WW CW Contest I decided to learn the Morse code, and immediately fell in love with CW from the very first moment. All this would not be possible without my great and very helpful friend, Mitch, KH6M. I would like to take this opportunity to thank Mitch for all of his help and support!!

In recent years I participated in some SSB contests. Now I was really excited and ready to experience how a CW contest would compare to one on SSB. In particular, I was curious if anyone would even be able to copy my call because I was working with only with a 100-watt Yaesu FT-991A and homemade wire loop and dipole antennas.

I started the big adventure in the 2022 CQ WW CW during the last weekend in November and it was incredible! My goal was to gain experience, to improve my CW skills, find out what's possible with a Morse key, an FT-991A and home-made wire antennas, work new and rare countries,

and above all, to have fun. It was really amazing how many stations were QRV during this weekend. In fact, one can call it DXers paradise!

I really enjoyed the contest and had many nice and special QSOs with radio amateurs from the Turks and Caicos Islands, Greenland, Norfolk Island, Grenada, Guam, New Zealand, Australia, and Bahamas, to name just a few. I want to thank all of the stations who answered my calls. It was great to have a CW QSO with you! There is no comparable feeling like the moment when a station copies your call sign through a big pile-up or working a rare DX-station with simple homemade antennas.

I'm grateful to be a part of the big world of amateur radio and I'm looking forward to many more unforgettable QSOs with all of you!

73 & 88 de Pia, DL7PIA

Le name is Leonardo (more commonly known as Léo) and I live in the city of Poá, Brazil, where I received the callsign, PY2POA, to honor my city and the former owner. I'm 16 years old and am passionate about DXing and even more with contests. When I participated in my first contest, I thought it was really cool, and since then I haven't slowed down. When I finally participated in my first CQWW, I thought it was fantastic because of the large number of operators from all over the world, making QSOs with several new countries. I really enjoy the CQ WW, which in my opinion has been getting better every year. The CQ WW has always been good to me because I always work at least one new country! A big thank you to all the organizers for your hard work!!

73, Léo, PY2POA



Remember your first WW? This is Leo Silva, PY2POA, celebrating his initial entry as a Youth operator in the 2022 CQ WW CW contest.

databases and other methods. As a participant, you can feel good that the final results, while not perfect, are an accurate reflection of what really happened in the contest.

We continue to experience sadness in our ranks as more of ham radio's

giants leave us. You'll recall from last month, that I reported the loss of our beloved friend, Fred Laun, K3ZO. Sadly, this month, I am sharing the loss of another giant, Rod Linkous, W7OM. We'll miss both of them, but will equally cherish the memories and experi-



Keep an eye on this 12-year-old Youth operator, Ryan Morrison, EI8KW. Ryan worked over 500 QSOs in the 2022 CW event with many more CQ WW contests in his future!

Hello from Ireland. I am Ryan, EI8KW, and am 12 years old. I first became aware of the Morse code after visiting the Titanic Museum in Belfast, Ireland. I especially became interested in the Morse code used in the Titanic's SOS distress call. It was at that moment that I decided to learn CW and later took the required examinations, which brought me into the world of amateur radio. After passing the Morse test, I discovered that I also needed to pass a theory test to obtain a valid license. After a lot of time studying basic radio principles, I passed the theory test and received my callsign, EI8KW, in August, 2020. Almost immediately, I purchased an IC-7300 and some wire and went live for the first time. My signal was not very strong, so I mainly operated on CW.

Soon after, I started listening to the contests on weekends and began operating in them. I found all of the activity and the loud signals on the bands to be really exciting. My current strategy is to mainly operate and give out as many points as possible with the big contest stations usually being able to pull me in. I love the energy on the bands during the big contests like the CQ WW CW and especially enjoy listening to the really good operators running large pileups.

When operating in the big contests I don't really have any other strategy except to operate for as much time as possible and contact anyone that can hear me. I mainly search and pounce around the bands as I don't work as many by calling CQ. At the end of the CQ WW, it's amazing to see the signals disappear and bands go quiet; it's all over until next year.

I always send in my log to the contest organizers so everyone's QSOs with me can be verified. In addition, I upload to LoTW and most of the other electronic platforms as well as sending my log into super check partial (*ed—is this how you were thinking when you were 12 years old?*).

I hope to meet you in the next contest.

