

# Results of the 2004 CQ WW DX CW Contest

BY BOB COX,\* K3EST

## Expanded CQ WW Contest Results on the Web

Several elements of our contest reporting are on the CQ website, including Station Operators of Multi-Op stations and expanded QRM. To view these additional and expanded elements of this year's CQ WW results, go to <<http://www.cq-amateur-radio.com/cqwwhome.html>>, then click on "Expanded results, 2004 CQ WW CW" and select the category you want to see. You may also get there by going to our home page at <<http://www.cq-amateur-radio.com>>, clicking on "Contest Rules & Info," then clicking on "CQ World Wide DX Contest" and selecting "Expanded Results, 2004 CQ WW CW."

The sunspots were really going down and depressed conditions were expected for the 2004 CQ WW DX CW Contest. What happened gives truth to the saying "The CQ WW makes its own propagation." The 2004 CW test was a real surprise. Yes, conditions were suppressed. The CQ WW was not. The 2004 contest marks the highest number of submitted CW logs in radio history. Over 4040 logs were received. Contesters got in on the action in droves from all over the world.

New records were set. Hundreds of contestants left home to try an adventure from a DX location. The CQ WW is a fantastic competition, and it brings out the best in operators. Months of preparation, trying out new antennas and equipment, and finally the celebration of ham radio skill and effort come to fruition during 48 fun-filled hours. If you operate in the CQ WW, you can't lose. It draws you in with its siren call. As has often been said, it's a world-wide party . . . and all of you are invited!

## All Band, High Power

The category that has always stood high on the prestige ladder is Single Operator, All Band, High Power. It is really tough. D4B operated by AI, 4L5A, took the top prize. Almost everyone is now familiar with D4B's big signal and operating skill (<http://www.qsl.net/d44t>). AI is an enthusiast contestant. He had to retire from the contest late on Sunday because of illness. However, he still managed to take first place! EA8ZS operated by many-time world champion Jose, CT1BOH, took the number two position (<http://www.qsl.net/ct1boh>). Jose was signing "dit dit" after every QSO as a thank you to Aruba (P40E and P43E). Third place went to Scott, K0DQ, who operated at P40Q (P43P's QTH).

Randy, K5ZD/1, pushed the pedal to the floor and took the number one position in the U.S. (<http://www.k5zd.com/>). His skill plus station allowed him to edge out Pat, N9RV, from Indiana (<http://www.qrz.com/n9rv>). Pat lost most of antennas soon after the contest and hopefully they will be rebuilt by the 2005 contests. Third place was taken by Alex, LZ4AX, operating from the Penn State station of K3CR (<http://www.clubs.psu.edu/up/k3cr/>).

In Europe it was a real fight. After detailed

log checking, CT8T, operated by OH1NOA, was declared the winner. Second place went to G11W with G10NWG at the key, and third place went to RK4FF. The number one scorer from the far west U.S. was Glenn, K6NA, followed by Steve, N2IC/5, from SW New Mexico.

Special mention should be made of A45XR, 6W1RW (F6BEE), S9A (OH2PM), and 9M6NA (JE1JKL). They made the maximum effort from rare locations.

The continental winners were: North America 8P5A (W2SC), USA K5ZD/1, Africa D4B (4L5A), Asia A45XR, Japan JH4UYB, Europe CT8T, Oceania 9M6NA (JE1JKL), South America P40Q (K0DQ).

## All Band, Low Power

Running barefoot is fun. Most of the entrants in the CQ WW run 100 watts or less. The Low Power category is the largest by far. To win this category for your country is not easy. Winning for the world is very difficult. Reprising his win from SSB was Thomas, SU9NC. He was easy to work and active on all bands. In addition, he set a new Africa low power record. Second place went to long-time low power advocate Joe, AA3B, who pushed V26K up the rankings. Third place went to CT9M (<http://www.ct3ee.net>) operated by Jon, KL2A (<http://www.kl2a.com/>). Special mention is made of 3V8SQ operated by DL2OBF, who finished fourth in the world.

The number one score in Europe and number six in the world was CT7B, operated by 18-year-old Felipe, CT1ILT. CT1ILT is a callsign to keep your eyes on. He is going places (<http://ct1ilt.cyton.com/>)! Another Iberian peninsular station took second-place honors; Manuel, EA7RM, also pushed the key to ninth place in the world. Third place in Europe went to Goran, YT7AW, who operated from 4N0W. In the U.S., Michael, W1MU, led the pack with 2.2+ million points. Second was Ed, N1UR, and third was Marvin, N5AW.

The continental winners were: North America V26K (AA3B), USA W1MU, Africa SU9NC, Asia UO2M (UN7MO), Japan J1RXQ, Europe CT7B (CT1ILT), Oceania VK2IMM, South America XQ4ZW.

## QRP

If you want to practice your contesting skills, the QRP category is the way to do it. Finding new



4M5X, operated by W4SO.

stations and knowing when to call a station or give up and move on are what QRP is all about. It is surprising what you can work with 5 watts. If you want to improve your contesting skills, the QRP category could be the refresher course you need. The number one score was John P40A (KK9A). Travelling to a great location and placing a great op behind the key resulted in the biggest small signal in the contest. Second place went to Bosko, YT7TY, located at the Serbian-Hungary border. He took top honors in Europe. You had to travel to the beautiful country of Costa Rica to find TI5N operated by N0KE, who finished number three worldwide (<http://www.qsl.net/ti5kd/contest.htm>). KT8X, operated by KK8I (aka DL2HBX), Uli, took top U.S. honors. Almost breaking a thousand QSOs in the small-signal category means you are doing something right. Taking second place was Tom, N4KG, from northern Alabama. Bill, N8ET, took third place. In Europe, YT7TY took top honors. Second place went to HG5Z operated by HA1CW, and third to LY4XX (LY2MW; <http://www.qsl.net/ly2mw/>).

The continental winners were: North America TI5N (N0KE), USA KT8X (KK8I), Africa no entry, Asia UA9SG, Japan JR4DAH, Europe YT7TY, Oceania VK8AN, South America P40A (KK9A).

## Assisted

When a single op receives QSO/multiplier spotting assistance from some source in any form, he or she is in the Assisted category. There are lots of reasons to try the Assisted category, and helping your club is one. You have to make the best use of spots without it affecting your QSO total. This is not easy to do. This year's world top scorer was 9Y4ZC, operated by Bernd, DL6FBL. Bernd did so well that he keyed his way to a new world record. Second place went to 5B/AA1TN, and third place went to John, W2GD, who put P40W through a workout. Way over in Tanzania, Mas made a lot of people happy as 5H3KK. Contesting from Germany's

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Chris, A45SR, put Oman on the map.

most southern corner, Manfred, DJ5MW, submitted the number one score from Europe (<http://www.dj5mw.de>). Two Zone 16 call signs battled for second and third place. Finishing number two was Vlad, RX4HZ. Third place in Europe was taken by UW8M, operated by UR5MID (<http://uw8m.narod.ru/index.html>).

If you are familiar with U.S. Assisted operators, you know the callsign K3WW. This year Charlie again took the top spot as number one USA (<http://www.k3ww.com/>). Not too far away geographically was Noah, K2NG, who took second place. The third-place position went to NI1N located in southwestern Virginia.

The continental winners were: North America K3WW, USA K3WW, Africa 5H3KK (JE3MAS), Asia 5B/AA1TN, Japan JF1PJK, Europe DJ5MW, Oceania VK1AA, South America 9Y4ZC (DL6FBL).

### Multi-Single

Each year contesters band together and travel to compete in a multi category, of which Multi-Single is the most popular. A real battle occurred in this category in the 2004 contest. Three FB stations with top operators went head to head. Three different continents took top honors. Putting Aruba on the map, P40L was a three-man team from northern California. They keyed their way to the top. Second place went to EA6IB located on Ibiza among the Balearic islands. Ideally located from a holiday and contesting perspective, EA6IB is always loud (<http://www.qsl.net/ea6ib>). Third place went to long-time Asian top scorer UA9AYA. Located on the outskirts of Chelyabinsk, UA9AYA put Zone 17 in a lot of logs.

The top Oceania score was the Japanese team at AH2R. They set a new Oceania record. Another team that deserves special mention is the Russian team at 8Q7DV (<http://www.fotki.com/8q7dv>). They provided a double multiplier for lots of people. First place in Japan was JA7YAA, who took away the combined SSB/CW MS trophy (<http://www.ja7yaa.org.tohoku.ac.jp/index.html>).

The number one scorer in Europe was the above-mentioned EA6IB. That team was followed by two Slovakian teams. At number two in Europe was the HF contest station situated in the heart of Europe, OM7M (<http://www.qsl.net/om7m>). They started seriously operat-

ing MS in 1999 and their results prove their skill. Just a little behind in third place was OM8A (<http://www.qsl.net/om8a>).

In the U.S. the number one score was submitted by K1IR. Jim's team from Sudbury, Massachusetts led all the rest to reach the top of the scores list. Second place went to K8AZ. Tom's crew is always competitive and his north-eastern Ohio station did its usual fine job. Third place in the U.S. went to W2FU in New York.

