



Ever wonder why RL3A is so loud everywhere? Now you know.

Results of the 2019 CQWW DX CW Contest

"Unaware that I could make such a big score with only five watts and an indoor Zepp!" – HB9CBR

BY JOHN DORR*, K1AR

This One Was a Little More Fun!

As the 71st CQWW contest season drew to an end, many participants were saying, "Who cares about SSB? The Sun came to life and so did the bands!" Indeed, conditions were much improved for us on CW and the scores reflect that fact.

I loved this enthusiastic note received from PY2NY who said, "Working Cycle 24-25 at the bottom forced me to change to Single Operator, Single Band operations several years ago. But, the CQWW CW 2019 was a surprise for



The super enthusiastic operating crew from SZ1A: (front row: SV5DKL, SV1DKD; 2nd row: SV4FFL, SV1JG, SV1DPJ; 3rd row: SV1BJW, SV1DPI; 4th row: SV1CDN, SV1CQK, SV1CIB).

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**UNITED STATES
SINGLE OPERATOR
HIGH POWER**

All Band
N5DX (@N2QV).....8,318,024
N2IC (@K1ZZ).....7,062,952
W1KM.....7,021,120
K02M.....5,654,400
AA1K.....5,244,570

28 MHz

W4DD.....8,050
K4WI.....7,298

21 MHz

NR5M (K5GA).....152,865
W2/E78WW.....96,728
W6YA.....64,980

14 MHz

K9BGL.....451,328
N1XS.....430,287
N5JJ.....278,898

7 MHz

W7WA.....453,887
K7BV.....411,417
N6CW.....381,760

3.5 MHz

NE8P.....109,161
W0EWD.....90,287
K0PJ.....84,958

1.8 MHz

K7GM.....61,370
N4XD.....53,738
KA1J.....39,783

**LOW POWER
All Band**

N9NB.....2,318,511
K1BX.....1,509,687
K5KU.....1,508,917
N4TZ.....1,508,892
N8II.....1,188,512

28 MHz

N5DTT.....130

21 MHz

AB1J.....17,608
W6DVS.....7,685
N6RM.....4,320

14 MHz

WB4TDH.....266,114
W2AW (N2GM).....242,460
K1VJSJ.....192,372

7 MHz

W0UO.....182,160

KA1IS.....172,483
KM4FOC (WA1FCN).....115,764

3.5 MHz

K9UIY.....38,634
N4OO.....11,184
N8VW.....9,116

1.8 MHz

KH6KG/W5.....5,715
WD8DSB.....4,680
W09S.....2,568

**QRP
All Band**

KR2Q.....709,992
W6JTI.....211,232
W6QU (W8QZA).....154,944
K8CN.....136,080
N7RCS.....135,037

28 MHz

W5GAI.....374

21 MHz

WE6EZ.....5,980

14 MHz

N1AIA.....19,760
KC4IM.....594
WD6DX.....325

7 MHz

*KS0MO.....7,296
KZ3I.....1,595

**ASSISTED
HIGH POWER
All Band**

K5ZD.....7,562,791
K3WW.....6,900,465
N3RS.....5,545,332
KV2K (K2NG).....4,668,405
NY3A.....4,604,370

28 MHz

N6SS.....6,004
N9LQ.....476

21 MHz

N8BJQ.....56,826
W7ZR.....27,525
WD2E.....16,974

14 MHz

N0AX.....444,132
N7DD.....399,843
W9ILY.....327,930

7 MHz

K7NJ.....424,377
W3YY.....332,010
W9PA.....306,270

3.5 MHz

N5RZ.....225,300
W4IZT (W6IZT).....209,400
W8AV.....184,737

1.8 MHz

AG4W.....38,548
W8UVZ.....30,349
K2RR.....19,270

**ASSISTED
LOW POWER
All Band**

KS1J.....2,145,792
W1NT.....1,970,453
K1VU (N1EN).....1,786,540
W3KB.....1,706,000
N4XL.....1,434,200

21 MHz

K6ICS.....2,318
K5ND.....1,012

14 MHz

WB2AA.....106,344
K2MFY.....92,158
K7SS.....71,240

7 MHz

K9OM.....253,827
NU4E.....189,528
N4IJ.....159,426

3.5 MHz

K3TW.....43,700
AB9YC.....25,194
NC1CC (WA1BXY).....4,905

1.8 MHz

W7RH.....8,862

**ASSISTED
QRP
All Band**

K8ZT.....343,966
W3UL.....38,936
N4TOL.....37,224
K2GMY.....29,610
KW2A.....18,914

21 MHz

N0UR.....6,968

14 MHz

WB40MM.....4,116

7 MHz

N7XR (N6MZ).....14,427
W4ER.....5,461

**MULTI-OP
SINGLE TRANSMITTER
High Power**

K1LZ.....9,492,336
W3UA.....9,201,828
N4WW.....8,587,524
W2FU.....8,418,348
K8AZ.....6,576,076

Low Power

NA5NN.....1,318,324

**MULTI-OP
TWO TRANSMITTER**

KC1XX.....13,845,958
K9CT.....8,367,375
K2LE.....7,266,078
K2AX.....6,112,390
K4TCG.....5,326,420

**MULTI-OP
MULTI-TRANSMITTER**

W3LPL.....17,895,017
K3LR.....16,727,576
NR4M.....12,625,272
K1TTT.....9,306,392
K1KI.....5,691,439

**ROOKIE
High Power**

NG6X.....58,776
W4IPC.....31,240
K15O.....10,795
N7DSX.....7,257
AK1MD.....3,705

Low Power

W9JWC (KD9LSV).....99,703
N8JLM.....66,150
AC3BU.....41,984
K65YOV.....33,333
AA0O.....27,324

**CLASSIC
High Power**

K1DG.....2,737,980
N4AF.....2,343,620
KU2M.....2,283,624
W4CB (W2RU).....2,227,359
W1WEF.....2,165,527

Low Power

K1BX.....1,509,687
N8II.....1,188,512
K1HT.....622,720
K5GDV (W6SL).....587,202
W1A0.....423,168

more than doubling his closest competitor, 3V8SS. Bud would have finished sixth amongst the high-power giants, which makes his result even more impressive.

Although the QRP guys typically don't receive comparable press to some of the other operating categories, it's notable that OK2FD took the world high score this year off the hands of KR2Q. I'm sure Doug will be ready for a rematch in 2020.

It took 5M points to break into the Top-10 World SOAB Assisted list, with John, W2GD operating from P4ØW, winning the category going away at almost 13M points. Will John ever tire in traveling to Aruba? Don't get your hopes up.

The semi-close photo finish this year was between P33W and CR3DX, being separated by only 300K, resulting in the boys from Cyprus winning the multi-single race yet again with 23.3M. Harry, RA3AUU, and his highly skilled crew have worked this game to new levels of skill, accuracy and station performance. Well done! The big boys (Multi-2 and Multi-Multi) did not disappoint us either, posting incredible scores with PJ4K (still under reconstruction) winning Multi-2 and EF8R making an amazing 48M points as the top Multi-Multi world entry. The #2 team at CN3A is hardly dissuaded, however, so look for significantly closer results next year.

Our U.S. friends seemed to ignore the sunspot minimum as well, with N5DX piloting the N2QV super-station to 8.3M points and victory over another traveling competitor, Steve, N2IC, operating from K1ZZ.

There was another close finish in the U.S. Multi-Single ranks with K1LZ firing up his new hardware in Maine, beating W3UA by only 300K with an impressive 9.5M result.

Lastly, the kingpins of the U.S. Multi-Multi competition, W3LPL and K3LR, fought it out again with Frank's Maryland operation coming out on top at 17.9M. NR4M continues to make progress against these long-time winners. Never count anyone out in this competitive sport of contesting.