73, Ryan, EI8KW

CLUB SCORES

UNITED STATES

Club	# Entrants	Score
FRANKFORD RADIO CLUB.....	244.....	464,027,502
YANKEE CLIPPER CONTEST CLUB.....	256.....	413,542,478
POTOMAC VALLEY RADIO CLUB.....	233.....	217,062,987
SOCIETY OF MIDWEST CONTESTERS.....	163.....	94,265,104
NORTHERN CALIFORNIA CONTEST CLUB.....	83.....	74,607,532
ARIZONA OUTLAWS CONTEST CLUB.....	73.....	69,544,228
FLORIDA CONTEST GROUP.....	86.....	67,304,129
MINNESOTA WIRELESS ASSN.....	134.....	51,607,635
SOUTHERN CALIFORNIA CONTEST CLUB.....	71.....	50,919,845
NORTH COAST CONTESTERS.....	19.....	49,131,846
CENTRAL TEXAS DX AND CONTEST CLUB.....	32.....	36,197,659
SOUTH EAST CONTEST CLUB.....	48.....	34,500,365
TENNESSEE CONTEST GROUP.....	44.....	28,829,708
WILLAMETTE VALLEY DX CLUB.....	63.....	27,747,196
BAY AREA DXERS.....	19.....	25,659,489
GRAND MESA CONTESTERS OF COLORADO.....	42.....	25,221,760
DFW CONTEST GROUP.....	43.....	23,130,268
ALABAMA CONTEST GROUP.....	29.....	19,525,472
HUDSON VALLEY CONTESTERS AND DXERS.....	40.....	18,386,691
SWAMP FOX CONTEST GROUP.....	20.....	16,182,784
WESTERN WASHINGTON DX CLUB.....	53.....	15,747,727
MAD RIVER RADIO CLUB.....	25.....	14,725,723
NORTHEAST MARYLAND AMATEUR RADIO CONTEST SOCIETY.....	26.....	13,674,803
SOUTHEASTERN DX CLUB.....	4.....	12,628,780
KENTUCKY CONTEST GROUP.....	21.....	11,876,461
NIAGARA FRONTIER RADIOSPORT.....	22.....	9,671,262
CAROLINA DX ASSOCIATION.....	28.....	9,295,380
ARKANSAS DX ASSOCIATION.....	14.....	7,776,047
DEEP DIXIE CONTEST CLUB.....	10.....	7,529,705
TEXAS DX SOCIETY.....	18.....	6,675,695
BIG SKY CONTESTERS.....	10.....	6,169,400
KANSAS CITY CONTEST CLUB.....	15.....	4,905,728
NORTHEAST WISCONSIN DX ASSN.....	5.....	4,760,762
SPOKANE DX ASSOCIATION.....	22.....	3,936,381
THE VILLAGES AMATEUR RADIO CLUB.....	13.....	3,021,988
HILLTOP TRANSMITTING ASSN.....	4.....	2,694,568
ORDER OF BOILED OWLS OF NEW YORK.....	7.....	2,513,564
MISSISSIPPI VALLEY DX/CONTEST CLUB.....	7.....	2,273,617
CWOPS.....	4.....	2,021,023
MOTHER LODE DX/CONTEST CLUB.....	15.....	1,893,506
CTRI CONTEST GROUP.....	7.....	1,878,084
SOUTH JERSEY RADIO ASSOCIATION.....	9.....	1,823,457
ROCHESTER (NY) DX ASSN.....	14.....	1,816,436
BRISTOL (TN/VA) ARC.....	12.....	1,680,749
DAYTON AMATEUR RADIO ASSOCIATION.....	5.....	1,540,543
CENTRAL VIRGINIA CONTEST CLUB.....	4.....	1,492,692
MERIDEN ARC.....	6.....	1,235,890
PORTAGE COUNTY AMATEUR RADIO SERVICE.....	9.....	1,012,474
NEW PROVIDENCE ARC.....	7.....	964,925
HEARTLAND DX ASSOCIATION.....	8.....	878,664
REDWOOD EMPIRE DX ASSOCIATION.....	6.....	865,964
FORT WAYNE RADIO CLUB.....	5.....	827,978
SILVER COMET AMATEUR RADIO SOCIETY.....	5.....	797,016
NORTHERN ARIZONA DX ASSN.....	8.....	763,997
NORTH FULTON AMATEUR RADIO LEAGUE.....	6.....	689,483
KANSAS CITY DX CLUB.....	4.....	574,571
SKYVIEW RADIO SOCIETY.....	5.....	561,891
METRO DX CLUB.....	10.....	420,431
ARC EMC COMM SRVC.....	6.....	323,507
BOLINGBROOK ARS.....	4.....	296,712
ALEXANDRIA RADIO CLUB.....	4.....	289,210
HILL COUNTRY AMATEUR RADIO CLUB.....	9.....	271,988
HAMILTON AMATEUR RADIO CLUB.....	7.....	265,522
STERLING PARK AMATEUR RADIO CLUB.....	7.....	247,804
SIERRA NEVADA AMATEUR RADIO SOCIETY.....	4.....	217,824
LONG ISLAND CW CLUB.....	7.....	216,03
PORT LAVACA AMATEUR RADIO CLUB.....	4.....	137,926
OH-KY-IN ARS.....	6.....	132,777
PANHANDLE AMATEUR RADIO CLUB.....	4.....	97,780
GREAT PLACES CONTEST CLUB.....	4.....	92,249
YORK COUNTY AMATEUR RADIO SOCIETY.....	9.....	72,541
HAZEL PARK AMATEUR RADIO CLUB.....	4.....	70,825
PHIL-MONT MOBILE RADIO CLUB.....	5.....	66,034
LAKE AREA RADIO KLUB (SD).....	4.....	21,118
UTAH DX ASSOCIATION.....	4.....	15,058