The continental winners were: North America VP2MZM, USA K1IR, Africa C91F, Asia UA9AYA, Japan JA7YAA, Europe EA6IB, Oceania AH2R, South America P40L.

### Multi-Two

The M2 category continues to grow in popularity. You have to have a good plan and operators if you want to try for the top spot. You cannot do better than to set a new world record the first time you enter a new category. The multinational team of HC8N would make Darwin proud, as it evolved to new heights and set a new Multi-Two world record. Operating from the heights of an extinct volcano with antennas really in the clouds, HC8N is to be congratulated (<http://hc8n.info/>). The Caribbean Contesting Consortium, PJ2T, took second place from the island of Curacao (<http://www.pj2t.org>). Third place went to CT9L representing the Rhein-Ruhr DX Association team. Three European teams have taken up the M2 challenge. Finishing number one was club station RU1A. Founded in 1956, this callsign has been a beacon from northern Europe. Did you ever wonder where IQ4A went? They changed into IR4X. Sitting on a mountain overlooking the plains of central Italy, IR4X took second place. Third place in Europe went to the UU7J contest team in the Crimea (<http://www.uu7j.com>).

The number six world score and number one USA M2 score was submitted by K4JA. This was Paul's last contest from his location located in northeastern Virginia (<http://www.k4ja.com>). What a way to go out! Second place went to Sig's N3RS team from the Philadelphia area. Made up of seasoned veterans, this Frankford Radio Club powerhouse always finishes near the top. Third place went to K1AR. John's team ventured into M2 and found they had lots of fun. Finally, Akira, JA8RWU, decided to try his luck in the M2 category and ended up with the new Japan record.

The continental winners were: North America K4JA, USA K4JA, Africa CT9L, Asia RT9W, Japan JA8RWU, Europe RU1A, Oceania no entry, South America HC8N.

### Multi-Multi

What makes up a good Multi-Multi team? Take a lot of work, a lot of planning, and friends coming together from all corners of the world and you have a Multi-Multi effort. Usually planning begins early in the year, as was the case with this year's winner, 5U5Z, the Voodoo Contest Club. This group of friends has placed western Africa on the map for a decade or more. They are to be congratulated for their dedication. The 5U5Z gang made it into almost everyone's log.

It is quite unusual for the second- and third-place winners to be from the U.S. Second in the world and number one in the USA was K3LR (<http://www.k3lr.com>). This was K3LR's first CW win in the CQ WW and it is very special to all the team members! Wow, number two world and number one U.S.! Tim's team from

western Pennsylvania just edged out the number-three world score of W3LPL. This was a real competition. Third place in the U.S. went to KC1XX, who experienced some aurora-like conditions (<http://www.kc1xx.com>).

The number one scorer from Europe was the DF0HQ club call of the Ilmenau Contest Club. The number world IARU champion certainly showed its skills in the CQ WW (<http://www.df0hq.de>). Second place went to the LZ9W Contest Team. They were loud and they could hear. The GMDX Group Contest Team, GM5A, made Scotland proud by finishing third in Europe (<http://www.gmdx.org.uk/>).

The continental winners were: North America K3LR, USA K3LR, Africa 5U5Z, Asia UP5G, Japan JA3YBK, Europe DF0HQ, Oceania ZL6QH, South America no entry.

### Clubs

Radio clubs are an important glue in contesting. They provide friendships, construction skills, and advice. Contesters can talk for days about their contesting experiences, a feature for which clubs are well suited. To end up with the huge scores achieved by the winners takes an enormous effort.

The 2004 winners amassed many of top scores in the world. The world's highest club score came from the Frankford Radio Club. This famous club draws upon a winning strategy every year. Second place was taken by the Yankee Clipper Contest Club. Getting all your members on the air helps everyone. Third place went to another East Coast powerhouse, the Potomac Valley Radio Club.

Every year in Europe there is a friendly battle in Germany for the top DX club score. The 2004 top DX club score came from a club in southern Germany, the Bavarian Contest Club. Second place was taken by the club from central Germany, the Rhein-Ruhr DX Association. Third place went to Contest Club Finland.

The total points accumulated by the six clubs was over 1.48 billion! That's a lot of people on the air. A great job was done by all the clubs.

### Team Contesting

What do five contesters from anywhere in the world have in common? Besides the fun of contesting, they can make a team. Register your team before the contest and you are all set to enter the Team Contesting category. As you can see in these results, the teams can be made up of members from all over the world.

1. Neiger's Tigers Team No. 1 (51,375,582): 8P5A (W2SC), EA8ZS (CT1BOH), D4B (4L5A), P40Q (K0DDQ), TO4A (N6TJ).



CT7B, operated by Filipe, CT1ILT.

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2. Team Horizontal (27,029,341): K1DG, K5ZD/1, K2UA, N9RV, VY2NT (K6LA).
3. Neiger's Tigers Team No. 2 (20,907,259): KQ2M/1, K1ZZ (N6ZZ), K6NA, 6W1RW (F6BEE), IR7G (N6AA).
4. CCF Team Sibelius (17,874,372): CT8T (OH1NOA), ES5TV, OH1F (OH1MDR), OH6NIO, 8R1K(OH0XX).
5. WWYC The Big 5 (11,697,680): CT7B (CT1ILT), ON5ZO, OZ1AA, DJ1YFK.
6. Have-CW – Will Contest (6,410,105): ZS1EL, ZS4TX, VE1OP, N5KA, K5UN.
7. VKCC East (6,349,200): VK2NU, VK9AA, VK2BAA, VK2IMM.
8. VKCC North-East (6,223,522): VK4DX, VK1AA/4, VK1KI (K1KI).
9. CCF Team Nurmi (3,540,900): EA8EW (ES2RR), OH0V (OH6LI), OH6AC (OH6CS), OH6BG.
10. CCF Team Sauna (2,713,381): OH0B (OH2UA), OH0I (YL2KL), OH2U (OH2IW), OH4A (OH6QU).
11. CCF Team Finlandia (2,096,246): EA8EA (OH2MM), OH0Z (OH5DX).
12. N1MM Logger Users Group (1,510,539): KE5CTY, ZZ8Z (PY8AZT), VA7ST, N7OR.
13. VKCC South-West (1,581,689): VK6LW, VK3YB, VK4AN, VK6DXI.
14. CCF Team Sisu (948,825): OH2LU, OH4MFA.
15. CCF Team Terva (943,730): OH0M (OH1MM), OH2BH (OH1WZ), OH4MCV, OH6XX.
16. CCF Team Mannerheim (762,684): OH2BO, OH6KXL, OH6OS, SM0W (SM0WKA).

### Records

On the CQWW.com web page are the all-time records for each continent and country. Setting a new record is difficult and challenging. Take a look at your country's records and choose a record you can try to beat. Congratulations to the following stations which set new world and continental records.

**World:** 14 CN2KM(SM2EKM), 1.8 IH9U (IN3QBR), Q1.8 LY5A (LY2PAJ), AA 9Y4ZC (DL6FBL), A3.5 HA5A (HA7ANT), M2 HC8N.

**Africa:** 14 CN2KM (SM2EKM), 1.8 IH9U (IN3QBR), LA SU9NC, L3.5 6W7RV (F5CW).

**Asia:** 14 A61AJ (N2AA), 7 A61AJ (S53R), AA 5B/AA1TN (RW3QC), A1.8 UA9AT.

**Europe:** 7 T9/9A5E, L3.5 OH0I (YL2KL), Q7 OM7DX, Q3.5 SP6GCU, Q1.8 LY5A (LY2PAJ), A3.5 HA5A (HA7ANT).

**Japan:** M2 JA8RWU.

**North America:** 14 3E1A (DJ7AA).

**USA:** L3.5 N4IJ.

**Oceania:** 14 KH7X (KH6ND), A14 VK1AA, A1.8 VK6VZ, MS AH2R.

**South America:** AA 9Y4ZC (DL6FBL), A7 PY2WC, A3.5 PY2NDX, M2 HC8N.

### Special Mention

The CQ WW sure brings out the desire to travel for many ops. Thanks to the many DXpeditions and the efforts of hundreds of contesters who made the contest experience more interesting for all of us this time. Here are some calls you probably worked:

VP2ETL, V26K, C6AKQ, C6AOQ, C6AWS, SU9NC, 8P5A, V31JP, VY2NT, VE6JY, J79A, H3KM, TO4A, 3E1A, KP4KE, KP3/VE7AHA, V47KP, PJ7/K4MA, IH9P, IH9U, EA8EV, EA8EA, EA8/OH4NL, EA8/DJ1OJ, EA8/PC8E, EA8/LY1DF, D4B, SU8BHI, CN2KM, CN2R, V51/DL5XL, S9A, 6W1RW, 6W7RV, ST2T, 3V8SQ, 3V8SF, R9/UT7CR, XU7ADE, XU7ADF, 5B/KI0BP, VU2WAP, HL2/JH1FXF, XW8KPL/RU3DX, HS0ZAR, HS0ZDR, A61AJ, UK/JI2MED, 9M2/G3TMA, 9M2/G4ZFE, OH0Z, OH0V, OH0B, OH0M, OH0I, OH0RB, ZA/Z35M, OE2G, T9/9A5E, 9A9D, J45KLN, SX5R, J43J, JI1NJC/TF, EI/SP4Z, IR7G, I0/N6CY, LX/G3VQO, CT8T, YO2/DL1CW, MW5A, VK1KI, 9M6NA, 9M8YY, KH2/WX8C, K1ER/KH6, KH6/N0CO, KH6/W0CN, YE0X, VK9AA, VK9NW, DU9/N0NM, ZK1DRA, P40Q, P40J, 5K5Z, 8R1K, CW2A,



EA8ZS, operated by Jose, CT1BOH.

