

Results of the 2016 CQ World Wide RTTY DX Contest

BY ED MUNS,* WØYK

"CQWW RTTY Contest is the best." – DL5HF

Solar conditions at the trough between Cycles 24 and 25 still provided lots of fun in the 30th annual CQWW RTTY DX Contest. With the K-index at 1-2 and the SSN at 47-49, no disturbances interrupted the weekend. Depending on location, on one extreme some reported great conditions while at the other extreme, some had a difficult time making contacts. Nearly 1.2 million QSOs appeared in the 3,078 submitted logs. Over the past 3 years, QSOs have predictably shifted down from the high bands. Whereas in 2014 half of the QSOs were made on 10 and 15 meters, only 25% were made there in 2016. And most of the 10-meter propagation was north-south.

	2014	2015	2016
80	7%	7%	10%
40	16%	21%	24%
20	26%	36%	41%
15	3%	33%	23%
10	18%	4%	2%

Percentage of QSOs in each contest.

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Activity decreased a bit and scores were down significantly for the most part. There were 162 different countries active and a number of stations worked over 100 of them on a single band. UR7GO led the way with 118 countries on 20 meters. 9A7Ø1A (9A1A) topped 15 meters with 111 while IQ6AN led 40 meters with 109. As a band, 20 meters had the highest single-band QSOs (1,945 by HK1T), highest number of zones (37 by both UA4M and UR7GO), highest countries (118 by UR7GO), and highest number of US/VE QTHs (59 by CR3W, 9A7Ø1A, W4AAA, and M9K). CW4MAX (CX2DK) dominated 10 meters with the high QSO count of 847, highest countries of 78 and highest US/VE QTHs of 41.

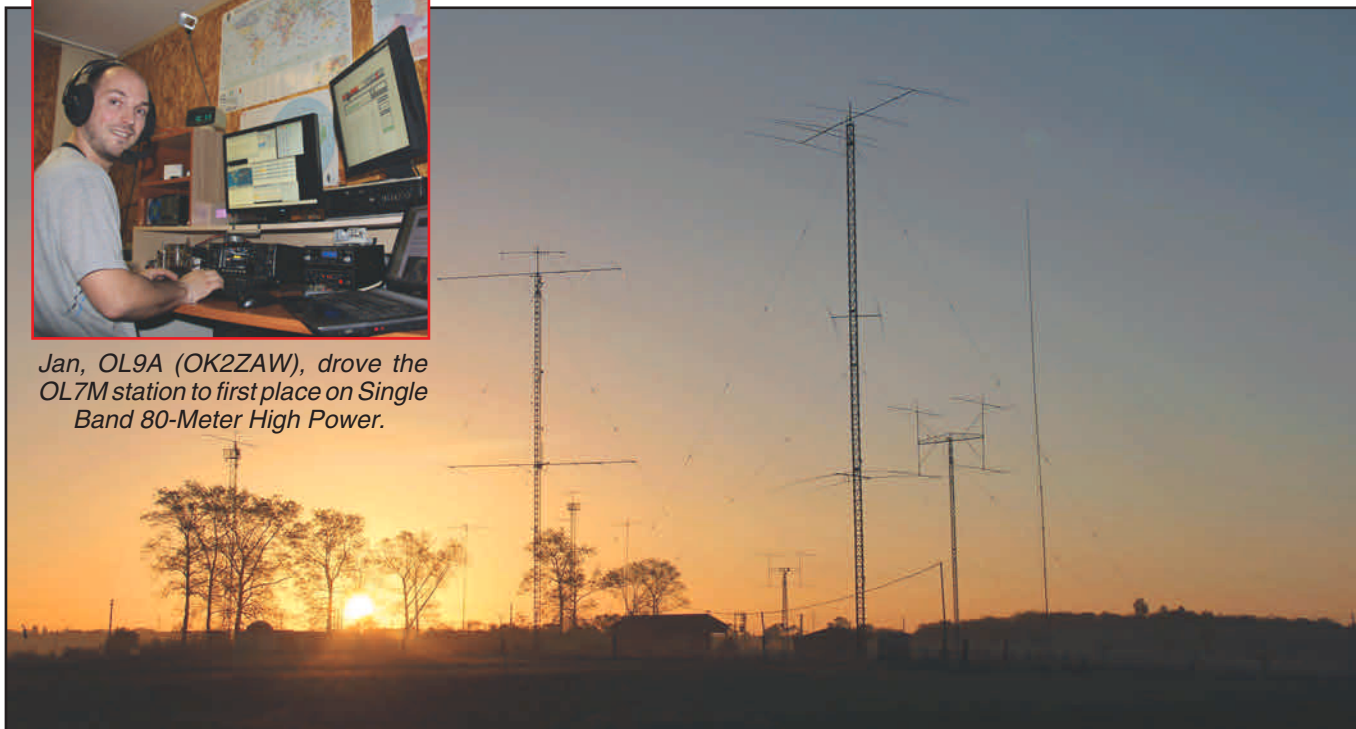
Videos made during contests are becoming more common. If you perform a Google search on "2016 CQWW RTTY video," you'll find videos by UX5UU, OZ1JTE, WXØV, KA6WKE, K3UK, KØCN, N7DR, and others.

Single-Op High Power (502 logs received)

Single-Op All Band High Power (358). Ed P49X (WØYK) won with 7.9 million points and Andy UB7K took second with 4 million points. His well-equipped antenna farm includes a stack of 6-element, 20-meter Yagis and 12 Beverages.



Jan, OL9A (OK2ZAW), drove the OL7M station to first place on Single Band 80-Meter High Power.



The OL7M antenna farm used by OL9A. (Photo by OK2ZAW)

Inside he uses a pair of K3/P3 radios with Win-Test. Darko, 9A5X; Velimir, K1LZ (K3JO); and Nick, EMØI, took the next three slots with 3.2 million, 3 million, and 2.9 million respectively.

Single-Op 80-Meter High Power (15): Daniel, HB9TOC, won with 81K.

Single-Op 40-Meter High Power (27): Robby, DM6DX, won with 339K.

Single-Op 20-Meter High Power (51): Jahm, HK1T, won with 1 million, breaking the South America record that he holds.

Single-Op 15-Meter High Power (46): Alex, 4Z4AK (UT7DK), won with 640K. This was his first RTTY contest which he operated from the club station 4X4REM.

Single-Op 10-Meter High Power (5): Marcelo, CW4MAX (CX2DK), won with 346K. Commemorative call sign CW4MAX was obtained at birth of his son, Maximo, in April 2014.

