

# Results of the 2017 CQWW DX SSB Contest

**“An all-time record number of logs received”**

BY DOUG ZWIEBEL\*, KR2Q

**W**hat a great statement about the biggest (and greatest) contest the amateur radio world has ever known. And it is still the biggest and it is still getting bigger. How satisfying. If you like numbers, 8,606 logs were submitted on phone, a more than 13% increase over last year, and 124 more logs than the prior all-time record reached in 2013, despite the big decline in sunspots since that time.

As we think about the massive, worldwide participation in the CQWW contest, as of presstime, we are reading disappointing news about the Bouvet expedition, cut short just a few miles away; so close they could almost touch it (*see this month's DX column for details – ed.*). As testers, we are so lucky that no matter what, the contest goes on. It is an event we count on, look forward to with growing anticipation, and in which we do our best regardless of conditions because we just love the game, not to mention working the annual regulars and engaging in the competition. We love to just be a part of it. And anybody and everybody *can* be a part of it.

\*c/o CQ Magazine

By the numbers, things were better than last year, especially for 15 meters. Ten meters continues to decline. (See charts below.)

## CQWW Horse Racing: Photo Finishes

Right after the contest, lots of folks compare their claimed scores. Later, CQWW publishes RAW scores. These scores are based on the submitted log that are scored using a common (shared) methodology, and before any log checking. There is always big interest in those, too. But the only scores that really matter are the final scores, for which we all wait impatiently.

Hidden away, except for those who are looking closely at their own scores, are the super-close horse races — the competitions that seem to be too close to believe. And there are lots of them. Example: For 2017 phone, there were 3,021 scores, on a world ranking basis, that were within a half percent (0.5%) of each other. That's not 5%; it is one half of 1%. This is one of the main elements that makes contesting in CQWW so exciting. No, we won't go over all

QSO counts, distribution by band over the last 10 years

| SSB  | 160     | 80      | 40      | 20        | 15        | 10        | ALL       |
|------|---------|---------|---------|-----------|-----------|-----------|-----------|
| 2017 | 87,025  | 364,827 | 663,891 | 1,089,839 | 1,076,617 | 249,281   | 3,531,480 |
| 2016 | 91,565  | 323,282 | 632,075 | 1,096,164 | 863,060   | 311,831   | 3,317,977 |
| 2015 | 75,892  | 297,933 | 607,356 | 1,089,102 | 1,333,440 | 1,280,820 | 4,684,543 |
| 2014 | 63,036  | 250,233 | 519,013 | 962,368   | 1,243,444 | 1,993,426 | 5,031,520 |
| 2013 | 80,157  | 290,961 | 583,674 | 1,070,449 | 1,290,113 | 2,008,877 | 5,324,231 |
| 2012 | 62,979  | 265,410 | 551,288 | 1,029,949 | 1,282,127 | 1,913,136 | 5,104,889 |
| 2011 | 86,450  | 288,365 | 571,517 | 985,590   | 1,196,006 | 1,873,553 | 5,001,481 |
| 2010 | 107,526 | 379,646 | 690,794 | 1,053,292 | 1,243,421 | 257,080   | 3,731,759 |
| 2009 | 94,519  | 332,631 | 661,030 | 1,087,242 | 1,058,864 | 290,898   | 3,525,184 |
| 2008 | 112,568 | 373,386 | 494,645 | 1,106,757 | 678,156   | 52,391    | 2,817,903 |

QSO percentage distribution, by band, per year

| SSB  | 160  | 80    | 40    | 20    | 15    | 10    |
|------|------|-------|-------|-------|-------|-------|
| 2017 | 2.5% | 10.3% | 18.8% | 30.9% | 30.5% | 7.1%  |
| 2016 | 2.8% | 9.7%  | 19.1% | 33.0% | 26.0% | 9.4%  |
| 2015 | 1.6% | 6.4%  | 13.0% | 23.2% | 28.5% | 27.3% |
| 2014 | 1.3% | 5.0%  | 10.3% | 19.1% | 24.7% | 39.6% |
| 2013 | 1.5% | 5.5%  | 11.0% | 20.1% | 24.2% | 37.7% |
| 2012 | 1.2% | 5.2%  | 10.8% | 20.2% | 25.1% | 37.5% |
| 2011 | 1.7% | 5.8%  | 11.4% | 19.7% | 23.9% | 37.5% |
| 2010 | 2.9% | 10.2% | 18.5% | 28.2% | 33.3% | 6.9%  |
| 2009 | 2.7% | 9.4%  | 18.8% | 30.8% | 30.0% | 8.3%  |
| 2008 | 4.0% | 13.3% | 17.6% | 39.3% | 24.1% | 1.9%  |

3,000 of them, but here are some highlights for scores that were super-close.

On 80-meter low-power/unassisted (LP-U), LY2BMX, #2 world, edged out F5BEG, #3 world, by 45 hundredths of 1% (0.45%). On 80-meter low-power/assisted (LP-A), HGØR, #2 world, edged out EU2EU, #3 world, by 33 hundredths of 1% (0.33%). In Europe multi-multi, #1 M6T slid by #2 DFØHQ by 0.32%. Again in Europe, #3 multi-single/high power (MSH) IR4M squeaked ahead of #4 IR4X by 0.30%. Back on the world stage for 10-meter LP-U, LW5DPG took #4 by 0.27%, while LU6DU took #5. And IF9A, #3 world competing in the 20-meter LP-A category, managed an extra 0.26% over #4, IT9STX. In the U.S., K5ZD, #1 all-band/high power/assisted (AB-H-A), maintained a buffer of 0.25% over rival K3WW. And out west, N6RV #4 USA all-band/low power/unassisted

(AB-L-U), sneaked past #5, N7IR by 0.12%. And in the closest race of all, SP5DDJ, #3 world in the 15-meter QRP unassisted category, beat out JR2EKD, #4, by 0.09%. Wow!

### How to Make a Big Score: More QSOs and Multipliers Are Not Enough. Accuracy Still Counts!

One of the fun things to do is to compare a station's raw score with its final score. They rarely match. As you can imagine, most that do match are "small" logs. We found 1,085 logs with no change from Raw to Final score. The "winner" is K8PGJ, who had the highest score and a "golden log." He was #2 in Michigan in the AB-H-U category. Congratulations!

But accuracy stretches far beyond the domain of "golden logs." Many entrants are able to "move up a slot" in the rank-

## 2017 CQWW DX SSB TROPHY WINNERS AND DONORS

### SINGLE OPERATOR

#### World

8P5A (Opr.: Tom Georgens, W2SC)  
Donor: Southern California DX Club

#### World – Low Power

H13T (Opr.: Ted Jimenez, HI3TEJ)  
Donor: Slovenian Contest Club

#### World – QRP

Doug Zwiebel, KR2Q  
Donor: Jeff Steinman, N5TJ

#### World – Assisted

P33W (Opr.: Andrey Sachkov, LZ2HM)  
Donor: Glenn Johnson, WØGJ

#### World – Assisted Low Power

P4ØW (Opr.: John Crovelli, W2GD)  
Donor: Gail Sheehan, K2RED

#### U.S.A.

Doug Grant, K1DG  
Donor: Potomac Valley Radio Club – KC8C Memorial

#### U.S.A. – Low Power

John Vogel, N1PGA  
Donor: North Coast Contesters

#### U.S.A. – QRP

Bob Jacobson, K2YGM\*  
Donor: Pat Collins, N8VV

#### U.S.A. – Assisted

Randy Thompson, K5ZD  
Donor: John Rodgers, WE3C

#### U.S.A. – Assisted Low Power

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

#### U.S.A. – Zone 3

Bob Wolbert, K6XX  
Donor: Northern California Contest Club

#### U.S.A. – Zone 4

Mike Wetzel, W9RE  
Donor: Kansas City DX Club

#### Europe

TK9R (Opr.: Salvatore Farina, IK8UND)  
Donor: Potomac Valley Radio Club – W4BVV Memorial

#### Europe – Low Power

E11A (Opr.: Olivier Vandenbalck, EI8QGB)  
Donor: Tim Duffy, K3LR

#### Europe – QRP

HG8U (Opr.: Gukyás Imre, HA8EK)  
Donor: Steve "Sid" Caesar, NH7C

#### Europe – Assisted

Bernd Och, DL6FBL  
Donor: Martin Huml, OL5Y

#### Europe – Assisted Low Power

TM3Z (Opr.: Dimitri Cosson, F4DSK)  
Donor: Rudy Bakalov, N2WQ

#### Africa

Mario Xavier Laporte, FR4QT  
Donor: Chris Terkla, N1XS

#### Asia

Gia Gvaladze, 4LØA  
Donor: Nodir Tursun-Zade, EY8MM

#### Caribbean/Central America – High Power

ZF9CW (Opr.: Stan Stockton, K5GO)\*  
Donor: John Rodgers, WE3C

#### Caribbean/Central America – Low Power

C6ARW (Opr.: Rich Westereberg, NØHJZ)  
Donor: Albert Crespo, NH7A

#### Oceania

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

#### South America

P4ØT (Opr.: Yuri Onipko, VE3DZ)  
Donor: Yankee Clipper Contest Club

#### Canada

Jeff Briggs, VY2ZM  
Donor: Contest Club Ontario – VE3WT Memorial

#### Russia

Yuri Kotelnikov, RT9S  
Donor: Roman Thomas, R5AA

#### Indonesia

Yana Koryana, YB1AR  
Donor: Karsono Suyanto, YBØNDT

#### Japan

Masaki Masa Okano, JH4UYB  
Donor: Rush Drake, W7RM Memorial

#### Japan – Low Power

Nob Watanabe, JH1EAQ  
Donor: World Wide Radio Operators Foundation (WWROF)