TI5N, 5H3KK, 5B/AA1TN, HS0ZDJ, 4U1ITU, EI/AB2E, P40W, PJ4M, 9Y4ZC, 4U1UN, VP2VVV, VP2MZM, C91F, 8Q7DV, LX7I, AH2R, P40L, VP8WWW, J7OJ, VP9I, V31RM, VP5W, CT9L, YI9KT, OD5/DJ5CL, 9N7BCC, GJ2A, HC8N, PJ2T, 5U5Z, HS72B, 3D2XA, 9Y4TBG, EA6/DH5CM, and HP1/DL6MYL.

One fun aspect of the contest is the competition that takes place within a country or other locality. Two friends or more go at it to see who will come out on top. By looking carefully at the results you can see many such competitions.

### Comments

The number of CW logs received for the 2004 contest reached an all-time high mark of approximately 4040. Over the years the number of CW logs has not declined; it has grown. The activity on CW is most apparent to anyone who tunes across the spectrum during the CQ WW CW contest. There is activity wall to wall on all the bands. CW is certainly an eloquent mode.

The percentage of electronically received logs continues to rise. The CQ WW Contest Committee wants to thank all of the entrants who took the time to submit their log via the CQWW robot. Your effort to submit an electronic log allows for a fairer adjudication process (please send in your log no matter how small). Submitting an electronic log is easy. Send your SSB log and summary to <cw@cqww.com> (SSB to <ssb@cqww.com>). Please send your log in Cabrillo format. If you did everything okay, you will get back an acknowledgment and a tracking number. The number of entrants who have a problem with log submission has decreased greatly.

Thanks to the sharp eyes of you, the CQ WW entrants, several corrections were made to the final UBN/NIL reports which are available at CQWW.com. We appreciate your input. It helps make the contest as accurate as possible.

In the CW section of the 2004 contest there were several stations that were flagged as having potential problem logs. It takes a great deal of time to research a "flagged" log to find out what the entrant was doing. The CQ WW Contest Committee has a lot of data at its figure tips. We have compiled averages for the number of packet hits that should occur in a non-packet vs. an Assisted log for each category for Europe, the U.S., and DXpeditions. Each has its own average. Using this information plus some very sophisticated software, we run all the logs through several programs to create a list of logs that require further inquiry. The

(Continued on page 99)

**CW TROPHY WINNERS AND DONORS**

**SINGLE OPERATOR ALL BAND World**  
**D4B (Opr: Alexander Teimurazov, 4L5A)**  
 Donor: W9IOP Memorial (Albert Kahn, K4FW)

**World Low Power**  
**Thomas Poland, SU9NC**  
 Donor: Slovenia Contest Club

**World QRPp**  
**P40A (Opr: John Bayne, KK9A)**  
 Donor: Gene Walsh, N2AA

**World Assisted**  
**9Y4ZC (Opr: Bernd Och, DL6FBL)**  
 Donor: Robert McGwier, N4HY

**USA**  
**Randall Thompson, K5ZD/1**  
 Donor: Frankford Radio Club

**USA Low Power**  
**Michael Zak, W1MU**  
 Donor: North Coast Contesters

**USA – Zone 3**  
**Glenn Rattmann, K6NA**  
 Donor: Central Arizona DX Association

**USA – Zone 4**  
**Patrick Barkey, N9RV**  
 Donor: The Society of Midwest Contesters

**Canada**  
**VC3L (Opr: Ron Vander Kraats, VE3AT)**  
 Donor: CQ magazine

**Carib./C.A.**  
**8P5A (Opr: Tom Georgens, W2SC)**  
 Donor: Chuck Shinn, W7MAP

**Europe**  
**CT8T (Opr: Timo Klimoff, OH1NOA)**  
 Donor: W3AU Memorial (Pete Raymond, N4KW)

**Europe – Low Power**  
**CT7B (Opr: Filipe Monteiro Lopes, CT1ILT)**  
 Donor: Scott Jones, N3RA & Tim Duffy, K3LR

**Scandinavia**  
**OH1F (Opr: Timo Pohjola, OH1MDR)**  
 Donor: W3FYS Memorial (Chas Weir, Jr., W6UM)

**Russia**  
**RK4FF**  
 Donor: Roman Thomas, RZ3AA

**Africa**  
**EA8ZS**  
 (Opr: Jose Carlos Cardoso Nunes, CT1BOH)\*  
 Donor: Gordon Marshall, W6RR

**Asia**  
**Chris Dabrowski, A45XR**  
 Donor: Chuck Shinn, W7MAP

**Japan**  
**Masaki Masa Okano, JH4UYB**  
 Donor: Tack Kumagai, JE1CKA

**Japan – Low Power**  
**Hiroyuki Ueno, J1RXQ**  
 Donor: Western Washington DX Club

**Oceania**  
**9M6NA (Opr: Saty Nakamura, JE1JKL)**  
 Donor: Chris Tran, ZL1CT

**South America**  
**P40Q (Opr: Scott Redd, K0DQ)**  
 Donor: Venezuela DX Club

**SINGLE OPERATOR, SINGLE BAND**  
**World – 28 MHz**  
**Pedro Alberto Cano Pereira, CX5BW**  
 Donor: Joel Chalmers, KG6DX