Single-Op Low Power (1,199 logs received)

Single-Op All Band Low Power (876): Wanderley, ZZ2T (PY2MNL), won with 3.1 million, followed by Alfredo, WP3C, with 2.8 million; Sulaiman, 7Z1SJ, with 2.2 million; Kazu, MJ5Z (JK3GAD), with 1.6 million; Dimitri, F4DSK with 1.5 million; Philippe, FG5LA, with 1.3 million; and Vitor, PY2NY, also with 1.3 million.

Single-Op 80-Meter Low Power (26): Tim, G8X (G4FJK), made 86K to win and set a new European record. This was accomplished from his modest station with an Inverted-V at 50 feet. Tim credits the favorable soil conditions under his antenna.

Single-Op 40-Meter Low Power (67): Cam, HK3TU, took first with 328K just 1,000 points away from the world record but setting a new South America record.

Single-Op 20-Meter Low Power (144): Simon, M9K (MØSIY), won with 476K; Francisco EC7WA was second with 426K, and Vlad UN6LN was third with 405K. All three exceeded the prior Europe record. Vlad lives in a 5-story apartment house with a tri-band Spider beam and uses a UR5EQF Log with his TS-590.

2016 CQWW RTTY TROPHY WINNERS AND DONORS

SINGLE OPERATOR HIGH POWER

North America: Dick Wilson, K6LRN & Carolyn Wilson, K6TKD. Won by: Velimir Deric, K1LZ (op: K3JO)

USA: Kevin Rowett, K6TD. Won by: Jeff Stai, W7RN (op: WK6I)

USA - 7th Call Area: Hank Lonberg, KR7X. Won by: Mark Reisenauer, KB7N

SINGLE OPERATOR LOW POWER

World: Grand Mesa Contesters of Colorado (GMCC). Won by: Wanderley Gomes, ZZ2T (op: PY2MNL)

North America: Joseph Young, W6RL. Won by: Alfredo Velez, WP3C

USA: Kevin Rowett, K6TD. Won by: Matt Shelburne, W4GO

SINGLE OPERATOR QRP

World: Kevin der Kinderen, K4VD. Won by: Konstantin Vakhonin, RU4SS

SINGLE OPERATOR ASSISTED HIGH POWER

World: Mike Sims, K4GMH. Won by: Krzysztof Sobon, SN7Q (op: SP7GIQ)

Asia: Lakshman "Lucky" Bijanki, VU2LBW. Won by: Hiroyuki Inaba, JS3CTQ

SINGLE OPERATOR ASSISTED LOW POWER

World: Jim Barron, WB5AAA. Won by: Andrius Ignatas, LY7Z

North America: Wray Dudley, AB4SF. Won by: Doug Ferris, VA3DF

SINGLE OPERATOR SINGLE BAND

High Power 21 MHz World: Steve "Sid" Caesar, NH7C. Won by: Alexander Krayzman, 4Z4AK (op: UT7DK)

High Power 14 MHz North America: Patrick W. Soileau, ND5C. Won by: John Bayne, W5AAA (op: KK9A)

Assisted QRP 7 MHz World: Central Texas DX and Contest Club (CTDXCC). Won by: Robert Wood, VY2/W5AJ

MULTI-OPERATOR, SINGLE-TRANSMITTER HIGH POWER

World: PL259 Contest Club. Won by: I4DZ (ops: I4DZ, I4EWH, I4IFL, IK3QAR, IK4DCW, IK4HVR, IK4MGP, IZ4NIC, IU4DBX)

Europe: EA Contest Club. Won by: IQ1RY (ops: I1BEP, IK1SPR, IT9RGY, IW1ARB, IW1QN, IZ1LBG)

North America: Steve Jarrett, K4FJ. Won by: K1SFA (ops: K1MK, K1NZ, K1SFA, W1TO, @K1TTT)

USA: Jack Satterthwaite, K3KG. Won by: NV9L (ops: NV9L, W9IE, K9CS, WB9Z)

MULTI-OPERATOR, SINGLE-TRANSMITTER LOW POWER

North America: John Miller, K6MM. Won by: K3LR (ops: WW3S, ND8L, K3GP, NO3M, K8IV, N8NB, K3UA, K3LA, K3LR)

SINGLE OPERATOR, MULTI-TWO

World: Ed Muns, WØYK. Won by: AN4ØØV (ops: EC2DX, EA2ABI, EA3HCJ, EA5BZ, EA5RM, EA7AJR, EA7KE)

Europe: CT3 Madeira Contest Team/CR3A/CQ9K. Won by: IQ9UI (ops: IT9EQO, IV3YYK, IT9NJE, IT9CHU, IT9GSF, IT9AUG, IT9CJC, IT9WNU)

SINGLE OPERATOR, MULTI-TRANSMITTER

World: Mike Trowbridge, KA4RRU. Won by: CR3W (ops: DJ7JC, DJ9RR, DK4QT, DL6TK, DF6QV)

North America: Kevin Rowett, K6TD. Won by: NR4M (ops: NR4C, K4MI, A14WU, K7SV, W6WLG, KM4NBM, KA4RRU, N4DXS, NR4M, N7TY, N3AIU, KK4RTF, K2KW, KE2KW, N3ZV, K4GM, K4GMH, KS4Q, KM4CDQ)

CLUB COMPETITION

World: Potomac Valley Radio Club. Won by: Bavarian Contest Club

North America: Northern California Contest Club. Won by: Potomac Valley Radio Club



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TOP SCORES

WORLD

SINGLE OPERATOR HIGH POWER ALL BAND

P49X (W0YK).....	7,854,600
UB7K.....	3,994,200
9A5X.....	3,206,709
EM0I (UT2IZ).....	2,916,950
LY6A.....	2,709,147

28 MHz

CW4MAX (CX2KD).....	345,873
IK3ASM.....	4,250
UY5ZZ.....	1,102

21 MHz

4Z4AK (UT7DK).....	640,000
EA1BD.....	553,026
LT0H (LUSHY).....	522,504

14 MHz

HK1T.....	1,004,369
E9LZ.....	937,300
OK3RM.....	701,220

7 MHz

DM6DX.....	338,752
US1Q (UW2OU).....	317,664
S51CK.....	275,919

3.5 MHz

OL9A.....	252,164
H89TOC.....	81,276
DJ3IW.....	71,467
HG1G.....	71,264

LOW POWER ALL BAND

ZZ2T (PY2MNL).....	3,101,461
WP3C.....	2,792,976
7Z1SJ.....	2,171,196
MJ5Z (JK3GAD).....	1,585,175
F4DSK.....	1,518,256

28 MHz

PU2WDX.....	42,675
ZP6ARO.....	4,110
LU9EHU.....	4,110

21 MHz

HK6NVV.....	656,397
YY2GAL.....	317,840
PP5NY.....	161,805

14 MHz

M9K (M0SIY).....	475,580
EC7WA.....	425,920
UN6LN.....	404,952

7 MHz

HK3TU.....	328,434
YW5T (YV5JBI).....	320,352
LY5W.....	233,289

3.5 MHz

G8X (G4FJK).....	85,570
HA3MY.....	57,528
OK2HBR.....	54,480

ASSISTED HIGH POWER ALL BAND

SN7Q (SP7GIQ).....	4,906,224
AA3B.....	3,400,320
S57AW.....	3,220,392
Y09HP.....	3,103,680
AN400T (EA1AKS).....	2,725,569