#### Southern Cone (CE CX LU) – Assisted

Pablo Moretti, LU7MT  
Donor: LU Contest Group

#### ASEAN (XZ HS XW XU 3W 9M 9V V8 YB DU)

Tony Waltham, HSØZDX  
Donor: YB Land DX Club

#### ASEAN (XZ HS XW XU 3W 9M 9V V8 YB DU) – Low Power

Wayyu "Yun" Ningrat, YC1CWK  
Donor: Bob Kupps, N6BK

### SINGLE OPERATOR, SINGLE BAND

#### World – 28 MHz

CW5W (Opr.: Jorge Diez Furest, CX6VM)  
Donor: Joel Chalmers, KG6DX

#### World – 21 MHz

D4Z (Opr.: Poitr Majchrzak, SQ9D)  
Donor: Robert Naumann, W5OV

#### World – 14 MHz

EI7M (Opr.: Dmitriy Pavlov, EI3JZ)  
Donor: North Jersey DX Assn. – K2HLB Memorial

#### World – 7 MHz

RU1A (Opr.: Andrey Karpov, RV1AW)  
Donor: Fred Laun, K3ZO – K7ZZ Memorial

#### World – 3.7 MHz

Vlado Lesjak, E7ØT  
Donor: Fred Capossela, K6SSS

#### World – 1.8 MHz

HG8R (Opr.: Pal Vrbovszki, HA8JV)  
Donor: OL7M Contest Group, QRO.cz, RemoteQTH.com

#### U.S.A. – 28 MHz

Chuck Dietz, W5PR  
Donor: John Rodgers, WE3C

#### U.S.A. – 21 MHz

Peter Bizlewicz, KU2M  
Donor: 11PM Dayton Pizza Gang

#### U.S.A. – 14 MHz

Rich Di Donna, NN3W  
Donor: Yankee Clipper Contest Club – KC1F Memorial

#### U.S.A. – 7 MHz

Dan Handa, W7WA  
Donor: Chuck Dietz, W5PR

#### U.S.A. – 3.7 MHz

Ken Claerbout, K4ZW  
Donor: John Rodgers, WE3C

#### U.S.A. – 1.8 MHz

Stephen Werner, AG4W  
Donor: South Texas DX & Contest Club (STDXCC)

#### Europe – 28 MHz

Tine Brajnik, S5ØA  
Donor: John Rodgers, WE3C

#### Europe – 21 MHz

Antonio Rui Sousa Santos, CR6T  
Donor: Tine Brajnik, S5ØA

#### Europe – 14 MHz

Frederic Lallemand, F8ARK\*  
Donor: Charles Wooten, NF4A

#### Europe – 7 MHz

LZ8A (Opr.: Mincho Petkoff, LZ2DF)\*  
Donor: Central Texas DX and Contest Club – NT5C Memorial

#### Europe – 3.7 MHz

Valery Sintsov, YL3CW\*  
Donor: Ted Demopoulos, KT1V

#### Europe – 1.8 MHz

G4L (Opr.: Tony Bettley, G4LDL)\*  
Donor: Robert Kasca, S53R

#### Caribbean/Central America (14 MHz)

Dean St. Hill, 8P2K  
Donor: Nate Moreschi, N4YDU

#### Oceania (14 MHz)

Club Station ZL1AM  
Donor: Bruce D. Lee, KD6WW

#### Asia (14 MHz)

Mamuka Kordzakhia, 4L2M  
Donor: Dallas/Fort Worth Contest Group - W5PG memorial

### OVERLAY CATEGORIES

#### World – Classic

P49Y (Opr.: Andy Faber, AE6Y)  
Donor: John Rodgers, WE3C

#### U.S.A. – Classic

Bob Shohet, KQ2M  
Donor: World Wide Radio Operators Foundation (WWROF)



The antenna farm is ready at EI1A.

**Europe – Classic**  
**Manfred Wolf, DJ5MW**  
 Donor: Steve Cole, GW4BLE Memorial

**World – Rookie**  
**Cyril Colom, TK4RB**  
 Donor: Tim Duffy, K3LR - N8SM Memorial

**U.S.A. – Rookie**  
**Don Gladwell, W4BBT**  
 Donor: Tim Duffy, K3LR - K3TUP Memorial

**Europe – Rookie**  
**Roland Roeder, DK5RL\***  
 Donor: EA Contest Club

**MULTI-OPERATOR, SINGLE TRANSMITTER**

**World**  
**EF8R (Oprs.: EA8RM, HA1AG, YO3JR, RA5A, UA3DJX, UA4WW, UA5C, R4FO, RW4WR, UA4FER, RA3AUU)**  
 Donor: So. Calif. DX Club – W6AM Memorial

**World – Low Power**  
**ED9E (Oprs.: EA9CD, EA9FY, EA9ABC, EA9ABE, EA9ABV, EA9ACD, EA9ACE, EA9ACF, EA9ACL, EA7KI)**  
 Donor: Rex Turvin, NR6M

**U.S.A.**  
**W1NA (Oprs.: W1NA, I8ULL, IC8WIC, I8QLS, N5NHJ)**  
 Donor: Carolina DX Assoc. – Ted Goldthorpe, W4VHF & Ken Boyd, K4DXA Memorial

**Canada**  
**VE3EJ (Oprs.: VE3EJ, VE3EK, VE3EY, VE3MM)**  
 Donor: John Sluyster, VE3EJ

**Africa**  
**CN2AA (Oprs.: R3DCX, RA3ATX, RA3CO, RA9USU, RC0F, RK3AD, RK4FW, RL3FT, RN5M, RU3RQ, RU9I, RX3APM, UA3ASZ, UA4Z, VE3LA)\***  
 Donor: World Wide Radio Operators Foundation (WWROF)

**Asia**  
**UP2L (Oprs.: R8AA, R9IR, RA9Y, RM9I, SM6LRR, UA9BA, UN4L, UN6LN, UN9LG)**  
 Donor: Edward L. Campbell, NW4DX – AA6BB and KA6V Memorial

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

**Europe – Low Power**  
**IB9T (Oprs.: IT9APL, IT9BLB, IT9CLN, IT9DBF, IT9MBZ, IT9VDQ, IT9WKU, IT9ZMX, IT9ZRU)**  
 Donor: EA Contest Club

**Oceania**  
**AH2R (Oprs.: JI3ERV/NH2C, JR7OMD/WI3O, JG3RPL/N1BJ, KH2JU, JE6HIB/AH2EG, JH1ASG/W3FO)**  
 Donor: Junichi Tanaka, JH4RHF

**South America**  
**FY5KE (Oprs.: F1HAR, F4CWN, F5HRY, F5UII, F6FVY, FY5FY)**  
 Donor: Victor Burns, K16IM – The Cuba Libre Contest Club

**Caribbean/Central America**  
**6Y1LZ (Oprs.: 6Y5GC, 9A5K, K1LZ, K2SSS, K3JO, S55M)**  
 Donor: Bob Raymond, WA1Z

**Japan**  
**JA7ZF (Oprs.: JA7ACM, JH7XMO, JI7GBI, JP7DKQ, JR7UOL)**  
 Donor: Arizona Outlaws Contest Club

**ASEAN (XZ HS XW XU 3W 9M 9V 8V YB DU) – Low Power**  
**E28AI (Oprs.: E24NQN, HS0KQR, HS5NFP, HS9YBR, E23GLG, E23WQD, E23WWT)**  
 Donor: Bob Kupps, N6BK

**MULTI-OPERATOR, TWO TRANSMITTERS**

**World**  
**CN2R (Oprs.: OK1DO, OK1FFU, OK1JKT, OK1RI, OK1VVT, OK6NM, W7EJ)**  
 Donor: Array Solutions

**U.S.A.**  
**KC1XX (Oprs.: JJ5GMJ, K1CC, K1QX, KC1XX, W1FV, WA1Z, KM3T, WP3A)**  
 Donor: Kimmo Chun, KH7U & Mike Gibson, KH6ND Dan Robbins, KL7Y Memorial

**Europe**  
**ES9C (Oprs.: ES1OX, ES2ADO, ES2MC, ES2TI, ES4NY, ES5GP, ES5JR, ES5QA, ES5RY, ES5TV, ES6QC, ES7GM, YL1XN, YL3AD, YL3AJA, YL3DW)**  
 Donor: Aki Nagi, JA5DQH