**World – 21 MHz**  
**Bernie Van Der Walt, ZS4TX**  
 Donor: Lew Sayre, W7EW

**World – 14 MHz**  
**CN2KM (Opr: Jan Erik Holm, SM2EKM)**  
 Donor: W2JT Memorial (North Jersey DX Assn.)

**World – 7 MHz**  
**Robert Orehoci, T9/9A5E**  
 Donor: Alex M. Kasevich, VP2MM

**World – 3.5 MHz**  
**CN2R (Opr: James Sullivan, W7EJ)**  
 Donor: Fred Capossela, K6SSS

**World – 1.8 MHz**  
**IH9U (Opr: Mauro Tomazzoni, IN3QBR)**  
 Donor: Kenneth Byers, Jr., K4TEA

**USA – 28 MHz**  
**Bill Tippet, W4ZV**  
 Donor: Wireless Institute of the Northeast

**USA – 21 MHz**  
**Bertram Aaron, K2BA/5**  
 Donor: Wayne Carroll, W4MPY

**USA – 14 MHz**  
**Saul Abrams, K2XA**  
 Donor: Northern Illinois DX Association

**USA – 7 MHz**  
**Bill Kollenbaum, K4XS**  
 Donor: W6AM Memorial (Jan Perkins, N6AW)

**USA – 3.5 MHz**  
**K7RAT (Opr: Tree Tyree, N6TR)**  
 Donor: Bill Feidt, NG3K

**USA – 1.8 MHz**  
**David Patton, NN1N**  
 Donor: Kat Obermann Memorial  
 Dave Patton, NT1N & Mark Obermann, AG9A

**Canada (14 MHz)**  
**VE6JY (Opr: Gary Caldwell, VA7RR)**  
 Donor: Radio Amateurs of Canada

**Carib./C.A. (14 MHz)**  
**C6AKQ (Opr: Robert Patten, N4BP)**  
 Donor: Bill Hein, NT1Y

**Europe – 28 MHz**  
**OH0Z (Opr: Ari Korhonen, OH5DX)**  
 Donor: Jay Pryor, K4OGG

**Europe – 21 MHz**  
**9A80A (Opr: Zdravko "Emil" Balen, 9A9A)**  
 Donor: Robert Naumann, N5NJ

**Europe – 14 MHz**  
**Ranko Boca, YT6A**  
 Donor: G3FXB Memorial (Maud Slater)

**Europe – 7 MHz**  
**OH0B (Opr: Toni Linden, OH2UA)\***  
 Donor: Ivo Pezer, 9A3A

**Europe – 3.5 MHz**  
**SN3A (Opr: Czeslaw Dubicki, SP3HLM)**  
 Donor: K3VW Memorial (Frankford Radio Club)

**Europe – 1.8 MHz**  
**Jerzy Stanis, SP3BQ**  
 Donor: Pat Barkey, N9RV & Terry Zivney, N4TZ

**Japan – 21 MHz**  
**Akito Nagi, JA5DQH**  
 Donor: DX Family Foundation

**Japan – 14 MHz**  
**Hiroyuki Inaba, JS3CTQ**  
 Donor: Chris Terkla, N1XS

**Asia – 14 MHz**  
**A61AJ (Eugene Walsh, N2AA)**  
 Donor: JA4WFM Memorial  
 (Alexander Teimurazov, 4L5A/D4B)

**MULTI-OPERATOR, SINGLE TRANSMITTER**  
**World**  
**P40L (Oprs: KX7M, N6X1, W6LD)**  
 Donor: Anthony Susen, W3AOH

**U.S.A.**  
**K1IR (Oprs: K1IR, K1LZ, K1OA, K1VR, KE1J, W1VE)**  
 Donor: Douglas Zwiebel, KR2Q

**Canada**  
**VE7GL (Oprs: VE7GL, VA7OO, VA7AO, VE7IJH, VA7VZZ, VE7HJJ)**  
 Donor: Eastern Canadian DX Assn.

**Carib./C.A.**  
**VP2MZM (Oprs: K2DM, K3ZM)**  
 Donor: Lone Star DX Association

**Africa**  
**C91F (Oprs: AA4NN, W4GMY)**  
 Donor: Harry Booklan, RA3AUA

**Asia**  
**UA9AYA (Oprs: RA9AB, RW9MG/9, RZ9AZ, UA9AR, UA9BA, UA9CDV, UN4L, UN0L)**  
 Donor: Steve Merchant, K6AW

**Europe**  
**EA6IB (Oprs: EA3AIR, EA3AVV, EA3KU, EA5BM, EA5GX, EA6BF, EA6FO)**  
 Donor: Bob Cox, K3EST

**Japan**  
**JA7YAA (Oprs: JE7HLZ, JH0NZN, JG7PSJ, 7M1JAS, JO7DJT, JO7FTJ, JI5RPT)**  
 Donor: Vienna Int'l Amateur Radio Club – 4U1VIC

**Oceania – Pacific Rim**  
**AH2R (Oprs: JI3ERV, JR7OMB, JR3RVO, JO1DFG)**  
 Donor: Junichi Tanaka, JH4RHF

**South America**  
**CP6CW (Oprs: CP6UH, KM0O, N0AT, N0STL, W0QR, W0ZR)**  
 Donor: Araucaria DX Group

**MULTI-OPERATOR, TWO-TRANSMITTER**  
**World**  
**HC8N (Oprs: N5KO, K6AW, HA1AG, K1TO)**  
 Donor: Ranko Boca, YT6A

**USA**  
**K4JA (Oprs: K4JA, AJ9C, K7SV, KA9FOX, KE9I, KO9A, WE9V)**  
 Donor: Northern Neck Contest Club

**Europe**  
**RU1A (Oprs: RU1AA, RW1AC, RV1AW, RA1AIP, RK1AM, UA1ARX, RA1AR, RN1AM)**  
 Donor: Aki Nagi, JA5DQH

**MULTI-OPERATOR, MULTI-TRANSMITTER**  
**World**  
**5U5Z (Oprs: G0MTN, G3PJT, G3SXX, G4BWP, G4PIQ, K5VT, KC7V, N7NG)**  
 Donor: K2GL Memorial (Doug Zwiebel, KR2Q)

**USA**  
**K3LR (Oprs: K3LR, K3UA, K0RF, N2NC, K3EST, W0UA, N5RZ, K8CX, N3SD, KL9A, W2AU)**  
 Donor: N6RJ Memorial (Bob Ferrero, W6RJ)

**Europe**  
**DF0HQ (Oprs: DL1AUZ, DL1DTL, DL3OI, DL3TD, DL4MM, DL5ANT, DL5AXX, DL5YY, DL7VOA, DL8WAA)**  
 Donor: Finnish Amateur Radio League

**Japan**  
**JA3YBK (Oprs: JH3PRR, JG3KIV, JI3OPA, JP3PZD, JO3LDN, JH3AIU, JH4NMT, JR4ISF, JF4FUF)**  
 Donor: Ryozo Goto, JH3JYS

**Oceania**  
**ZL6QH (Opr: ZL1AZE, ZL1BYZ, ZL2AGY, ZL2BSJ, ZL1CT, ZL1TM)**  
 Donor: Prairie DX Group

**WORLD - SSB/CW COMBINED**  
**HC8L/HC8N (69,753,125)**  
 Donor: W0ID/W0UN Alpha Award

**USA - MULTI-MULTI SSB/CW COMBINED**  
**W3LPL (34,641,108)**  
 Donor: N8SM Memorial (Operators of K3LR)

**JAPAN - MULTI-SINGLE SSB/CW COMBINED**  
**JA7YAA (8,083,290)**  
 Donor: Vienna Int'l Amateur Radio Club – 4U1VIC

**CONTEST EXPEDITIONS**  
**World Single Operator**  
**S9A (Opr: Pertti Simovaara, OH2PM)**  
 Donor: Yankee Clipper Contest Club

**World Multi-Single**  
**8Q7DV (Oprs: RA9CKQ, RW6AN, UA9CDC, UA9CLB, UA9DD, UN9LW)**  
 Donor: Carl Cook, A16V

**World Multi-Multi – Jim Neiger, N6TJ Award**  
**3D2XA (Oprs: K2KW, N6BT, KE7X, AG9A, WA6O, W2VJN)**  
 Donor: Alexander Teimurazov, 4L5A/D4B

**SPECIAL – SINGLE OPERATOR AWARD**  
**World SSB/CW Combined**  
**D4B (Opr: Alexander Teimurazov, 4L5A/D4B)**  
 (34,038,802 points )  
 Donor: Hrane Milosevic, YT1AD

**World All Band: Under 21 years old**  
**CT7B (Opr: Filipe Monteiro Lopes, CT1ILT)**  
 Donor: Chuck Shinn, W7MAP

**CLUB**  
**World SSB/CW**  
**Frankford Radio Club**  
 (387,506,863)  
 Donor: W1WY Memorial (CQ magazine)

**Non-USA SSB/CW**  
**Bavarian Contest Club**  
 (263,199,539)  
 Donor: N6AUV Memorial  
 (Northern California Contest Club)

\*Second place

# BAND-BY-BAND BREAKDOWN—TOP ALL BAND SCORES

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

## WORLD TOP SINGLE OPERATOR ALL BAND

Station	160	80	40	20	15	10
D4B	91/13/47	186/17/48	1478/27/93	1470/34/112	1952/33/114	2062/31/105
EA8ZS	144/7/33	569/17/66	1886/33/103	1144/28/98	1248/34/99	1361/33/103
P40Q	94/11/23	459/21/69	1885/26/92	981/31/92	2016/27/9	971/25/78
A45XR	141/12/43	466/22/68	1336/33/100	1010/36/109	1757/38/111	837/32/102
8P5A	151/11/22	672/22/76	1079/28/85	1434/35/94	1810/30/91	1376/26/89
VY2NT	340/13/53	984/21/87	1369/28/94	1478/33/106	798/23/86	251/20/47
S9A	24/7/17	53/15/35	450/24/74	1086/35/111	1556/33/100	1559/25/86
CT8T	181/8/49	732/18/70	1526/26/92	882/28/97	1220/29/99	896/30/96
6W1RW	9/5/9	77/11/38	437/23/72	1122/30/95	1509/33/108	1109/27/91
9M6NA	38/10/12	270/19/53	1008/31/9-	826/35/85	1282/35/95	502/26/73

## USA TOP SINGLE OPERATOR ALL BAND

Station	160	80	40	20	15	10
K5ZD/1	62/13/34	418/21/83	616/29/106	1174/37/124	803/31/108	131/23/68
N9RV	33/8/16	258/21/72	852/35/102	1125/40/116	889/32/113	175/24/71
K3CR	60/11/31	333/21/80	486/26/97	952/38/118	860/30/105	130/23/64
W1KM	46/11/24	692/21/79	487/24/80	840/32/96	684/26/91	132/23/65
K1DG	42/11/25	253/20/75	514/30/104	913/34/111	675/29/101	157/25/76
AA1K/3	45/11/29	357/19/70	537/24/86	776/37/112	890/26/98	117/20/59
KT1V	56/11/34	412/21/72	647/27/90	829/33/98	613/25/90	139/23/68
N2IC/5	32/12/16	229/25/63	785/34/88	477/38/107	674/32/103	276/29/61
K1ZZ	40/10/24	300/24/79	483/29/101	655/31/100	645/27/90	225/26/85
K5GN	37/11/20	206/20/71	563/35/86	548/37/107	862/33/111	238/26/69

## WORLD MULTI-OPERATOR SINGLE TRANSMITTER

P40L	115/11/29	731/25/85	1631/33/121	1229/40/130	1758/32/117	1226/28/96
EA6IB	69/16/67	1095/32/109	1769/37/138	1643/38/144	1558/37/135	571/34/116
UA9AYA	247/17/57	917/26/92	1219/35/125	960/37/121	980/36/122	725/31/96
AH2R	21/15/20	297/28/65	1261/33/105	980/39/119	2016/37/115	704/36/88
8Q7DV	35/13/30	433/21/68	1526/32/106	653/35/122	1391/33/117	1217/31/98
OM7M	333/21/83	1133/32/118	1428/39/144	1009/39/138	806/37/138	215/34/108

