

Results of the 2015 CQWW DX CW Contest

“It’s always fun to make some dots and dashes with friends around the world!” – Todd, W9YK

BY RANDY THOMPSON,* K5ZD

The 68th edition of the CQ World Wide DX Contest CW weekend filled the bands with the sounds of DX, even as we began to feel the slide down the backside of the solar cycle. Somehow the CQWW brings out activity that exposes every possible opening.

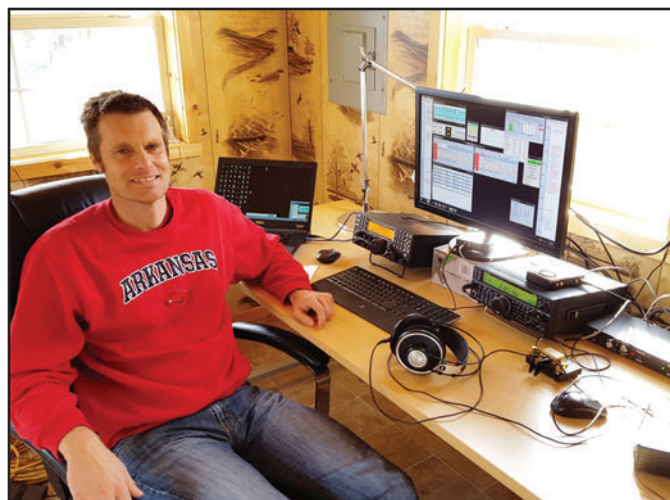
Ten meters continued to show signs of life with good openings between Europe and the eastern half of the U.S. Signals were quite strong at times, but activity was low as many operators didn’t check the band or were too busy with the fantastic conditions on 15 meters. At the other end of the spectrum, 160 meters was difficult the first evening due to absorption, but provided much better openings the second night. While northern Europe seemed to have 24-hour propagation on 20 meters, those in southern Europe reported the band closed early each evening. This was true in North America as well, with half of the contacts from VE6JY on 20 meters being with Europe.

The Reverse Beacon Network forwarded over 7 million spots from 171 CW skimmer nodes around the world during the 48 hours of the contest — an average of over 40 spots per second. There were many comments after the contest by operators saying how much fun they had, and how fast the rate could be, just by clicking on spots. We received twice as many entries in the high-power assisted category as for non-assisted. Any station that called CQ was likely spotted on the RBN, helping even small stations to have a chance to run (see sidebar on convergence).

While spots make it easy to find DX, they don’t always help the station on the receiving end of the pile-up. There were many comments in the logs about the difficulty of trying to copy any callsign when everyone is calling exactly on the spot frequency.

Thanks to SU9ØIARU in zone 34; 5H3EE and C92ZO in zone 36; 9J2HN, 9XØNH, and ZD8W in zone 37; 3B9HA and FR/OH2YL in zone 39; and increased activity from China in zone 23, working all 40 zones was possible. In fact, many of the multi-op stations were able to do so on three bands. Eighty stations worked all 40 zones on 40 meters, 85 did it on 20 meters, and 14 on 15 meters. KH6J managed to find 39 zones on 10 meters. That feeling of satisfaction that comes from capturing the last zone is part of what makes CQWW so special.

There were contacts with 197 country multipliers reported in the received logs. This is down a bit from previous years, partly due to improved log checking and removal of more busted callsigns. There were over 1 million contacts made



Top U.S. Single Operator Kevin, N5DX, operated from this nice arrangement at N2QV in upstate New York. (Courtesy of N5DX)

with U.S. stations, followed by 357K with European Russia, 329K with Germany, and 275K with Japan.

Single Operator All Bands

The rules limit single operators to only one signal on the air at a time. There have been rumors over the past few years of stations experimenting with a concept of alternating CQs on two bands to increase the QSO rate. Here’s how it works. You call CQ on one band. When the CQ ends, you automatically start a CQ on the second band while listening to the first. As you respond to a station on the first band, you listen on the second for any response to your second CQ. From a rare location, with callers on both bands, you can achieve QSO rates over 300/hour without those waiting in either pileup knowing you are alternating. One benefit is that stations doing this send their call after every QSO to help with the timing. This new technique is difficult to master and easily mismanaged. But, like the 4-minute mile, the barrier has been broken.

It was a close race between the top two scores in the Single Operator High Power category. Both were using the “Dual CQ” technique. The winner was Dan, N6MJ, operating from ZF1A. Dan said, “This was my first shot at being single op from the DX side. The goal for the contest was to successfully operate in a Dual CQ environment at high rates on both

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2015 WWDX CW TROPHY WINNERS AND DONORS

SINGLE OPERATOR

World
ZF2MJ (Opr.: Dan Craig, N6MJ)
Donor: Vibroplex

World – Low Power
V26K (Opr.: Bud Trench, AA3B)
Donor: Slovenia Contest Club

World – QRP
GJ2A (Opr.: Mathieu Roche, MJ0ASP)
Donor: Bob Evans, K5WA

World Assisted
Randy Thompson, K5ZD/1
Donor: Robert McGwier, N4HY

World – Assisted Low Power
LZ8E (Opr.: Boyan Petkov, LZ2BE)
Donor: Lyubomir "Leo" Slavov, OR2F

World – Assisted QRP
DM2M (Opr.: Pit Schmidt, DK3WE)
Donor: Steve "Sid" Caesar, NH7C

U.S.A.
Kevin Stockton, N5DX/2
Donor: Frankford Radio Club

U.S.A. – Low Power
K3CR (Opr.: Alex Avramov, LZ4AX)
Donor: North Coast Contesters

U.S.A. – QRP
David Leduc, N1IX
Donor: W3ZZ Memorial (Andy Blank, N2NT)

U.S.A. – Assisted
Chas Fulp, Jr., K3WW*
Donor: John Rodgers, WE3C

U.S.A. – Assisted Low Power
Ken Low, KE3X
Donor: LA9Z/LN9Z Leia Contest Club

U.S.A. Zone 3
Bob Wolbert, K6XX
Donor: Arizona Outlaws Contest Club

U.S.A. Zone 4
Pat Barkey, N9RV/7
Donor: Society of Midwest Contesters

Europe
OH0X (Opr.: Kim Ostman, OH6KZP)
Donor: W3AU Memorial (Florida Contest Group)

Europe – Low Power
EF2A (Opr.: Jon Zumalabe, EA2OT)
Donor: Tim Duffy, K3LR

Europe – QRP
Goran Krajcar, S52P*
Donor: I4FAF Memorial (Sergio Cartoceti, IK4AUY)

Europe – Assisted
SN7Q (Opr.: Krzysztof Sobon, SP7GIQ)
Donor: I4IND Memorial (IR4X Monte Capra Contest Team)

Europe – Assisted Low Power
Andy Ruse, YO3JR*
Donor: Alex Goncharov, R3ZZ

Africa
CR300 (Opr.: Jose Nunes, CT1BOH)
Donor: K5KA Memorial (Ralph "Gator" Bowen, N5RZ)

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

Caribbean/Central America
V47T (Opr.: Andy Blank, N2NT)*
Donor: W5PG Memorial (DFW Contesting Group)

Caribbean/Central America – Low Power
KP3Z (Opr.: Felipe Hernandez, NP4Z)*
Donor: Albert Crespo, NH7A

Oceania
Kevin, Smith, VK6LW
Donor: KH2D Memorial (Ken Hoppe, KH7R and Mani Albrecht, KH2F)

South America
YW4D (Opr.: Paolo Stradiotto, YV1DIG)
Donor: Dave Farnsworth, WJ2O

South America – Southern Cone (CE, CX, LU) – High Power
Eduardo Gomez, LW3DG
Donor: Dale Long, N3BNA

South America – Southern Cone (CE, CX, LU) – Low Power
CW5W (Opr.: Jorge Diez, CX6VM)
Donor: LU Contest Group

ASEAN (XZ HS XW XU 3W 9M 9V V8 YB DU) – Low Power
Phinyo Yodseranee, HS6ZBQ
Donor: Bob Kupps, N6BK

Scandinavia (LA, OH, OZ, SM)
OH0V (Opr.: Jukka Klemla, OH6LI)*
Donor: W3FYS Memorial (Chas Weir, Jr., W6UM)

Baltic (ES, LY, YL)
Viesturs Jakovlevs, YL2SM
Donor: LY2OO Memorial (Lithuanian Radio Sports Federation)

Canada
VE2IM (Opr.: Yuri Onipko, VE3DZ)
Donor: John Sluymmer, VE3EJ & Jim Roberts, VE7ZO

Russia
Anatolij Polevik, RC9O
Donor: Roman Thomas, RZ3AA

Japan
Masaki Masa Okano, JH4UYB
Donor: Phil Yasson, AB7RW

Japan – Low Power
Nobuhiro Iwasa, JH8SLS
Donor: Western Washington DX Club

SINGLE OPERATOR, SINGLE BAND

World – 28 MHz
5J1E (Opr.: Ville Hiilesmaa, OH2MM)
Donor: Joel Chalmers, KG6DX

World – 21 MHz
VK2IA (Opr.: Bernd Langer, VK2IA)
Donor: World Wide Radio Operators Foundation

World – 14 MHz
FY5KE (Opr.: Laurent Haas, F6FVY)
Donor: W2JT Memorial (North Jersey DX Assn.)