The Classic category continues to grow in popularity (*having nothing to do with our increasing age, of course!*). This year, 855 Classic logs were submitted, representing 20,520 total hours of operating time. In the end, Alex, KU1CW, operating from P4ØC, edged out Oliver, W6NV, from ZD7W with an impressive 24-hour score of 4.4M points.

tipitate in a Multi-Op for any major CW contest. We had fun, and wished for even more operators to share in the fun and operating time. I was thrilled to have my Elmer, Jim, W5LA, available for the majority of the run times. Whether he realizes it or not, we are going to make a serious contender out of him!"

It is amazing to me how many folks enter the CQWW universe as casual operators and leave the fray having become rabid contesters. This contest has that effect on people — a global phenomenon of activity from nearly 200 countries bringing the bands alive for 48 straight hours. There is simply nothing else like it in our hobby.

**Some Amazing Results
This Year**

It seems that every year has a surprise or two in scoring, such as a photo finish

or an underdog victory in a difficult category. The 2019 CW edition of the CQWW was no exception and did not disappoint.

Who would think that World Single Operator records would be broken at the bottom of the cycle? Well, Jose, CT1BOH, did exactly that with a monster score of 19.9 million, beating his closest competitor, T17W (KL9A operator), by over 1.5M points. The 19-year record held by Jeff, N5TJ, operating from EA8BH, came crashing down by nearly 2M points. Jose, along with several other top-10 operators, have mastered the 2BSIQ operating technique (more on that later), producing huge QSO totals and multipliers to come along for the ride as well.

Speaking of gigantic scores, AA3B drove his V26K station to a decisive victory in the SOAB Low Power category,

Finally, a well-deserved shout-out goes to the 76 entries submitted in the Rookie class of 2019, all having been licensed less than three years. Still in his teenage years, David, VE7DZO, ran away with the high-power prize with 535K points, while Nan, PY2FRQ, took the low-power category with an impressive 434K score.

The CQWW is a DX Machine!

There is something unique about the CQWW's ability to draw rare stations out of the woodwork and get them on the air. In some cases, groups plan trips for months in advance to amazing places such as 3B8, 6W, 9G, CN, PZ, TK, or V8. After all, thousands of QSOs await them when the clock hits 0000Z on the first day of the contest. In other cases, home stations

are brought back to life, sometimes by simply having someone in an interesting place like Brunei Darussalam turn on their radio and wonder what all the activity is about. Scores of QSOs later, they've caught the bug like Tamat, V85T, did this past year with his 193-QSO entry.

No matter what, the CQWW did not disappoint this year with nearly 200 entities making an appearance yet again (See *Table 1*). And, the best is yet to come if history defines what we can look forward to on the bands.

How Many Hours did You Operate?

Each year, there is a group of participants who simply amaze the rest of us by operating nearly the entire contest — and 2019 was no exception as demonstrated by 28 operators

2019 CQWW CW PLAQUE WINNERS AND DONORS

SINGLE OPERATOR, ALL BANDS

World

D4C (Opr.: Jose Nunes, CT1BOH)
Donor: Vibroplex

World - Low Power

V26K (Opr.: Bud Trench, AA3B)
Donor: Slovenia Contest Club

World - QRP

Karel Karmasin, OK2FD
Donor: Bob Evans, K5WA

World - Assisted

P40W (Opr.: John Crovelli, W2GD)
Donor: Robert McGwier, N4HY

World - Assisted Low Power

5B/RN3QO (Opr.: Sergey Popov, RN3QO)
Donor: Mike Charteris, VK4QS

World - Assisted QRP

Pit Schmidt, DM2M
Donor: Steve "Sid" Caesar, NH7C

USA

Kevin Stockton, N5DX
Donor: Frankford Radio Club

USA - Low Power

Ted Rappaport, N9NB
Donor: North Coast Contesters

USA - QRP

Doug Zwiebel, KR2Q
Donor: Andy Blank, N2NT - W3ZZ Memorial

USA - Assisted

Randy Thompson, K5ZD
Donor: John Rodgers, WE3C

USA - Assisted Low Power

Jim Bowman, KS1J
Donor: LA9Z/LN9Z Leia Contest Club

USA - Zone 3

NO6T (Opr.: Axel W. Bruderer, K16RRN)
Donor: Arizona Outlaws Contest Club

USA - Zone 4

Mike Wetzel, W9RE
Donor: Society of Midwest Contesters

USA - Zone 5

Steve London, N2IC*
Donor: Carolina DX Association - N4ZC Memorial

Europe

CR5E (Opr.: Filipe Lopes, CT1ILT)
Donor: Florida Contest Group - W3AU Memorial

Europe - Low Power

MU2K (Opr.: Oleg Borisov, RL5D)
Donor: Tim Duffy, K3LR

Europe - QRP

Rudolf Rüffer, DK7HA*
Donor: Sergio Cartoceti, IK4AUY - I4FAF Memorial

Europe - Assisted

9A5Y (Opr.: Zvonko Karnik, 9A3LG)
Donor: IR4X Monte Capra Contest Team - I4IND Memorial

Europe - Assisted Low Power

UZ3A (Opr.: Sergei Fesenko, UX1AA)
Donor: Alex Goncharov, R3ZZ

Africa

ZD7W (Opr.: Oliver Sweningsen, W6NV)*
Donor: Ralph "Gator" Bowen, N5RZ - K5KA Memorial

Asia

UP0L (Opr.: Vladimir Vinichenko, UN9LW)
Donor: DFW Contesting Group - W5PG Memorial

Carib./C.A.

T17W (Opr.: Chris Hurlbut, KL9A)
Donor: DFW Contesting Group - W5PG Memorial

Carib./C.A. - Low Power

YN2CC (Opr.: Mike Kasrich, AJ9C)*
Donor: Albert Crespo, NH7A

Oceania

ZM1A (Opr. Jacky Calvo, ZL3CW)
Donor: Ken Hoppe, KH7R

South America

HC0T (Opr.: Alan Higbie, K0AV)*
Donor: Dave Farnsworth, WJ2O

South America - Southern Cone (CE, CX, LU)

Matt Acevedo, CE2LR
Donor: Dale Long, N3BNA

Scandinavia (LA, OH, OZ, SM)

LA4C (Opr.: Christian Quale, LA8OM)
Donor: Chas Weir, Jr., W6UM - W3FYS Memorial

Baltic (ES, LY, YL)