## USA MULTI-OPERATOR SINGLE TRANSMITTER

K1IR	37/13/34	489/21/85	766/33/120	1094/37/134	709/31/120	114/24/77
K8AZ	42/15/39	240/24/87	795/38/132	919/40/145	764/32/127	104/26/85
W2FU	34/12/31	447/22/86	544/34/118	706/40/138	827/35/124	105/24/75
K3OO	22/36/12	341/24/86	540/29/98	730/38/141	832/31/115	88/24/76
N4RV	28/10/26	166/21/80	406/31/112	695/38/129	826/32/122	116/23/74
N0NI	27/12/26	121/23/65	355/34/106	678/39/128	726/35/128	110/26/72

## WORLD MULTI-OPERATOR TWO TRANSMITTER

HC8N	276/14/39	1114/28/94	2552/38/131	2219/40/140	3585/39/143	2683/37/132
PJ2T	329/16/45	720/25/89	2520/33/122	2224/39/136	2493/34/115	1902/30/102
CT9L	237/10/51	1189/22/87	2534/32/108	1717/37/129	2383/33/123	2215/31/109
RT9W	362/15/57	1016/26/103	1501/36/129	1211/37/125	1353/33/124	960/31/99
RU1A	634/22/74	879/33/124	1791/39/148	1995/40/140	1443/40/135	412/34/107
K4JA	132/13/51	652/27/97	1598/38/141	1488/40/146	1478/34/137	389/30/102

## USA MULTI-OPERATOR TWO TRANSMITTER

K4JA	132/13/51	652/27/97	1598/38/141	1488/40/146	1478/34/137	389/30/102
N3RS	81/12/46	644/25/86	1259/38/129	1194/39/141	1408/35/132	292/26/92
K1AR	46/12/27	346/23/87	994/38/129	900/39/136	967/33/126	186/24/83
N4WW	36/11/25	252/21/84	813/37/121	783/39/120	997/34/128	296/24/83
W6YI	29/12/16	239/27/56	1154/38/125	654/39/131	695/35/113	313/30/66
W8AV	47/10/28	215/21/79	422/33/116	1022/40/131	762/33/123	154/24/78

## WORLD MULTI-OPERATOR MULTI-TRANSMITTER

5U5Z	333/16/59	929/30/87	2062/36/129	4276/39/155	4045/39/153	2602/36/137
K3LR	160/16/58	654/31/103	1441/40/152	1988/40/158	1411/38/147	568/33/112
W3LPL	228/15/54	909/29/101	1575/37/139	1814/40/160	1548/37/149	613/32/109
DF0HQ	878/18/70	1968/35/121	2531/40/158	1905/39/145	1243/38/144	502/33/114
LZ9W	852/17/70	1407/30/106	2749/36/141	2173/36/132	1835/36/137	636/34/115
KC1XX	225/14/50	958/27/103	1322/39/139	1811/40/153	1285/34/136	468/31/109

## USA MULTI-OPERATOR MULTI-TRANSMITTER

K3LR	160/16/58	654/31/103	1441/40/152	1988/40/158	1411/38/147	568/33/112
W3LPL	228/15/54	909/29/101	1575/37/139	1814/40/160	1548/37/149	613/32/109
KC1XX	225/14/50	958/27/103	1322/39/139	1811/40/153	1285/34/136	468/31/109
K9NS	179/20/52	533/29/94	1113/39/135	1414/40/150	1331/36/138	477/31/102
K1TTT	125/14/53	662/25/96	584/34/123	1716/40/155	1185/35/127	354/26/94
K1RX	121/13/43	679/26/94	800/37/125	1626/40/148	1058/34/131	339/26/89

good news is that very few logs are flagged. Out of approximately 4040 CW logs only 40 were flagged. The great majority of the 40 were stations that innocently forgot to claim the Assisted category. The remaining logs remained suspicious. More sophisticated checking techniques were needed to prove that something was amiss. As you can imagine, this creates a lot of work. Fortunately, the CQ WW CC has dedicated members who are in the highest levels of contesting.

A problem that has been emerging over the last few years is the use of help in the contest. If you are single operator in *any* category, you cannot receive help in *any* way from another person. Each year we receive reports of someone allegedly having another operator spot or work QSOs for him. This is against the rules, and we will enforce CQ WW DX Contest Rule XII in such cases (see the 2005 rules elsewhere in this issue).

### Thanks

Thanks to the dedicated CQ WW log checkers who help make the CQ WW the standard of contest log checking. Here is the present list: K1DG, K3WW, K3ZO, KR2Q, N2AA, N2NC, N3ED, N6ZZ, N9RV, W3ZZ, K1AR, KM3T, KT3Y, N5TJ, N5NJ, K6AW and N8BJQ. The DX advisors offered advice and sorted out potential problems: CT1BOH, DL6RAI, EA3DU, F6BEE, G3SXW, I2UIY, JE1CKA, OH2KI, OH2MM, PY5EG, S5OA, UA9BA, VA7RR, VE3EJ, RA3AAU, E21EIC.

Dick, N6AA, and Larry, N6TW, once again spent countless hours dealing with incoming logs and making the CQ WW database the best in contesting. The CQ WW uses the software developed by Tree, N6TR. Additional software provided by WT4I was used. The CQ WW records are maintained by John, N2NC, and K3EST. Phil, N6ZZ, put in lots of hours making sure the database was as clean as possible. Thanks as always to John, K1AR, for his advice.

Congratulations to all the participants! See you in the 2005 contests.

73, Bob, K3EST

### DX QRM

Great fun! A big thank you to my hosts, the Scouts of Monastir! . . . **3V8SQ**. Definitely the most fun one can have in a contest with just one dipole! Hats off to all the great CW op callers who let us keep the rate up despite our weak signal. . . . **4U1UN**. Huge pile-ups at times made run tough, but it was a great contest. Poor antennas on low bands. I'll be back with a real setup! . . . **6W1RW**. First time on 160m in CQWW. Happy with the result considering I was using an inverted Vee antenna. . . . **7S2E**. Wow, as usual the WW DX contest is the king of the contests! . . . **B4TB**. My 1st SOAB contest. Feels good, although met the tribander problem. See you next year! . . . **BA4RF**. What a hoot! First time as DX in CQ WW CW! . . . **C91F**. My fourth trip to CT8T. Again thanks to Santos family! . . . **CT8T**. Biggest thrill was working CX5AO and LU5FF on an almost dead 20m band Sunday night as country multipliers #100 and #101! . . . **DL4AAE**. Great to work my second CQWW CW on 160m and enjoyed the nice but different condx. Improved my antennas with a helium balloon and DX rate improved



VK9AA, operated by Bernd, VK2IA.

more than I thought. . . . **DL7CX**. Special thanks to my host John, EI7BA, for his hospitality, making it a wonderful contest. . . . **EIAB2E**. Sunday saw the band close down very early here but it was interesting to see 10m during low sunspots. . . . **EIACF**. In my 40th year of contesting, and CQ WW is still the top event. A real pleasure to operate from home for a change, but will hit the road again next year. . . . **F5VHJ**. This was my first serious entry in a contest for some years and it was a chance to test my new antenna. The conclusion: it needs improvement! It was a joy to listen to D4B run the 40 metre pile-ups in the wee hours of Sunday morning, and a wonder how he can keep such a mess flowing so smoothly. . . . **G0RTN**. Enjoyable contest, even though conditions were a bit marginal for QRP, and 10m didn't really open. As usual the K2 worked superbly; it really is an ace contest rig. . . . **G3YMC**. Many thanks to the Jersey club GJ3DVC for letting us rearrange the shack and change all the antennas! No antenna was higher than 45 ft., but we

### EUROPE TOP SINGLE OPERATOR ALL BAND

Station	160	80	40	20	15	10
CT8T	181/8/49	732/18/70	1526/26/92	882/28/97	1220/29/99	896/30/96
G11W	518/9/50	1014/22/75	1156/29/109	1170/29/95	884/27/104	167/21/64
RK4FF	192/12/47	786/24/94	1297/34/129	773/33/110	559/32/101	284/29/80
YP3A	155/7/38	607/18/78	1100/35/115	975/33/106	969/34/113	164/30/84
IR7G	209/10/50	506/20/67	1227/31/100	649/30/91	759/34/104	347/25/59
EA5FV	43/6/31	236/14/67	1255/29/106	635/33/102	1108/31/103	532/28/75
TM6X	119/10/52	431/21/74	810/27/103	791/31/88	647/34/99	240/25/77
ES5TV	363/15/53	572/25/84	1019/33/110	761/30/80	566/35/93	256/21/65
HA8A	199/10/49	514/19/70	897/34/104	753/31/105	570/35/116	200/32/73
OH1F	201/7/46	335/20/73	669/30/92	1019/35/98	734/31/92	159/19/60

### EUROPE MULTI-OPERATOR SINGLE TRANSMITTER

EA6IB	69/16/67	1095/32/109	1769/37/138	1643/38/144	1558/37/135	571/34/116
OM7M	333/21/83	1133/32/118	1428/39/144	1009/39/138	806/37/138	215/34/108
OM8A	278/17/68	1085/34/119	1311/36/138	1323/38/135	783/36/129	255/33/110
S50A	159/13/60	681/32/109	1497/36/143	869/37/134	1099/37/126	135/33/96
HG1S	167/10/53	1091/29/99	1318/37/137	1334/37/133	826/36/123	139/31/104
RW2F	748/25/81	1008/31/113	1169/38/139	988/36/134	490/34/128	180/32/110