DX

Club	# Entrants	Score
BAVARIAN CONTEST CLUB.....	314.....	347,577,055
ITALIAN CONTEST CLUB.....	272.....	311,152,448
EA CONTEST CLUB.....	107.....	224,490,956
RHEIN RUHR DX ASSOCIATION.....	149.....	141,531,863
CONTEST CLUB ONTARIO.....	96.....	122,981,453
CROATIAN CONTEST CLUB.....	46.....	92,565,865
ARAUCARIA DX GROUP.....	61.....	79,838,022
CLIPPERTON DX CLUB.....	32.....	68,606,304
CONTEST CLUB SERBIA.....	46.....	62,517,271
BALTIC CONTEST CLUB.....	20.....	62,150,183
RUSSIAN CONTEST CLUB.....	42.....	57,101,556
LU CONTEST GROUP.....	35.....	56,139,670
CONTEST CLUB FINLAND.....	54.....	51,629,274
HA-DX-CLUB.....	20.....	49,222,472
BELOKRANJEC CONTEST CLUB.....	14.....	44,304,254

Club	# Entrants	Score
UKRAINIAN CONTEST CLUB.....	98.....	42,733,686
VK CONTEST CLUB.....	35.....	37,830,327
RIO DX GROUP.....	108.....	32,486,997
LA CONTEST CLUB.....	12.....	32,054,938
SP DX CLUB.....	92.....	28,008,188
BELARUS CONTEST TEAM.....	15.....	25,031,154
CATALONIA CONTEST CLUB.....	29.....	21,994,874
CONTEST GROUP DU QUEBEC.....	20.....	21,903,821
UNCC.....	10.....	21,537,206
SLOVENIA CONTEST CLUB.....	42.....	21,527,387
WORLD WIDE YOUNG CONTESTERS.....	9.....	18,448,850
ORCA DX AND CONTEST CLUB.....	30.....	18,267,497
SIAM DX GROUP.....	22.....	16,948,334
THREE A'S CONTEST GROUP.....	7.....	16,013,476
NICOSIA CONTEST GROUP.....	4.....	15,530,482
DANISH DX GROUP.....	34.....	15,019,936
CONTEST CLUB BELGIUM.....	31.....	14,856,943
CZECH CONTEST CLUB.....	24.....	14,794,284
INTEREST GROUP RTTY *.....	12.....	13,257,926
LATVIAN CONTEST CLUB.....	30.....	13,145,478
GMDX GROUP.....	19.....	11,284,867
NORFOLK AMATEUR RADIO CLUB.....	9.....	11,007,218
CE CONTEST GROUP.....	11.....	10,658,758
RADIO AMATEUR ASSOCIATION OF WESTERN GREECE.....	7.....	10,500,508
CHILTERN DX CLUB.....	25.....	10,255,230
BELARUS CONTEST CLUB.....	22.....	9,431,125
599 CONTEST CLUB.....	20.....	9,407,328
JSFC.....	5.....	8,973,198
ARIPA DX TEAM.....	7.....	8,318,606
BOSNIA AND HERZEGOVINA CONTEST CLUB.....	4.....	8,262,098
RTTY CONTESTERS OF JAPAN.....	6.....	8,007,207
EUROPEAN DX CONTEST CLUB *.....	7.....	7,738,784
SAUDI CONTEST GROUP.....	5.....	7,466,336
VU CONTEST GROUP.....	21.....	7,399,696
URAL CONTEST GROUP.....	10.....	6,172,873
CS PETROLUL PLOIESTI.....	5.....	5,930,724
MARITIME CONTEST CLUB.....	17.....	5,923,421
YB-LAND DXING PASSION IS.....	227.....	5,911,318
SOUTHERN OSAKA CONTEST CLUB.....	11.....	5,557,113
WEST SERBIA CONTEST CLUB.....	13.....	5,374,418