World – 7 MHz
CN2R (Opr.: Jim Sullivan, W7EJ)
Donor: World Wide Radio Operators Foundation

World – 3.5 MHz
IH9R (Opr.: Emilio Borea, IZ1GAR)
Donor: Fred Capossela, K6SSS

World – 1.8 MHz
Algirdas Uzdonas, LY7M
Donor: Kenneth Byers, Jr., K4TEA

U.S.A. – 28 MHz
Zeljko Repic, K2SSS
Donor: dxcoffee.com

U.S.A. – 21 MHz
Carl Kratzer, K3RV/4
Donor: Bob Naumann, W5OV

U.S.A. – 14 MHz
NR5M (Opr.: Bill Bradford, K5GA)
Donor: Northern Illinois DX Association

U.S.A. – 7 MHz
Dan Handa, W7WA
Donor: Gene Shablygin, W3UA

U.S.A. – 3.5 MHz
Robye Lahum, W1MK
Donor: Bill Feidt, NG3K

U.S.A. – 1.8 MHz
Rick Niswander, K7GM/2
Donor: Jeff Briggs, K1ZM

Asia – 21 MHz
Shinya Hatakenaka, JA5FDJ
Donor: Coconut Wireless Contest Club

Asia – 14 MHz
A45XR (Opr.: Chris Dabrowski, SP5EXA)
Donor: W5FO Memorial (Ralph "Gator" Bowen, N5RZ)

Asia – 7 MHz
7J1AAI (Opr.: Hal Offutt, W1NN)
Donor: Coconut Wireless Contest Club

Carib./C.A. – 7 MHz
Pedro Piza, NP4A
Donor: David Hodge, N6AN

Canada – 7 MHz
Peter Barron, VE3PN
Donor: John Sluymmer, VE3EJ

Japan – 21 MHz
Akito Nagi, JA5DQH*
Donor: Bob Wilson, N6TV

Japan – 14 MHz
Syuichi Sato, JA7FTR
Donor: Chris Terkla, N1XS

China – 21 MHz
Yong Wang, BD7DX
Donor: LZ9W Contest Team

Europe – 28 MHz
Eugen Calopa, 9A7V
Donor: Jay Pryor, K4OQG

Europe – 21 MHz
OH8X (Opr.: Pasi Luoma-Aho, OH6UM)
Donor: Bob Naumann, W5OV

Europe – 14 MHz
SJ2W (Opr.: Mikael Larssmark, SM2WMV)
Donor: G3FXB Memorial (Maud Slater)

Europe – 7 MHz
Darko Martinovic, 9A5X
Donor: Ivo Pezer, 9A3A

Europe – 3.5 MHz
CS2C (Opr.: Jiri Pesta, OK1RF)
Donor: K3VW Memorial (Frankford Radio Club)

Europe – 1.8 MHz
Karel Javorka, OK2W*
Donor: Pat Barkey, N9RV & Terry Zivney, N4TZ

OVERLAY CATEGORIES

World – Classic
P40W (Opr.: John Crovelli, W2GD)
Donor: World Radio Operators Foundation

U.S.A. – Classic
Jon Zaines, AA1K/3
Donor: CWops

World – Rookie
Niko Vanhatalo, OH5CZ
Donor: CWops

U.S.A. – Rookie
Brian Byers, WB4IT
Donor: CWops

MULTI-OPERATOR, SINGLE TRANSMITTER

World
CN2AA (Oprs.: RL3FT, UA3ASZ, RA3CO, RA9USU, UA0SC, RN2FA, UA4Z, RU3RQ, RN5M, RX3APM)
Donor: KL7RA Memorial (Friends of Rich)

H3K (Oprs.: WP3A, K1MM, H3Y, H3K, H3CC)
Donor: EA Contest Club

U.S.A.
NQ4I (Oprs.: VE7ZO, W4IX, K4TD)
Donor: Douglas Zwiebel, KR2Q

U.S.A. – Low Power
N3ND/4 (Oprs.: N3ND, N4CW, N4GU, W4FS, WA4PSC, W0UCE)
Donor: CWOps

Canada
VE3JM (Oprs.: VE3EK, VE3EY, VE3JM)
Donor: John Sluymmer, VE3EJ – Paul Hudson, VE3TA Memorial

Africa
EF8R (Oprs.: UA2FZ, RA5A, RC5A, RW1A, UA3RF, RN1AM, UA5C)*
Donor: Harry Booklan, RA3AUU

Asia
P33W (Oprs.: UR5MID, RA1AP, LY4AA, R4FO, RV1AW, UA4FER, RA3AUU)
Donor: Steve Merchant, K6AW

Caribbean/Central America
T46A (Oprs.: KJ4QHL, CO6YAC, CO6LP, CO6LC, CO6EC)*
Donor: Kansas City DX Club

Europe
ES9C (Oprs.: ES10X, ES2DW, ES2MC, ES2NA, ES2RR, ES4RD, ES5GP, ES5JR, ES5QA, ES5QX, ES5RY, ES5TV, ES7GM, OK1JD, OZ7AM)
Donor: Gail Sheehan, K2RED

Oceania
AH2R (Oprs.: JI3ERV/NH2C, JR7OMD/WI3O, J8KKX/AH2K)
Donor: Junichi Tanaka, JH4RHF

South America
PJ4Q (Oprs.: W4PA, S53R, WF7T, PJ4NX)
Donor: Araucaria DX Group

Canada
VE3EJ (Oprs.: VA3EC, VE3EJ, VE3EK, VE3EY, VE3MM)
Donor: VE3TA Memorial (John Sluymmer, VE3EJ)

Japan
JR5YCE (Oprs.: JM1UWB, J5JGMJ, JR5JQA, JH5FIS, JH5RXS)
Donor: Madison Jones, W5MJ

ASEAN (XZ HS XW XU 3W 9M 9V V8 YB DU)
E2X (Oprs.: E2ØGMY, E2ØHHK, E2ØMDN, HSØZGQ,
HS6RMY, HS8KVH)
Donor: Bob Kupps, N6BK

MULTI-OPERATOR, TWO TRANSMITTERS

World
D4C (Oprs.: HB9CAT, IK2NCJ, LY2IJ, OM3GI, OM3RM,
YL2KL, YL3DW)
Donor: Array Solutions

U.S.A.
K9CT (Oprs.: K9CT, NQ6N, N9CK, K3WA, N9TK, N4RR,
KB9OWD)
Donor: Robert Kasca, S53R

Europe
LX7I (Oprs.: DD2ML, DF3VM, DK3DM, DK6WL, DL2JRM,
DL3BPC, HB9CVQ, LX2A, PC5A)
Donor: Aki Nagji, JA5DQH

Japan
7J1YAJ (Oprs.: JR1CBC, JA1TRC, JK1MZT, JQ2WTT,
JR8OXT, JN1RVS)
Donor: Coconut Wireless Contest Group

MULTI-OPERATOR, MULTI TRANSMITTER

World
CR3L (Oprs.: DJØZY, DJ2YA, DK7YY, DL5AXX, DL8JJ,
LZ2JE, PA4A)
Donor: K2GL Memorial (The K2GL Operators)

U.S.A.
W3LPL (Oprs.: W3LPL, K1DQV, NH1N, K2YWE, K3AJ,
K3KU, K3MM, N3OC, K3RA, W3UR, WR3Z, KD4D,
N4QQ, AC6WI)
Donor: W6RJ and N6RJ Memorial (Ham Radio Outlet)

Europe
9A1A (Oprs.: 9A5W, 9A9A, 9A7R, 9A5E, 9A6A, 9A2DQ,
9A4WW, 9A2EU, 9A7DR, 9A8A, 9A2WJ, 9A6M, 9A9AB)
Donor: Finnish Amateur Radio League

Africa
ZD8W (Oprs.: W6NV, W6XD, N6AA)*
Donor: EA9EO Memorial

Asia
JA3YBK (Oprs.: JG3KIV, JG3MRT, JG3WDN, JI3OPA,
JF4FUF, JH4NMT, JR4ISF, JS1PWV)
Donor: Nodir Tursun-Zade, EY8MM

Oceania
KH6J (Oprs.: N2NL, KH6SH, KH6U, KH7U, KH6FP,
WH7W, WH6R, K5KG, K1XX, K1QX)
Donor: JA9SSY Memorial (Tack Kumagai, JE1CKA & Masa
Sakurada, JR2GMC)