Andrius Ignotas, LY7Z
Donor: Lithuanian Radio Sports Federation - LY200 Memorial

Canada

Ken Wideltz, YV2TT
Donor: John Sluymmer, VE3EJ & Jim Roberts, VE7ZO

Russia

Jack Danielyan, R2AA
Donor: Roman Thomas, RZ3AA

Indonesia

Ibrahim Noor, YC7YGR
Donor: "Joy" N. Djojo, YB0NSI

Japan - High Power

Katsuhiro Kondou, JE6RPM
Donor: Phil Yasson, AB7RW

Japan - Low Power

Hiroyuki Ueno, J11RXQ
Donor: Juan Muñoz, TG9AJR

Japan - Assisted

Hajime Hazuki, JR2GRX
Donor: Aki Nagi, JA5DQH

SINGLE OPERATOR, SINGLE BAND

World - 28 MHz

Ricardo Sawon, LU2DX
Donor: Joel Chalmers, KG6DX

World - 21 MHz

PX2A (Opr.: Alan Laure Santamaria, PY2LSM)
Donor: CWOps

World - 14 MHz

YW1K (Opr.: Julio Rivero, YV1KK)
Donor: North Jersey DX Assn. - W2JT Memorial

World - 7 MHz

KP2M (Opr.: Philip Allardice, KT3Y)
Donor: John Rodgers, WE3C

World - 3.5 MHz

OK6W (Opr.: Pavel Prihoda, OK1MU)
Donor: Fred Capossela, K6SSS

World - 1.8 MHz

Jeffrey T. Briggs, VY2ZM
Donor: Kenneth Byers, Jr., K4TEA

USA - 28 MHz

Jeff Stuparits, W4DD
Donor: John Rodgers, WE3C

USA - 21 MHz

NR5M (Opr.: Bill Bradford, Jr., K5GA)
Donor: Bob Naumann, W5OV

USA - 14 MHz

Karl Bretz, K9BGL
Donor: Northern Illinois DX Association

USA - 7 MHz

Dan Handa, W7WA
Donor: Gene Shablygin, W3UA

USA - 3.5 MHz

Michael Polom, NE8P
Donor: Bill Feidt, NG3K

USA - 1.8 MHz

Rick Niswander, K7GM
Donor: Jeff Briggs, K1ZM

Europe - 28 MHz

Zeljko Stanisic, YU7EE
Donor: Jay Pryor, K4OGG

Europe - 21 MHz

Vidyo Gospodinov, LZ9V
Donor: Bob Naumann, W5OV

Europe - 14 MHz

OH8X (Opr.: Pasi Luoma-Aho, OH6UM)
Donor: Maud Slater - G3FXB Memorial

Europe - 7 MHz

403A (Opr.: Dragan Djordjevic, 404A)
Donor: Ivo Pezer, 9A3A

Europe - 3.5 MHz

TM6X (Opr.: Dennis Andrews, F5VHY)*
Donor: Frankford Radio Club - K3VW Memorial

Year	# entities worked
2010	254
2011	252
2012	249
2013	257
2014	263
2015	248
2016	260
2017	201
2018	194
2019	198

Table 1. Number of DX entities that were worked in the CQWW CW contest by year.

being active for more than 47 of the 48 total hours in the contest. Now that is dedication (*some of you may have other ways to describe it!*). There were 166 entries that operated more than 40 hours.

The median operating commitment this year was a little over 14 hours, with the bulk of operators falling into the 5-10 hour operating time group (see *Table 2*). Simply put, the CQWW is a contest for everyone, whether you only have a few hours to put into the contest or your weekend is fully committed to operating.

What's Your Category?

It's always interesting to analyze the categories participants select in the CQWW (see *Table 3*). Again, the most popular

<p>Europe - 1.8 MHz Vladimir Gumennikov, UA2FF Donor: Pat Barkey, N9RV & Terry Zivney, N4TZ</p> <p>Asia - 14 MHz C4W (Opr.: Marios Nicolaou, 5B4WN) Donor: Ralph "Gator" Bowen, N5RZ - W5FO Memorial</p> <p>Asia - 7 MHz Vakhtang Mumladze, 4L8A Donor: Rich Gelber, K2WR</p> <p>Carib./C.A. (7 MHz) PJ5/SP6EQZ (Opr.: Wlodek Herej, SP6EQZ)* Donor: David Hodge, N6AN</p> <p>Canada (14 MHz) Noel Poulin, VE2FWW* Donor: John Sluymer, VE3EJ</p> <p>Japan - 21 MHz Akito Nagi, JA5DQH Donor: Bob Wilson, N6TV</p> <p>Japan - 14 MHz Yukihisa Yamashita, JA6LCJ Donor: Chris Terkla, N1XS</p> <p>OVERLAY CATEGORIES</p> <p>World - Classic P40C (Opr.: Alex Tkatch, KU1CW) Donor: CWops</p> <p>U.S.A. - Classic Doug Grant, K1DG Donor: CWops</p> <p>World - Rookie David Samu, VE7DZO Donor: CWops</p> <p>U.S.A. - Rookie W9JWC (Opr.: Connor Dickey, KD9LSV) Donor: CWops</p> <p>Europe - Rookie Maurizio Baiera, IU0KTT Donor: EA Contest Club</p> <p>Asia - Rookie Mahendra Kannavar, VU2ZMK Donor: Jon Kimball, KL2A - VU2PAI Memorial</p> <p>MULTI-OPERATOR, SINGLE TRANSMITTER</p> <p>World P33W (Oprs.: UA4FER, RW4WR, R4FO, RA2FA, LZ2HM, YO3JR, 4Z5LA, RA3AUU) Donor: Friends of Rich - KL7RA Memorial</p> <p>World - Low Power CR3X (Oprs.: CT3HF, R6KVA, R7KW, RW7K, VE3LA, UZ5DX) Donor: EA Contest Club</p> <p>U.S.A. K1LZ (Oprs.: K1LZ, K3JO) Donor: Douglas Zwiebel, KR2Q</p> <p>U.S.A. - Low Power NA5NN (Oprs.: K2FF, W5UE) Donor: CWops</p>	<p>Africa CR3DX (Oprs.: HA3NU, OM2VL, OM3BH, OM3GI, OM7LW) Donor: Harry Booklan, RA3AUU</p> <p>Asia RT0C (Oprs.: RW0CR, RW0CF, UA0CA, UA0CDX, UA0DM, R0CM, RN0C, RN0D)* Donor: Steve Merchant, K6AW</p> <p>Carib./C.A. VP5M (Oprs.: K4QPL, W2LK, K2SX, AC0W) Donor: CWOps</p> <p>Europe TK0C (Oprs.: S53CC, S53F, S53MM, S53RM, S53WW, S55OO, S57AL, S57C, S57L, S57VW) Donor: Gail Sheehan, K2RED</p> <p>Oceania AH2R (Oprs.: NH2C, JR7OMD/WI3O) Donor: Junichi Tanaka, JH4RHF</p> <p>South America PJ4A (Oprs.: KU8E, K4BAI, NE9U) Donor: Araucaria DX Group</p> <p>Canada VE3EJ (Oprs.: VE3EJ, VE3EK, VE3EY, VE3MM) Donor: John Sluymer, VE3EJ - VE3TA Memorial</p> <p>Japan JG6YLY (Oprs.: JA6BXA, JA6WFM, JR6IKD, JF6DEA) Donor: Madison Jones, W5MJ</p> <p>ASEAN (XZ, HS, XW, XU, 3W, 9M, 9V, V8, YB, DU) 7A2A (Oprs.: YB2DX, YB0ARJ, YB2LSR, YB5QZ, YB2TJV, YB1ALL, YC2XVT, YD1SDL) Donor: Bruce Frahm, K0BJ</p> <p>MULTI-OPERATOR, TWO TRANSMITTERS</p> <p>World PJ4K (Oprs.: WA3LRO, N3RD, GD4XUM, K9RS, W4PA, K1XX, W1MD) Donor: Array Solutions</p> <p>U.S.A. KC1XX (Oprs.: DL1MGB, K1CC, K1QX, KC1XX, KM3T, NN1C, W1FV, W1UE) Donor: Robert Kasca, S53R</p> <p>Europe 9A7A (Oprs.: 9A5X, 9A3TR, 9A2V, 9A3OS, 9A7V, 9A5M, 9A4EK, 9A6NA) Donor: D4C, Monteverde Contest Team</p> <p>ASEAN (XZ, HS, XW, XU, 3W, 9M, 9V, V8, YB, DU) HS0ZAR (Oprs.: E21E1C, DL3DXX, E20NKB, K3ZO, LA5YJ, G3AB, HS0ZDX, HS4RAY, HS0ZDY, HS3PJF, HS3XVP, K4ZW, LA7JO, 5B4AGN) Donor: Champ C. Muangamphun, E21E1C - Siam DX Group</p> <p>MULTI-OPERATOR, MULTI TRANSMITTER</p> <p>World EF8R (Oprs.: EA2OT, EA7RM, EA8RM, EW2A, R3GG, R6FFS, R6FGG, RA5A, RC5A, RO4F, RU3XY, UA5C) Donor: The K2GL Operators - K2GL Memorial</p> <p>U.S.A. W3LPL (Oprs.: N11N, KL2A, K3AJ, N3HEE, W3LPL, K3MM, N3OC, K3RA, W3UR, NN3W, WR3Z, KD4D, N4QQ, K4ZA, AD5XI) Donor: Ham Radio Outlet - W6RJ & N6RJ Memorial</p>	<p>Europe 9A1A (Oprs.: 9A5W, 9A9A, 9A6A, 9A7R, 9A5E, 9A8A, 9A3SMS, 9A2EU, 9A7DR) Donor: Finnish Amateur Radio League</p> <p>Africa CN3A (Oprs.: IK2QE1, OK1RI, I2WIJ, OK1NY, OK1JKT, OK1MM, OK1HGM, OM6NM, OK1FFU, CN8WK)* Donor: EA9EO Memorial</p> <p>Asia RM9A (Oprs.: RG9A, RZ8A, RA9AA, RC9A, RK9A, RL9A, RN9A, RO9A, R9CM, RA9AP, UC9A) Donor: Nodir Tursun-Zade, EY8MM</p> <p>CONTEST EXPEDITIONS</p> <p>World Single Operator Didier Cadot, FO/F6BCW Donor: Friends of Phil - N6ZZ memorial</p> <p>World Multi-Operator 3B8M (Oprs.: G0CKV, K1ZZ, KX7M, N6AA, N6V1, W6XD) Donor: CWOps</p> <p>SPECIAL AWARDS</p> <p>World SSB/CW Combined 8P5A (Opr.: Tom Georgens, W2SC) 24,114,163 Donor: Hrane Milosevic, YT1AD</p> <p>USA SSB/CW Combined Kevin Stockton, N5DX 13,668,614 Donor: Bob Shohet, KQ2M</p> <p>Triathlon Award - World RTTY/SSB/CW Combined Andrius Ignotas, LY7Z 10,866,656 Donor: DX Lodge Roatan (HQ9X)</p> <p>Triathlon Award - Europe RTTY/SSB/CW Combined UV5U (Opr.: Sergei Litvinov, UX1UA)* 4,328,035 Donor: Bavarian Contest Club - DJ4PT Memorial</p> <p>World Combined SSB/CW Score 160 Meters VY2ZM (Opr.: Jeff Briggs, K1ZM) 743,659 Donor: Team IB9T/IR9Y - IT9ZGY Memorial</p> <p>World Combined SSB/CW Score - Multi-Operator Multi-Transmitter LZ9W (Oprs.: IZ2GRG, LZ1ANA, LZ1BJ, LZ1FG, LZ1PJ, LZ1PM, LZ1UQ, LZ1VS, LZ1ZD, LZ2CJ, LZ2HQ, LZ2UU, LZ2YO, LZ3FM, LZ3RR, LZ3UP, LZ4AE) 32,021,295 Donor: Friends and Family of Gene - N2AA Memorial</p> <p>CLUB</p> <p>USA SSB/CW Frankford Radio Club 314,674,589 Donor: Northern California Contest Club</p> <p>DX SSB/CW Bavarian Contest Club 261,326,851 Donor: John Rodgers, WE3C</p>
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*Second place