GUNMA CONTEST CLUB.....	12.....	4,914,693
RUSSIAN CW CLUB.....	23.....	4,822,320
THRACIAN ROSE CLUB.....	37.....	4,740,586
COCKENZIE AND PORT SETON ARC.....	5.....	4,738,469
OKAYAMA DX CLUB.....	10.....	4,635,904
ASSOCIAÇÃO DOS RÁDIOAMADORES DO PARANA.....	11.....	4,561,812
CABREUVADX.....	38.....	4,530,882
RADIOCLUBLUB RADU BRATU.....	7.....	4,493,338
CSTA SUCEAVA.....	4.....	4,382,462
TRAC.....	6.....	4,307,555
ORARI LOKAL BEKASI.....	4.....	4,171,374
MEDITERRANEO DX CLUB.....	8.....	4,026,700
VRHNIKA CONTESTERS.....	5.....	3,987,193
THAILAND DX ASSOCIATION.....	6.....	3,669,575
RSGB CONTEST CLUB.....	11.....	3,648,992
RADIOSPORT MANITOBA.....	6.....	3,637,996
TRAC TRABZON.....	5.....	3,620,425
ISRAEL AMATEUR RADIO CLUB.....	6.....	3,567,653
5NNDXCO.....	39.....	3,560,390
VERON A63 FRIESE WOUDEN.....	6.....	3,097,348
GIRESUN TELSİZ VE RADYO AMATORLERİ DERNEGİ.....	4.....	2,806,303
CSA STEAU.....	4.....	2,716,200
GRIMSBY AMATEUR RADIO SOCIETY.....	6.....	2,631,855
FUCHU AMATEUR RADIO CLUB.....	9.....	2,525,496
PZK OT-01.....	8.....	2,468,434
LITHUANIAN CONTEST GROUP.....	5.....	2,415,390
KOREA DX GROUP.....	10.....	2,410,752
ESSEX CW AMATEUR RADIO CLUB.....	5.....	2,343,038
UA2 CONTEST CLUB.....	7.....	2,299,051
STOCKPORT RADIO SOCIETY.....	6.....	2,236,432
RADIO CLUB KVARNER RIJEKA.....	10.....	2,192,490
CSM CRAIOVA.....	8.....	2,118,646
SK6AW HISINGENS RADIOKLUBB.....	9.....	2,032,530
ALBERTA CLIPPERS.....	4.....	2,026,366
SHARKS DX TEAM.....	5.....	2,025,118
CSU PITesti.....	5.....	1,955,144
SASKATCHEWAN CONTEST CLUB.....	9.....	1,912,393
S51DSW.....	6.....	1,889,035
UNIVERSITY OF TOKYO CONTEST CLUB.....	7.....	1,888,169
ADMIRA ARAD.....	7.....	1,850,236
IVANOVO DX CLUB.....	6.....	1,750,996
599 DX GROUP.....	8.....	1,700,679
ESPIRITO SANTO CONTEST GROUP.....	7.....	1,694,167
SK0QQ SODERTORNS RADIAMATORER.....	4.....	1,685,739
KEYMEN'S CLUB OF JAPAN.....	30.....	1,674,582
NORFOLK COAST AMATEUR RADIO SOCIETY.....	4.....	1,534,008
SK6DG RADIoclub VASA.....	4.....	1,505,733
CDR GROUP.....	30.....	1,405,396
UNION FRANCAISE DES TELEGRAPHISTES.....	8.....	1,371,319
JAPAN LID CLUB.....	4.....	1,371,230
SPANDAU DXERS.....	7.....	1,324,906
TRUJILLO ALTO CONTEST CLUB.....	5.....	1,311,036
CSR BRAILA.....	9.....	1,296,323
SAYAN DX CLUB.....	4.....	1,290,593
KAUNAS UNIVERSITY OF TECHNOLOGY RADIO CLUB.....	16.....	1,275,562
SP-CW-C.....	8.....	1,273,894
LA2T TRONDHEIMSGRUPPEN AV NRRL.....	4.....	1,193,199
RIIHIMAEN KOLMOSET.....	6.....	1,180,809