CONTEST EXPEDITIONS

World Single Operator
3B9HA (Opr.: Olof Lundberg, GØCKV)
Donor: Friends of Phil Goetz, N6ZZ

World Multi-Operator
PZ5W (Oprs.: DF7AT, KØAD, K3WT, NØAT, NØSTL,
WØOR)
Donor: Al6V Memorial (Sue Cook, Al6YL)

SPECIAL AWARDS

World SSB/CW Combined
Kim Ostman, OH6KZP
20,344,296
Donor: Hrane Milosevic, YT1AD

World RTTY/SSB/CW Combined
Bud Trench, AA3B
18,618,994
Donor: Rudy Bakalov, N2WQ

Combined SSB/CW Score 160 Meters
Kenneth Hemstedt, OZ1IKY
207,000
Donor: Team IB97/IR9Y - IT9ZGY Memorial

CLUB

USA SSB/CW
Yankee Clipper Contest Club
429,010,745
Donor: Northern California Contest Club

DX SSB/CW
Bavarian Contest Club
296,475,847
Donor: John Rodgers, WE3C

*Second place



The 80-meter 4-square antenna used by EI5DI for his single-band effort.
(Courtesy of EI5DI)

radios. In order to prepare for this, I practiced with two laptops running MorseRunner on each side over the last few months. I was actually quite surprised how lifelike MorseRunner was as compared to actual operating. I was able to control the pile up just like [when] I was using the program. Having this training was an enormous help." The result was over 10K QSOs and the second highest single op score of all time.

Second place went to Jose, CT1BOH, operating from CR3OO. Jose also spent hours practicing with MorseRunner before the contest. After the contest, he reported that his hardware switching needs to be optimized to achieve the same rates he was seeing with the simulator. Dual CQ may now be a necessary skill for operators competing at the world level. It will be interesting to see how it progresses.

The race for top U.S. score was also very competitive. Kevin, N5DX, visited N2QV in upstate New York to capture the victory. Kevin normally operates from Arkansas and this was his first chance to work from the Northeast. Afterward, Kevin reported, "At times it almost felt like cheating being so loud into Europe and always having a steady

stream of callers. Going into the contest, my major concern was being on the right band at the right time. I soon realized that all I needed to do was follow the zone 16 stations. Wherever Russia was loudest, that was the band to be on." The N2QV station includes stacked 3-element monobanders for 40 meters, which was also his best band over the competition. Second place went to Dan, K1TO, who was operating from the W5WMU station in Calais, Maine. That's as far east as you can go and still be in the U.S. Dan had to overcome a number of equipment and antenna issues before and during the contest. Howie, N4AF, in North Carolina, was the highest finisher not in the northeast at number 6, followed by an outstanding score from N9RV/7 in Montana.

There was a spirited competition for the top European score. The winner was Kim, OH6KZP, operating from OHØX. "I worked for 48 hours straight, only getting up from the chair occasionally to stretch or to heed nature's call. I had some serious trouble staying awake on Sunday around 02z (our sunrise is at 07z), so I tried to stand up while making QSQs, slapped myself in the face to get some adrenaline running,



Mats, RM2D, took the family on vacation to Vietnam and found time to operate single-op all bands as XV2D. (Courtesy of RM2D)

drank an energy drink, etc., but it wasn't helping. Finally I went into the cold outside and splashed some water in my face, which seemed to help," said Kim. Filipe, CT1ILT, arrived at the CR6K station just three hours before the contest and managed to put in 44.4 hours of operating time to finish second.

The most popular entry category was Single-Op, Low-Power, All Bands with 1,595 entries. The top 10 are popu-

lated by stations from all around the world. The overall winner, for his 12th time, was Bud, AA3B, operating from V26K. Not even an experienced operator like John, W2GD, with the "3-point advantage" from P4ØW, could keep up. Faisal, 9K2RR, set a new scoring record for Asia with his third place finish from 9K2HN. Alex, LZ4AX, continued his winning ways from K3CR by taking the top U.S. score, just 300K below the U.S. record set last year by WA1Z.

The second most popular entry category was Single-Op, High-Power Assisted with 1,168 entries. The world high score was by Randy, K5ZD/1. Comparing his score to similar non-assisted single operator entries in New England indicates that having access to DX spotting information at this level provides about a 15-20% benefit to the final score. Look at the band-by-band breakdowns to see how the advantage comes from having a much higher multiplier count on each band. Second place went to Martin, LU5DX, operating as LP1H. Nearing high summer in Argentina, it was difficult for Martin to have much success on the low bands. Martin was one of the few entries from south of the Equator to appear in any of the world top 10 boxes. SN7Q, operated by Krzysztof, SP7GIQ, was far ahead of all other European scores.

Single Band

Forty meters was the band for close competition with 488 single-band entries. Jim, W7EJ, piloted CN2R to the top high power score. Alfredo, WP3C, visited the NP4A mountaintop and finished second, breaking the North American record set all the way back in 1992! Darko, 9A5X, finished just ahead of Sine, S53RM, operating S5ØC, for the top European score. Over in the Assisted category, there are eight European scores just 100K points apart between second and ninth place. That's close!

The most popular single band was 15 meters with 554 entries among all of the categories. World high score was by



A panoramic view of the ED1R multi-single operating team hard at work. (Courtesy of EC1KR)

2015 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
ZF2MJ	259/14/40	968/25/81	2335/34/102	2426/37/107	2626/34/109	1400/26/88
CR300	313/12/48	1129/21/69	1775/26/84	1383/31/86	2165/34/95	2047/28/92
V47T	266/14/53	523/18/71	2155/34/108	1748/34/105	1801/30/96	1556/24/89
VE2IM	401/15/54	1183/23/83	1385/26/101	1437/31/102	1333/30/102	522/20/64
N5DX/2	74/13/48	720/24/77	1847/34/117	1261/37/118	1060/31/104	135/20/62

USA TOP SINGLE OPERATOR ALL BAND

Station	160	80	40	20	15	10
N5DX/2	74/13/48	720/24/77	1847/34/117	1261/37/118	1060/31/104	135/20/62
K1TO	217/13/52	345/19/77	1682/30/103	1160/34/105	1269/31/107	113/22/59
K1DG	220/17/68	661/25/79	1431/30/99	856/35/112	1279/30/106	116/20/59
KØDQ/1	254/15/60	539/21/82	1584/33/95	1382/28/106	1008/28/98	103/18/54
W1KM	294/15/55	887/23/74	1035/27/87	1295/31/106	787/27/94	316/20/74

WORLD SINGLE OPERATOR ASSISTED ALL BAND

Station	160	80	40	20	15	10
K5ZD/1	135/17/65	726/28/99	1189/38/129	1299/38/138	1160/34/136	233/24/87
LP1H	32/11/12	236/21/43	906/32/98	1296/37/124	1746/38/130	1365/30/106
P3F	73/9/41	1120/28/80	1730/34/113	1002/23/78	1402/31/101	379/22/66
K3WW	83/15/53	484/25/95	1377/36/124	1285/39/140	1133/33/126	111/24/72
C4W	200/9/50	348/17/66	1673/32/113	870/36/113	928/35/121	693/25/94

USA SINGLE OPERATOR ASSISTED ALL BAND

Station	160	80	40	20	15	10
K5ZD/1	135/17/65	726/28/99	1189/38/129	1299/38/138	1160/34/136	233/24/87
K3WW	83/15/53	484/25/95	1377/36/124	1285/39/140	1133/33/126	111/24/72
N3RS	64/13/49	478/24/93	971/38/130	1009/39/135	863/35/133	278/24/82
AB3CX/2	111/12/40	334/22/79	1312/32/114	953/38/124	1009/32/120	138/25/73
K6ND/1	163/16/63	424/24/95	954/38/130	877/38/139	814/33/125	185/23/79

WORLD MULTI-OPERATOR SINGLE TRANSMITTER

Station	160	80	40	20	15	10
CN2AA	388/22/91	1913/36/127	2551/40/147	1794/40/154	2176/40/155	2135/37/146
P33W	488/19/81	1608/33/118	2712/40/145	2376/40/153	1975/39/154	1091/33/130
EF8R	140/18/77	1263/32/115	2550/40/145	1538/40/150	2046/39/152	1970/35/140
ED8X	114/21/76	905/31/113	2114/39/137	1683/39/140	2182/38/153	1412/36/133
UP2L	321/20/72	1203/36/117	2462/40/149	1760/40/149	1071/34/138	746/29/101

USA MULTI-OPERATOR SINGLE TRANSMITTER

Station	160	80	40	20	15	10
NQ4I	55/15/53	384/30/104	1620/40/143	948/40/148	1276/37/140	257/28/107
W3UA/1	112/15/57	554/24/92	1497/39/134	1125/39/146	1166/37/137	138/25/86
K8AZ	64/18/62	450/29/99	1239/38/135	1161/40/150	1097/38/137	196/27/100
K5TR	44/18/41	219/31/104	1572/40/139	535/40/145	1408/39/149	256/31/109
K2LE/1	53/15/50	691/26/92	1450/32/107	997/39/131	797/34/125	105/25/76