### EUROPE MULTI-OPERATOR TWO TRANSMITTER

RU1A	634/22/74	879/33/124	1791/39/148	1995/40/140	1443/40/135	412/34/107
UR4X	300/14/66	1301/32/113	2016/38/144	1836/38/136	1386/37/131	387/34/105
UU7J	515/19/70	1407/33/118	2140/36/138	2247/40/141	1586/35/128	681/33/127
ES6Q	676/16/67	1374/29/108	1502/38/138	1651/39/133	928/34/134	237/28/86
HG6N	582/16/66	1112/30/106	1236/37/137	1114/36/126	978/35/119	305/32/98
GJ2A	817/12/58	1440/16/80	1372/31/111	1408/33/107	1350/32/123	424/26/92

### EUROPE MULTI-OPERATOR MULTI-TRANSMITTER

DF0HQ	878/18/70	1968/35/121	2531/40/158	1905/39/145	1243/38/144	502/33/114
LZ9W	852/17/70	1407/30/106	2749/36/141	2173/36/132	1835/36/137	636/34/115
GM5A	1022/14/63	1720/26/104	1920/35/128	2159/39/134	1350/32/124	347/26/92
LY7A	843/13/59	1321/25/88	1464/33/133	1201/35/121	735/35/120	350/32/96
OZ5E	613/10/51	1073/25/96	838/31/115	894/34/108	348/27/101	89/21/50
UV2L	318/10/50	822/17/75	567/28/90	1022/33/114	382/31/98	140/25/61

had a lot of fun with a small Multi-2 team. . . . **GJ2A**. This was my third QRP entry in CQ WW. It was great to make nearly 1000 QSOs with just 5 watts to simple antennas. . . . **GW4ALG**. A good time to be in HC8. For some reason, we really struggled to work EU on 20. . . . **HC8N**. Had fun, most at the end the last 90 minutes. My first CQWW November 1954 as 11YCZ/Trieste, license 5 months old. . . . **IK2AIT**. 20m is still new to me since until February 2003. I wasn't allowed to transmit there because of my past license privilege, so I'm still learning the propagation using this good opportunity of CQWW contest. . . . **J11BDX/3**. What a contest! Had great fun. Loads of DX to be worked. First attempt at a big CW contest. See you all next time. . . . **M3CVN**. Tnx for another nice contest weekend. Unusual: no soldering iron during whole contest. . . . **OE3GSA**. Contest QTH went QRT just in time for the CW leg. Made some QSOs with indoor dipole for 15/20m. Great fun anyway! . . . **OE5OHO**. Second time ever I made over 1,100 QSOs during a single weekend, hi. Running 100W keeps my neighbors happy, hi. No CQ's, only S&P. Did I ever mention my shack is part of the bedroom? Tnx to my XYL. She must be getting used to have dits and dashes as a lullaby. CU agn in the next contest. Pse don't forget the QSL chore, guys! . . . **ON4CAS**. Great contest for little pistol. Low noise from aurora and nice to give out double mult! . . . **OX2KAN**. Great fun. Jacky, P43P, was the consummate host, as always. Spent most of pre-contest time repairing and setting up Jacky's station after separate lightning and tornado strikes. 168 second radio QSOs but still managed to miss lots of easy multipliers. . . . **P40Q (op K0DDQ)**. Being a 160m DXer is not good for overall score. . . . **P40W (op W2GD)**. Had a great contest. Worked with my Banaba K2/100 and that little rig performed outstanding. Great filters which is needed on a crowded band. Little concerned about the impact of a packe cluster on a DX station. Not everyone can handle that big pile-up after being spotted. . . . **PA2R**. Thanks to Atilano (PY5EG/PY2OMS) who gave you unbelievable station at my hands. Really hard to work under these special situation, listening practically to everybody, hi! . . . **PS2T**. 10m was alive and kicking in spite of low solar flux. Saturday was better than Sunday, but Sunday offered some skewed paths and good EU backscatter for many multipliers. . . . **SM6FHZ**. I used the station of Martin, V51WM, on farm Otjikoko near Omaruruin the northern part of Namibia. I'd like to thank Martin and his wife Ursi for their generous hospitality. During the contest, a heavy thunderstorm with 45mm of rain hit the farm. It was really pouring! So I suffered very strong QRN on all bands during the contest weekend, particularly on the low bands. I am sorry to those callers that did not make it through the static. . . . **V51/DL5XL**. Awesome time! I just missed the 1m point mark, so something to shoot for next year. My kingdom for another hour! See everyone again next year. . . . **VE6TN**. Murphy's Law . . . who needs it when you can have an 8 hour power outage on

### TOP SCORES IN VERY ACTIVE ZONES

<b>Zone 3</b>	K1DG.....4,334,442	OK1AVY.....2,066,474
K6NA.....2,249,808	AA1K/3.....4,214,421	*SP4R.....1,909,200
K6XX.....2,094,344	KT1V.....4,209,712	
N7TT.....1,534,764	K1ZZ.....3,940,670	<b>Zone 16</b>
WA7LT.....1,243,032	KQ2M/1.....3,649,088	RK4FF.....4,771,950
KO7X.....956,940	W1WEF.....3,572,316	RW1ZA.....2,479,598
KG7H.....942,630		*UA4FER.....2,183,800
W6UM.....800,442		UV5U.....2,001,926
*K6XV.....693,294	<b>Zone 14</b>	*RW3GU.....1,766,682
K7ZA.....671,606	CT8T.....6,646,626	*UR3HC.....1,657,436
VA7ST.....669,892	G11W.....5,215,284	RT3T.....1,627,909
	*CT7B.....4,741,380	*RZ4AG.....1,248,102
	EA5FV.....4,448,125	UY5HF.....1,174,500
	TM6X.....4,246,625	RN6FA.....1,152,039
<b>Zone 4</b>	DL3YM.....3,530,565	RD4WA.....1,131,140
N9RV.....5,847,400	MW5A.....3,378,080	
VC3L.....5,247,550	TM2Y.....3,242,400	<b>Zone 25</b>
VE3EJ.....4,322,120	DJ1YFK.....3,233,508	JH4UYB.....5,048,535
N2IC/5.....4,050,496	*EA7RM.....3,152,800	JA6GCE.....3,437,497
K5GN.....3,761,008		JE1CKA.....2,302,366
VE3JM.....3,286,754	<b>Zone 15</b>	JH0FUW.....2,161,614
VE3EY.....3,034,010	IR7G.....4,456,917	JH7XGN.....1,917,552
K8GL.....2,781,914	ES5TV.....3,848,544	*J1RXXQ.....1,369,695
WX0B/5.....2,584,944	HA8A.....3,829,344	JS1OYN.....1,218,736
*VE3DZ.....2,537,536	OH1F.....3,725,344	JK1OPL.....1,172,600
	S57DX.....3,675,246	*JA2AXB.....1,009,800
<b>Zone 5</b>	OH6KN.....3,331,664	JR3NZC.....890,109
VY2NT.....7,789,028	*4N0W.....2,551,060	
K5ZD/1.....6,070,659	S53XX.....2,077,634	<i>*Low Power</i>
K3CR.....4,976,188		
W1KM.....4,513,080		

Friday night and Saturday morning, and then have your neighbour switch on an electric blanket on Saturday night just when the 160, 80, and 40 meter bands were in good condition, and completely wipe signals out, (except for the strongest stations). On top of that, you have to call in an arborist to top three trees which were preventing you from rotating the beam. Other than that really enjoyed the contest. . . . **VE7NH**. Many equipment failures, hence a small entry! Good fun while it lasted! ICOM IC735, tuned rain guttering on the side of the house as an antenna! . . . **VK2BAA**. I have enjoyed operation on 80m during this contest very much. It is a band I started my hamming on, some 30 years ago. Time flies. . . . **VK6DXI**. Great fun as always. Nice conditions into Europe on the first nite but poor to North America. Roll on CQWW CW 2005! . . . **VK6VZ**. Fun to be one of three (3!) VK9s active for the event! . . . **VK9NW**. What a thrill it was to operate from Montserrat! . . . **VP2MZM**. Good long path conditions. . . . **WH2A**. Team contesting "Aztecas II" first time operation in the 80m band. Conditions were better on Friday night. Saturday night the band had more noise and opening to Europe was shorter. Many thanks to XE1V and XE3KKT for being great hosts. . . . **XE1NW**. I used small equipments in this year but Vy fun. Thanks to all QSOs. . . . **XU7ADE (op E21E1C)**. First time to participate in 40m band. Hello USA! . . . **YC3MM**. Nice contest and good propagation on 80m. I was very surprised by the number of U.S. station that came on my CQ. I operated from my house located on mount of Zlatibor (at 889m ASL). It was very cold and windy before the contest and the antennas were damaged but I managed to fix it before the contest. . . . **YT2A**. Two young kids and wife, but managed 1100 QSOs on 40m! . . . **YU1LA**. Great contest. Few hours before the contest we decided to work Multi-2, without cluster, multiplier stations etc.. We have a nice fun as usual. Thanks to all who called us. . . . **Z37M**. Think that I broke my dupe record 120. Auto Morse "ain't what it used to be." Thanks to all concerned for running the contest. . . . **ZC4LI**. To stations far away (from ZK1): We hear you! We always don't answer because of QRM, so send your call only once, as we have to wait until everybody is finished sending before we can respond. Remember, if we are 459 to you (W, JA, even EU) you are 589+ to us. 747 contacts using a J38 key and a ballpoint pen. . . . **ZK1DRA**. Great contest as always! Lost power to the QTH for 3 days before the event. Conditions down since 2003. Highlights: being called by ZS6MG on 80m and 5U5Z on 10m. . . . **ZL6QH**. My second CQWW contest. This time using a vee beam directed towards North America. Two days of fun and madness! . . . **ZS1AN**.