28 MHz

N6SS/7.....	3,224
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21 MHz

YV1YLY.....	830,023
LU1FKR.....	581,360
JA1BPA.....	436,045
9A5D (9A7Z).....	428,645

14 MHz

DL1REM.....	726,544
YT1X.....	703,902
UR7GO.....	665,247

7 MHz

IN3VVK.....	676,980
IQ6AN (IZ6TSA).....	643,848
P3X (UT5UDX).....	615,061

3.5 MHz

I4AVG.....	204,303
MD/DL7VEE.....	171,200
IV3XQ.....	162,301

ASSISTED LOW POWER ALL BAND

3Z9M (SQ9UM).....	2,315,451
LY7Z.....	1,431,621
UT8EL.....	1,331,616
RM3F (UA4LCQ).....	1,320,476
CT1BXT.....	1,157,266

28 MHz

LW5DW.....	59,340
PU3LTA.....	4,240
YC9GWR.....	1,950

21 MHz

PY2KC.....	157,276
9V1XX.....	146,025
IT9WDC.....	118,231

14 MHz

5C5W (CN8KD).....	585,900
WH0RU (JG7PSJ).....	437,250
IK3TPP.....	340,740

7 MHz

YT2B.....	236,205
Y04NF.....	219,645
LN7TTT (LA5LJA).....	141,360

3.5 MHz

ES3VI.....	34,722
UA5F.....	17,350
AB1J.....	12,730

SINGLE OPERATOR QRP ALL BAND

RU4SS.....	778,360
DL8TG.....	307,520
K2YG.....	237,120
LY5G.....	211,347
DL3CB.....	99,267

21 MHz

PU2TRX.....	48,307
Y03DAC.....	25,205
EC7KW.....	17,697

14 MHz

TG9ANF.....	117,260
YU1RH.....	38,640
OH2DP/QRP.....	29,562

7 MHz

NP3RE.....	48,807
Y03CBZ.....	41,760
S51DX.....	38,664

3.5 MHz

ON3DI.....	46,336
IK4UXA.....	16,752
RU6YJ.....	11,730
UT5UUV.....	11,224

SINGLE OPERATOR QRP ASSISTED ALL BAND

ON6NL.....	472,052
VE3KI.....	316,274
SB0A (SM0LPO).....	240,670
PE2K.....	119,064
ZP9MCE.....	51,405

28 MHz

JH3DMQ.....	630
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21 MHz

UW6E (UR6EA).....	30,476
PY2MSR.....	26,244
A96A.....	10,548

14 MHz

LZ8U (LZ2TU).....	45,109
I0UZF.....	34,365
IZ1ANK.....	19,980

7 MHz

VY2/W5AJ (W5AJ).....	71,820
YT5TT.....	7,844

3.5 MHz

DK6SP.....	62,480
IZ3NVR.....	1,100

MULTI-OPERATOR SINGLE TRANSMITTER HIGH POWER

I4DZ.....	6,762,744
IQ1RY.....	5,224,422
HG1S.....	4,608,336
HG7T.....	4,359,856
RW0A.....	4,019,323

MULTI-OPERATOR SINGLE TRANSMITTER LOW POWER

IT9BLB.....	3,343,300
DD1A.....	2,887,843
EA8ED.....	2,683,504
S50W.....	2,252,906
K3LR.....	2,188,059
IQ3RK.....	2,167,083

MULTI-OPERATOR TWO TRANSMITTER

AN400V.....	7,864,506
IQ0UI.....	7,670,016
4O10A.....	7,492,513
S51A.....	5,470,413
DR5N.....	4,899,756

MULTI-OPERATOR MULTI-TRANSMITTER

CR3W.....	9,929,820
9A701A.....	9,753,186
LX7I.....	6,868,495
UA4M.....	5,380,100
PI4CC.....	4,323,594

ROOKIE SINGLE OPERATOR HIGH POWER ALL BAND

YV1YLY.....	830,023
IU4CHE.....	763,800
OK7LO.....	254,200
NB8F.....	44,690
W3RPH.....	40,216

ROOKIE SINGLE OPERATOR LOW POWER

CR5U (CS7AJL).....	1,106,406
EW7BA.....	281,232
SQ7SAU.....	185,094
OH2EUU.....	177,630
IU3BSY.....	137,922

CLASSIC SINGLE OPERATOR HIGH POWER

UW1M.....	1,952,960
FM/DD5ZZ.....	1,579,552
GW0A.....	1,381,272
DJ8OG.....	1,164,855
DJ3NG.....	956,862

CLASSIC SINGLE OPERATOR LOW POWER

MW2I (G4FRE).....	992,593
ZB2TT.....	692,899
KG4SS.....	480,403
V31MA.....	419,604
RU9AC.....	418,863

UNITED STATES SINGLE OPERATOR HIGH POWER ALL BAND

K1LZ (K3JO).....	1,959,318
W7RN (WK6J).....	1,494,409
AC0C.....	876,736
W4UEF.....	597,919
N7US/9.....	594,384

21 MHz

N4BP.....	202,383
KU2M.....	94,640
W9ILY.....	90,882

14 MHz

W4AAA (KK9A).....	510,114
W3RTY.....	88,076
WC7Q.....	16,677

7 MHz

WK9U.....	42,632
N1XF.....	25,630
W9AKS.....	9,990

3.5 MHz

K4FJ.....	13,975
KS0AA.....	2,478

LOW POWER ALL BAND

KG4SS.....	480,403
W4GO.....	389,286
WR0U.....	310,341
N7IR.....	294,321
WN6K.....	283,560

28 MHz

K4WI.....	945
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21 MHz

W1ZD/7.....	43,275
K7MY.....	8,145
W9IDX.....	8,100

14 MHz

K6GHA.....	60,528
W4LC.....	49,120
N8HP.....	40,488

7 MHz

WC1X/6.....	29,328
WB8JU.....	18,048
W2VTU.....	15,453

3.5 MHz

NA5NN (K2FF).....	4,680
N04K.....	1,740
KK4HEG.....	1,596

ASSISTED HIGH POWER ALL BAND

AA3B.....	3,400,320
W3FV.....	1,599,631
N3QE.....	1,480,470
N7AT (K8IA).....	1,118,124
K0KX.....	1,116,968

28 MHz

N6SS/7.....	3,224
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21 MHz

N6EE/2.....	60,628
N3UA/4.....	37,512

14 MHz

K9OM.....	370,574
W7ZR.....	222,045
K7OX.....	188,710

7 MHz

W7RY/5.....	101,850
K0MP/7.....	24,696
AG2T.....	3,538

3.5 MHz

W6GJB.....	280
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ASSISTED LOW POWER ALL BAND