WORLD MULTI-OPERATOR TWO TRANSMITTER

Station	160	80	40	20	15	10
D4C	360/24/88	1303/33/104	2846/40/142	2593/40/152	4418/39/162	3279/35/142
P40L	221/16/47	971/29/101	2999/37/135	2055/39/135	3276/37/146	1767/30/99
TC0A	715/16/73	1801/33/104	2702/40/134	2130/38/132	1497/37/137	768/31/111
RM9A	457/18/69	1629/34/119	2673/39/145	1803/40/149	1649/34/140	1137/28/93
PZ5W	269/15/50	801/26/80	2093/34/110	1976/36/118	2791/36/118	2249/29/101

USA MULTI-OPERATOR TWO TRANSMITTER

Station	160	80	40	20	15	10
K9CT	80/18/45	586/29/104	1608/39/142	1634/40/153	1692/39/144	406/29/93
K1ZR	124/14/47	884/25/95	1959/39/132	1588/38/138	1521/35/139	169/26/77
W9SN/4	48/15/35	583/25/90	1560/36/125	1314/40/141	1262/35/126	287/26/86
NØNI	103/17/45	525/30/90	1046/40/132	1487/40/137	1313/39/142	245/28/92
K4TCG	58/12/26	464/20/80	1159/34/111	1201/38/121	1164/34/126	318/26/87

WORLD MULTI-OPERATOR MULTI-TRANSMITTER

Station	160	80	40	20	15	10
CR3L	283/18/71	1379/28/105	3351/36/123	1979/39/143	3081/40/140	1761/33/118
W3LPL	492/22/83	1627/35/123	2846/40/150	2948/40/166	2173/38/154	728/29/117
PJ2T	706/21/67	1079/26/90	3075/34/114	2800/37/131	2712/37/128	2147/31/98
K3LR	315/20/73	1387/35/123	2759/40/157	2577/40/169	2070/40/164	554/30/117
9A1A	1480/27/99	2051/32/116	3346/40/151	2943/40/153	2494/39/153	1013/37/129

USA MULTI-OPERATOR MULTI-TRANSMITTER

Station	160	80	40	20	15	10
W3LPL	492/22/83	1627/35/123	2846/40/150	2948/40/166	2173/38/154	728/29/117
K3LR	315/20/73	1387/35/123	2759/40/157	2577/40/169	2070/40/164	554/30/117
WE3C	397/18/74	1240/30/110	2458/40/149	2767/40/162	2213/37/151	679/28/103
W2FU	320/17/75	1357/35/118	2095/40/146	2530/40/158	2008/37/149	449/27/100
NR4M	308/16/56	1384/30/111	2256/40/143	1963/39/135	1514/38/133	574/28/105

Bernd, VK2IA, operating Field Day style from a new location in the country. Pasi, OH6UM, put in a very nice effort from OH8X to finish second. Pasi was able to take advantage of an auroral opening to the U.S. during the last four hours of the contest that was not available to stations farther south. Carl, K3RV/4, finished just ahead of Peter, KU2M, for top U.S. and third place overall. Shinya, JA5FDJ, and Aki, JA5DQH, had a close race for top score in Japan.

There were 424 entries across the single-band, 20-meter, categories. Laurent, F6FVY, did his first 20-meter, single-band effort from the FY5KE club station to break the world record by just 70K points. Mike, SM2WMV, visited SJ2W and took advantage of his northern location to make over 4,000 contacts and finish in second. His score raised the European record by over 300K. Bill, K5GA, operated NR5M to finish first in the U.S., falling just short of his W5 record from a year ago. Honorable mention goes to Nigel, G3TXF, who made the Top 10 as MZ5B while using a simple vertical dipole and braving gale force winds to operate from a lighthouse in the Shetland Islands.

There were 266 operators who were not yet ready to bid adieu to 10 meters. It is interesting to note that there were five different continents represented in the top six scores. Ville, PY2ZEA, (a.k.a. OH2MM) operated 5J1E from the HK1NA station to easily have the overall high score. His only complaint was the difficulty many operators had in copying his call correctly (it's not HJ1E). Eugen, 9A7V, had the top European score. Vidi, ZS1EL, and Frank, ZM2B, took advantage of north-south propagation to finish third and fourth, far from the population centers of Europe and North America.

Eighty meters was also a popular band with 303 single-band entries. Emilio, IZ1GAR, continued his annual suitcase

DXpedition to "African Italy" and operated as IH9R, this time on 80 instead of 40 meters. He made over 2,400 QSOs using a very simple antenna. Second place went to Jiri, OK1RF, operating from CS2C, his station in Portugal. Jiri fell just short of his attempt to capture a third single band record for Europe. Robye, W1MK, won the U.S. for the 18th time. He is a presence on the band every year. Vladimir, R8WF, had a very nice score to finish first from Asia.

There were 212 entries on 160 meters, evenly split between Assisted and Non-Assisted. The winner was Algirdas, LY7M, who managed to find 1,324 QSOs, 29 zones, and 98 countries on the band. Karel, OK2W, struggled with antenna problems the first night, but still managed 230 QSOs with North America and 35 with Japan, to finish second. Rick, K7GM/2, operated a remote station from New York to take the top U.S. position.

QRP

It takes a special kind of patience and perseverance to enter the CQWW using just 5 watts. Mathieu, MJØASP, operating as GJ2A, braved not only the QRM, but gale force winds as well. The high winds cost him his 40-meter dipole on the second night and the main beam got stuck pointing south on Saturday afternoon. He reported, "this limited my ability to run into EU and the U.S., but working African mults was no problem!" Not far behind was Ron, VE3VN, another regular in the QRP top scores. Ron noted "very little Europe on 10, and a shorter and narrower opening that way on 15," as reducing his score compared to last year. David, N1IX, ground his way to the top U.S. score and fourth overall.

There was quite a close race for top QRP Assisted score. DM2M, operated by Pit, DK3WE, finished just 1,024 points

EUROPE TOP SINGLE OPERATOR ALL BAND

Station	160	80	40	20	15	10
OH0X	332/12/53	961/23/82	1316/35/105	1893/37/118	1589/35/101	181/29/78
CR6K	327/15/58	628/19/73	1369/35/117	1410/34/110	1320/35/111	687/27/89
CR2X	343/14/51	962/21/78	879/26/77	1473/31/92	1211/28/98	1138/27/83
403A	286/10/53	835/24/75	2207/35/105	1653/35/107	861/32/98	464/27/78
UW2M	267/21/68	977/31/91	1627/35/107	1182/36/97	1058/35/109	401/29/87

EUROPE SINGLE OPERATOR ASSISTED ALL BAND

SN7Q	186/18/72	937/29/102	1330/34/118	1216/37/120	1178/37/133	103/29/92
9A1P	216/17/66	538/26/85	1353/33/120	871/37/127	772/37/140	474/35/113
YL2KO	265/17/68	1305/32/109	382/35/115	504/38/119	1130/39/137	311/31/109
OE2S	171/14/61	424/18/73	1074/38/132	1018/39/130	708/36/137	429/34/117
S57AL	164/9/54	448/18/73	1509/38/134	858/36/116	690/36/125	271/28/93

EUROPE MULTI-OPERATOR SINGLE TRANSMITTER

ES9C	452/27/93	1531/35/123	1668/40/150	2142/40/151	2392/40/157	384/35/125
TM6M	254/18/72	1394/30/108	1750/40/146	1715/40/151	1557/39/150	748/35/129
OM7M	218/21/89	695/33/117	2242/40/150	1753/40/149	1457/40/153	348/37/137
E7DX	408/23/85	1324/34/115	2119/40/147	1858/40/150	1722/39/152	335/35/130
IR4M	132/17/74	643/33/109	2608/40/152	1860/40/143	1615/38/147	303/34/123

EUROPE MULTI-OPERATOR TWO TRANSMITTER

LX7I	819/20/83	1884/30/110	2875/40/149	2577/39/140	2135/37/144	303/34/117
LY2W	683/23/81	1586/32/109	1973/40/149	1973/40/138	1722/38/146	372/31/110
HG7T	410/15/66	1670/31/116	1979/40/144	1779/40/142	1733/38/149	348/34/123
ED1R	366/18/78	1468/28/105	2311/39/137	1859/40/138	1918/37/136	739/33/102
DL1A	172/9/60	1512/26/104	2124/40/145	1432/39/143	1365/38/146	371/35/114

EUROPE MULTI-OPERATOR MULTI-TRANSMITTER

9A1A	1480/27/99	2051/32/116	3346/40/151	2943/40/153	2494/39/153	1013/37/129
LZ9W	1166/22/83	2097/36/127	3374/40/150	2702/40/155	2119/37/148	847/36/123
DF0HQ	896/21/81	2035/33/117	2955/40/151	2215/40/151	1616/37/150	656/37/127
YT5A	1149/21/77	1613/27/91	2452/39/132	2739/40/146	1639/38/144	778/34/126
HG1S	349/14/66	1012/25/94	1977/37/132	1487/39/132	1508/37/143	278/34/121

ahead of Karel, OK2FD. Both had very different strategies with Pit having more QSOs and Karel with a big lead on multipliers. In the end, just two or three QSOs would have made the difference with Pit winning by having a bit better logging accuracy.