### USA QRM

Here's a tip from experience: Don't break a tooth right before the contest, and spend four hours Saturday morning in the dentist's chair, especially when working single band on a daylight-only band. . . . **AE9F/6**. 15 meters still the band to be on. . . . **K0BX**. Biggest thrill was working several JA's in the last two hours of the contest to bump my contact total above my goal of 1200. I also got a kick out of some rare DX that called me on my frequency, including S9, KH2, KL (not really rare, but sometimes hard to get zone 1 on several bands), TK, and HS. . . . **K1KD**. Special thanks to those who took the time for a QSO with a weak signal instead of hitting the CQ button again! . . . **K2TA**. It's always a great experience to operate with the best CW contest operators in the world. . . . **K2ZR**. Thanks to all the great ops with great ears! . . . **K3UW**. First, the computer crashed. Then by the time I had the laptop working (several hours later) the transmitter smoked and died. Hooked up another rig and managed to get in a couple of hours. . . . **K4GM**. This was a tough contest if you had the overnight shift on 160 and 20 meters. Slow! Breaking in a few new ops and still enjoying the company of all. Thanks to all for

the QSOs and spots. . . . **KB1H**. I ran a homebrew amp (25–50 watts) to a low (10m) dipole fed with ladder line. Not the best setup, but I had a lot of fun. The skill of most of the ops is simply amazing. . . . **KD5CMN**. The conditions this year were incredible for being so near the sunspot minimum. Put up a portable tower this year on top of a mountain. Unfortunately, punctured. Murphy is getting a sense of humor! . . . **KP4US**. Special thanks to A61AJ (op N2AA) for being extra patient and correcting "K1" to "KS" for my only new 40m DX on a wire vertical! . . . **KS7T**. CQWW CW is the contest! . . . **KT1V**. Was glad to finish 80m 4-square 10 minutes into the contest, but was so happy about it that forgot to run 40 meters. . . . **KU1CW/O**. With 4-week-old infant, bottle, burp cloth in one arm, his first contest. A truly single-handed effort! . . . **N2NI**. Now that was a good reason to have been working on my code speed! . . . **N3GNW**. Conditions not as good as CQWW SSB. More

hours in the chair almost the same score. Have to work on my three S's: improve skills, improve strategy, stay in the seat! . . . **N3MX**. No chance to make a full effort this year, but this is one contest you just can't stay away from! . . . **N4GN**. If you're not moving ahead, you're falling behind. My low-power competitors seemed to be following this adage. N5AW added a 4-element SteppIR. N1UR replaced his Field-Day type setup with real towers. W1MU goes to his Maine QTH to be closer to the DX. I, on the other hand, just barely got back to my standard antenna setup by erecting my 80 and 160 antennas the week before the contest. So, while the leaders were falling only 300k or 600k off their last year's scores due to the declining propagation, my score dropped by 1 meg. I like to feel I'm performing a public service by not changing my station; that permits others to more accurately gauge their station improvements despite changing propagation. . . . **N4TZ9**. What is with the

## TOP SCORES

### World All Band

D4B	13,605,364
E8ZS	11,484,894
P40Q	10,597,877
A45XR	10,488,336
8P5A	9,447,417
VY2NT	7,789,028
S9A	7,499,328
CT8T	6,646,626
6W1RW	6,610,774
9M6NA	6,316,800

### 28 MHz

CX5BW	1,196,103
CX6VM	1,133,008
5B/K10BP	528,220
PS2E	415,758
OH0Z	263,238
RF4R	239,612

### 21 MHz

ZS4TX	1,606,140
E8BEW	1,566,126
IH9P	1,480,720
8R1K	1,316,412
ZC4LI	993,876
WH2A	900,136

### 14 MHz

CN2KM	2,023,740
E8BEA	1,833,008
3E1A	1,577,532*
4M5X	1,304,206
A61AJ	1,245,904
4L8A	1,162,560

### 7 MHz

A61AJ	1,655,109
T9/9A5E	1,048,017
P40J	936,720
OH0B	898,275
E88PP	826,354
F6ARC	778,260

### 3.5 MHz

CN2R	1,037,704
E8/0H4NL	693,264
SN3A	541,650
OK2RZ	511,820
A61AJ	432,279
OH2BH	408,455

### 1.8 MHz

IH9U	274,032
SP3BQ	155,870
ON4WVV	151,368
YR2I	125,557
S57M	118,464
HA8BE	117,059

### Low Power All Band

SU9NC	8,411,944
V26K	7,468,593
CT9M	7,165,665
3V8S	5,446,230
KP4KE	5,086,719
CT7B	4,741,380
H13K	4,092,192
J79A	3,596,216
EATRM	3,152,800
UO2M	2,804,358

### 28 MHz

LT7W	506,883
CT1AOZ	163,215
9A3VM	130,458
9A7D	114,720
RA9SO	94,168
RU4SS	80,586

### 21 MHz

V31LZ	748,500
EA8NN	705,012

LU5FC	664,724
LO2F	661,149
CO8LY	567,936
EA8/LY1DF	515,247

### 14 MHz

CX5AO	799,444
3V8SF	708,246
5K5Z	618,788
SU8BHI	571,956
ZZ8Z	560,120
CX9AU	504,668

### 7 MHz

YZ1W	515,732
4N1FG	508,680
VE7SV	464,310
A45WD	403,795
LZ9R	293,832
JA6WFM/H18	296,370

### 3.5 MHz

C8ATP	235,000
OH0I	231,516
YU7CB	192,572
YT2A	159,430
SP5KEH	141,350
YZ5W	138,075

### 1.8 MHz

OH0RB	56,355
ER5GB	41,210
ES6PZ	35,264
9A3RE	33,600
UT1FA	29,504
OL6T	29,315

### QRP

P40A	4,078,977
YT7TY	1,348,496
T15N	1,295,256
HG5Z	1,159,878
KT8X	953,520
LY4XX	905,464
N4KG	782,768
RN6AL	739,276
YT2T	695,622
OK1VBA	651,024

### Assisted, All Band

9Y4ZC	14,581,665
5B/AA1TN	13,715,573
P40W	9,488,012
5H3KK	5,470,958
DJ5MW	5,004,964
PJ4M	4,645,888
K3WW	4,435,981
RX4HZ	3,622,592
K2NG	3,522,717
RG9A	3,455,097

### Multi-Op, Single Trans

P40L	13,592,412
EA6IB	11,026,533
UA9AYA	10,647,435
AH2R	10,283,700
8Q7DV	9,244,364
OM7M	9,028,838

### Multi-Op, Two Trans

HG8N	30,971,500
PJ2T	22,440,300
CT9L	22,157,172
RT9W	13,556,710
RU1A	13,021,632
K4JA	12,901,632

### Multi-Op, Multi-Trans

5U5Z	36,651,908
K3LR	15,170,944
W3LPL	15,067,008
DF0HQ	14,652,565
LZ9W	13,875,100
KC1XX	13,408,500

### Europe All Band

CT8T	6,646,626
G11W	5,215,284
RK4FF	4,771,950*
YP3A	4,670,469*
IR7G	4,456,917
EA5FV	4,448,125
TM6X	4,246,625
ES5TV	3,848,544
HA8A	3,829,344
OH1F	3,725,334

### 28 MHz

OH0Z	263,238
RF4R	239,612
LZ9X	174,178
EA5HT	154,854
9A6A	146,765
HG8Z	108,406

### 21 MHz

9A80A	760,416
OH0V	670,806
T97M	590,226
IU3X	491,508
YZ5Z	449,226
UR5IAW	294,600

### 14 MHz

YT6A	901,458
OH4A	826,200
9A5W	812,337
SO2R	788,072*
YZ9A	704,802
G3TXF	699,524

### 7 MHz

T9/9A5E	1,048,017
OH0B	898,275
F6ARC	778,260
YT7A	771,711
OH2U	757,390
SK3W	748,744

### 3.5 MHz

SN3A	541,650
OK2RZ	511,820
OH2BH	408,455
YU7AV	389,536
OH0M	381,545
G0IVZ	376,740

### 1.8 MHz

SP3BQ	155,870
ON4WVV	151,368
YR2I	125,557
S57M	118,464
HA8BE	117,059
LY3UM	114,777

### Low Power All Band

CT7B	4,741,380
EA7RM	3,152,800
4N0W	2,551,060
YO3APJ	2,257,668
UA4FER	2,183,800
SP4R	1,909,200
RW3GU	1,766,682
EA4NP	1,721,937
LY9A	1,672,825
UR3HC	1,657,436