Club	# Entrants	Score
RAAC CYCLADES DX CLUB.....	.7	1,142,451
PHILIPPINE AMATEUR RADIO LEAGUE.....	.9	1,130,539
ZRHB.....	.6	1,080,086
AMSTERDAM DX CLUB.....	.4	1,045,551
YB LAND DX CLUB.....	.22	1,020,954
GRUPO ARGENTINO DE CW.....	.4	993,013
YO DX CLUB.....	.12	979,749
SERRA DO LOPO DX GROUP.....	.7	951,399
7A DX-CONTEST CLUB.....	.14	944,834
CW QRS TELEGRAM GROUP.....	.4	910,340
ARCK.....	.9	890,490
RADIO CLUB VENEZOLANO CARACAS.....	.7	868,899
KING'S LYNN AMATEUR RADIO CLUB.....	.4	832,915
ARABIAN GULF DX GROUP.....	.4	831,428
SHARP HAM CLUB.....	.9	807,581
GPDX-PORTUGUESE DX GROUP.....	.4	794,481
HOLYLAND DX GROUP.....	.4	792,701
DX101 CONTEST CLUB.....	.9	766,236
NEWBURY & DISTRICT ARS.....	.4	751,680
JAPAN CONTESTER'S CLUB.....	.5	745,582
SWINDON & DISTRICT AMATEUR RADIO CLUB.....	.6	728,438
SKGEI SKOVDE AMATORRADIOKLUBB.....	.6	720,189
UNIO DE RADIOAFICIONATOS DEL VALLES ORIENTAL.....	.6	715,147
YYP CLUB.....	.5	705,952
RADIO CLUB VENEZOLANO.....	.5	702,508
GLoucester AMATEUR RADIO & ELECTRONICS SOCIETY.....	.4	671,150
BRISTOL CONTEST GROUP.....	.5	655,804
ARKTIKA.....	.6	606,225
E74FRS.....	.9	578,419
NATIONAL CHILDREN'S PALACE.....	.8	523,619
HERMOSILLO CONTEST GROUP.....	.6	523,386
LITTLE GUN CLUB.....	.4	458,967
CWSP.....	.7	453,429
FALCONS DX GROUP.....	.16	424,849
CLUB RADIOAMATEUR VE2CWG.....	.5	401,265
USRA.....	.5	397,416
LKK LVIV SHORTWAVE CLUB.....	.5	395,810
S53EOP.....	.4	381,667
CS SILVER FOX DEVA.....	.6	377,887
SK5AA VASTERAS RADIOKLUBB.....	.5	376,351
SPORT CLUB MIERCUREA-CIU.....	.4	367,630
HALIFAX AMATEUR RADIO CLUB.....	.4	364,393
TALL TREES CONTEST GROUP.....	.5	349,784
BT CW CLUB.....	.7	329,554
VRZA VERENIGING VAN RADIO ZEND AMATEURS.....	.4	323,979
CSU BRASOV.....	.6	318,719
SP9PBB.....	.13	318,274
CHILEAN PACIFIC DX GROUP.....	.9	312,880
PETERBOROUGH AMATEUR RADIO CLUB.....	.4	307,715
ONLINE AMATEUR RADIO COMMUNITY.....	.6	294,463
LOMA DEL TORO DX CLUB.....	.4	287,618
JUST FOR FUN CONTEST CLUB.....	.6	282,921
ORARI LOKAL BOGOR.....	.10	259,645
CSM BOTOSANI.....	.6	238,261
CWJF GROUP.....	.4	227,243
GERMAN DX FOUNDATION.....	.5	222,951
LA-DX-GROUP.....	.4	217,243
GUARA DX GROUP.....	.12	210,665
RADIOCLUB LJUBLJANA S53AJK.....	.5	190,804
ALRS ST PETERSBURG.....	.5	168,964
ORARI LOKAL KEDIRI.....	.18	168,512
RADIO CLUB DE COSTA RICA.....	.4	164,816
BA3RA.....	.4	160,128
BAKTRAD.....	.4	151,394
RU-QRP CLUB.....	.4	148,226
KOREA CONTEST CLUB.....	.4	146,983
GRUPO DXXE.....	.5	131,495
ROYAL.....	.5	131,054
LA4O.....	.6	128,854
RADIOCLUBUL QSO BANAT TIMISOARA.....	.4	128,659
HEREFORD AMATEUR RADIO SOCIETY.....	.4	127,869
CSM TIMISOARA.....	.4	123,505
CSA STEAUÀ BUCURESTI.....	.4	119,481
CLUB DE RADIO EXPERIMENTADORES DE OCCIDENTE.....	.6	105,312
LOMZA AND DISTRICT RADIO SOCIETY CONTEST GROUP.....	.5	101,706
SPDXT.....	.7	94,870
CMDXGROUP.....	.6	93,313
RADIOFAROL DX GROUP.....	.9	92,940
SHIJIAZHUANG AMATEUR RADIO CLUB.....	.4	83,966
YB6_DX COMMUNITY.....	.11	80,588
JARL KYOTO CLUB.....	.4	79,699
ORARI LOKAL BLITAR.....	.5	68,152
THE AKITA DX ASSOCIATION.....	.5	67,949
ECHELFORD ARS.....	.6	62,118
EDIT14.....	.5	58,981
TORBAY ARS.....	.4	58,265
VLADIMIR CONTEST GROUP.....	.4	54,229
A1CLUB.....	.6	51,834
RADIO CLUB DE PANAMA.....	.4	47,693
DX2EVM SCAN INTERNATIONAL.....	.5	43,268
WEST BORNEO DX CLUB.....	.6	37,508
CHIANGRAI DX & CONTEST GROUP.....	.4	24,965
OLDHouseradioclub.....	.4	507