Overlay Categories

We had 64 entries in the Rookie overlay category this year. The top score was earned by Niko, OH5CZ. Niko is 15 years old and has been licensed since 2013. Second place was



Martti, OH2BH, enjoying the contest from Albania as ZA1WW. (Courtesy of OH2BH)

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JUNE

BALTIMORE, MARYLAND — The Amateur Radio Club of the National Electronics Museum will air special event station, **W2W**, daily from 1300 to 2000 UTC, Saturday, June 3 through Monday, June 6 to commemorate the anniversary of D-Day. Frequencies include 7.244, 14.244, 7.044, 14.044. QSL a SASE to: W2W – D-Day, Box 1693, MS 4015, Baltimore, MD 21203. Website: <http://ww-2.us>.

SEASIDE, OREGON — The Sea-Pac Ham Convention will hold **SEA-PAC** and the **2016 ARRL Northwest Division Convention** Friday, June 3; Saturday, June 4; and Sunday, June 5 at the Seaside Convention Center. Contact: Wayne Shuler, AI9Q, (360) 892-5580. Email: <info@seapac.org>. Website: <http://www.seapac.org>. Talk-in 145.45 (PL 118.8) or 145.49 (PL 118.8). VE exams.

GREECE, NEW YORK — The Rochester Radio Repeater Association will hold the **Barnard Hamfest** of Rochester, NY Saturday, June 4 at the Barnard Fireman's Field. Website: <http://k2rra.org> or <http://barnardfire.org>. VE exams.

MARIETTA, GEORGIA — The Atlanta Radio Club and the Kennebec Amateur Radio Club will hold the **Atlanta Hamfest** and **2016 ARRL Georgia State Convention** Saturday, June 4 at Jim Miller Park. Contact: John Talipsky, N3ACK, <n3ack@atlaradioclub.org>. Website: <http://www.atlathamfest.org>. Talk-in 146.820- (PL 146.2). VE exams.

MISSISSAUGA, ONTARIO, CANADA — The Mississauga Amateur Radio Club will air special event station, **VE3MIS**, from 1400 to 2000 UTC daily from Saturday, June 4 to Sunday, June 5 to salute the Annual Streetsville Bread and Honey Festival. QSL \$2 to MARC, c/o Michael Brickell, VE3TKI, 2801 Bucklepost Cres., Mississauga, ON, Canada L5N 1X6. Website: <http://www.marc.on.ca>.

PRINCETON, KENTUCKY — The Princeton Ham Radio Club will hold the **Fifth Annual Princeton Hamfest** in conjunction with the **Pennington Folk Music Festival**, Saturday, June 4 at the Princeton, KY Fire Training Center. Phone (270) 365-7777. Email: <n4mht@mchsi.com>. Website: <http://www.w4kbl.org>. Talk-in 145.230 (PL 179.9) or 444.175 (PL 123). VE exams.

FISHKILL, NEW YORK — The Mt. Beacon Amateur Radio Club will hold the **Spring Ham Radio Hamfest** Sunday, June 5 at the Employee's Recreation Center. Contact: Adam Nowik, KC2DAA, (845) 849-3666. Email: <president@wr2abb.org>. Talk-in 146.97- (PL 100). VE exams.

PROSPECT, PENNSYLVANIA — The Breezeshooters will hold its **62nd Annual Hamfest & Computer Show** and the **2016 ARRL Western Pennsylvania Section Convention** Sunday, June 5 at the Big Butler Fairgrounds. Contact: Jim, KB3IYS, (412) 600-1979. Email: <hamfest2016@breezeshooters.org>. Website: <http://www.breezeshooters.org>. VE exams.

PRINCETON, ILLINOIS — The Starved Rock Radio Club will hold its **Amateur Radio Hobbyist and Collectors Show** Sunday, June 5 at the Bureau County Fairgrounds. Contact: SRRC c/o Hamfest Chairman, P.O. Box 198, Lenmore, IL 61332. Email: <starvedrockhamfest@hotmail.com>. Website: <http://www.w9mks.org>. Talk-in 146.955 (PL 103.5). VE exams.

RAVENA, OHIO — The Portage Amateur Radio Club will hold **Hamfair 2016** Sunday, June 5 at the Maplewood Career Center. Contact: Joanne Solak, KJ3O, (330) 274-8240. Email: <kj3o@arrl.net>. Website: <http://potagearc.org>.

TOMS RIVER, NEW JERSEY — The Jersey Shore Amateur Radio Society will hold the **Hamfest By The Shore** Sunday, June 5 at Riverwood Park. Contact: Darlene (732) 237-9448. Email: <jsars910@gmail.com>. Website: <http://www.jsars.org>. Talk-in 146.910- (PL 127.3). VE exams.

PRESCOTT, ARIZONA — The Yavapai Amateur Radio Club, Eagle Amateur Radio Club, and the **Amateur Radio Council of Arizona** will hold the **Prescott Hamfest 2016** Friday, June 10 and Saturday, June 11 at the Embry Riddle Aeronautical University. Contact: Bill Noe, W7PVA, <w7pva@arrl.net> or Chuck Zappala, KE7SA, <czappala@cableone.net>. Website: <http://www.w7yrc.org>. Talk-in 146.88- (PL 100) or 447.650- (PL 100). VE exams and DXCC card checking.

IRVING, TEXAS — **Ham-Com 2016** will be held Friday, June 10 and Saturday, June 11 at the Irving Convention Center. Website: <http://www.hamcom.org>. Talk-in 146.720 (PL 110.9) or 147.180 (PL 107.2). VE exams.

LIME RIDGE, PENNSYLVANIA — The Columbia-Montour Amateur Radio Club will hold the **26th Annual Bloomsburg Hamfest** Saturday, June 11 at the Lime Ridge Community Center. Contact: Dave, W3CA, (570) 951-9694. Email: <bloomfest2016@yahoo.com>. Website: <http://www.qsl.net/cm-arc>. Talk-in 147.225+ (PL 85.4). VE exams.

PORT LUDLOW, WASHINGTON — The Port Ludlow Amateur Radio Club will hold its **Tailgate Swap Meet** Saturday, June 11 at the Grace Christian Center Parking Lot. Website: <http://www.n7pl.org>. Talk-in 146.52.

WINSTON-SALEM, NORTH CAROLINA — The Forsyth Amateur Radio Club will hold the **Winston-Salem Classic Hamfest** Saturday, June 11 at the Summit School Dining Center. Email: <hamfest@w4nc.com>. Website: <http://www.w4nc.com>. Talk-in 146.64 (PL 100) or 145.47 (PL 100). VE exams.

HASTINGS, NEBRASKA — The Amateur Radio Association of Nebraska will hold the **Greater Midwest Radio Show 2016** Saturday, June 18 at the Kiewit Gymnasium-Hasting College. Website: <http://www.greatermidwestradio.org>. VE exams and fox hunt.

KNOXVILLE, TENNESSEE — The Radio Amateur Club of Knoxville will hold its **50th Annual Hamfest** and **2016 ARRL Tennessee State Convention** Saturday, June 18 at the Kerbala Temple. Contact: Lou Dreinhofer, WB3JKQ, (865) 995-1588. Email: <wb3jq@arrl.net>. Website: <http://www.w4bbb.org>. Talk-in 53.770, 147.300, or 224.500. VE exams.

MIDLAND, MICHIGAN — The Midland Amateur Radio Club will hold the **Midland Hamfest** Saturday, June 18 at the Salvation Army Building. Contact: Pat Russell, W8PMR, 4451 E. Wise Road, Freeland, MI 48623. Phone: (989) 832-2924. Email: <chuck.cribbley@live.com>. Website: <http://w8kea.org>. Talk-in 147.00. VE exams.

MILFORD, OHIO — The Milford Amateur Radio Club will hold the **26th Annual Milford Hamfest** Saturday, June 18 at the Eastside Christian Church. Contact: Jim, WB8RRR, (513) 831-6255. Email: <wb8rrr@arrl.net>. Website: <http://www.w8mrc.com>. Talk-in 147.345+ (PL 123). VE exams.