**Japan**  
**JA1YPA (Oprs.: JA1PEJ, JE1PMQ, JG4KZE)**  
 Donor: Coconut Wireless Contest Club

**ASEAN (XZ HS XW XU 3W 9M 9V 8V YB DU)**  
**HS0AC (Oprs.: HS1FVL, HS1IFU, E20ZFD, HS5NMF, E29BUQ, E23NHL, E24XUR, E24PNG, JI1DQR, E20EHQ, E23NEZ, HS0KRM, E21FYK, HS7BHK, E21SP, E25AHH, HS7JPW, E24VRK, JA1WCV, E24MMV, HS1GAB, HS5VLE, E24PQG, E24VRP, E21GJC, E24XUS)**  
 Donor: Champ C. Muangamphun, E21EIC – Siam DX Group

**MULTI-OPERATOR, MULTI-TRANSMITTER**

**World**  
**CN3A (Oprs.: IK2QEI, IK2SGC, IK2LFF, IZ2ZOZ, IK3STG, E77DX, LY4A, 9A6A, 9A5BWWW)**  
 Donor: Dave Leeson, W6NL & Barb Leeson, K6BL

**U.S.A.**  
**K3LR (Oprs.: AA4WJ, K1AR, K3LA, K3UA, K3LR, KL9A, LU7DW, N2NC, N2NT, N3GJ, N3SD, N5UM, N6MJ, W2RQ, WM2H)**  
 Donor: Jim Lawson, W2PV Memorial

**Europe**  
**M6T (Oprs.: G0AEV, G0VJG, G0WCW, G2NF, G4BUO, G4PIQ, G7TWC, M0BCT, M0CLW, M0HKB, M0MDR, M0SDV, M0TGV, M1ACB, PT2FM)**  
 Donor: Finnish Amateur Radio League

**CONTEST EXPEDITIONS**

**World Single Operator**  
**T8ED (Opr.: Tetsuya Sakabe, JA7XBG)**  
 Donor: National Capitol DX Association - Stuart Meyer, W2GHK Memorial

**World Multi-Op**  
**VK9CZ (Oprs.: GM3WOJ, GM4YXI)**  
 Donor: Gail Sheehan, K2RED

\*Awarded to second place finisher



EI1A at the helm for the 2017 CQWW DX SSB Contest.

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★★★★★ 690  
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| 4 star | 17  |
| 3 star | 2   |
| 2 star | 1   |
| 1 star | 0   |

\* as of March 2018

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ing because their log was more accurate. In other words, these entrants “came from behind.” While they had an initial rank of X using their RAW score, they ended up in position X-1 when ranked by the final score. On a world score basis, 3,347 entrants improved their final ranking due to a more accurate log than their competitors. And 26 of them were in the World Top 5 by their category of entry. Here is the listing of these impressive entrants.

| Call   | Category | World Rank | Final Score |
|--------|----------|------------|-------------|
| K3LR   | MM       | 3          | 19,187,946  |
| ES9C   | M2       | 4          | 14,124,964  |
| VA3DF  | AB-L-A   | 4          | 1,899,235   |
| C6ARW  | AB-L-U   | 2          | 1,897,350   |
| S57DX  | 20M-H-A  | 5          | 1,079,190   |
| CF7RR  | 20M-H-U  | 3          | 923,580     |
| RT5K   | 20M-H-U  | 5          | 814,320     |
| CO6LC  | 15M-L-U  | 5          | 382,145     |
| IF9A   | 20M-L-A  | 3          | 334,050     |
| IT9STX | 20M-L-A  | 4          | 333,168     |
| S56A   | 40M-L-A  | 4          | 164,724     |
| SV9GPV | 10M-L-A  | 4          | 121,968     |
| G3Y    | 20M-L-U  | 5          | 108,014     |
| LW5DPG | 10M-L-U  | 4          | 86,190      |
| CO8ZZ  | 40M-L-U  | 4          | 68,931      |
| OK2VWB | 40M-Q-U  | 3          | 27,056      |
| GW2X   | 160M-H-U | 3          | 23,313      |
| JM1NKT | 20M-Q-A  | 5          | 20,475      |
| RW3AI  | 20M-Q-U  | 5          | 18,023      |
| YL2PP  | 160M-H-U | 5          | 15,176      |
| RD3K   | 160M-L-A | 3          | 14,112      |
| OK1JOK | 160M-L-U | 4          | 9,776       |
| HA7I   | 160M-Q-A | 2          | 5,547       |
| 9A4AA  | 15M-Q-A  | 1          | 3,973       |
| 3G3O   | 10M-Q-A  | 5          | 1,159       |
| YC3PPD | 40M-Q-A  | 5          | 336         |

### All About You, the Entrant

Ever wonder where the logs come from or what the numbers by category look like? We do! By far, the largest number of logs are from Europe.

| All Categories of Logs |              |             |
|------------------------|--------------|-------------|
| Continent              | # of logs    | % of all    |
| AF                     | 85           | 1.0%        |
| AS                     | 1,079        | 12.5%       |
| EU                     | 4,157        | 48.3%       |
| NA                     | 2,437        | 28.3%       |
| OC                     | 394          | 4.6%        |
| SA                     | 456          | 5.3%        |
| <b>ALL</b>             | <b>8,608</b> | <b>100%</b> |

As for category of entry, you may be surprised. Most entrants are Single-Operator, all-band (SOAB). Second are Single-Band entrants. With limited time and sunspots, that makes sense. The rest (not including check logs or other actions by the committee logs), are shown below. One might wonder why Multi-Multi (MM) gets so much coverage in the write up, since they are a very tiny group of logs. There are more than 5 times as many QRP logs as there are MM logs. Maybe we need more focus on Low Power and more on Europe and SOAB categories. Hmmm?

| Type              | Count | Percent |
|-------------------|-------|---------|
| SOAB              | 5,259 | 61.1%   |
| Single Band       | 2,277 | 26.5%   |
| MS (Multi-Single) | 428   | 5.0%    |
| QRP               | 298   | 3.5%    |
| M2 (Multi-Two)    | 107   | 1.2%    |
| MM (Multi-Multi)  | 56    | 0.7%    |

| Continent          | Power Analysis |              |            | Grand Total  |
|--------------------|----------------|--------------|------------|--------------|
|                    | HIGH           | LOW          | QRP        |              |
| AF                 | 33             | 31           |            | 64           |
| AS                 | 363            | 555          | 38         | 956          |
| EU                 | 1,264          | 2,064        | 188        | 3,516        |
| NA                 | 1,103          | 1,102        | 37         | 2,242        |
| OC                 | 106            | 227          | 18         | 351          |
| SA                 | 110            | 280          | 17         | 407          |
| <b>Grand Total</b> | <b>2,979</b>   | <b>4,259</b> | <b>298</b> | <b>7,536</b> |

| Assisted Analysis: includes Single-Op Only |              |              |
|--|--------------|--------------|
| Continent                                  | ASSISTED     | NON-ASSISTED |
| AF   | 21           | 43           |
| AS   | 323          | 633          |
| EU   | 1,435        | 2,081        |
| NA   | 1,003        | 1,239        |
| OC   | 110          | 241          |
| SA   | 189          | 218          |
| <b>Grand Total</b>                         | <b>3,081</b> | <b>4,455</b> |

| Assisted Analysis %, includes Single-Op Only |              |              |
|--|--------------|--------------|
| Continent                                    | ASSISTED     | NON-ASSISTED |
| AF   | 32.8%        | 67.2%        |
| AS   | 33.8%        | 66.2%        |
| EU   | 40.8%        | 59.2%        |
| NA   | 44.7%        | 55.3%        |
| OC   | 31.3%        | 68.7%        |
| SA   | 46.4%        | 53.6%        |
| <b>Grand Total</b>                           | <b>40.9%</b> | <b>59.1%</b> |

### Time Study

A lot of folks gripe about not being able to stay awake all those hours. Well, it's true; it's difficult to stay awake, and relatively very few entrants make it past 40 hours. Doing the math, 25% of entrants operate less than 4.5 hours; 50% operate less than 9.3 hours; and 75% operate less than 17.2 hours. Operating more than 40 hours really puts you up into the rarified strata. So don't worry about how many hours you can operate. Just get on, have some fun, and remember to send us your log.

| Hours    | # of Logs | % of all | cum %  |
|----------|-----------|----------|--------|
| 0-5      | 1433      | 27.7%    | 27.7%  |
| 5.1-10   | 1291      | 25.0%    | 52.7%  |
| 10.1-15  | 865       | 16.8%    | 69.5%  |
| 15.1-20  | 578       | 11.2%    | 80.7%  |
| 20.1-25  | 427       | 8.3%     | 89.0%  |
| 25.1-30  | 255       | 4.9%     | 93.9%  |
| 30.1-35  | 173       | 3.4%     | 97.3%  |
| 35.1-40  | 79        | 1.5%     | 98.8%  |
| up to 41 | 14        | 0.3%     | 99.1%  |
| up to 42 | 11        | 0.2%     | 99.3%  |
| up to 43 | 9         | 0.2%     | 99.4%  |
| up to 44 | 7         | 0.1%     | 99.6%  |
| up to 45 | 7         | 0.1%     | 99.7%  |
| up to 46 | 6         | 0.1%     | 99.8%  |
| up to 47 | 1         | 0.0%     | 99.8%  |
| up to 48 | 8         | 0.2%     | 100.0% |