W3FIZ.....	386,568
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KE2D.....	275,440
W0JW.....	228,512
N1API.....	227,448
W1ARY.....	207,144

14 MHz

W6HGF/4.....	42,120
KV4QS.....	23,760
WK4Y.....	11,088

7 MHz

WA1FCN/4.....	69,125
WX1S.....	29,652
WU0B/4.....	8,400

3.5 MHz

AB1J.....	12,730
K1IU.....	2,331

SINGLE OPERATOR QRP ALL BAND

K2YG.....	237,120
W6QU (W8OZA).....	87,696
AB3WS.....	84,738
K4VD.....	48,720
K2YGM.....	29,388

21 MHz

WD9FT/8.....	7,830
N5IJE.....	3,026

14 MHz

KC7CM.....	14,416
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7 MHz

K3TW/4.....	720
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SINGLE OPERATOR QRP ASSISTED ALL BAND

KB2HSH.....	5,250
KC2WUF.....	1,728

MULTI-OPERATOR SINGLE TRANSMITTER HIGH POWER

K1SFA.....	3,066,079
NV9L.....	1,651,968
K3MJW.....	1,437,864
WW4LL.....	1,216,688
W0LSD.....	1,189,890

MULTI-OPERATOR SINGLE TRANSMITTER LOW POWER

Single-Op 15-Meter Low Power (76): Andres, HK6NVV, was first with 656K.

Single-Op 10-Meter Low Power (10): Celso, PU2WDX, won with 43K.

Single Operator QRP (104 logs received)

Single-Op All Band QRP Power (49): Konstantin, RU4SS, won with 778K and Dave, K2YG, was second with 354K.

Single-Op 80-Meter QRP (6): Pieter, ON3DI, won with 46K, which set a new world record.

Single-Op 40-Meter QRP (10): Raphael, NP3RE, won with 49K for a new North America record.

Single-Op 20-Meter QRP (20): Francisco, TG9ANF, won with 117K for a new North America record.

Single-Op 15-Meter QRP (19): Geraldo, PU2TRX, won with 48K for a new South America record.

Single-Op Assisted High Power (519 logs received)

Single-Op Assisted All Band High Power (392): Chris, SN7Q (SP7GIQ), won with 4.9 million. Bud, AA3B, was second with 4.7 million, Robert, S57AW, was third with 3.2 million, Alex, YO9HP, was fourth with 3.1 million, and Jose, AN4ØØT (EA1AKS), was fifth with 2.7 million.

Single-Op Assisted 80-Meter High Power (19): G. Franco, I4AVG, won with 204K, just shy of the world record. A retired school teacher, G. Franco splits his time between volunteer ambulance work and low-band contesting on 160 and 80 meters. He has also participated in the multi-ops of IG9A, I19P, and IR4X as the 80-meter operator.

Single-Op Assisted 40-Meter High Power (23): Paolo, IN3VVK, won with 677K for a new world record and Nicolo, IQ6AN (IZ6TSA), was second with 644K. Paolo is a devoted digital contester who set his goal to do his very best in this contest. To that end he temporarily added an additional 40-meter antenna fixed on the U.S. at his quiet mountaintop location over a mile above sea level.

Single-Op Assisted 20-Meter High Power (48): Frank, DL1REM, was first with 727K and Vladan, YT1X, was second with 704K, operating from the beautiful YT3X QTH. Alex,

UR7GO, took third with 665K and is a retired professional shipboard radio officer for a Black Sea shipping company who now enjoys portable operations on various islands around the world.

Single-Op Assisted 15-Meter High Power (34): Grecia, YV1YLY (now YV1YL), won with 830K for a new South America record and Karlos, LU1FKR, was second with 581K. Grecia was first licensed in 2014 and has fallen in love with SSB and RTTY contesting and, along with partner Julio, YV1KK, is evolving their "Signal Hill" station. Together they constructed the homebrew 15-meter, 5-element Yagi that complements their mountaintop QTH over a mile above the Caribbean Sea with clear foreground propagation to both North America and Europe.

Single-Op Assisted Low Power (452 logs received)

Single-Op Assisted All Band Low Power (317): Alek, 3Z9M (SQ9UM), won with 2.3 million, Andrius, LY7Z, was second with 1.4 million, Oleg, UT8EL, and Yuri, RM3F, were third and fourth with 1.3 million each and Rodrigo, CT1BXT, was fifth with 1.2 million.

Single-Op Assisted 80-Meter Low Power (9): Villi, ES3VI, won with 35K.

Single-Op Assisted 40-Meter Low Power (23): Bozidar, YT2B, took first with 236K and Silviu YO4NF was second with 220K. Silviu is a veteran CW contester at multi-ops such as YR2C, YR7M, and YRØHQ. Only a year ago he started operating under his own callsign, branching out into the RTTY mode for the first time.