ORCUTT HILL, CALIFORNIA — The Satellite Amateur Radio Club will hold the **Santa Maria Ham Radio Swapfest and BBQ** Saturday, June 18 at the Newlove Picnic Grounds. Website: <http://www.satellitearc.com>. Talk-in 145.14- (PL 131.8). VE exams and t-hunt.

PISCATAWAY, NEW JERSEY — The **Raritan Valley Radio Club** will hold the **W2QW Hamfest** Saturday, June 18 at Piscataway High School. Contact: Drew, W2OU, (732) 801-4654 (before 9 p.m.). Email: <w2oudrew@gmail.com>. Website: <http://www.w2qw.org>. Talk-in 146.625- (PL 241.8), 442.250- (PL 141.3), or 146.52. VE exams and DXCC/VUCC/WAS card checking.

CAMBRIDGE, MASSACHUSETTS — The **Harvard Wireless Club**, **MIT Electronics Research Society**, **MIT UHF Repeater Association**, and the **MIT Radio Society** will hold **Flea at MIT** Sunday, June 19 at the Parking Garage on Albany and Main Streets. Contact MIT Radio Society, P.O. Box 397082, Cambridge, MA 02139-7082. Phone: (617) 253-3776. Website: <http://www.swapfest.us>. Talk-in 146.52 or 449.725- (PL 114.8).

MANASSAS, VIRGINIA — The **Ole Virginia Hams Amateur Radio Club** will hold the **42nd Manassas Hamfest Amateur Radio & Maker Technology Show** Sunday, June 19 at the Prince William County Fairgrounds. Contact: Terry, KC4DV, <chairman@manassashamfest.org>. Website: <http://manassashamfest.org>. Talk-in 146.97- or 442.200+ VE exams and DXCC card checking.



Randy, K5ZD, finished with the world high Single Operator Assisted score. (Courtesy of K5ZD)

CR5U operated by Helder, CR7AJL. Helder was licensed in January 2014. The top U.S. Rookie was Brian, WB4IT. Licensed in July 2013, Brian says, "I am not a contester, but I enjoy participating." Well, as winner of a CQWW plaque, he can't say he is not a contester anymore.

The Classic category continues to gain interest with 672 entries this year. It has been a popular way for those who are time-limited to still enjoy a competitive outlet within CQWW. The top three high power scores were all single-op expeditions that did well counting their first 24 hours on the air. The U.S. leader Jon, AA1K/3, also did a near full-time effort, but captured the win with his first 24 hours. He claims, "this was the last of my single-radio entries as I plan to return to SO2R operation in future contests."

On low power, it was John, W2GD, using his first 24 hours from P4ØW to take the top score. Second place was Seppo, PJ6/OH1VR, who said, "I would like to thank my wife for this trip to Saba Island. This has been the best possible 70th anniversary gift for a guy who loves pile-ups." Art, K1BX, took third and the top U.S. position. He was followed by a callsign that confused both humans and CW Skimmers — CQ8CQ — operated by Joao, CU3AA.

Multi-Operator

The Multi-Operator, Single-Transmitter category once again featured a number of Russian-led teams demonstrating technical and operating skill in their race for victory. The winner this time was CN2AA with nearly 11,000 contacts and the highest country multiplier of any entry in the contest (820). They were only nine countries away on 160 meters from completing an unprecedented six-band DXCC! The seven operators at P33W in Cyprus, were close on QSOs, but could not match the CN2AA multiplier totals. The third-place team, EF8R, lost 45 minutes due to a power outage and was only able to use low power for another five hours. That surely cost them a few points. The race for top European score was north vs. south with ES9C in Estonia finishing just ahead of TM6M in France. Notice how incredibly close the rest of the European Top 10 scores were.

The U.S. Multi-Single title was closely challenged by three teams. With the NQ4I station not being prepared for its usual Multi-Multi effort, the group decided to do a small Multi-Single with only three operators. There were just two operators at second place W3UA/1 in New Hampshire — an accomplishment when you consider the effort required to keep run and multiplier stations active all weekend. K8AZ finished third, and posted, “the fast friendships of contesting with many of the same guys for decades — made the weekend a true pleasure ... everybody got some sleep and a great radio weekend was had by all.”

We received 54 entries in only the second year of the new Multi-Single, Low-Power category. The winning score was by HI3K in the Dominican Republic. Check out the HI3K video on YouTube to get a closer look at their fine effort. The top U.S. score was also a repeat with the N3ND/4 team enjoying the social aspects of contesting along with making QSOs. The ops at HSØZIA handed out a lot of zone 26 QSOs on their way to third place. Remember when Thailand was rare on the bands? The ZL4YL score was a father-daughter affair. Holger, ZL3IO, reports that his 14-year old daughter, Xenia, had only been licensed for 3 months, but easily managed to keep a rate between 50 and 100 QSOs/hour.

Thanks to a lot of antenna work done before the CQWW SSB a month earlier, the D4C team was back to being fully operational at their mountaintop location to dominate the Multi-Two category with almost 15,000 contacts and 5BDXCC! A team of four Americans visited P4ØL to finish in second. The rest of the top scores are quite close together. TCØA finished just ahead of RM9A for Asia honors. Winners of the multi-op DX-pedition plaque, PZ5W, finished just 40K points ahead of PJ4A. LX7I finished well ahead of the other European teams.

After years of station and team building, Craig, K9CT, and his team in Illinois saw their goal realized as U.S. champions in the Multi-Two category. Over the last four years, they have moved from sixth, to fourth, to second, and now first. Very close behind in second was the first attempt at a multi-op from K1ZR in New Hampshire. Shane was happy with the result saying, “we divided my SO2R station into two operating positions and ran the contest with only two radios ... Running M2 with two great friends and a new station was a fantastic experience.”

The Multi-Unlimited category had its share of drama as well. The CR3L team originally submitted their log in the Multi-

Two category. A concern about possible issues with the transmitter lockout caused them to resubmit their log before the deadline in the Multi-Multi category. They ended up as the world high score. Close behind in second place was W3LPL in Maryland with a fantastic result that ended the 10-year run of U.S. victories by K3LR. The friendly rivalry and respect between Frank and Tim is well known and there is always much anticipation when they exchange scores after the contest. The third place effort by PJ2T suffered from medical emergencies and a 6-hour power outage.

Final Thoughts

Once again the investigations team of

the CQWW Contest Committee was much busier than they would like to have been. There were disqualifications for self-spotting, unclaimed use of DX Cluster spots, too many signals (for multi-ops), and others. We also issued a number of warnings. Everyone is encouraged to read the rules and the FAQ on the website. If you have a question about the rules, please ask.

A reminder that CQ magazine is no longer providing paper certificates for its contests. Everyone who submitted a log before the deadline may download an electronic version of their certificate and print it themselves. Go to the <cqww.com> website, enter

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800.727.7646(ROHN)