Club scores with **4 or more** entries.

* This club does not meet eligibility rules.

Stories from our CQ WW Explorers

A Bahamas Adventure, by Gregg Marco, W6IZT

The availability of the Explorer category proved to be a perfect match for the goals of our C6AGU operation. The team was operating from an uninhabited island in classic DXpedition style. There was no hotel withing 100 miles of our location.

Operating via remote access from our boat, we utilized RIB (radio-in-a-box) hardware. The RIB configuration, developed by George, AA7JV, and funded by the NCDXF, was comprised of a Flex 6700 transceiver, operating with 100 watts. The antenna was an N6BT V8 vertical fed through an automatic L-network tuner mounted to the base of the antenna, placed a few feet above the high tide line. Power was supplied by a solar array and batteries. George, AA7JV, and Mike, KN4EEI, set up the station a few weeks before the contest, which remained in place and in use from our unmanned location until early January 2023.

Deployment of the station involved using a landing craft that carried two RIBs, a generator and fuel. We also transported the UHF IP-link needed to connect the RIBs to the boat. A short video on how we deployed the RIBs on the island can be found here: <<https://www.dropbox.com/s/7dge5250hljq743/RIBlandingCraft.mp4?dl=0>>.

Remote access was accomplished using AnyDesk remote desktop software. Receive audio (with sidetone) was available using SonoBus. Our contest logging software was N1MM+, which also delivered CW keying. The internet connection utilized StarLink, much like what was accomplished in the recent Bouvet DXpedition.

Operating this station remotely during a contest was a joy, easily exceeding our expectations. The Codec in Sonobus provided outstanding audio quality. Jitter, or variations in network latency can be problematic over satellite or cellular connections. The ability to manually control buffer depth in Sonobus was key to realizing an optimal user experience.

In the end, we had a blast, and were very pleased with the results. A huge thank-you goes out to the NCDXF and George, AA7JV, for making this possible.

Exploring from ZL3!