TOP SCORES IN VERY ACTIVE ZONES

Zone 3

W7RN (WK6I).....1,494,409
W7YAQ525,760
VA7ST417,025
NN6XX340,572
*N7IR.....294,321

Zone 15

9A5X.....3,206,709
LY6A.....2,709,147
OG2P (OH2PM)1,987,704
IK2NCJ.....1,117,850
OK1DBE.....910,690

Zone 4

ACØC876,736
N7US/9594,384
K6XT/Ø537,642
AD5XD462,336
VE3TW424,473

Zone 16

UB7K3,994,200
EMØI (UT2IZ)2,916,950
UW1M1,952,960
UV5U (UX1UA)1,835,928
*UT5EPP1,008,763

Zone 5

K1LZ (K3JO)1,959,318
*VA2UP644,782
VE2EBK630,084
W4UEF597,919
*KG4SS480,403

Zone 20

YO3VU576,180
YO3GNF497,840
*SV5/DL3DRN347,244
*YO6HSU287,964
*YO8RFS277,500

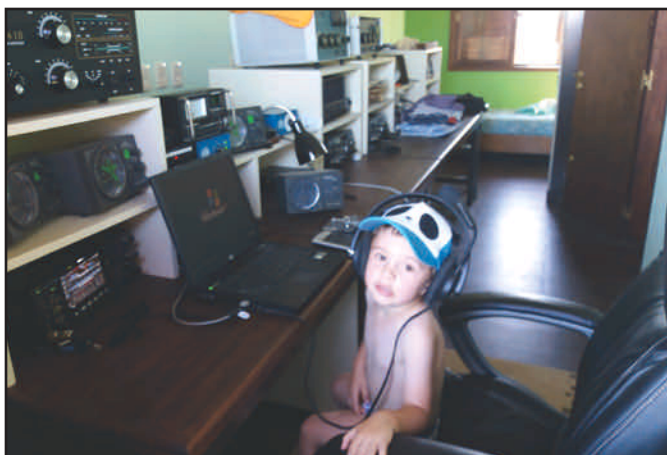
Zone 14

*MJ5Z (JK3GAD).....1,585,175
*F4DSK1,518,256
GWØA1,381,272
DJ8OG1,164,855
*MW2I (G4FRE)992,593

Zone 25

JH4UTP850,459
JA7BME778,540
JH1QDB699,949
*JI1RXQ636,174
JF1OPL542,850

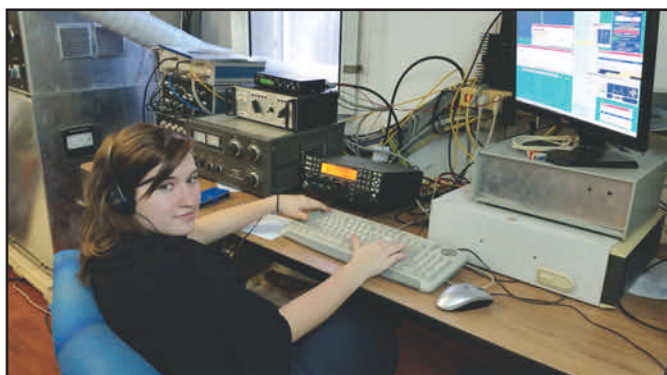
*Low Power



Marcelo, CW4MAX, won Single Band 10 meters, inspired by his young son Maximo as honored in his callsign.



Grecia, YV1YLY, won Single Band 15-Meter Assisted High Power and now sports her new callsign YV1YL.



Two of the eight high school students who operated 9A7Ø1A at the 9A1A multi-op station to a very close second place finish in Multi-Multi.

Single-Op Assisted 20-Meter Low Power (61): Mohamed, 5C5W (CN8KD), won with 586K and Hiro, WHØRU, was second with 437K.

Single-Op Assisted 15-Meter Low Power (38): Ozren, Z35T, won with 179K, Rodrigo, PY2KC, was second with 157K, and Kazu, 9V1XX, was third with 146K.

Single-Op Assisted 10-Meter Low Power (4): Jorge, LW5DW, won with 59K.

Single-Op Assisted QRP (36 logs received)

Single-Op Assisted All Band QRP (16): Anton, ON6NL, won with 472K and Rich, VE3KI, was second with 463K.

Single-Op Assisted 80-Meter QRP (4): Philippe, DK6SP, won with 63K and set a new world record. Markus, DG8MG, and Uschi, DO3UR, hosted Philippe on their hilltop QTH in the Bavarian countryside. With help of local amateurs, three wire antennas were installed to cover primary directions. A tremendous success story for the modest station.

Single-Op Assisted 40-Meter QRP (4): Robert, VY2/W5AJ, set a world record with 110K. He is hard-pressed to pick a favorite between the 4-element, 40 meter Yagi at 145 feet or the scrumptious lobster cuisine by Spencer, head cook at the station.

Single-Op Assisted 20-Meter QRP (6): Doby, LZ8U (LZ2TU), won with 45K.

Single-Op Assisted 15-Meter QRP (5): Paul, UW6E (UR6EA), won with 30K.

Multi-Operator (156 logs received)

Multi-Single High Power (65): I4DZ (I4EWH, I4IFL, IK3QAR, IK4DCW, IK4HVR, IK4MGP, IZ4NIC, IU4DBX) won with 6.7 million; IQ2RY (I1BEP, IK1SPR, IT9RGY, IW1ARB, IW1QN, IZ1LBG) was second with 5.2 million; HG1S was third with 4.6 million; K1SFA was fourth with 4.4

CLUB SCORES

UNITED STATES

Club	# Entrants	Score
POTOMAC VALLEY RADIO CLUB	55	14,760,852
NORTHERN CALIFORNIA CONTEST CLUB	22	14,299,443
FRANKFORD RADIO CLUB	23	12,075,965
YANKEE CLIPPER CONTEST CLUB	28	11,821,420
WILLAMETTE VALLEY DX CLUB	17	8,105,184
MINNESOTA WIRELESS ASSN.	46	7,812,466
ARIZONA OUTLAWS CONTEST CLUB	28	6,094,386
SOCIETY OF MIDWEST CONTESTERS	33	6,012,618
FLORIDA CONTEST GROUP	13	5,763,650
DFW CONTEST GROUP	9	4,305,339
CTRI CONTEST GROUP	3	3,395,055
WESTERN WASHINGTON DX CLUB	9	3,322,637
NORTH COAST CONTESTERS	4	3,107,302
GRAND MESA CONTESTERS OF COLORADO	6	3,092,219
GEORGIA CONTEST GROUP	4	2,207,618
KANSAS CITY CONTEST CLUB	3	1,942,246
SOUTHERN CALIFORNIA CONTEST CLUB	11	1,884,373
MAD RIVER RADIO CLUB	5	1,753,878
KENTUCKY CONTEST GROUP	6	1,204,206
CAROLINA DX ASSOCIATION	4	1,128,421
BERGEN ARA	3	877,535
NIAGARA FRONTIER RADIOSPORT	6	741,676
HILLTOP TRANSMITTING ASSN.	3	692,678
BRISTOL (TN/VA) ARC	4	628,676
NEW PROVIDENCE AMATEUR RADIO CLUB	3	589,213
MOTHER LODE DX/CONTEST CLUB	7	550,510
MISSISSIPPI VALLEY DX/CONTEST CLUB	3	549,504
CAROLINA SHINE	3	503,192
SOUTH EAST CONTEST CLUB	6	428,922
ALABAMA CONTEST GROUP	6	384,473
NE MARYLAND AMATEUR RADIO CONTEST SOCIETY	3	371,802
SPOKANE DX ASSOCIATION	4	324,805
NORTH TEXAS CONTEST CLUB	3	312,297
METRO DX CLUB	3	296,619
CENTRAL TEXAS DX AND CONTEST CLUB	3	286,377
UTAH DX ASSOCIATION	3	162,512
MIDLAND AMATEUR RADIO CLUB	4	152,227
TENNESSEE CONTEST GROUP	4	120,118
DELAWARE LEHIGH AMATEUR RADIO CLUB	3	98,963
ORDER OF BOILED OWLS OF NEW YORK	3	97,378