CLUB SCORES

UNITED STATES

Club	# Entrants	Score
YANKEE CLIPPER CONTEST CLUB.....	292	429,010,745
FRANKFORD RADIO CLUB.....	204	406,911,308
POTOMAC VALLEY RADIO CLUB.....	207	283,120,835
SOCIETY OF MIDWEST CONTESTERS.....	153	134,324,607
NORTHERN CALIFORNIA CONTEST CLUB.....	103	116,693,331
MINNESOTA WIRELESS ASSN.....	121	106,313,647
FLORIDA CONTEST GROUP.....	98	101,423,602
NORTH COAST CONTESTERS.....	24	99,091,710
SOUTHERN CALIFORNIA CONTEST CLUB.....	70	88,733,064
ARIZONA OUTLAWS CONTEST CLUB.....	88	72,293,832
TENNESSEE CONTEST GROUP.....	35	50,428,514
CENTRAL TEXAS DX AND CONTEST CLUB.....	29	41,766,606
DFW CONTEST GROUP.....	42	32,186,280
CAROLINA DX ASSOCIATION.....	44	30,335,666
WILLAMETTE VALLEY DX CLUB.....	45	27,075,309
SOUTH EAST CONTEST CLUB.....	21	26,915,636
MAD RIVER RADIO CLUB.....	34	23,508,218
IOWA DX AND CONTEST CLUB.....	7	22,607,657
WESTERN WASHINGTON DX CLUB.....	38	21,764,704
HUDSON VALLEY CONTESTERS AND DXERS.....	28	18,927,072
GEORGIA CONTEST GROUP.....	21	17,459,916
BIG SKY CONTESTERS.....	14	13,948,677
GRAND MESA CONTESTERS OF COLORADO.....	25	13,606,634
ALABAMA CONTEST GROUP.....	26	12,647,340
NORTH TEXAS CONTEST CLUB.....	10	9,369,832
CTRI CONTEST GROUP.....	8	9,095,292
TEXAS DX SOCIETY.....	8	8,593,189
KANSAS CITY CONTEST CLUB.....	15	8,382,583
NIAGARA FRONTIER RADIOSPORT.....	16	7,258,133
ROCHESTER (NY) DX ASSN.....	19	7,208,169
UTAH DX ASSOCIATION.....	15	6,919,727
LOUISIANA CONTEST CLUB.....	11	6,537,824
BAY AREA DXERS.....	7	5,560,818
NORTH CAROLINA DX AND CONTEST CLUB.....	12	5,495,826
KENTUCKY CONTEST GROUP.....	19	4,650,081
NORTHEAST MARYLAND AMATEUR RADIO CONTEST SOCIETY.....	13	4,637,960
NORTHEAST WISCONSIN DX ASSN.....	8	4,200,560
MISSISSIPPI VALLEY DX/CONTEST CLUB.....	10	4,114,301
MOTHER LODGE DX/CONTEST CLUB.....	29	3,928,514
SPOKANE DX ASSOCIATION.....	14	3,612,375
SWAMP FOX CONTEST GROUP.....	11	3,052,040
MALL CITY CONTEST GROUP.....	8	3,004,717
HILLTOP TRANSMITTING ASSN.....	6	2,533,243
SOUTHWEST OHIO DX ASSOCIATION.....	6	2,418,585
METRO DX CLUB.....	14	2,385,143
DELARA CONTEST TEAM.....	5	1,693,509
BERGEN ARA.....	11	1,611,313
BRISTOL (TN/VA) ARC.....	11	1,604,436
MIDLAND AMATEUR RADIO CLUB.....	4	1,503,182
MERIDEN ARC.....	6	1,342,875
SUSSEX COUNTY ARC.....	4	1,327,744
PANHANDLE DX AND CONTEST CLUB.....	4	1,257,210
SALT CITY DX ASSOCIATION.....	4	1,037,543
SOUTH JERSEY RADIO ASSOCIATION.....	6	975,596
STERLING PARK AMATEUR RADIO CLUB.....	6	764,280
SKYVIEW RADIO SOCIETY.....	5	716,256
PUEBLO WEST AMATEUR RADIO CLUB.....	6	699,192
PORTAGE COUNTY AMATEUR RADIO SERVICE.....	5	507,016
WEST PARK RADIOPS.....	6	393,045
KANSAS CITY DX CLUB.....	6	351,752
IDAHO DX ASSOCIATION.....	7	232,191
NORTHERN ARIZONA DX ASSN.....	4	104,341
SOUTHERN CALIFORNIA DX CLUB.....	4	89,703
GREAT SOUTH BAY AMATEUR RADIO CLUB.....	5	66,509
TALLAHASSEE AMATEUR RADIO SOCIETY.....	4	64,394

DX

BAVARIAN CONTEST CLUB.....	323	296,475,847
EA CONTEST CLUB.....	119	222,722,623
ITALIAN CONTEST CLUB.....	240	220,994,977
RHEIN RUHR DX ASSOCIATION.....	208	170,409,658
CONTEST CLUB ONTARIO.....	88	136,340,173
CONTEST CLUB FINLAND.....	79	130,462,063
ARAUCARIA DX GROUP.....	64	124,758,976
CROATIAN CONTEST CLUB.....	69	116,198,030
LU CONTEST GROUP.....	58	82,415,927
SP DX CLUB.....	150	79,762,519
UKRAINIAN CONTEST CLUB.....	138	76,727,492
SLOVENIA CONTEST CLUB.....	61	76,084,584
HA-DX-CLUB.....	24	70,992,958
KAUNAS UNIVERSITY OF TECHNOLOGY RADIO CLUB.....	58	63,284,788
RUSSIAN CONTEST CLUB.....	46	53,614,671
ORCA DX AND CONTEST CLUB.....	37	41,417,132
CLIPPERTON DX CLUB.....	24	37,484,592
URAL CONTEST GROUP.....	44	37,377,087
BOSNIA AND HERZEGOVINA CONTEST CLUB.....	19	36,704,923
DXARC DX COLOMBIA AMATEUR RADIO CLUB.....	5	32,230,916
BELARUS CONTEST CLUB.....	41	32,173,713
UA2 CONTEST CLUB.....	11	31,467,734
SOUTH URAL CONTEST CLUB.....	18	29,916,229
LATVIAN CONTEST CLUB.....	32	29,721,397
CONTEST GROUP DU QUEBEC.....	19	28,454,024
VYTAUTAS MAGNUS UNIVERSITY RADIO CLUB.....	14	27,845,366
CONTEST CLUB SERBIA.....	90	24,357,579
ARIPA DX TEAM.....	4	23,934,831
VK CONTEST CLUB.....	28	22,078,020
RADIO CLUB VENEZOLANO CARACAS.....	14	20,348,961
LA CONTEST CLUB.....	16	19,613,333
BELOKRANJEC CONTEST CLUB.....	12	19,237,092
SKY CONTEST CLUB.....	7	18,355,485
RIO DX GROUP.....	52	17,509,065
CHILTERN DX CLUB.....	48	15,924,779
CE CONTEST GROUP.....	7	13,896,961
RUSSIAN CW CLUB.....	74	13,323,058
BAHRAIN CONTEST TEAM.....	10	12,133,540
599 CONTEST CLUB.....	14	12,118,997
RIIHIMAIEN KOLMOSET.....	8	12,058,319
VU CONTEST GROUP.....	27	11,278,219
DANISH DX GROUP.....	32	11,182,799
GUARA DX GROUP.....	10	10,246,953
MARITIME CONTEST CLUB.....	11	10,242,480
UNIVERSITY OF TOKYO CONTEST CLUB.....	8	10,097,307