## TOP SCORES IN VERY ACTIVE ZONES

**Zone 3**

|            |           |
|------------|-----------|
| K6XX.....  | 1,995,490 |
| W6TK.....  | 834,912   |
| N7ZG.....  | 748,880   |
| W6AFA..... | 636,350   |
| NX1P.....  | 604,920   |

**Zone 5**

|            |           |
|------------|-----------|
| VY2ZM..... | 8,514,880 |
| K1DG.....  | 6,769,048 |
| W2RE.....  | 6,692,379 |
| NR3X.....  | 5,905,782 |
| N5DX.....  | 5,825,913 |

**Zone 15**

|             |           |
|-------------|-----------|
| TK9R.....   | 5,839,788 |
| ES6RW.....  | 2,956,115 |
| IO2X.....   | 2,733,805 |
| YL2GD.....  | 1,856,778 |
| *HA3NU..... | 1,418,480 |

**Zone 20**

|            |           |
|------------|-----------|
| H2T.....   | 3,572,603 |
| YPØC.....  | 3,398,771 |
| 4Z5LY..... | 1,675,320 |
| YO3VU..... | 727,659   |
| YO3RU..... | 443,552   |

**Zone 4**

|           |           |
|-----------|-----------|
| XL3T..... | 7,343,728 |
| W9RE..... | 3,925,128 |
| N9RV..... | 2,481,972 |
| KØEJ..... | 2,310,120 |
| N2IC..... | 1,955,766 |

**Zone 14**

|             |           |
|-------------|-----------|
| EA5DFV..... | 3,117,768 |
| DJ5MW.....  | 3,047,198 |
| *E11A.....  | 1,797,582 |
| DL7BC.....  | 1,177,908 |
| DL1WA.....  | 1,057,680 |

**Zone 16**

|                   |           |
|-------------------|-----------|
| US5D (UT7DX)..... | 2,538,200 |
| RT9S.....         | 2,325,724 |
| R8WF.....         | 1,508,420 |
| RM4HZ.....        | 1,085,077 |
| RM2U.....         | 1,073,550 |

**Zone 25**

|             |           |
|-------------|-----------|
| JH4UYB..... | 3,479,617 |
| JE6RPM..... | 1,823,290 |
| JA7NVF..... | 1,167,790 |
| JH3CUL..... | 737,704   |
| JR1GSE..... | 693,528   |

\*Low Power

### Border Control Report

Adhering to the band edge is important. Last year (2016 contest), we removed a lot of QSOs that were Out-Of-Band (OOB) contacts. You only knew about it if you looked carefully at your individual log analysis. In composing the 2017 rules, we added a notation for ITU Region 1 (ITU R1 is the same as IARU R1). And now we make it very clear in your individual reports. And obviously, we are focusing attention on it here.

For 2017 SSB, we found and removed 601 OOB QSOs from entrant logs. They came from 300 separate logs. Approximately, 65% of the 300 made just one OOB contact while 14.3% made two such contacts. Remarkably, five folks made 10 or more OOB Qs. It might be time to set some add-on penalties for “excessive” OOB QSOs.

When identifying OOB contacts, we did not rely on the frequency in the submitted logs. Every OOB QSO was *confirmed* via audio using our global SDR system files. Yes, it



The team at 3V8SS during the 2017 CQWW DX SSB Contest.



The shack at LY7Z.



D4Z and D4C have an excellent view for the 2017 CQWW DX SSB Contest.