The ZL3X (Quake Contesters) team proudly entered the Explorer category in the 2022 CQ WW CW Contest. Normally we would have been operating as a Multi-2 from my QTH (ZL3PAH), but this year one of our ops, Geoff, ZL3GA, had COVID in their household. Given my daughter was getting married shortly afterwards, we did not feel comfortable hosting our usual operating team together in one shack. The Explorer category was the perfect solution! Mark, ZL3AB, and I operated from my Motueka, Tasman shack while Geoff, ZL3GA, operated from his home QTH in Christchurch.

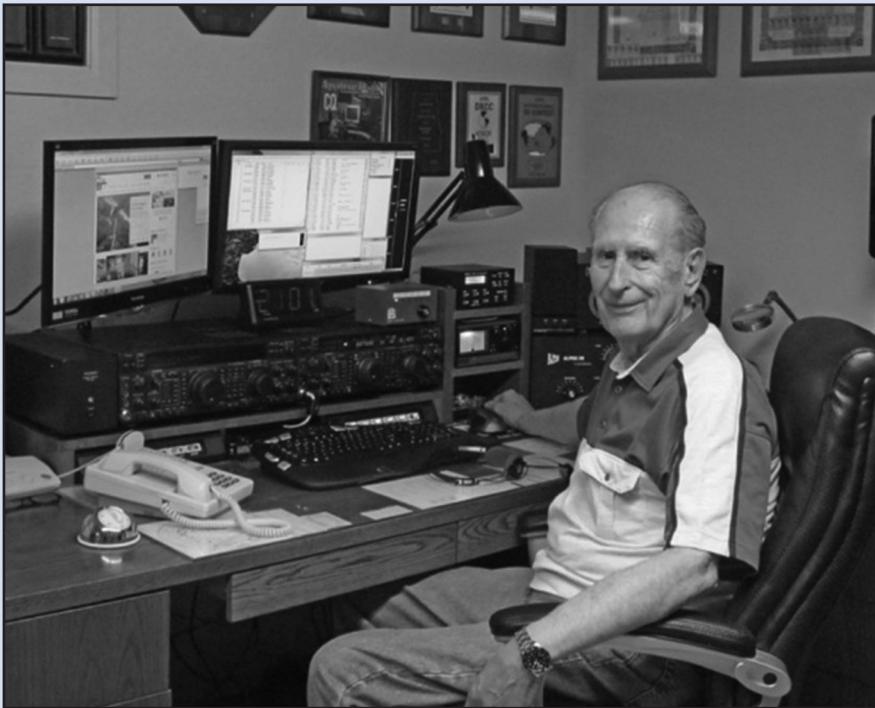
We used a K3 & K3S alongside SPE-1K and SPE-1K5 amplifiers. Our antennas were a 40-10m 2/3-EI Ultrabeam at 18 meters, plus a 5-element 15-meter beam, 15 meters in the sky. We also used home-built band pass filters between transceivers and linears to allow multiband operation with very little interference on each band. Utilizing N1MM+ connected over the Internet, we could easily view how each station was doing and make strategic operating decisions on the fly.

Exploring may not be for everyone, but it sure worked for us!

73, Phil, ZL3PAH/ZL3P

A Tribute to Rod Linkous, W7OM

BY TOM OWENS, K7RI



Rod Linkous, W7OM, at home in one of his favorite places; the ham radio shack!

November 30, 2022. Indeed, Rod's passing shortly after his 88th birthday was a very sad day. A hearty amen to all the nice things that have been said about Rod and his accomplishments in ham radio.

Rod was real gentleman. In all my years of knowing Rod, I never heard him say a disparaging word about anyone. Rod received his first license in 1949 when he was 15 years old – W7KIM – the beginning of a passion for ham radio that he enjoyed for the rest of his life. Rod's first station was a set of ARC-5 aircraft radios and simple wires in trees. Years later, he became W7YBX and finally, W7OM, in 1977.

Rod entered the US Air Force aviation cadet program after high school, having already received his pilot's license. He opted to attend airborne radio/radar school with his first assignment being an airborne operator at an airbase in Japan. Many years later, in 1979, an Air Force posting took him to his first stop at the Pentagon. In 1961 he was also hired by Boeing on their aerospace program, which required a lot of traveling in the mid-1970s and beyond – both nationally and internationally. Many trips to the Washington, DC area ensured where, in his spare

time, he made lifelong amateur radio friends. Rod retired from Boeing in 1993. In addition, after a distinguished 41-year career, Rod retired from the Air Force in late 1994, having attained the rank of Major General.