LITHUANIAN CONTEST GROUP.....	10	9,511,054
YB LAND DX CLUB.....	64	8,986,535
WORLD WIDE YOUNG CONTESTERS.....	18	8,400,804
ARKTIKA.....	10	8,104,063
ALRS ST PETERSBURG.....	25	8,044,744
WEY VALLEY AMATEUR RADIO GROUP.....	4	7,537,631
SIAM DX GROUP.....	8	7,500,275
CRIMEAN CONTEST CLUB.....	7	7,373,152
CZECH CONTEST CLUB.....	6	7,361,127
TARTU CONTEST TEAM.....	7	7,305,180
GMDX GROUP.....	12	7,163,743
YO DX CLUB.....	27	6,699,239
RADIOSPORT MANITOBA.....	9	6,641,599
NOVOKUZNETSK RADIO CLUB.....	16	6,277,944
THRACIAN ROSE CLUB.....	44	6,172,433
ARCK.....	20	6,132,872
BLACK SEA CONTEST CLUB.....	46	5,997,543
KRIVBASS.....	8	5,996,171
YOKOHAMA DX CLUB.....	8	5,960,829
LIPETSK RADIO CLUB.....	5	5,778,175
THREE A'S CONTEST GROUP.....	13	5,629,270
NORFOLK AMATEUR RADIO CLUB.....	6	5,450,481
LES NOUVELLES DX.....	4	5,223,818
CLUB DE RADIO EXPERIMENTADORES DE OCCIDENTE.....	7	5,134,976
CATALONIA CONTEST CLUB.....	9	5,007,598
SHAKHAN CONTEST CLUB.....	4	4,885,538
IRKUTSK RADIO CLUB.....	12	4,728,457
THAILAND DX ASSOCIATION.....	4	4,286,896
WEST SERBIA CONTEST CLUB.....	11	4,256,190
CSM CRAIOVA.....	9	4,226,430
GIPANIS CONTEST GROUP.....	14	4,134,176
ASSOCIACAO DE RADIOAMADORES DO PARANA.....	7	4,125,217
CSTA BUCURESTI.....	4	3,855,730
OMSK RADIO CLUB.....	11	3,848,160
RU-QRP CLUB.....	21	3,495,333
DONBASS CONTEST CLUB.....	19	3,448,245
SK6AW HISINGENS RADIOKLUBB.....	11	3,223,815
SOUTHERN OSAKA CONTEST CLUB.....	14	2,880,559
IVANOVO DX CLUB.....	6	2,877,757
GRIMSBY AMATEUR RADIO SOCIETY.....	11	2,737,636
SAMARA RADIO CLUB.....	7	2,599,819
DOMODOVO.....	8	2,447,189
THE AKITA DX ASSOCIATION.....	4	2,328,300
CDR GROUP.....	35	2,203,718
PODOLSK.....	2	2,181,613
VRHNIKA CONTESTERS.....	8	2,142,763
R4F-DX-G.....	10	2,126,229
MAUI AMATEUR RADIO CLUB.....	5	2,094,747
ADMIRA ARAD.....	9	2,014,284
NORDX CLUB.....	7	1,987,019
NORD OOST LIMBURG.....	4	1,983,317
OLDHOUSERADIOCLUB.....	7	1,812,568
FALKOPINGS RADIOCLUB.....	8	1,775,601
SPEKTR.....	5	1,726,988
VERENIGING VAN RADIO ZEND AMATEURS.....	6	1,722,414
DE MONTFORT UNIVERSITY ARS.....	4	1,673,317
Z37M CONTEST TEAM.....	7	1,582,572
TOP OF EUROPE CONTESTERS.....	5	1,523,788
LA-DX-GROUP.....	6	1,517,588
MOSCOW RADIO CLUB.....	7	1,427,038
SERPUKHOV RADIO CLUB.....	4	1,396,803
RADIOCLUBUL RADU BRATU.....	4	1,210,586
SK0QQ SODERTORNS RADIOAMATORER.....	4	1,169,799
SK5LW ESKILSTUNA SANDAREAMATORER.....	4	1,138,416
THE BARBEQUE ENTHUSIASTS AMATEUR RADIO CLUB.....	4	1,018,523
VOLYN CONTEST GROUP.....	10	1,001,435
KILMARNOCK AND LOUDOUN ARC.....	5	912,103
MEDITERRANEO DX CLUB.....	10	909,727
SP CONTEST CLUB.....	5	893,499
KEYMEN'S CLUB OF JAPAN.....	21	886,056
HAROS RADIO CLUB.....	4	875,710
GRUPO DXXE.....	6	864,072
BRACKNELL AMATEUR RADIO CLUB.....	4	863,818
CHILEAN PACIFIC DX GROUP.....	8	852,014
CSM CLUJ-NAPOCA.....	8	835,686
SOUTH GERMAN DX GROUP.....	4	834,759
RADIO CLUB KVARNER RIJEKA.....	10	808,531
BRISTOL CONTEST GROUP.....	5	793,677
OK1KQJ CONTEST CLUB.....	4	742,741
BARIVM DX TEAM.....	8	675,483
UKRAINIAN DX CLUB.....	4	672,968
SWINDON AND DISTRICT AMATEUR RADIO CLUB.....	7	662,591
SASKATCHEWAN CONTEST CLUB.....	6	657,292
LITTLE GUN CLUB.....	4	648,386
ORENBURG CONTEST CLUB.....	5	608,588
CWJF CLUB.....	4	602,204
UR-QRP GROUP.....	12	590,431
SAYAN DX CLUB.....	7	574,060
NEWBURY AND DISTRICT ARS.....	4	536,346
KALININGRAD RADIO CLUB.....	4	479,990
SARATOVSKAYA OBLAST RADIO CLUB.....	6	475,451
PERUGIA CONTEST CLUB.....	6	467,321
GRESUN TELSIZ VE RADYO AMATORLERI DERNEGI.....	4	440,676
TALL TREES CONTEST GROUP.....	5	432,754
RTTY CONTESTERS OF JAPAN.....	10	348,708
CABREUVADX.....	4	336,827
ARGO.....	4	327,157
BASHKORTOSTAN DX CLUB.....	4	310,604
ALEXANDER THE GREAT CONTEST GROUP.....	4	297,420
ACTIVITY SMOLENSK GROUP.....	6	296,576
RADIOCLUBUL QSO BANAT TIMISOARA.....	10	280,018
GERMAN DX FOUNDATION.....	6	234,567
SK5AA VASTERAS RADIOKLUBB.....	5	225,649
OSTROW AMATEUR RADIO CLUB SP3POW.....	5	223,213
PETERBOROUGH AMATEUR RADIO CLUB.....	6	197,483
ARS LA SPEZIA.....	5	194,103
MARRAD.....	4	187,697
UPPSALA RADIOKLUBB.....	4	184,333
EDIT 14.....	5	178,725
TDR.....	7	177,965
CSM TIMISOARA.....	4	152,325
YYP CLUB.....	5	139,300
NANAIMO AMATEUR RADIO ASSOCIATION.....	4	107,302
OBINSKI QRU CLUB.....	5	78,801
CS AEROSTAR BACAUI.....	4	75,023
NOGINSKIJ RADIOCLUB.....	4	57,579
SP5PRF.....	4	11,158

your call in the search field, and then look for the certificate link.

There are many people who put in long hours to help administer and judge the 7,535 logs that were received this year. They do it because they love the contest and want to help preserve its unique place as the premier DX competition. You can see a list of the committee members on the website.

This will be my final report as Director of the CQWW Contest. A new job is demanding more of my time and it is

no longer possible for me to give the contest the attention that it needs. After five years of WPX, four years of WRTC2014, and three years of CQWW, I also need a break. The search for a new director is ongoing. I plan to keep working on the contest as an individual contributor. It has been a great experience and one that I very much enjoyed doing.

We look forward to seeing everyone again next year for the CQWW DX CW Contest on November 26-27, 2016. Full rules, records, and other information are available on the web at <www.cqww.com>.

CQ WW CW 2015 on the Web

N6MJ operating as ZF2MJ: <<https://youtu.be/no8nGGa99cE>>
TK0C CQWW CW 2015 photo album: <<https://youtu.be/MDEz5wg-n5U>>
PA3FYM 160m CQWW CW 2015: <<https://youtu.be/Zpv7ilyXrOw>>
N5DX at N2QV Story: <<http://zf2dx.com/blog/cqww-cw-2015/>>
E12KC fast action in CQWW CW 2015: <<https://youtu.be/VGaay861bQ4>>
HI3K CQ WW CW 2015: <<https://youtu.be/miDh2NrWLno>>
OA85O CQWW DX CW 2015: <<https://youtu.be/EqR117bkfLw>>
Moving map of all 10-meter QSOs in CQWW CW 2015: <<https://youtu.be/-Xj-ewd7OBw>>
WQ6X remote operation: <<http://bit.ly/1MbQxLX>>
CQWW CW 2015: HS0ZAR@HS0ZGD: <<https://youtu.be/9l6s3b2Wn3Q>>
CONTEST CQWW CW 2015 YV1KK: <<https://youtu.be/XNGGggxaAbE>>
Reverse Beacon Network statistics during CQWW CW: <<http://bit.ly/1P3Ya6Y>>
DH8BQA Contest Audio: <<http://www.dh8bqa.de/cqww-cw-2015-contest-audio/>>

Convergence and Change Perspective and Commentary by K5ZD

Many years ago, the best DX and contest operators were hunters. They studied the bands, knew when the rare DX was most likely to be on, and could even recognize the sound of that rare station needed for a multiplier. As technology improved, stations got better and more capable. Personal computers entered our shacks to help with logging and sending CW. The game started to change from hunting to running.

In the mid 1980s, Dick Newell, AK1A, invented Packet-Cluster® software that allowed operators to enter the call and frequency of a DX station — a “DX spot” — and have it announced to everyone connected to the VHF packet network. Suddenly we could have hundreds of others telling us where the DX was hiding. After some controversy, the CQWW added the Assisted category in 1989 to place those using this new tool into a separate category.

In early 2008, a new innovation appeared. Alex Shovkoplyas, VE3NEA, introduced his CW Skimmer software. CW Skimmer is a multi-channel CW decoder that copies all of the callsigns in the receiver passband and displays them on the screen. It had amazing CW copying ability — especially when Software Defined Radios provided the ability to capture a full 96 kHz of each amateur radio band. It suddenly became possible to simultaneously copy and announce every station calling CQ on CW across all six contest-eligible HF amateur radio bands along with their signal strength.

Soon after, PY1NB and N4ZR began building out the Reverse Beacon Network (RBN). The RBN collected data from CW Skimmers around the world, made it available to DX Cluster nodes, and stored it in an archive. This concept was quickly adopted by testers because it provided immediate knowledge of activity around the world. You could call one CQ and see your signal reported from every

Skimmer where there was propagation. The archive was a rich resource for propagation and antenna evaluation.

This convergence of personal computers, Internet access, DX clusters, and CW Skimmer have changed the nature of CW contesting. Even the smallest station can now call CQ and be noticed. The top multi-operator stations have developed the ability to interlock multiple stations on a band so they can chase these Skimmer-spotted stations in between CQs on their run frequency. Many single ops talk about the fun of doing all of their operating just by working stations found when clicking on DX spots.

Like it or not, the CQWW CW (and contesting in general) has certainly been impacted by this convergence. Having so much information has helped more people have more fun — generating even more activity and QSOs for everyone. It has also made it more difficult to police the line between the single operator working alone and those who are using the assistance of DX spotting. Anyone who has received a ham radio license in the last 25 years doesn't know amateur radio DXing without the DX Cluster.

We have to remember that contesting is ultimately a game played using the ionosphere and our ability to hear faraway signals with our own ears. Enjoy the tools, but never forget that our real purpose is to build and test our skills as radio operators. Given our history of technological innovation, when does it make sense to accept convergence and recombine the single operator categories — giving everyone access to spotting information?

(The opinions expressed in this commentary are the personal views of the writer and do not necessarily reflect the opinions of the CQ World Wide Contest Committee or CQ magazine.)