## 2017 CQWW DX SSB TOP SCORES

|  |   |   |  |  |  |
|--|---|---|--|--|--|
| <p><b>WORLD SINGLE OPERATOR HIGH POWER All Band</b></p> <p>8P5A.....13,794,654<br/>P40T.....10,358,145<br/>VY2ZM.....8,514,880<br/>XL3T.....7,343,728<br/>K1DG.....6,769,048<br/>W2RE.....6,692,379<br/>ZF9CW.....6,564,075<br/>NR3X.....5,905,782<br/>TK9R.....5,839,788<br/>N5DX.....5,825,913</p> <p><b>28 MHz</b></p> <p>CW5W.....1,178,376<br/>LW7DX.....650,670<br/>CE2AWW.....420,954</p> <p><b>21 MHz</b></p> <p>D4Z.....2,954,982<br/>CR6T.....1,356,736<br/>CV7S.....1,134,296</p> <p><b>14 MHz</b></p> <p>EI7M.....1,388,640<br/>F8ARK.....1,210,440<br/>CF7RR.....923,580</p> <p><b>7 MHz</b></p> <p>RU1A.....671,974<br/>4X2M.....632,392<br/>LZ8A.....579,810</p> <p><b>3.7 MHz</b></p> <p>E70T.....280,245<br/>OK8WW.....199,662<br/>K4ZW.....128,594</p> <p><b>1.8 MHz</b></p> <p>HG8R.....95,459<br/>G4L.....24,750<br/>GW2X.....23,313</p> <p><b>LOW POWER All Band</b></p> <p>HI3T.....3,303,664<br/>C6ARW.....1,897,350<br/>EI1A.....1,797,582<br/>V3A.....1,547,808<br/>HA3NU.....1,418,480<br/>N1PGA.....1,036,480<br/>N8II.....1,009,896<br/>UX1UX.....896,080<br/>VE9HF.....683,880<br/>M1U (M0UTD).....621,569</p> <p><b>28 MHz</b></p> <p>EA8TX.....400,710<br/>CB3LR.....142,926<br/>LW5DPG.....86,190</p> <p><b>21 MHz</b></p> <p>9Y4D.....1,195,122<br/>YV4YC.....1,101,992<br/>CO6HLP.....600,210</p> <p><b>14 MHz</b></p> <p>MI0M.....257,504<br/>RA3XM.....127,800<br/>OM6DN.....126,636</p> | <p><b>7 MHz</b></p> <p>EA7RM.....139,776<br/>LA2AB.....114,466<br/>HS0ZIA.....73,854</p> <p><b>3.7 MHz</b></p> <p>PA2TMS.....86,240<br/>LY2BMX.....61,965<br/>F5BEG.....61,688</p> <p><b>1.8 MHz</b></p> <p>SN0R.....33,062<br/>SQ5GVY.....18,468<br/>SP5CJY.....13,395</p> <p><b>QRP All Band</b></p> <p>KR2Q.....644,160<br/>HG6C.....427,785<br/>JR4DAH.....266,104<br/>G4CWH.....250,756<br/>JH10GC.....224,301<br/>UT5EOX.....195,027<br/>UA30Q.....161,100<br/>SP4LVK.....112,714<br/>UX2MF.....105,090<br/>PW5T.....86,412</p> <p><b>28 MHz</b></p> <p>LU7VCH.....32,096<br/>J5KAP.....17,263<br/>R7NA.....12,772</p> <p><b>21 MHz</b></p> <p>HG3C.....43,952<br/>K8ZT.....24,820<br/>SP5DDJ.....20,826<br/>JR2EKD.....20,808</p> <p><b>14 MHz</b></p> <p>TG9ADQ.....131,824<br/>IZ1ANK.....42,585<br/>CT1BXT.....30,952</p> <p><b>7 MHz</b></p> <p>KP3LR.....64,676<br/>LY5G.....36,260<br/>OK2VWB.....27,056</p> <p><b>3.7 MHz</b></p> <p>SQ8MFB.....10,296<br/>CR5M.....6,578<br/>DO4HZ.....5,136</p> <p><b>1.8 MHz</b></p> <p>HA5NB.....3,680<br/>SQ2BXI.....3,535<br/>VA3XO.....2,431</p> <p><b>ASSISTED HIGH POWER All Band</b></p> <p>P33W.....13,936,272<br/>ZX5J.....10,324,320<br/>DL6FBL.....9,525,360<br/>S57AL.....5,654,932<br/>LY7Z.....5,520,064<br/>S53M.....5,162,560<br/>K5ZD.....4,570,185<br/>K3WWV.....4,558,642<br/>ZZ2T.....4,377,347<br/>W3UA.....4,341,753</p> | <p><b>28 MHz</b></p> <p>LU7HN.....461,010<br/>CT9/DJ2YA.....434,343<br/>IT9BUN.....128,934</p> <p><b>21 MHz</b></p> <p>CX2DK.....1,896,412<br/>CQ3W.....1,603,296<br/>9A9A.....1,495,239</p> <p><b>14 MHz</b></p> <p>D4C.....2,327,904<br/>KH7XS.....1,623,645<br/>S50K.....1,297,405</p> <p><b>7 MHz</b></p> <p>UP0L.....1,018,720<br/>OK7K.....796,854<br/>SN3A.....762,125</p> <p><b>3.7 MHz</b></p> <p>OM2VL.....398,130<br/>9A8M.....306,652<br/>UA2F.....279,744</p> <p><b>1.8 MHz</b></p> <p>5B4AIF.....117,180<br/>S530.....82,998<br/>EU4A.....80,388</p> <p><b>ASSISTED LOW POWER All Band</b></p> <p>P40W.....5,077,050<br/>TM3Z.....2,356,263<br/>HA4XH.....2,047,222<br/>VA3DF.....1,899,235<br/>UW6E.....1,867,020<br/>RA3Y.....1,376,000<br/>EW1P.....1,200,870<br/>RL6M.....1,196,848<br/>Y07SR.....1,180,848<br/>KS1J.....1,115,926</p> <p><b>28 MHz</b></p> <p>LU9DDJ.....220,214<br/>PU2SDX.....160,378<br/>HZ1SK.....135,622</p> <p><b>21 MHz</b></p> <p>PY2UD.....512,080<br/>BD7BM.....486,286<br/>IIBM.....401,301</p> <p><b>14 MHz</b></p> <p>UR3GU.....473,628<br/>S52OT.....402,744<br/>IF9A.....334,050</p> <p><b>7 MHz</b></p> <p>9A5Y.....286,800<br/>YT5X.....239,496<br/>OL9R.....198,648</p> <p><b>3.7 MHz</b></p> <p>UK9AA.....120,951<br/>HG0R.....95,056<br/>EU2EU.....94,738</p> <p><b>1.8 MHz</b></p> <p>E74R.....43,200</p> | <p>LZ2JE.....34,050<br/>RD3K.....14,112</p> <p><b>ASSISTED QRP All Band</b></p> <p>OK2FD.....391,710<br/>RT4W.....247,086<br/>YU1LM.....108,000<br/>IZ0FUW.....102,816<br/>IK1ZOF.....69,520<br/>PE2K.....38,478<br/>I28JFL.....32,660<br/>DO8VX.....28,215<br/>JK1TCV.....27,768<br/>HA5BA.....27,000</p> <p><b>28 MHz</b></p> <p>PY2ZA.....17,934<br/>PU2RTO.....6,042<br/>SP5EWX.....2,709</p> <p><b>21 MHz</b></p> <p>9A4AA.....3,973<br/>EI1E (EI5KF).....3,731<br/>YC2VOC.....3,204</p> <p><b>14 MHz</b></p> <p>UZ7M.....91,800<br/>YP8W.....56,232<br/>TA3AER.....40,755</p> <p><b>7 MHz</b></p> <p>IT9GAK.....34,040<br/>LX/G1TP/AP.....28,842<br/>ES40.....2,652</p> <p><b>3.7 MHz</b></p> <p>OZ60M.....15,892<br/>UT5WAA.....2,013<br/>HA8V.....1,943</p> <p><b>1.8 MHz</b></p> <p>Y09FLD.....5,841<br/>HA7I (HA7JTR).....5,547<br/>EU1AA.....5,375</p> <p><b>MULTI-OP SINGLE TRANSMITTER High Power</b></p> <p>EF8R.....31,451,984<br/>CN2AA.....27,771,275<br/>CR3A.....20,170,863<br/>F5YKE.....18,259,920<br/>TM6M.....13,676,145<br/>LX7I.....13,415,550<br/>UP2L.....13,011,399<br/>IR4M.....12,836,928<br/>IR4X.....12,798,432<br/>9K2HN.....12,730,971</p> <p><b>Low Power</b></p> <p>ED9E.....4,485,280<br/>3V8SS.....3,172,500<br/>IB9T.....3,082,500<br/>IQ3RK.....2,630,880<br/>ZW8T.....2,158,650<br/>YP7P.....1,898,397<br/>A61FK.....1,584,740<br/>PR1T.....1,493,172<br/>EA3CI.....1,399,658<br/>I28XE.....1,155,807</p> | <p><b>MULTI-OP TWO TRANSMITTER</b></p> <p>CN2R.....26,206,313<br/>PZ5K.....23,541,502<br/>PJ4G.....17,801,244<br/>ES9C.....14,124,964<br/>PX2A.....13,941,148<br/>PJ4Q.....13,356,636<br/>KC1XX.....13,350,755<br/>9A7A.....13,087,800<br/>LT1F.....12,425,000<br/>EC2DX.....12,330,400</p> <p><b>MULTI-OP MULTI-TRANSMITTER</b></p> <p>CN3A.....34,131,377<br/>A73A.....19,654,817<br/>K3LR.....19,187,946<br/>PJ2T.....18,646,320<br/>A44A.....16,487,691<br/>V26B.....14,638,603<br/>W3LPL.....14,193,245<br/>M6T.....13,456,575<br/>DF0HQ.....13,414,101<br/>LZ9W.....12,984,558</p> <p><b>ROOKIE High Power</b></p> <p>LB1AH.....773,816<br/>DK6MP.....642,200<br/>TK4RB.....631,736<br/>F4HRM.....359,060<br/>M0VCB.....304,794<br/>K4AKK.....289,712<br/>C93PA.....235,620<br/>DK5RL.....209,884<br/>EA8DET.....186,202<br/>W3XOX.....132,111</p> <p><b>ROOKIE Low Power</b></p> <p>EW7BA.....267,850<br/>PA9S.....242,795<br/>KM4SII.....222,642<br/>OH1XF.....176,484<br/>OH5Y.....143,060<br/>SP5WIT.....137,313<br/>IU4HMY.....133,749<br/>M0TWB.....121,326<br/>W2XK.....114,774<br/>EA4GSL.....111,735</p> <p><b>CLASSIC High Power</b></p> <p>P49Y.....5,370,008<br/>4L0A.....3,920,940<br/>H2T.....3,572,603<br/>DJ5MW.....3,047,198<br/>VA2WA.....3,021,744<br/>ES6RW.....2,943,738<br/>KQ2M.....2,367,480<br/>RT9S.....2,325,724<br/>N2IC.....1,955,766<br/>YL2GD.....1,856,778</p> <p><b>CLASSIC Low Power</b></p> <p>HA3NU.....1,418,480<br/>N8II.....1,009,896<br/>V3A.....914,628<br/>M1U.....621,569<br/>US0HZ.....545,445<br/>RU9AC.....483,531</p> | <p>K1HT.....353,438<br/>MM1E.....330,544<br/>UA3BL.....320,736<br/>N2GA.....320,320</p> <p><b>UNITED STATES SINGLE OPERATOR HIGH POWER All Band</b></p> <p>K1DG.....6,769,048<br/>W2RE.....6,692,379<br/>NR3X.....5,905,782<br/>N5DX.....5,825,913<br/>N1UR.....4,848,096<br/>W9RE.....3,925,128<br/>AA1K.....3,715,191<br/>N9RV.....2,481,972<br/>KQ2M.....2,367,480<br/>K0EJ.....2,310,120</p> <p><b>28 MHz</b></p> <p>W5PR.....32,760<br/>K4WI.....19,812<br/>W4DD.....18,241</p> <p><b>21 MHz</b></p> <p>KU2M.....591,840<br/>N40X.....303,298<br/>WD5K.....124,200</p> <p><b>14 MHz</b></p> <p>NN3W.....591,680<br/>N5CR.....184,800<br/>K2YY/6.....154,810</p> <p><b>7 MHz</b></p> <p>W7WA.....251,505<br/>W1XX.....119,068<br/>KM5VI.....29,842</p> <p><b>3.7 MHz</b></p> <p>K4ZW.....128,594<br/>W3BGJ.....88,032<br/>W4QNW.....22,536</p> <p><b>1.8 MHz</b></p> <p>AG4W.....5,838<br/>W2V0.....3,636</p> <p><b>LOW POWER All Band</b></p> <p>N1PGA.....1,036,480<br/>N8II.....1,009,896<br/>AC0W.....513,264<br/>N6RV.....457,056<br/>N7IR.....456,494<br/>K5FUV.....415,584<br/>K7ACZ.....365,638<br/>K1HT.....353,438<br/>N2GA.....320,320<br/>K3SU.....295,456</p> <p><b>28 MHz</b></p> <p>NV4B.....4,896<br/>KA3MZR.....1,800<br/>N2VIG.....1,680</p> <p><b>21 MHz</b></p> <p>W2AW (N2GM).....124,956<br/>K5KJ.....111,531<br/>K0BBB.....67,288</p> <p><b>14 MHz</b></p> <p>N5JJ.....69,720</p> |
|--|---|---|--|--|--|

was a lot of work for us and we hope that *you* get the message. When you make an OOB QSO, you are wasting your time because it **will be removed**. Even worse, some of you attempted to "hide" what you did by changing the discrete frequency in your log. Come on guys, you think we don't know where the QSO actually took place? Working an OOB contact is most likely an error; changing the frequency in your log to hide it is *cheating*.