DX

BAVARIAN CONTEST CLUB	84	46,565,243
RHEIN RUHR DX ASSOCIATION	48	34,101,058
ITALIAN CONTEST CLUB	65	29,131,598
UKRAINIAN CONTEST CLUB	48	19,294,120
CROATIAN CONTEST CLUB	11	14,311,310
EA CONTEST CLUB	22	11,845,006
HA-DX CLUB	5	10,443,635
SLOVENIA CONTEST CLUB	9	9,884,447
RUSSIAN CONTEST CLUB	7	6,536,412
CONTEST CLUB ONTARIO	21	6,471,335
CONTEST CLUB FINLAND	8	5,838,832
ARAUCARIA DX GROUP	16	5,555,945
ORCA DX AND CONTEST CLUB	12	4,934,097
KAUNAS UNIVERSITY OF TECHNOLOGY RADIO CLUB	10	4,869,935
SOUTH URAL CONTEST CLUB	5	4,631,580
599 CONTEST CLUB	7	4,315,809
ARIPA DX TEAM	4	3,667,022
LU CONTEST GROUP	20	3,564,401
CONTEST GROUP DU QUEBEC	7	3,008,138
CE CONTEST GROUP	3	2,695,830
SAUDI CONTEST GROUP	3	2,640,446
RTTY CONTESTERS OF JAPAN	14	2,372,365
CONTEST CLUB SERBIA	7	2,361,354
DL-DX RTTY CONTEST GROUP	9	2,310,311
SP DX CLUB	17	2,037,590
RIIHIMAEN KOLMOSET	3	1,924,208
YB LAND DX CLUB	35	1,801,369
DANISH DX GROUP	6	1,748,647
BRITISH AMATEUR RADIO TELEDATA GROUP	3	1,737,164
BLACK SEA CONTEST CLUB	4	1,373,801
URAL CONTEST GROUP	4	1,294,632
SIAM DX GROUP	5	1,248,168
BELARUS CONTEST CLUB	5	1,220,137
CHILTERN DX CLUB	5	895,744
RIO DX GROUP	5	876,576
EUROPEAN PSK CLUB	5	867,795
VU CONTEST GROUP	8	842,115
BAHRAIN CONTEST TEAM	7	800,209
LATVIAN CONTEST CLUB	6	645,693
RADIO CLUB VENEZOLANO CARACAS	5	611,381
SK6AW HISINGENS RADIOKLUBB	3	572,257
Z37M CONTEST TEAM	3	556,958
VYTAUTAS MAGNUS UNIVERSITY RADIO CLUB	5	519,265
GRIMSBY AMATEUR RADIO SOCIETY	5	496,194
MAUI AMATEUR RADIO CLUB	3	475,499
UNIVERSITY OF TOKYO CONTEST CLUB	3	444,232
GMDX GROUP	3	427,412
YO DX CLUB	3	411,514
RUSSIAN DIGITAL RADIO CLUB	10	408,409
THRACIAN ROSE CLUB	6	322,341
GIPANIS CONTEST GROUP	4	318,410
YYP CLUB	3	302,871
RUSSIAN CW CLUB	3	283,390
RU-QRP CLUB	4	279,605
CDR GROUP	8	153,375
SASKATCHEWAN CONTEST CLUB	3	119,022
GRUPO DXE	3	92,769
DONBASS CONTEST CLUB	3	78,176
NORFOLK AMATEUR RADIO CLUB	3	37,978

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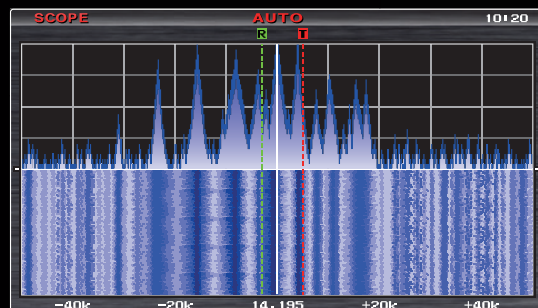
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BAND-BY-BAND BREAKDOWN—TOP ALL BAND SCORES