Amazing 7-element wire array on 160 meters at UK9AA.

SOAB entries only

Op time (hours)	# entries	% of all
0-5	704	14.84%
5.1-10	966	20.36%
10.1-15	862	18.17%
15.1-20	679	14.31%
20.1-25	548	11.55%
25.1-30	389	8.20%
30.1-35	254	5.35%
35.1-40	176	3.71%
40.1-45	109	2.30%
up to 46	23	0.48%
up to 47	6	0.13%
up to 48	28	0.59%
All	4,744	
Median: 14.05 hours		

Single operators who invested more than 47 hours of operating time:
 8P5A, 9A3XV, D4C, HI3CC, IR2C, J42L, JH4UYB, LY7Z, N5DX, NO6T, OM5WW, OR2F, R2AA, RM9I, S52CO, SW9AA, TI7W, UB7K, UR6EA, UT5C, UW2M, UZ3A, V47T, W1KM, YO4RDW, ZF1A, ZF9CW, ZW5B

Table 2. Single-op operating time analysis.

2019 CQWDX 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
D4C	365/20/69	1376/27/90	2174/34/112	2493/35/128	2608/31/118	261/18/61
TI7W	469/18/63	1827/28/99	3152/37/122	3128/35/126	2254/30/107	394/14/17
ZF1A	499/15/61	2118/29/102	2834/33/122	2892/32/112	1654/25/98	54/14/16
8P5A	471/17/59	1279/24/93	1973/32/103	2426/32/115	1966/27/107	405/16/25
V47T	360/15/59	910/17/77	2707/35/118	2363/31/102	2036/27/108	183/12/16

WORLD SINGLE OPERATOR ASSISTED ALL BAND

P40W	287/16/70	1188/27/101	1357/34/124	2032/33/128	1204/29/105	376/14/23
ZW5B	77/15/30	383/24/74	1069/36/105	1400/32/101	2315/31/119	483/16/53
ZF9CW	298/21/88	887/32/113	1244/37/140	1811/35/139	803/27/90	32/11/13
4X6FR	0/0/0	445/19/80	2006/34/131	1654/38/129	816/32/98	6/5/6
K5ZD	265/17/76	652/27/100	961/34/133	1677/34/145	198/24/87	36/11/25

WORLD MULTI-OPERATOR SINGLE TRANSMITTER

P33W	538/27/101	1481/37/132	2808/38/150	3118/39/158	1199/34/141	63/12/38
CR3DX	266/19/87	1346/33/120	2958/39/153	2215/39/153	2377/36/138	53/16/36
PJ4A	346/17/76	1083/29/111	1998/38/143	2222/35/130	1488/27/114	378/17/28
TK0C	694/24/94	1514/35/129	2760/39/153	3242/39/157	1158/34/135	102/10/32
LZ5R	172/25/89	1539/34/124	2806/39/152	3154/39/152	763/34/134	81/15/43

WORLD MULTI-OPERATOR TWO TRANSMITTER

PJ4K	668/26/94	1500/30/115	3776/39/154	3702/36/151	2750/30/122	326/16/24
6V7A	144/16/52	1014/26/99	2068/35/123	2844/36/139	2049/31/127	354/16/54
PZ5W	293/18/51	1434/24/93	1965/35/117	3322/34/130	1817/25/104	314/17/38
9A7A	432/23/87	1783/35/124	2976/39/152	2514/38/152	718/33/131	48/11/44
KC1XX	295/27/95	1457/34/122	1655/38/154	2180/35/147	553/25/108	49/14/30

WORLD MULTI-OPERATOR MULTI-TRANSMITTER

EF8R	1577/26/101	3006/35/134	4487/39/159	4316/39/166	3375/38/149	345/24/74
CN3A	1388/22/94	2797/34/131	4108/39/152	2877/38/150	2724/34/141	161/17/53
PJ2T	557/19/63	2185/32/114	3533/37/142	3481/36/140	2609/30/125	509/17/37
CR3W	1185/19/82	2439/34/124	3322/39/150	2521/39/154	2138/34/128	75/12/34
9A1A	1676/28/111	2395/35/125	3730/39/159	2785/39/158	1240/35/138	189/11/54

USA TOP SINGLE OPERATOR ALL BAND

Station	160	80	40	20	15	10
N5DZ	281/19/75	970/25/100	1232/31/120	1795/33/125	251/22/76	41/11/24
N2IC	225/14/68	753/22/93	1293/31/109	1612/26/113	247/19/78	26/9/19
W1KM	325/19/71	1009/24/93	915/27/99	1668/28/105	239/20/76	29/11/20
KQ2M	190/14/65	508/23/88	770/31/107	1726/32/124	194/22/74	27/11/17
AA1K	199/18/67	530/23/84	880/26/97	1529/27/107	261/22/76	24/9/14

USA SINGLE OPERATOR ASSISTED ALL BAND

K5ZD	265/17/76	652/27/100	961/34/133	1677/34/145	198/24/87	36/11/25
K3WWW	120/18/82	622/27/109	999/31/128	1550/31/132	215/24/90	42/14/29
N3RS	100/18/78	330/30/115	667/35/133	1207/34/135	330/25/98	36/13/24
KV2K	95/23/87	345/30/116	597/38/146	874/35/143	266/25/101	18/10/17
NY3A	113/17/72	381/25/99	445/30/120	1266/31/137	167/24/90	42/14/31