During his first week at the University of Washington in 1958 Rod met Donna, his Scottish lass, who survives him. They were married in 1960 and in 1963 bought their home in West Seattle. A year later there was a 60-foot tower and a tri-bander in the backyard. Over the years the antenna farm varied and grew to its present state: three slopers on 80- and 160-meters and a SteppIRDB-18E at 60 feet. All in all, he enjoyed good coverage for 40 through 6 meters – neatly snuggled on a 50x128-foot city lot. Oh, did I forget? Rod received an Electrical Engineering degree from the UW in 1961. Most of his contesting and DX chasing from the West Seattle QTH was low power out of respect for his neighbors.

For around five years, during the 1970s, Rod was an Assistant DX Editor for CQ magazine. And, over the years he authored several articles that were available in various amateur radio publications on topics that were of interest to fellow amateurs around the world.

Rod's operating numbers are right at the top of the standings in all categories, including DXCC totals of 373/Mixed, 370/Phone and 350/CW as well as CQ's elusive 5BWAZ achievement. The shack is adorned with several plaques for first-place, low power entries in QSO parties and other operating events. In addition, several Air Force plaques and awards which commemorate his service to our country.

In summary, Rod was a quiet, unassuming but excellent enabler. His drive and enthusiasm were responsible for many positive results. In addition to being an effective mentor and willingness to share his wisdom and time with others, Rod was the dynamic force that made many things successful. Mentioning two will have to suffice:

- **The Western Washington DX Club (WWDXC) – the early years**

In the early 1950s Rod became the Club President and served in that role for many terms. Under his guidance, membership grew from 31 members to several hundred. Three major factors facilitated the growth: (1) a chain of buffet restaurants with free meeting rooms; (2) dinner meetings raffles, which financed the club for many years without the need for dues; and (3) excellent programs on topics of interest at each meeting, which was a magnet for attendance. Interest in DX and contesting thrived, and the club became known worldwide for its *Totem Tabloid* publication, *The Washington Totem Award* (still sought after by amateurs worldwide all these years), and the club's excellent contest.

- **Monthly Lunch Meetings**

With the demise of many buffet restaurants, it became significantly more difficult to find cost-effective venues that could accommodate 100+ people for dinner meetings. Membership fell considerably, as has dinner meeting attendance. Accordingly, Rod was instrumental in establishing monthly lunch meetings which continue to this day, providing a needed boost to the club.

Thank you, Rod. There is no doubt that you will be greatly missed by all who knew you in the hobby and outside of radio as well. You were one of a kind!



What a fantastic set-up at the Multi-2 2022 CQ WW CW operation of VA2UR, manned by station owner, Guy Lemieux, VE2BWL, and Don Girard, VE2IR!

ences of getting to know these outstanding contributors to our hobby and the world at large.

One final note of encouragement. As sophisticated as our stations are becoming, nothing beats what you can process between your two ears. We see many logs containing calls based on what the spotting computers are reporting as opposed to the actual stations being worked. Embracing the long-standing strategy of “trust but verify” what you see on the screen as an assisted operator will always result in a higher final score.

Without Further Ado...

This is my second and final opportunity this year to recognize the individuals who do the real work behind the scenes for the CQ WW contest. Without these dedicated volunteers, we would have no contest. It's my honor to acknowledge the following members who made it happen this time around: Bud Trench, AA3B; CT1BOH, José Nunes; EA4KD, Pedro Vadillo; ES5TV, Tonno Vahk; F6BEE, Jacques Saget; G0MTN, Lee Volante; 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; OH6LI, Jukka Klemola; PA3AAV, Gert Meinen; RA3AUU, Igor (Harry) Booklan; S50A, Tine Brajnik; S50XX, Kristjan Kodermac; UA9CDC, Igor Sokolov; VE3EJ, John Sluymer; VK2IA, Bernd Laenger; YO3JR, Andrei (Andy) Ruse.

And finally, if current band conditions are any indicator, this fall contest season bodes for an amazing set of CQ WW contests. Amazingly, it's only five months away. See you in October and November 2023!

73, John, K1AR

(Scores on page)