Number groups indicate: QSOs, Countries, Zones, US/VE on each band

WORLD						USA					
Station	80	TOP SINGLE OPERATOR ALL BAND				SINGLE OPERATOR ALL BAND					
		40	20	15	10						
P49X	297/43/12/41	669/51/22/62	1412/55/31/78	1674/52/27/84	192/33/15/30	K1LZ	368/0/12/40	738/0/22/65	818/0/22/69	705/0/23/65	4/0/2/3
UB7K	391/11/14/60	654/38/27/78	1323/54/33/97	604/19/30/83	69/1/22/33	W7RN	206/0/7/6	775/0/26/63	1139/0/26/76	470/0/26/50	5/0/3/4
9A5X	211/13/10/42	641/46/27/74	780/54/23/62	577/43/28/69	110/2/14/42	AC0C	274/0/10/25	442/0/20/55	583/0/25/77	265/0/24/66	1/0/1/1
*ZZZT	0/0/0/0	277/35/15/43	633/51/24/61	883/47/21/71	454/25/17/63	W4UEF	189/0/8/25	392/0/13/51	331/0/15/54	249/0/14/49	0/0/0/0
EM0I	220/2/14/54	624/31/27/88	1325/49/32/95	332/9/25/74	10/1/6/7	N7US/9	146/0/6/7	316/0/21/45	558/0/24/66	185/0/20/55	0/0/0/0
SINGLE OPERATOR ASSISTED ALL BAND						SINGLE OPERATOR ASSISTED ALL BAND					
SN7Q	400/23/14/58	643/45/26/82	1177/51/34/107	705/40/29/92	55/1/15/39	AA3B	484/0/13/52	858/0/27/90	1202/0/32/102	591/0/27/97	24/0/9/11
AA3B	484/0/13/52	858/0/27/90	1202/0/32/102	591/0/27/97	24/0/9/11	W3FV	213/0/12/34	565/0/15/61	678/0/26/89	433/0/20/73	10/0/5/6
S57AW	292/17/14/63	649/44/30/97	539/47/35/108	386/36/32/110	88/1/16/46	N3QE	294/0/12/39	524/0/23/73	694/0/25/83	340/0/23/78	8/0/4/6
YO9HP	279/9/12/56	607/41/30/90	797/51/34/100	372/21/27/86	57/1/18/34	N7AT	115/0/11/11	590/0/28/67	712/0/30/82	283/0/26/65	2/0/2/2
AN400T	215/24/13/44	607/42/21/65	707/52/23/64	627/30/26/62	176/1/13/33	K0KX	115/0/11/28	269/0/23/65	662/0/32/102	262/0/19/64	0/0/0/0
MULTI-OPERATOR SINGLE TRANSMITTER						MULTI-OPERATOR SINGLE TRANSMITTER					
I4DZ	358/34/19/71	817/54/33/103	1249/57/36/116	897/53/32/107	87/1/18/52	K1SFA	224/0/13/55	830/0/27/89	1176/0/33/109	454/0/29/99	16/0/11/14
IQ1RY	283/32/16/64	796/51/31/98	1094/56/36/113	594/47/31/106	75/1/15/45	*K3LR	261/0/13/48	740/0/26/87	739/0/33/98	466/0/24/87	14/0/10/11
HG1S	263/9/13/54	990/50/29/94	1056/55/30/95	564/42/32/89	78/1/16/43	NV9L	289/0/13/34	350/0/26/70	985/0/32/90	374/0/25/81	9/0/6/7
HG7T	464/22/14/64	644/44/31/97	968/54/35/107	471/33/32/98	78/1/16/40	K3MJW	258/0/12/34	430/0/16/59	865/0/25/80	423/0/23/77	3/0/2/3
RW0A	243/1/14/55	495/15/30/90	1132/47/34/110	952/1/23/90	21/1/11/17	WW4LL	179/0/9/23	535/0/24/62	781/0/31/90	265/0/22/73	4/0/3/4
MULTI-OPERATOR TWO TRANSMITTER						MULTI-OPERATOR TWO TRANSMITTER					
AN400V	519/25/15/58	1297/51/30/95	1555/56/33/95	1218/49/31/107	177/1/15/41	K9CT	484/0/17/48	1164/0/33/90	1472/0/35/113	755/0/29/98	25/0/8/8
IQ9UI	495/32/16/66	1017/48/32/97	1369/56/35/106	1257/51/33/105	133/5/24/62	W1DX	161/0/9/29	424/0/20/67	915/0/29/90	528/0/22/81	10/0/4/5
4O10A	670/26/14/61	1451/47/31/92	1504/56/32/104	875/41/30/90	167/1/15/51	KB80	260/0/10/28	468/0/18/47	620/0/27/82	364/0/17/59	0/0/0/0
S51A	540/18/14/63	1122/50/31/96	1175/55/31/98	581/39/29/88	89/2/16/39	K7JR	89/0/5/4	298/0/25/44	758/0/28/83	292/0/25/54	0/0/0/0
DR5N	584/21/13/61	997/46/31/98	1088/56/34/106	465/41/29/88	62/1/13/31	WA3EKL	138/0/7/22	273/0/15/50	400/0/20/70	348/0/19/62	9/0/5/6
MULTI-OPERATOR MULTI-TRANSMITTER						MULTI-OPERATOR MULTI-TRANSMITTER					
CR3W	338/29/14/52	1219/53/28/81	1774/59/34/84	1532/49/29/94	313/1/10/51	NR4M	622/0/15/55	1172/0/28/93	1361/0/34/103	824/0/30/96	85/0/13/18
9A701A	818/27/17/69	1592/47/32/99	1745/59/36/110	1065/49/33/111	178/1/19/49	W4AAW	387/0/10/32	344/0/21/56	1051/0/31/95	512/0/22/77	27/0/7/9
LX7I	822/25/14/62	1127/48/29/89	1379/57/34/107	823/47/29/91	62/1/14/38	K3EST/6	210/0/12/14	633/0/26/58	896/0/29/79	561/0/23/60	20/0/8/8
UA4M	490/5/15/61	972/30/33/102	1235/53/37/115	908/17/30/104	77/1/19/48						
PI4CC	471/13/11/55	994/42/26/84	1102/53/35/103	540/44/29/81	35/1/7/17						



Paulo, IN3VVK, won Single Band Assisted 40-Meter High Power.

million; and HG7T was fifth with 4.3 million.

Multi-Single Low Power (48): IT9BLB (IT9BLB, IT9MUO, IT9VDQ, IT9WKU, IT9ZMX, IT9ZRU, IT9DWW) was first with 3.3 million in the close race with K3LR (WW3S, ND8L, K3GP, NO3M, K8IV, N8NB, K3UA, K3LA, K3LR) and their 3.1 million. This was the maiden voyage for super-station K3LR in RTTY contesting. Respecting the station design that has been 100% focused on CW and SSB contesting for years now, another set of radios, computers, and station equipment was temporarily brought in to complement the K3LR antenna farm. Hopefully the team will return for more! DD1A

was third with 2.9 million and EA8DED was fourth with 2.7 million.

Multi-Two (28): The top three places were close with AN400V (EC2DX, EA2ABI, EA3HCJ, EA5BZ, EA5RM, EA7AJR, EA7KE) at 7.9 million; IQ9UI (IT9EQO, IV3YYK, IT9NJE, IT9CHU, IT9GSF, IT9AUG, IT9CJC, IT9WNU) at 7.8 million; and 4O10A (S52X, S53X, S50XX, S57BM, 9A5LEA, YU5EEA, YU3AWA, E79AA, E73CRK) at 7.5 million.

Multi-Multi (15): The number of multi-multi entries doubled this year with a close race at the top. CR3W (DJ7JC, DJ9RR, DK4QT, DL6TK, DF6QV) won with 9.9 million. The second place team made 9.7 million points at 9A701A (9A5W, 9A9A, 9A6A, 9A7R, 9A7C, 9A4T, 9A7MIM, 9A7MSM, 9A7CDZ, 9A5CKM, 9A5AEV, 9A5CMM, 9A5CPL, 9A3TKK @9A1A). Remarkably, the last eight team members listed are students between the ages of 16-19 who have amateur radio training as part of their curriculum at the Technical School Rudjer Boskovic in Zagreb. NR4M (NR4C, K4MI, A14WU, K7SV, W6WLG, KM4NBM, KA4RRU, N4DXS, NR4M, N7TY, N3AIU, KK4RTF, K2KW, KE2KW, N3ZV, K4GM, K4GMH, KS4Q, KM4CDQ) won North America with a fourth place world finish and the all-remote operation of W4AAW (AA5AU, MM0LID, W4TMO, N1MGO, ND3D, KU1CW, W3UL, WS7I, K4XD, W6IHG, W4AAW, K4UB) was second in North America with 2.6 million.