USA MULTI-OPERATOR SINGLE TRANSMITTER

K1LZ	393/24/100	928/31/115	1381/36/141	1482/33/141	240/24/99	21/10/20
W3UA	235/16/76	870/26/107	1401/37/142	1912/33/144	197/24/91	38/12/23
N4WWW	100/18/80	640/31/118	1381/39/158	1539/37/155	374/27/104	37/13/24
W2FU	114/19/84	879/30/117	1071/37/139	1875/34/144	150/24/91	28/12/27
K8AZ	148/19/80	518/28/110	904/37/137	1503/32/140	202/24/86	29/14/24

USA MULTI-OPERATOR TWO TRANSMITTER

KC1XX	295/27/95	1457/34/122	1655/38/154	2180/35/147	553/25/108	49/14/30
K9CT	186/24/83	617/32/116	1222/38/148	1603/37/156	382/25/99	49/12/25
K2LE	259/16/79	687/28/107	891/36/134	1599/31/138	274/24/91	40/11/22
K2AX	216/16/76	525/24/104	720/31/126	1369/31/140	346/24/96	62/14/28
K4TCG	92/16/49	395/26/92	853/39/135	1107/35/131	477/26/96	40/14/23

USA MULTI-OPERATOR MULTI-TRANSMITTER

W3LPL	672/27/100	1732/36/124	2068/36/150	2494/36/150	974/27/122	121/16/33
K3LR	486/27/100	1502/34/122	2113/39/159	2465/39/161	649/27/106	136/17/41
NR4M	401/23/92	908/25/112	1797/38/145	2118/34/142	779/25/106	120/17/33
K1TTT	332/20/87	935/28/116	1268/33/133	1632/33/129	386/25/96	127/14/37
K1KI	186/17/71	448/25/103	948/34/133	1181/33/135	284/24/88	17/9/11

Category	AF	AS	EU	NA	OC	SA	All	% by Cat
SOAB High (A)	7	132	569	596	16	21	1341	24.5%
SOAB High (U)	4	115	274	273	25	10	701	12.8%
SOAB Low (A)	4	122	529	311	9	30	1005	18.4%
SOAB Low (U)	14	240	826	369	25	22	1496	27.3%
SOAB QRP (A)	0	7	37	12	2	1	59	1.1%
SOAB QRP (U)	0	15	96	27	2	2	142	2.6%
Checklog	2	46	294	38	1	8	389	7.1%
Multi-2	1	5	24	25	4	3	62	1.1%
Multi-Multi	4	6	12	10	1	2	35	0.6%
Multi-Single High	2	21	97	49	7	4	180	3.3%
Multi-Single Low	3	12	35	7	4	0	61	1.1%
Total	41	721	2793	1717	96	103	5471	100.0%
% by Cont.	0.7%	13.2%	51.1%	31.4%	1.8%	1.9%	100.0%	

Table 3. Single Operator, All Band / Multi-Op entry category totals by continent.

this year was the Single Operator, Unassisted, Low Power group, capturing over 27% of the total submitted all band logs. However, the high power assisted group was right behind at 24.5%. Also of note is the fact that Europe continues to dominate the number of all-band log submissions, with over 1,700 all-band entries alone.

Impressive Accuracy Recognized

At the end of the day, accuracy is what really matters in contesting. The absence of correct callsigns and exchanges diminish what we define as valid QSOs. And, frankly, as committee members, we see a wide range of accuracy ranging

from golden logs (no detected errors) such as that submitted by Yoshihiro, JK2VOC, with 705 perfect QSOs, to really sloppy entries. There are indeed some real superstars out there such as V55A's log with only a 0.8% error rate out of 5,400 QSOs (See Table 4). Many operators have developed rep-

TOP 10 Accuracy (SOAB Unassisted entries only)				
Call	Cont	Cat	Reduction %	Raw Q
JK2VOC	AS	ALL_L_U	0.0%	705
K1HT	NA	ALL_L_U	0.5%	696
DL3NAA	EU	ALL_Q_U	0.6%	678
JA1IAZ	AS	ALL_H_U	0.7%	530
OH4TY	EU	ALL_L_U	0.8%	549
YL3GQ	EU	ALL_L_U	0.8%	620
W7YAQ	NA	ALL_H_U	0.8%	665
V55A	AF	ALL_H_U	0.8%	5400
KR2Q	NA	ALL_Q_U	0.9%	747
LZØM	EU	ALL_L_U	1.0%	1925

Table 4. Single operator accuracy leaders with more than 500 logged QSOs.

TOP SCORES IN VERY ACTIVE ZONES	
Zone 3	Zone 15
NO6T (K16RRN @WA6TQT).....4,133,628	ISØSWW (OM3RM).....5,439,240
K6XX.....2,690,748	LY7Z.....4,963,716
K6NA.....2,255,475	S57K.....4,094,040
W6YX (N7MH).....2,233,011	HA8A (HA8DZ).....3,016,865
VE7JH.....1,637,230	OM7RU.....2,547,125
Zone 4	Zone 16
VE3JM.....5,640,440	UW2M (URØMC).....6,935,438
XL3A (VE3AT).....5,565,120	R2AA.....6,839,646
W9RE.....4,200,748	UB7K.....5,753,349
K5GN.....4,067,058	R3XA.....2,742,011
WXØB (AD5Q).....3,732,582	RM2U (RU3UR).....1,458,864
Zone 5	Zone 20
VY2TT (K6LA).....8,453,495	YP8T (YO8TTT).....4,708,560
N5DX (@N2QV).....8,318,024	*SW9AA (LZ3FN).....3,499,280
N2IC (@K1ZZ).....7,062,952	YO9HP.....2,327,526
W1KM.....7,021,120	LZ6E.....1,557,528
KQ2M.....5,654,400	*LZØM (LZ2SX).....1,272,460
Zone 14	Zone 25
CR5E (CT1ILT).....8,827,785	JE6RPM (JH5GHM).....4,247,304
DJ5MW.....6,012,330	JH4UYB.....3,731,556
DL5AXX.....5,070,627	*J11RXQ.....1,247,668
EA3DU.....3,849,582	*JA1BJI.....1,229,796
*MU2K (RL5D).....3,843,628	*JH1EAQ.....982,916

*Low Power

EUROPE TOP SINGLE OPERATOR ALL BAND						
Station	160	80	40	20	15	10
CR5E	472/16/63	1211/25/84	1882/30/103	2218/34/107	1324/30/104	72/12/31
UW2M	380/21/74	1267/30/107	1991/35/129	1352/36/126	364/30/99	35/5/17
R2AA	439/17/75	899/31/113	2154/35/131	1688/36/130	322/31/107	25/4/16
DJ5MW	281/11/54	927/23/84	1686/33/123	1700/34/107	304/33/100	44/9/31
UB7K	329/19/66	825/31/100	1648/31/114	1870/36/114	504/32/103	13/3/8
EUROPE SINGLE OPERATOR ASSISTED ALL BAND						
9A5Y	347/24/91	675/34/121	1563/39/146	1460/38/147	372/33/126	47/10/34
IR2C	267/20/81	746/31/110	1427/38/146	1614/37/146	327/33/117	42/9/25
SN7Q	231/16/68	1222/32/116	1303/34/134	1563/35/128	293/32/107	38/8/25
9A3XV	220/19/70	652/30/104	1491/39/141	1609/39/143	268/32/113	42/10/35
S53M	283/19/72	786/26/98	1222/38/128	1384/37/137	364/33/102	65/10/36
EUROPE MULTI-OPERATOR SINGLE TRANSMITTER						
TKØC	694/24/94	1514/35/129	2760/39/153	3242/39/157	1158/34/135	102/10/32
LZ5R	172/25/89	1539/34/124	2806/39/152	3154/39/152	763/34/134	81/15/43
IR4X	168/25/95	1124/34/126	2344/39/153	2812/38/154	673/34/136	44/13/44
TM6M	413/23/96	1075/33/121	2333/39/151	2509/37/157	828/33/133	37/13/37
IR4M	161/25/92	891/37/133	2655/39/154	2733/37/156	448/34/133	44/12/44
EUROPE MULTI-OPERATOR TWO TRANSMITTER						
9A7A	432/23/87	1783/35/124	2976/39/152	2514/38/152	718/33/131	48/11/44
LX7I	760/20/88	2035/34/124	2864/38/151	2176/37/150	736/32/128	71/11/37
HG7T	559/22/89	1772/35/128	2620/38/149	1433/38/149	503/33/125	71/10/37
ED1R	458/20/82	1460/26/102	2462/36/131	2160/38/136	1311/33/116	75/8/21
SK3W	890/24/96	1844/34/126	1832/38/146	1602/39/155	215/31/108	38/5/23
EUROPE MULTI-OPERATOR MULTI-TRANSMITTER						
9A1A	1676/28/111	2395/35/125	3730/39/159	2785/39/158	1240/35/138	189/11/54
LZ9W	1518/21/88	2518/38/139	3756/39/149	2775/39/154	1268/35/139	195/14/48
YT5A	1282/24/90	2150/32/124	3652/39/156	2646/38/152	924/34/133	171/12/42
M6T	1135/20/86	2506/34/125	3131/39/158	2286/37/157	797/32/130	276/14/59
DFØHQ	1247/21/91	2316/35/127	3145/38/154	2020/38/157	687/33/139	203/13/50