Somewhat surprising to us is that we found more U.S. entrants operating OOB than ITU R1 entrants. Everybody worldwide needs to know where the band-edge is, for their country and their license class. Sure, some folks get caught up in the excitement of the contest. It happens and most of us have done it at least once. If you only do it once or twice, you have not wasted a lot of time. If the guy you worked OOB was a mult and you didn't try to work "another one" that was not OOB, then you lost that mult. Just wait until the mult comes up/down into "your part" of the band before you attempt to make a QSO.

We did further analysis on the OOB QSOs. We think that, especially for Europe, contesters are just clicking on DXCluster spots and not bothering to check the frequency. Check out the table below.

### Tracking who works OOB QSOs

| QTH                | ASSISTED   | UNASSISTED |
|--------------------|------------|------------|
| USA count          | 230        | 151        |
| DX count           | 190        | 30         |
| <b>Total Count</b> | <b>420</b> | <b>181</b> |
| USA %              | 60.4%      | 39.6%      |
| DX %               | 86.4%      | 13.6%      |

### Speaking of Assisted

The world of "assisted" continues to morph. Sure, it is fun to just click, click, click and work guys. A big problem is that

K3SWZ.....56,352  
N7FLT.....51,980

**7 MHz**

W2AAB.....10,914  
WA7NWL.....2,700  
KE4KVC.....2,370

**3.7 MHz**

W4PGM.....1,288

**QRP All Band**

KR2Q.....644,160  
K2YGM.....78,110  
W6OU.....70,007  
ND0C.....44,880  
W6VH.....5,043  
K8CN.....3,225  
WS9V.....2,432  
W4TTZ.....1,530

**28 MHz**

N4IHS.....468

**21 MHz**

K8ZT.....24,820

**14 MHz**

K2GMY.....5,265  
KZ3I.....4,914

**ASSISTED HIGH POWER All Band**

K5ZD.....4,570,185  
K3WW.....4,558,642  
W3UA.....4,341,753  
AB3CX.....3,924,195  
AA3B.....3,771,632  
K1ZZ.....3,346,460  
N3RS.....3,326,904  
N2RJ.....3,168,662  
N2SR.....2,838,112  
N2MM.....2,683,652

**28 MHz**

N6SS.....23,952  
K4YYL.....3,900  
W3IP.....2,523

**21 MHz**

N6WM.....191,280  
K2UR.....143,374  
WA3C/8.....99,036

**14 MHz**

N2PP.....522,668  
N7DD.....495,680  
N4PN.....475,244

**7 MHz**

K3EST.....242,296  
K3MA.....124,084  
K2RD.....102,360

**3.7 MHz**

W3NO.....68,706  
K1KNQ.....49,588  
KM2G.....12,155

**1.8 MHz**

W2MF.....10,835  
N4RJ.....4,404

**ASSISTED LOW POWER All Band**

KS1J.....1,115,926  
W3KB.....957,600  
N2SQW.....765,360  
K7WP.....497,777  
W4ZAO.....481,901  
W1AEC.....456,672  
N1API.....438,212  
K8LY.....422,406  
AA0AI.....369,642  
AA4R.....299,450

**21 MHz**

W9ILY.....53,865  
N3TD.....48,208  
N9TF.....46,812

**14 MHz**

N4IJ.....144,988  
N9TGR.....93,360  
WK9U.....78,600

**7 MHz**

WA1FCN.....43,022  
KB3LX.....9,024

**3.7 MHz**

AB4B.....26,714  
KK4BZ.....3,876  
NM9P.....2,349

**1.8 MHz**

N40C.....1,403

**ASSISTED QRP All Band**

K4SSE.....690

**14 MHz**

K7HBN.....828

**1.8 MHz**

K3TW.....276

**MULTI-OP SINGLE TRANSMITTER High Power**

W1NA.....6,411,252  
K1XM.....5,329,986  
K5TR.....4,429,061  
K8AZ.....4,383,540  
N4WW.....4,052,724  
NV9L.....4,004,079  
N1MM.....3,211,747  
AA9A.....3,086,366  
WX1S.....1,835,541  
W3MF.....1,823,481

**Low Power**

WK1DS.....306,772  
WA1F.....141,588  
N8YXR.....116,382  
W8AJT.....52,700  
K7JAN.....36,166  
W6BHZ.....35,640  
W6NJB.....27,136  
ND6U.....4,560  
N5XXD.....3,456

**MULTI-OP TWO TRANSMITTER**

KC1XX.....13,350,755

K2LE.....5,316,135  
WW4LL.....5,096,979  
K9CT.....4,207,896  
N7AT.....2,606,752  
K2AX.....2,274,171  
WA3EKL.....2,063,000  
W2CG.....1,749,956  
K7ZS.....1,389,214  
WB2P.....1,373,625

**MULTI-OP**

**MULTI-TRANSMITTER**

K3LR.....19,187,946  
W3LPL.....14,193,245  
K1TTT.....8,799,840  
K1KI.....4,399,488  
K1KP.....3,314,400  
W0AIH.....3,193,344  
N5AA.....2,340,700  
NE3F.....2,099,512  
W1CSM.....1,156,965  
K0BBC.....286,612

**ROOKIE High Power**

K4AKK.....289,712  
W3XOX.....132,111  
KD2IWW.....126,100  
K2RYD.....92,184  
W6MOB.....40,576  
N4VLK.....31,124  
WA6NFJ.....27,224  
KE0CRP.....23,051  
K9GWS.....20,739  
K4AFE.....17,661

**Low Power**

KM4SII.....222,642  
W2XK.....114,774  
NN2T.....102,510  
K7HKR.....50,310  
W4BBT.....49,790  
K2MV.....35,310  
AA5DX.....31,242  
NQ5M.....27,192  
W4LID.....23,892  
KM4RKT.....23,072

**CLASSIC High Power**

KQ2M.....2,367,480  
N2IC.....1,955,766  
W3LL.....1,767,768  
AA1K.....1,692,288  
KD2RD.....1,513,673  
N5AW.....1,282,424  
W1WEF.....921,633  
NX1P.....604,920  
W4KW.....537,230  
K3TC.....511,280

**Low Power**

N8II.....1,009,896  
K1HT.....353,438  
N2GA.....320,320  
K1BX.....274,950  
W3MMM.....252,572  
K1VSJ.....208,832  
AC2RL.....193,536  
K4SXT.....161,352  
KC4TEO.....159,399  
W0ETT.....146,306

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many "clickers" are not waiting to copy the callsign of the person they just worked. That's a big mistake. As a QRPer (often waiting in line), I cannot tell you how many times I am waiting for the DX to give his call, when I hear a string of cluster users stop by in rapid succession. They throw their call in, make a QSO, and instantly QSY. Hey wait a minute. How did you get his call? Sure, you just trusted the DX spot. It is startling to see how many bad calls (-B) there are because of that. Yes, we can, and do, listen to some of those QSOs (or should we say "QSOs" because they really are not valid QSOs).

In the old days, contesters used spotting networks as a source of additional information; a potential new-one to work. Increasingly, "spots" are being used as method of communication from someone trying to establish contact with the person they want to contact. That is not good. That is using non-amateur means to arrange a QSO. What's next? Will we see spot comments such as "Good QSO, you are in my log"

# 2017 CQWW DX SSB BAND-BY-BAND BREAKDOWN—TOP ALL BAND SCORES

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

## WORLD SINGLE OPERATOR ALL BAND

| Station | 160       | 80        | 40          | 20          | 15          | 10        |
|---------|-----------|-----------|-------------|-------------|-------------|-----------|
| 8P5A    | 158/11/30 | 658/18/74 | 2134/29/108 | 2059/35/104 | 3034/32/116 | 991/21/64 |
| P40T    | 38/8/18   | 222/16/42 | 1996/30/109 | 1280/31/104 | 2427/31/111 | 529/16/49 |
| VY2ZM   | 334/14/61 | 731/20/81 | 1227/25/100 | 1784/31/111 | 1398/22/99  | 35/8/18   |
| XL3T    | 178/9/18  | 784/18/69 | 976/23/74   | 1999/32/116 | 1668/27/110 | 38/10/26  |
| K1DG    | 101/12/44 | 333/19/78 | 525/24/81   | 1364/31/108 | 1979/25/109 | 87/12/29  |

## WORLD SINGLE OPERATOR ASSISTED ALL BAND

|        |           |           |             |             |             |             |
|--------|-----------|-----------|-------------|-------------|-------------|-------------|
| P33W   | 182/11/59 | 426/18/80 | 1056/30/106 | 1636/38/137 | 2320/37/142 | 797/25/94   |
| ZX5J   | 33/9/19   | 194/22/65 | 566/28/89   | 1271/38/110 | 2162/36/137 | 1339/26/106 |
| DL6FBL | 209/11/62 | 601/16/89 | 1096/34/122 | 1994/38/132 | 1390/37/143 | 237/22/74   |
| S57AL  | 161/9/56  | 756/18/81 | 1075/31/113 | 1513/35/121 | 718/37/132  | 71/20/50    |
| LY7Z   | 408/9/63  | 792/19/82 | 845/30/113  | 1573/36/123 | 865/34/128  | 189/17/50   |