Score Listing

The complete listing of scores begins on page 101. Note that the US/VE QTH multiplier column is missing. Please refer to the online Score Listing at CQ's website <www.cq-

EUROPE SINGLE OPERATOR ALL BAND

UB7K	391/11/14/60	654/38/27/78	1323/54/33/97	604/19/30/83	69/1/22/33
9A5X	211/13/10/42	641/46/27/74	780/54/23/62	577/43/28/69	110/2/14/42
EM0I	220/2/14/54	624/31/27/88	1325/49/32/95	332/9/25/74	10/1/6/7
LY6A	475/6/10/53	658/31/23/72	964/48/29/84	378/21/26/77	1/1/1/1
OG2P	280/6/12/49	382/27/18/54	941/53/27/84	228/27/28/71	0/0/0/0

SINGLE OPERATOR ASSISTED ALL BAND

SN7Q	400/23/14/58	643/45/26/82	1177/51/34/107	705/40/29/92	55/1/15/39
S57AW	292/17/14/63	649/44/30/97	539/47/35/108	386/36/32/110	88/1/16/46
Y09HP	279/9/12/56	607/41/30/90	797/51/34/100	372/21/27/86	57/1/18/34
AN400T	215/24/13/44	607/42/21/65	707/52/23/64	627/30/26/62	176/1/13/33
*3Z9M	467/13/14/58	644/35/24/81	532/40/27/86	251/21/29/76	36/1/14/28

MULTI-OPERATOR SINGLE TRANSMITTER

I4DZ	358/34/19/71	817/54/33/103	1249/57/36/116	897/53/32/107	87/1/18/52
IQ1RY	283/32/16/64	796/51/31/98	1094/56/36/113	594/47/31/106	75/1/15/45
HG1S	263/9/13/54	990/50/29/94	1056/55/30/95	564/42/32/89	78/1/16/43
HG7T	464/22/14/64	644/44/31/97	968/54/35/107	471/33/32/98	78/1/16/40
SZ1A	329/12/15/63	777/41/31/92	1084/45/31/94	443/18/30/98	63/1/18/36

MULTI-OPERATOR TWO TRANSMITTER

AN400V	519/25/15/58	1297/51/30/95	1555/56/33/95	1218/49/31/107	177/1/15/41
IQ9UI	495/32/16/66	1017/48/32/97	1369/56/35/106	1257/51/33/105	133/5/24/62
4010A	670/26/14/61	1451/47/31/92	1504/56/32/104	875/41/30/90	167/1/15/51
S51A	540/18/14/63	1122/50/31/96	1175/55/31/98	581/39/29/88	89/2/16/39
DR5N	584/21/13/61	997/46/31/98	1088/56/34/106	465/41/29/88	62/1/13/31

MULTI-OPERATOR MULTI-TRANSMITTER

9A701A	818/27/17/69	1592/47/32/99	1745/59/36/110	1065/49/33/111	178/1/19/49
LX7I	822/25/14/62	1127/48/29/89	1379/57/34/107	823/47/29/91	62/1/14/38
UA4M	490/5/15/61	972/30/33/102	1235/53/37/115	908/17/30/104	77/1/19/48
PI4CC	471/13/11/55	994/42/26/84	1102/53/35/103	540/44/29/81	35/1/7/17
LZ9W	642/23/13/60	867/37/16/58	862/46/24/67	579/38/26/68	45/1/12/24

*Low Power

amateur-radio.com> for the complete listing which also denotes late logs with italics.

Clubs

Worldwide: For the third year in a row the same clubs finished in the top three, with the order the same as 2015. The Bavarian Contest Club (BCC) achieved the top club score worldwide with 46.6 million across its 84 log entries. The Rhein Ruhr DX Association took second with 34.1 million and 48 entries; and the Italian Contest Club (ICC) rallied 65 entries to take third worldwide with 29.1 million.

United States: The Potomac Valley Radio Club (PVRC)



Chris, SN7Q (SP7GIQ), won Single-Op Assisted High Power at his pristine operating position.

with 55 logs and 14.8 million squeaked by the Northern California Contest Club (NCCC) with 22 logs and 14.3 million. Frankford Radio Club had 23 logs and 12.1 million for third place. These three clubs were 5th, 7th, and 8th respectively worldwide.

Logs

Log statistics were similar to the past four years. There were enough logs submitted so that 84% of all QSOs were cross-checked and 96% of those QSOs were deemed good. Approximately 1% of all QSOs had busted (incorrect) call-signs. Another 1.9% were not found in the other station's log, up from 1.5% in 2015. Busted exchanges remained the same at 1.0%. Individual Log Check Reports (LCRs) are available upon request to <w0yk@cqwwrtty.com> where you can see how your log stacks up to the overall numbers.

Website

The contest website <www.cqwwrtty.com> is a valuable resource for all aspects of the contest: Rules (including language translations), log format, log submittal, historical statistics, and results database (searchable for any entry and geographical breakdown and all-time records).

Thanks

Thanks to all participants who, together, make this a fun weekend for everyone. Thanks also to the team of volunteers behind the scenes who make it all possible:

- Jason, KD2IWM, Associate Editor for *CQ Amateur Radio*.
- Rules translators: Boyan, LZ2BE; Caros, BH4TX; Tapani, OH2LU; Fabi, VA2UP; Steffan, DL6SFR; Kostas, SV1DPI; Joe, IT9BLB; Kazu, JK3GAD/MØCFW; Marcos, PY2WS; Andy, YO3JR; Vlad, VE3IAE; Gerardo, EA1AST; and Mehmet, TA5FA.
- Ken, K1EA, provided the log check software and consulting during log check.
- Randy, K5ZD, for his substantial support on a wide range of issues, including a fair amount of the log fixes so that the checking software could do its task.

I look forward to seeing everyone again in the 30th annual CQWW RTTY DX Contest on 23-24 September 2017.

— Ed, WØYK

(Scores on page 101)



Impressive all homebrew antennas at SN7Q (SP7GIQ).