utations over the years for outstanding accuracy, a trait we should all want on our contest resumes.

Taking a Look at Activity by Band

It is interesting to see where the activity really takes place in the CQWW contest. In many ways, there are no huge surprises (See *Table 5*). High bands drop with reduced conditions; overall totals follow as well. But it was encouraging to

see that even at the bottom of the cycle, there were still nearly 50K QSOs made on 10 meters while activity continued to rise on to record levels 160 meters.

What Logging Software Do You Use?

The use of computer logging software has been with us since Ken Wolff, K1EA, released his first edition of CT in 1985. Often personally possessing luddite characteristics, I remem-

Year	160	80	40	20	15	10	Total (in millions)
2019	0.296	0.832	1.325	1.494	0.447	0.460	4.441
2018	0.290	0.790	1.382	1.484	0.402	0.016	4.366
2017	0.265	0.800	1.289	1.300	0.673	0.048	4.375
2016	0.257	0.746	1.175	1.247	0.672	0.078	4.175
2015	0.190	0.681	1.276	1.197	1.263	0.421	5.027
2014	0.180	0.557	1.104	1.090	1.268	1.399	5.598
2013	0.172	0.575	1.121	1.019	1.218	1.165	5.270
2012	0.193	0.601	1.016	1.058	1.193	0.852	4.913
2011	0.177	0.554	1.108	0.924	1.051	1.286	5.100
2010	0.246	0.744	1.181	1.147	0.905	0.169	4.392

Table 5. Approximate CQWW CW number of total QSOs (in millions per band by year).

CLUB SCORES

UNITED STATES

Club	# Entrants	Score
FRANKFORD RADIO CLUB	251	314,674,589
YANKEE CLIPPER CONTEST CLUB	246	269,521,930
POTOMAC VALLEY RADIO CLUB	262	158,847,507
NORTHERN CALIFORNIA CONTEST CLUB	86	78,324,748
ARIZONA OUTLAWS CONTEST CLUB	82	66,631,135
FLORIDA CONTEST GROUP	91	60,086,699
SOUTHERN CALIFORNIA CONTEST CLUB	62	53,487,355
SOCIETY OF MIDWEST CONTESTERS	124	47,751,772
MINNESOTA WIRELESS ASSN	107	38,275,416
NORTH COAST CONTESTERS	23	35,183,263
TENNESSEE CONTEST GROUP	47	23,698,524
CENTRAL TEXAS DX AND CONTEST CLUB	30	19,470,900
SOUTH EAST CONTEST CLUB	38	18,999,582
ALABAMA CONTEST GROUP	35	14,849,261
GEORGIA CONTEST GROUP	15	13,721,584
DFW CONTEST GROUP	45	13,574,978
CAROLINA DX ASSOCIATION	40	12,324,869
THE VILLAGES AMATEUR RADIO CLUB	5	11,667,478
MAD RIVER RADIO CLUB	32	10,868,900
WILLAMETTE VALLEY DX CLUB	44	10,088,416
GRAND MESA CONTESTERS OF COLORADO	33	9,901,735
WESTERN WASHINGTON DX CLUB	50	7,717,651
HUDSON VALLEY CONTESTERS AND DXERS	27	7,537,406
NIAGARA FRONTIER RADIOSPORT	20	6,921,833
NE MARYLAND AMATEUR RADIO CONTEST SOCIETY	20	6,676,038
KENTUCKY CONTEST GROUP	16	6,339,159
TEXAS DX SOCIETY	16	6,029,622
NORTHEAST WISCONSIN DX ASSN	9	5,595,812
KANSAS CITY CONTEST CLUB	18	5,435,625
DEEP DIXIE CONTEST CLUB	12	4,802,126
LOUISIANA CONTEST CLUB	5	4,295,611
SWAMP FOX CONTEST GROUP	15	3,867,615
NORTH TEXAS CONTEST CLUB	9	3,764,990
NORTH CAROLINA DX AND CONTEST CLUB	8	3,328,502
BIG SKY CONTESTERS	8	3,258,637
BAY AREA DXERS	9	2,765,457
599 DX ASSOCIATION	7	2,482,298
BRISTOL (TN/VA) ARC	11	2,052,724
CTRI CONTEST GROUP	11	1,791,278
ROCHESTER (NY) DX ASSN	14	1,767,948
SPOKANE DX ASSOCIATION	19	985,238
METRO DX CLUB	10	972,409
SILVER COMET AMATEUR RADIO SOCIETY	7	798,196
MERIDEN ARC	5	770,086
GREAT SOUTHERN DX ASSOCIATION	4	694,783
CENTRAL VIRGINIA CONTEST CLUB	4	658,841
FORT WAYNE RADIO CLUB	4	634,039
SOUTH JERSEY RADIO ASSOCIATION	6	507,078
NEW PROVIDENCE ARC	9	506,748
REDWOOD EMPIRE DX ASSOCIATION	4	475,408
BERGEN ARA	6	469,691
MISSISSIPPI VALLEY DX/CONTEST CLUB	7	469,565
HILLTOP TRANSMITTING ASSN	7	426,484
NORTHERN ARIZONA DX ASSN	5	362,068
MOTHER LODE DX/CONTEST CLUB	12	347,846
IDAHO DX ASSOCIATION	8	321,397
VIENNA WIRELESS SOCIETY	4	277,156
SHENANDOAH VALLEY WIRELESS	4	245,273
ORDER OF BOILED OWLS OF NEW YORK	4	238,410
SKYVIEW RADIO SOCIETY	6	226,939

Club	# Entrants	Score
MILFORD OHIO AMATEUR RADIO CLUB	4	97,492
UTAH DX ASSOCIATION	9	97,367
SOUTHWEST OHIO DX ASSOCIATION	4	86,780
RADIO CLUB OF REDMOND	4	63,158
STERLING PARK AMATEUR RADIO CLUB	4	6,444