## WORLD MULTI-OPERATOR SINGLE TRANSMITTER

|       |           |             |             |             |             |             |
|-------|-----------|-------------|-------------|-------------|-------------|-------------|
| EF8R  | 290/17/80 | 1054/25/105 | 2524/35/131 | 3030/39/153 | 3060/39/160 | 1738/31/126 |
| CN2AA | 237/18/80 | 976/26/106  | 2463/35/127 | 3272/39/151 | 3227/39/155 | 531/29/120  |
| CR3A  | 213/15/65 | 1071/23/96  | 1046/32/110 | 1707/37/136 | 3246/39/141 | 1059/28/115 |
| FY5KE | 62/11/35  | 636/25/87   | 1167/35/123 | 1469/39/147 | 2422/37/151 | 2045/30/120 |
| TM6M  | 196/11/64 | 766/21/94   | 1547/36/129 | 2548/36/133 | 2422/38/153 | 108/22/72   |

## WORLD MULTI-OPERATOR TWO TRANSMITTER

|      |           |             |             |             |             |             |
|------|-----------|-------------|-------------|-------------|-------------|-------------|
| CN2R | 136/11/44 | 1475/25/97  | 2587/32/121 | 2704/35/128 | 3862/38/136 | 975/26/94   |
| PZ5K | 188/13/47 | 755/22/83   | 2421/33/110 | 2083/36/121 | 3590/34/132 | 1919/27/120 |
| PJ4G | 110/14/33 | 807/22/83   | 1638/31/116 | 2457/34/124 | 3067/34/127 | 1103/24/66  |
| ES9C | 539/14/76 | 1516/23/103 | 2070/33/135 | 3199/39/149 | 2249/37/164 | 202/27/73   |
| PX2A | 6/6/5     | 52/14/41    | 721/31/104  | 1596/37/125 | 3593/35/136 | 1637/27/115 |

## WORLD MULTI-OPERATOR MULTI-TRANSMITTER

|      |           |             |             |             |             |             |
|------|-----------|-------------|-------------|-------------|-------------|-------------|
| CN3A | 418/14/68 | 1535/22/104 | 3431/33/130 | 2770/38/135 | 3822/39/148 | 1896/30/128 |
| A73A | 211/10/52 | 613/20/76   | 1981/31/120 | 2473/38/145 | 2924/36/137 | 1238/29/103 |
| K3LR | 536/18/59 | 808/27/101  | 2062/36/135 | 2812/39/156 | 2915/33/146 | 367/21/51   |
| PJ2T | 96/12/25  | 602/22/79   | 2282/29/103 | 2975/37/123 | 3503/30/121 | 1133/19/60  |
| A44A | 332/10/56 | 583/18/75   | 1388/31/115 | 1985/37/135 | 2795/33/137 | 1311/29/105 |

## USA TOP SINGLE OPERATOR ALL BAND

| Station | 160       | 80        | 40        | 20          | 15          | 10        |
|---------|-----------|-----------|-----------|-------------|-------------|-----------|
| K1DG    | 101/12/44 | 333/19/78 | 525/24/81 | 1364/31/108 | 1979/25/109 | 87/12/29  |
| W2RE    | 77/9/31   | 245/16/67 | 771/25/87 | 1371/29/104 | 2017/26/105 | 68/8/22   |
| NR3X    | 29/7/14   | 241/16/69 | 610/23/91 | 1180/33/105 | 1864/24/110 | 142/11/28 |
| N5DX    | 62/13/34  | 243/18/75 | 776/22/97 | 1042/32/114 | 1407/23/105 | 91/10/28  |
| N1UR    | 29/8/14   | 321/17/74 | 505/23/92 | 1226/33/103 | 1183/25/97  | 128/11/31 |

## USA SINGLE OPERATOR ASSISTED ALL BAND

|       |          |           |           |             |             |           |
|-------|----------|-----------|-----------|-------------|-------------|-----------|
| K5ZD  | 31/9/17  | 155/16/67 | 217/23/78 | 1029/33/121 | 1321/27/119 | 117/12/35 |
| K3WWW | 54/10/29 | 238/18/79 | 231/23/87 | 854/30/118  | 1313/24/117 | 130/13/39 |
| W3UA  | 45/9/28  | 152/16/70 | 395/24/90 | 940/31/113  | 1184/23/113 | 138/12/30 |
| AB3CX | 34/8/17  | 233/16/74 | 214/24/86 | 826/30/117  | 988/25/118  | 185/12/34 |
| AA3B  | 49/10/27 | 161/15/69 | 275/23/90 | 859/27/111  | 1026/25/113 | 108/11/33 |

## USA MULTI-OPERATOR SINGLE TRANSMITTER

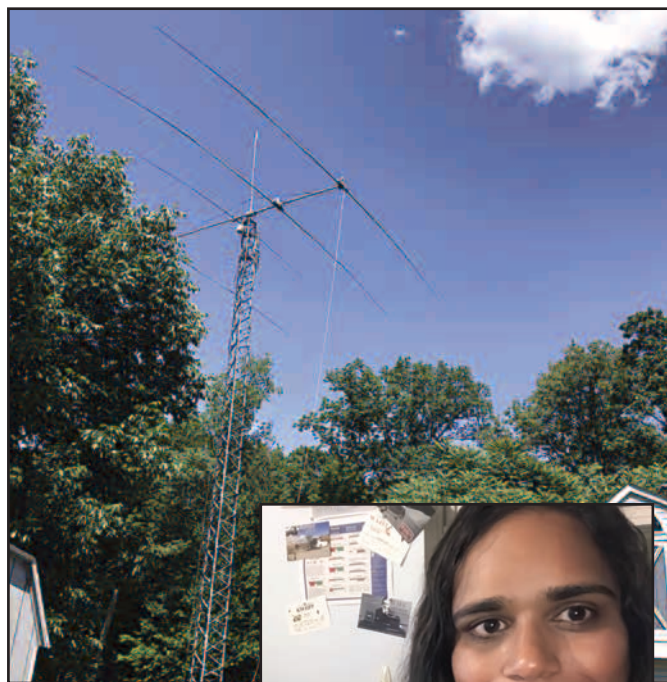
|      |          |           |            |             |             |          |
|------|----------|-----------|------------|-------------|-------------|----------|
| W1NA | 28/9/27  | 324/17/81 | 606/28/102 | 1305/35/123 | 1606/30/125 | 93/13/38 |
| K1XM | 40/10/32 | 344/19/81 | 628/27/107 | 1132/34/130 | 1137/27/124 | 45/13/43 |
| K5TR | 27/12/24 | 102/22/66 | 964/34/113 | 744/34/122  | 1324/31/129 | 56/15/35 |
| K8AZ | 32/12/29 | 204/19/72 | 361/31/102 | 840/37/130  | 1111/27/125 | 42/14/41 |
| N4WW | 37/11/35 | 157/18/78 | 782/32/113 | 983/32/118  | 655/30/119  | 58/13/27 |

## USA MULTI-OPERATOR TWO TRANSMITTER

|       |          |           |             |             |             |           |
|-------|----------|-----------|-------------|-------------|-------------|-----------|
| KC1XX | 69/13/35 | 572/24/93 | 1810/32/122 | 2074/39/144 | 2268/32/137 | 174/18/48 |
| K2LE  | 48/10/21 | 300/17/76 | 657/28/104  | 1145/32/120 | 1035/28/121 | 158/12/36 |
| WW4LL | 35/10/17 | 320/19/79 | 763/29/107  | 991/33/121  | 1251/29/123 | 124/12/28 |
| K9CT  | 60/11/22 | 222/17/65 | 468/30/96   | 1080/38/130 | 873/30/123  | 195/14/40 |
| N7AT  | 7/4/3    | 210/17/41 | 606/29/76   | 615/32/99   | 1095/30/95  | 146/12/26 |

## USA MULTI-OPERATOR MULTI-TRANSMITTER

|       |           |            |             |             |             |           |
|-------|-----------|------------|-------------|-------------|-------------|-----------|
| K3LR  | 536/18/59 | 808/27/101 | 2062/36/135 | 2812/39/156 | 2915/33/146 | 367/21/51 |
| W3LPL | 407/17/59 | 663/21/93  | 1798/34/127 | 2363/36/138 | 1811/30/135 | 426/18/47 |
| K1TTT | 158/11/37 | 584/22/84  | 940/30/108  | 2070/36/131 | 1314/28/126 | 346/19/47 |
| K1KI  | 47/10/27  | 251/17/77  | 723/32/111  | 804/31/119  | 810/24/113  | 78/13/34  |
| K1KP  | 31/8/7    | 219/16/63  | 431/23/87   | 1014/31/103 | 992/23/108  | 6/5/6     |



N2RJ's antenna.