DX

Club	# Entrants	Score
BAVARIAN CONTEST CLUB	293	261,326,851
RUSSIAN CONTEST CLUB	111	138,086,060
EA CONTEST CLUB	77	123,437,491
ITALIAN CONTEST CLUB	102	109,092,238
RHEIN RUHR DX ASSOCIATION	174	105,663,941
CONTEST CLUB ONTARIO	87	81,624,397
CLIPPERTON DX CLUB	40	73,382,547
CROATIAN CONTEST CLUB	49	70,897,678
ARAUCARIA DX GROUP	56	70,584,098
UKRAINIAN CONTEST CLUB	185	65,827,482
HA-DX-CLUB	73	50,796,523
CONTEST CLUB FINLAND	75	46,586,521
CONTEST CLUB SERBIA	55	44,147,703
SLOVENIA CONTEST CLUB	47	42,014,006
KAUNAS UNIVERSITY OF TECHNOLOGY RADIO CLUB	69	36,332,572
BELOKRANJEC CONTEST CLUB	15	35,485,876
LU CONTEST GROUP	46	32,213,030
URAL CONTEST GROUP	35	26,229,148
SP DX CLUB	97	23,778,499
WORLD WIDE YOUNG CONTESTERS	15	22,855,997
CENTRAL SIBERIA DX CLUB	6	22,370,621
BELARUS CONTEST CLUB	33	21,049,399
SOUTH URAL CONTEST CLUB	15	20,735,455
CHILTERN DX CLUB	28	19,902,757
VK CONTEST CLUB	27	17,247,618
RIO DX GROUP	41	17,041,660
LA CONTEST CLUB	8	14,628,771
CONTEST GROUP DU QUEBEC	15	13,613,361
MARITIME CONTEST CLUB	14	11,815,745
VYTAUTAS MAGNUS UNIVERSITY RADIO CLUB	23	11,211,541
ORCA DX AND CONTEST CLUB	39	9,088,650
ARIPA DX TEAM	6	9,078,294
LATVIAN CONTEST CLUB	36	8,456,176
RUSSIAN CW CLUB	50	7,593,818
CE CONTEST GROUP	7	6,768,427
THRACIAN ROSE CLUB	68	6,278,685
RSGB CONTEST CLUB	7	6,210,219
SIAM DX GROUP	12	5,964,880
CROWS CONTEST TEAM	6	5,851,980
ARABIAN GULF DX GROUP	6	5,596,248
CATALONIA CONTEST CLUB	14	5,477,493
599 CONTEST CLUB	10	5,322,732
BOSNIA AND HERZEGOVINA CONTEST CLUB	9	5,170,389
DANISH DX GROUP	31	5,059,442
LITHUANIAN CONTEST GROUP	10	4,961,982
RIIHIMAEN KOLMOSET	7	4,877,380
CSA STEAUJA BUCURESTI	5	4,535,699
ARCK	23	4,217,129
WEST SERBIA CONTEST CLUB	12	4,178,233
S59ACP	4	4,056,061
CSTA SUCEAVA	7	3,640,667
ASSOCIACAO DOS RADIOAMADORES DO PARANA	5	3,635,276
THAILAND DX ASSOCIATION	10	3,520,144
GMDX GROUP	13	3,460,022
THREE A'S CONTEST GROUP	6	3,282,850

ber thinking that this technology will never take off; how can we possibly type at high QSOs rates? Boy was I wrong (yet again!). Well, take off it did with adoption of N1MM's amazing logging program as the current leader (See *Table 6*).

But some habits are hard to break. We noted that there were still 24 users of CT DOS, 17 users of TR Log and even six users of NA in the 2019 contest. Hard to believe, but it's true.

Logging	AF	AS	EU	NA	OC	SA	Grand Total
N1MM	24	388	1776	1397	121	177	3,883
Win-Test	17	34	382	50	5	13	501
TR4W	2	84	362	14	3	2	467
CTESTWIN (J11AQY)	0	348	1	0	3		352
UcxLog	1	4	320	1	2	0	328
N3FJP	0	1	4	264	3	0	272
5MContest	1	41	165	1	0	3	211
WriteLog	0	13	35	137	5	1	191
QARTest	2	2	180	0	0	3	187
CQWW Adif2CabilloConverter	4	17	106	47	5	3	182
none listed	1	58	87	22	3	1	172
DXLog.net	3	16	113	7	2	4	145
AAATest		24	93	1	0	0	118
MixW	1	8	93	2	1	0	105

Table 6. Logging software usage in 2019 CQWW CW Contest.

Club	# Entrants	Score	Club	# Entrants	Score
GIPANIS CONTEST GROUP	14	3,278,900	NOVOKUZNETSK RADIO CLUB	12	457,825
ALRS ST PETERSBURG	13	3,275,250	OK QRP KLUB	4	456,855
GRIMSBY AMATEUR RADIO SOCIETY	6	3,252,346	RUSSIAN DIGITAL RADIO CLUB	4	448,121
SHAKHAN CONTEST CLUB	8	3,207,166	NEWBURY AND DISTRICT ARS	6	441,039
IRKUTSK RADIO CLUB	9	3,091,382	TORBAY ARS	8	439,694
INTEREST GROUP RTTY	8	2,982,941	GERMAN DX FOUNDATION	7	428,922
TERESINA DX GROUP	4	2,786,454	CSM CRAIOVA	7	423,966
UA2 CONTEST CLUB	13	2,731,841	TERENGGANU DX TEAM	4	417,342
VU CONTEST GROUP	16	2,631,304	KRIVBASS	8	416,551
TARTU CONTEST TEAM	5	2,618,702	SK5AA VASTERAS RADIOKLUBB	12	404,069
VERON A63 FRIESE WOUDE	4	2,526,586	DISCOLO DX GROUP	5	398,206
VRHNIKA CONTESTERS	5	2,425,508	YYP CLUB	6	371,069
CZECH CONTEST CLUB	4	2,425,374	LA-DX-GROUP	8	361,635
ARKTIKA	11	2,387,260	CS SILVER FOX DEVA	5	360,040
YB LAND DX CLUB	93	2,383,780	TALL TREES CONTEST GROUP	10	355,656
NORFOLK AMATEUR RADIO CLUB	10	2,370,753	NATIONAL CHILDREN'S PALACE	9	349,345
SKOQO SODERTORNS RADIOAMATORER	5	2,191,125	GRUPO TORTUGASCW	11	328,527
IVANOVO DX CLUB	5	2,001,965	SHARP HAM CLUB	6	314,555
UNION FRANCAISE DES TELEGRAPHISTES	8	1,907,696	SK5DB UPPSALA RADIOKLUBB	6	306,846
RADIOCLUBUL RADU BRATU	4	1,876,527	OMSK RADIO CLUB	5	298,355
KEYMEN'S CLUB OF JAPAN	35	1,869,350	UR-QRP-CLUB	8	292,865
SASKATCHEWAN CONTEST CLUB	4	1,849,010	CABREUVADX	29	288,660
TRAC IZMIR	8	1,710,434	YB7 BALIKPAPAN DX CONTESTER	5	270,614
VERON TWENTE	4	1,691,477	SPEKTR	5	263,288
UNIO DE RADIOAFECIONATS DEL VALLES ORIENTAL	5	1,643,445	GPDY-PORTUGUESE DX GROUP	4	253,722
ESSEX CW AMATEUR RADIO CLUB	5	1,626,980	RADIO CLUB KVARNER RIJEKA	8	249,886
VLADIMIR CONTEST GROUP	12	1,553,936	KINGS LYNN AMATEUR RADIO CLUB	4	241,016
SK6QA STENUNGSUND AMATEUR RADIO CLUB	6	1,548,489	CMDXGROUP	8	238,999
MEDITERRANEO DX CLUB	9	1,526,465	YOKOHAMA DX CLUB	4	216,230
SHARKS DX TEAM	8	1,517,414	CHILEAN PACIFIC DX GROUP	6	215,922
SKY CONTEST CLUB	5	1,514,731	CRIMEAN CONTEST CLUB	4	214,349
RADIOSPORT MANITOBA	4	1,494,894	SCAN INTERNATIONAL	7	212,573
CSU PITESTI	7	1,367,487	SWINDON AND DISTRICT AMATEUR RADIO CLUB	6	192,089
VERON A03 AMERSFOORT	5	1,258,985	SHEFFIELD & AMP; DISTRICT WIRELESS SOCIETY	4	186,928
CDR GROUP	43	1,219,146	GRUPO DXXE	8	171,580
CWOPS	4	1,191,701	ADMIRA ARAD	4	141,317
LKK LVIV SHORTWAVE CLUB	9	1,169,515	LEICESTER RADIO SOCIETY	6	127,319
ANTWERP CONTEST CLUB	4	1,108,470	KILMARNOCK AND LOUDOUN ARC	7	113,924
ONE PARTNER DX CLUB	4	1,093,579	SK6EI SKOVDE AMATORRADIOKLUBB	4	111,172
SOUTHERN OSAKA CONTEST CLUB	13	1,078,272	PYRAMID RADIO SOCIETY	5	101,653
WEST LITHUANIA RADIO CLUB SVYTURYS	7	1,037,053	LZ1KAA	4	91,441
DONBASS CONTEST CLUB	7	944,789	NORTH EAST RADIO GROUP	7	85,565
FUCHU AMATEUR RADIO CLUB	7	933,643	UNIVERSITY OF TOKYO CONTEST CLUB	7	80,461
SP-CW-C	4	927,044	VERON A26 HOOGEVEEN	4	73,606
GUARA DX GROUP	22	835,013	POLDHU AMATEUR RADIO CLUB	4	69,933
YB6_DX COMMUNITY	15	788,278	ROYAL	7	69,824
HAM SOCIETY OF THE PHILIPPINES DX3H	4	752,237	SK2AT FORENINGEN UMEA RADIOAMATORER	5	69,607
PEMBROKESHIRE CONTEST GROUP	7	744,198	EDIT14	4	55,084
RADIO CLUB VENEZOLANO CARACAS	10	689,298	PETERBOROUGH AMATEUR RADIO CLUB	4	53,490
SK6AW HISINGENS RADIOKLUBB	8	681,981	ORARI LOKAL KEDIRI	17	52,946
YO DX CLUB	18	672,522	SINGLE FIGHTER DX GROUP	8	48,591
CS PETROLUL PLOIESTI	6	640,778	ORARI LOKAL BOGOR	8	45,797
RU-QRP CLUB	19	639,293	CSM TIMISOARA	5	44,438
BLACK SEA CONTEST CLUB	4	618,975	SFDXG	4	31,252
BANDUNG CONTEST CLUB	4	618,481	SAYAN DX CLUB	4	28,166
SAMARA RADIO CLUB	5	612,323	WEST BORNEO DX CLUB	8	27,792
FURNESS ARS	4	604,753	CWJF GROUP	4	24,429
FIRST CLASS CW OPERATORS CLUB	5	569,892	WATERLAND	4	23,343
VOLYN CONTEST GROUP	5	543,416	PHILIPPINE AMATEUR RADIO LEAGUE	7	22,643
OBNSK QRU CLUB	8	519,042	ORARI LOKAL KOTA JAYAPURA	10	12,911
THE AKITA DX ASSOCIATION	6	480,946	RADIO CLUB	5	97,290
SP5MASR	5	465,988			
599 DX GROUP	8	461,690			
RADIO CLUB VENEZOLANO	7	460,343			

Rate tables for 2019 CQWW CW Contest

EF8R	698	T17W (KL9A)	402
LZ9W	577	ZF1A (N6MJ)	391
PJ2T	555	HI3CC (N4YDU)	355
CN3A	528	V47T (N2NT)	321
9A1A	501	CR5E (CT1ILT)	300
YT5A	493	V26K (AA3B)	299
W3LPL	464	8P5A (W2SC)	292
CR3W	446	D4C (CT1BOH)	292
PJ4K	446	KP3DX (NP4Z)	285
RM9A	442	P40W (W2GD)	273

Table 7A. Top hourly rates Multi-Operator stations.

Table 7B. Top hourly rates for Single-Operator stations.



Aloha from the two-man team at WH7M, which was comprised of (from l. to r.) K1RU and K1YR.

Working Them Really Fast

One of the most common metrics we like to use to measure contest success is our run rate or number of QSOs made in one hour. Back in the good old days, the golden standard was to work 100 stations in an hour. Of course, times have changed with the advent of SO2R (Single Operator, two radios) operating configurations. And, in just the recent past, a new technique has emerged: 2BSIQ (Two Bands, Synchronized Interleaved QSOs), by which stations are being “run” on two bands at the same time while only transmitting on one band at any point. Now, run rates of up to 10 QSOs in one minute are possible by single-operator stations. A few ops have really mastered this technique, including CT1BOH, N6MJ, KL9A and others. If you’re interested in learning more, there is a great presentation developed by Jose, CT1BOH, which can be found at: <<https://tinyurl.com/sa2xl8p>>.

Keep in mind (as if you need a reminder) that although we are at the bottom of the sunspot cycle, peak single op rates are now floating around 400 QSOs/hour and multi-ops logging nearly 700 (See *Tables 7A/7B*). By the way, I’m told that the 2003 HC8N operation achieved a single hour run rate of 889. Is 1,000 possible when the spots come back?

An Observation

There is a growing concern in both contest and DX circles regarding the use of remote RX / TX technology. The issue is worthy of mention. In recent years, access to remote receiver sites has grown dramatically, and the ability to integrate this capability into well-appointed contest stations has never been easier. The simplest direction I can give everyone is: *Don’t do it — period*. The rules are clear: IX.6 – GENERAL RULES FOR ALL ENTRANTS:

Remote receivers outside of the station location are not permitted. The CQWW Contest Committee will continue to grow our investments used to detect this type of rule-breaking (including TX abuse as well) and take appropriate action. Be advised!

Closing Comments

Finally, the incredible CQWW committee members have done it again this year, giving of their time and talents to produce the results you are reading this month. Each of them is an amazing contributor to our sport and include: CT1BOH, José Nunes; EA4KD, Pedro Vadillo; ES5TV, Tonno Vahk; F6BEE, Jacques Saget; GØMTN, Lee Volante; HA1AG, Zoli Pitman; IK2QEI, Stefano Brioschi; JH5GHM, Katsuhiko (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 Iglund; LU5DX, Martin Monsalvo; N8BJQ, Steve Bolia; OH6LI, Jukka Klemola; PA3AAV, Gert Meinen; RA3AUU, Igor (Harry) Booklan; S5ØA, Tine Brajnik; S5ØXX, Kristjan Kodermac; UA9CDC, Igor Sokolov; VE3EJ, John Sluymmer; VK2IA, Bernd Laenger; YO3JR, Andrei (Andy) Ruse; YU1EW, Zoran Mladenovic. My thanks and respect go out to each of you!

Thanks to all of you who participated in the 2019 CQWW CW Contest. This contest is not a success because of the organizers, *CQ* magazine, or our comprehensive website. It’s become the gold standard for contests because of the tens of thousands of participants who make it special each and every year!

I’ll be looking forward to hearing you later this fall: SSB on October 24th, 25th and CW on November 28th, 29th in 2020!

— 73, John, K1AR

(Scores on page 96)

Operating in Paradise from WH6M by Gene Frohman, K1RU

Lou, K1YR, and I reunited for the 2019 CQWW CW contest to activate WH7M in Volcano, Hawaii. Back in the day, Lou and I would run our minor league Multi-Single station to see how close we could come to the real competition. Lou was my Elmer, who introduced me to radio when I was 12 years old, so suffice it to say we go “way back.” It was time for another Multi-Single effort, this time from the DX side.

Even though I’ve been contesting for the majority of my life, I’ve never really gone to a legitimate DX location to operate. Although we did make it to VE1 one year, that location really wasn’t much different from the east coast experiences that we had in the past.

Arriving in Volcano on Thursday night, the station owner, Max, KH6ZM, and Lou picked me up at the airport. After a quick station tour, it was apparent that Max had been hard at work organizing the station for our Multi-Single effort. The station had antennas on all bands with two stations, one for running and one for spotting. Band switching was manual, needing quite a few clicks and switches to get it done, but we quickly got used to it. A quick shakedown indicated everything was in working order.

Max and his wife were the quintessential host and hostess, preparing complete meals for us and attending to our needs. The station has a unique setup in that the ham quarters are directly above the ham shack, affording a quick trip to freshen up or catch a short nap.

Given that this was the first time I had operated from this part of the world, it opened up a whole new perspective. I couldn’t get over the strength of the JAs and how prevalent Southeast Asian stations were, especially on 160 meters. We pushed hard, and in the end, were quite pleased with our final score.

Again, our thanks to Max and his wife for their attentiveness and kindness. We had a great experience!