N2RJ poses for a selfie in front of her Flex Maestro.

hoping that the other end will reciprocate by logging him if the QSO was shaky, or worse, non-existent? We see that often for DXing, but not for contesting. Don't do it. DX spotting is supposed to be used as a resource for gathering DX data; it is not supposed to be a substitute for your radio. Things are getting out of hand (if not there already).

With the "assisted" category moving farther beyond past practices, and more and more functioning as a social media mode of ancillary communication, I am becoming convinced that this category should never be "merged" in any way, shape, or form with the minority of vocal operators (that gets smaller every year) who shout, "keep single-op unassisted separate!"

## Closing Remarks

We would like to thank the many contesters out there who continue to send us suggestions on where to look to identify potential unsportsmanlike behavior that they have observed or suspect. We check every one of them out; keep 'em coming! The CQWW Contest is the biggest and best contest going (always has been) and appreciate everyone's input to keep it that way.

At this time, we enthusiastically look forward to seeing all of you again on October 27, 28 on Phone and on November 24, 25 on CW in 2018.

And finally, many thanks to the members of the CQWW Contest Committee, whose help, suggestions, expertise, and even criticism, make the contest the huge success that it is:

CT1BOH, José Nunes; EA4KD, Pedro Vadillo; ES5TV, Tonno Vahk; F6BEE, Jacques Saget; GØMTN, Lee Volante; HA1AG, Zoli Pitman; IK2QEI, Stefano Brioschi; JH5GHM,



# what's new

## EUROPE TOP SINGLE OPERATOR ALL BAND

| Station | 160      | 80        | 40         | 20         | 15          | 10        |
|---------|----------|-----------|------------|------------|-------------|-----------|
| TK9R    | 322/8/48 | 617/14/67 | 785/22/90  | 1979/31/96 | 1393/30/106 | 190/15/55 |
| YP0C    | 141/7/33 | 514/11/55 | 1134/27/83 | 1141/27/80 | 1327/28/90  | 128/18/44 |
| EA5DFV  | 62/7/34  | 251/8/48  | 737/25/83  | 854/19/61  | 1869/25/96  | 138/8/30  |
| DJ5MW   | 93/6/37  | 275/11/48 | 522/23/78  | 1290/30/84 | 570/32/102  | 120/16/50 |
| ES6RW   | 146/8/43 | 394/15/59 | 467/28/78  | 1041/31/82 | 805/32/99   | 225/17/59 |

## EUROPE SINGLE OPERATOR ASSISTED ALL BAND

|        |           |           |             |             |             |           |
|--------|-----------|-----------|-------------|-------------|-------------|-----------|
| DL6FBL | 209/11/62 | 601/16/89 | 1096/34/122 | 1994/38/132 | 1390/37/143 | 237/22/74 |
| S57AL  | 161/9/56  | 756/18/81 | 1075/31/113 | 1513/35/121 | 718/37/132  | 71/20/50  |
| LY7Z   | 408/9/63  | 792/19/82 | 845/30/113  | 1573/36/123 | 865/34/128  | 189/17/50 |
| S53M   | 102/10/51 | 596/15/78 | 652/31/99   | 1090/37/115 | 1101/35/128 | 169/20/61 |
| YL2SM  | 202/13/64 | 427/18/82 | 568/29/102  | 934/36/118  | 747/35/135  | 142/22/63 |

## EUROPE MULTI-OPERATOR SINGLE TRANSMITTER

|      |           |           |             |             |             |           |
|------|-----------|-----------|-------------|-------------|-------------|-----------|
| TM6M | 196/11/64 | 766/21/94 | 1547/36/129 | 2548/36/133 | 2422/38/153 | 108/22/72 |
| LX7I | 299/13/71 | 924/22/98 | 1967/34/126 | 2380/38/145 | 2059/38/149 | 149/23/93 |
| IR4M | 73/13/71  | 619/20/95 | 1773/34/123 | 2675/38/145 | 1769/37/150 | 103/25/81 |
| IR4X | 140/13/72 | 524/20/96 | 1547/36/132 | 2622/39/147 | 1842/39/154 | 130/24/92 |
| OM7M | 126/13/69 | 826/26/98 | 1534/35/134 | 2541/39/146 | 1499/38/150 | 84/25/84  |

## EUROPE MULTI-OPERATOR TWO TRANSMITTER

|       |           |             |             |             |             |           |
|-------|-----------|-------------|-------------|-------------|-------------|-----------|
| ES9C  | 539/14/76 | 1516/23/103 | 2070/33/135 | 3199/39/149 | 2249/37/164 | 207/22/73 |
| 9A7A  | 184/12/63 | 1094/21/92  | 2011/34/134 | 2564/39/141 | 2148/38/149 | 172/26/76 |
| EC2DX | 229/12/65 | 1240/24/103 | 1530/32/115 | 2940/36/132 | 2585/38/144 | 146/23/76 |
| HG7T  | 302/12/66 | 1302/24/98  | 1771/32/131 | 2408/39/133 | 1612/38/153 | 339/25/87 |
| YT5A  | 205/12/60 | 1116/22/91  | 1663/33/112 | 2311/38/133 | 1379/36/138 | 133/25/81 |

## EUROPE MULTI-OPERATOR MULTI-TRANSMITTER

|       |           |             |             |             |             |            |
|-------|-----------|-------------|-------------|-------------|-------------|------------|
| M6T   | 919/11/67 | 1964/23/98  | 3003/36/137 | 2145/37/138 | 1453/34/128 | 543/21/95  |
| DF0HQ | 906/13/74 | 1442/21/98  | 2974/32/142 | 2137/39/151 | 1246/38/145 | 521/28/106 |
| LZ9W  | 753/12/74 | 1645/25/103 | 2193/33/131 | 3158/37/137 | 1727/38/146 | 463/26/89  |
| CU4DX | 232/12/49 | 1048/17/86  | 1487/27/97  | 2516/32/107 | 2966/30/99  | 1130/24/96 |
| OT5A  | 756/13/64 | 1320/15/74  | 2677/36/135 | 1430/36/104 | 1113/34/120 | 355/20/66  |

Katsuhiro (Don) Kondou; K1AR, John Dorr; K1DG, Doug Grant; K3LR, Tim Duffy; K3WW, Charles Fulp; K3ZO, Alfred A. (Fred) Laun, III; K5ZD, Randy Thompson; KR2Q, Doug Zwiebel; 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 Sluymer; VK2IA, Bernd Laenger; W4PA, Scott Robbins; W5OV, Bob Naumann; YO3JR, Andrei (Andy) Ruse; YU1EW, Zoran Mladenovic.

(Continued on page 94)



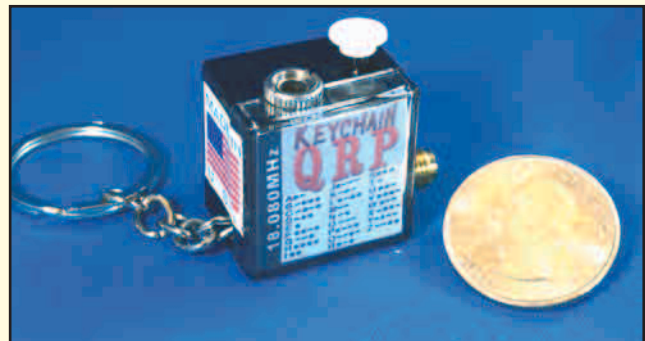
The team of the Red Forest Contest Station, SV1DPI.

## KeychainQRP HF Transmitters

Did you ever want a full-fledged CW QRP transmitter that can fit on your keychain that actually works? Well QuirkyQRP Ham Radios has the solution for you with its micro-sized CW ham radios that are small enough to keep attached to your car keys.

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When paired with an inexpensive multi-band shortwave receiver or HF receiver kit, a very lightweight transceiver setup can be achieved. Another HF receiver option is one of the many dual-band VHF/UHF handheld ham radios on the market that has a built-in wide band HF receive mode, which many hams already own.

Each transmitter has a built-in micro straight key for transmitting code without the need for an external key. The latest model now sports a standard 3.5-millimeter jack to allow the use of any external straight key or electronic keyer. There is even the potential to use KeychainQRP as an experimental propagation beacon or as an RDF "foxhunting" transmitter.

KeychainQRP is powered by a standard 9-volt battery and puts out a maximum of 160 milliwatts of RF power via its SMA antenna connector. Batteries as well as BNC/SMA adapters are available as optional accessories.

A transmit indicator LED shows you that you are transmitting and can be helpful for beginners when sending code. Another helpful addition for hams still learning CW is the built-in Morse code chart, which is part of the label on the front of the rig.

Each KeychainQRP transmitter is handmade in the U.S., is available now, and has a retail price of \$39.95. For more information or to purchase, visit: <[www.etsy.com/shop/QuirkyQRPHamRadios](http://www.etsy.com/shop/QuirkyQRPHamRadios)>.

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