### 28 MHz

CT1AOZ	163,215
9A3VM	130,458
9A7D	114,720
RU4SS	80,586
4N1N	80,228
SX5R	72,675

### 21 MHz

YT7Z	454,020
J43J	424,760
EA4KR	344,410

HG8I	304,022
S57L	209,166
YT1RA	192,172

### 14 MHz

YZ2A	489,372
G6M	320,951
US7IGF	275,710
OK1EP	270,413
DL1LH	256,247
SV1BJW	239,136

### 7 MHz

YZ1W	515,732
4N1FG	508,680
LZ9R	293,832
T94FC	263,790
S54A	249,312
YU1LA	228,816

### 3.5 MHz

OH0I	231,516
YU7CB	192,572
YT2A	159,430
SP5KEH	141,350
YZ5W	138,075
HA8MD	132,114

### 1.8 MHz

OH0RB	56,355
ER5GB	41,210
ES6PZ	35,264
9A3RE	33,600
UT1FA	29,504
OL6T	29,315

### QRP, All Band

YT7TY	1,348,496
HG5Z	1,159,878
LY4XX	905,464
RN6AL	739,276
YT2T	695,622
OK1VBA	651,024
S52P	594,688
LY5G	531,456
HB9DAX	461,898
OH4MFA	440,176

### Assisted, All Band

DJ5MW	5,004,964
RX4HZ	3,622,592
UW8M	3,288,976
DK3GI	3,249,372
RA6CM	3,178,300
LY9Y	3,023,943
UW5Q	2,982,554
UA6LV	2,860,889
SN8F	2,754,000
RZ3AZ	2,659,377

### Multi-Op, Single Trans

EA6IB	11,026,533
OM7M	9,028,938
OM8A	8,877,313
S50A	8,046,400
HG1S	7,440,275
RW2F	7,225,119

### Multi-Op, Two Trans

RU1A	13,021,632
IR4X	12,791,640
UW7J	12,076,290
ES6Q	8,842,550
HG6N	7,884,742
GJ2A	7,638,274

### Multi-Op, Multi-Trans

DF0HQ	14,652,565
LZ9W	13,875,100
GM5A	10,975,578
LY7A	6,915,660
OZ5E	3,842,067
UV2L	2,979,880

### USA All Band

K5ZD/1	6,070,659
N9RV	5,847,400
K3CR	4,976,188
W1KM	4,513,080
K1DG	4,334,442
AA1K/3	4,214,421
KT1V	4,209,712
N2IC/5	4,050,496
K1ZZ	3,940,670
K5GN	3,761,008

### 28 MHz

W4ZV	237,600
K4MM	67,574
W9YYG	24,057

### 21 MHz

K2BA/5	413,624
W6YA	291,688
K4OAO	264,465
K2AAW/9	178,158
K8JM	175,558
N0VD	172,692

### 14 MHz

K2XA	662,742
N2MF	595,170
W7WA	486,066
K0AV	170,956
W8TWA	141,932
K0RI	105,868

### 7 MHz

K4XS	534,842
KT3Y	473,026
W6NV	293,112
AA7A	280,460
K7AO	251,328
N4CC	225,120

### 3.5 MHz

K7RAT	191,309
K1LZ	140,990
K6OY	128,520
K5RX	110,094
W5UN	92,773
N2GC	62,792

### 1.8 MHz

## CLUB SCORES

### DX

Bavarian Contest Club (DL) .....	263,199,539	Vladimir Radio Club (UA3V).....	616,203
Rhein-Ruhr DXA (DL) .....	226,830,817	ARCK (UA0).....	601,465
Contest Club Finland.....	116,455,732	Far East ARC (UA0C).....	591,034
Contest Club Ontario.....	107,670,337	Yaroslavl Club (UA3M).....	581,329
Slovenian Contest Club.....	71,633,922	SK6AW Club.....	572,560
Russian Contest Club.....	54,895,893	BFRR (EU).....	568,443
Ural Contest Group.....	51,215,002	Mediterraneo DX Club (I8).....	558,245
Araucaria DX Group (PY5).....	48,119,972	RK0BWW Team.....	556,242
Croatian Contest Club.....	45,275,314	YO DX Club.....	521,703
Mt. RF (JA3).....	35,451,100	Pushkino (UA3).....	520,399
Kaunas Techology University (LY).....	35,023,776	West of Scotland ARS.....	430,402
Central Siberia DX Club (UA0A).....	33,254,835	ALRS St. Petersburg.....	426,451
YU Contest Club.....	30,432,106	URE Cartagena (EA5).....	399,144
Bashkortostan DX Club (UA9W).....	30,343,792	Taganrog RC (UA6L).....	368,129
BC DX Club (VE7).....	29,949,395	Noviomagnum DX Club (PA).....	328,874
Tartu Contest Team (ES).....	27,467,295	ARM (ER).....	325,235
VK Contest Club.....	26,750,405	HA6KNX Club.....	298,797
Crimean Contest Club (UU).....	24,990,702	Cocosolo Sibichi Club (V4).....	287,806
Tikiriki Contest Club (I).....	24,295,101	Club 22 (UA3I).....	180,794
Bad Power (LU).....	24,152,709	Wythall Radio Club (G).....	159,530
GMDXC (GM).....	24,022,665	SK4BX Club.....	133,014
Latvian Contest Club.....	22,839,359	Russian QRP Club.....	127,579
Marconi Contest Club (I).....	21,731,104	Krivbass (UT).....	62,129
HA DX Club.....	19,241,018	Arrow Communications (W8).....	54,180
Maritime Contest Club (VE1/9VY2).....	19,190,125	Parnu RC (ES).....	45,655
SP DX Club.....	18,832,104	CSM Craiova (YO).....	35,129
East Coast Canada CC (VO).....	15,693,078	SK6HD Club.....	15,805
Ukrainian Contest Club.....	15,660,251	CSM YO7KFA.....	14,352
Vrhnika Contesters (S5).....	13,594,396		
Lithuanian Contest Group.....	13,302,065		
Bosnia-Herzegovina CC.....	13,076,466		
South Ural Contest Club (UA9A).....	12,641,320		
Southwest Ohio DXA.....	12,275,643		
LNDX (F).....	11,983,490		
Chiltern DX Club (G).....	11,853,036		
Top of Europe Contesters.....	10,432,940		
LU Contest Group.....	9,888,387		
Beemster Contest Club (PA).....	8,873,375		
Aruk (EX).....	8,438,276		
UA2 Contest Club.....	7,612,752		
Danish DX-Group.....	6,876,316		
Kiev Contest Group.....	6,539,847		
Sky Contest Club (YU).....	5,470,757		
Guara DXG (PY7/8).....	5,150,971		
RAAWG (SV).....	4,916,904		
University of Tokyo Contest Club.....	4,817,109		
GACW (LU).....	4,728,666		
Orenburg Contest Group (UA9S).....	4,587,203		
Moscow Contest Club.....	4,339,282		
Temirtau Contest Club (UN).....	3,765,124		
LYNX (EA5).....	3,334,192		
Mother Lode DXCC (W6).....	3,213,941		
ATCC (EY).....	3,197,197		
KKKK (UA6A).....	3,159,904		
Udmurtia (UA4W).....	3,049,433		
Z30M Contest Team.....	2,782,384		
Belarus Contest Club.....	2,781,325		
TuPY DX Group (PY2).....	2,717,036		
Aztecas II (XE).....	2,496,982		
South German DXG.....	2,440,347		
Pizza & Pasta CC (I2).....	2,359,670		
Alberta Clippers (VE6).....	2,323,754		
Ivanovo DX Club (UA3U).....	2,316,100		
SP Contest Club.....	1,999,007		
Bloemfontein ARC (ZS).....	1,954,143		
Jiangsu DX Club (BY).....	1,923,254		
Fox Contest Club (YU).....	1,872,440		
KRS (UR-H).....	1,736,248		
Sao Paolo Contest Group.....	1,717,888		
Brimham Contest Group (G).....	1,567,859		
Venezuela DX Club.....	1,512,576		
Amateur Radio Club of Saipan.....	1,445,120		
Kemerovskiy RC (UA9U).....	1,426,423		
Banat DX Group (YU7).....	1,417,984		
ADXC (PA).....	1,163,975		
Siam DX Group (HS).....	1,063,280		
Kiel Canal Activity Group (DL).....	964,124		
Uirapuru DX Club (PY8).....	823,617		
Belokranje Contest Club (S5).....	808,712		
Low Land Crazy Contesters (PA).....	730,059		
Serpukhov RC (UA3).....	722,684		
Obninsk-QRU-Club (UA3X).....	693,881		

### USA

Frankford Radio Club (W3).....	387,506,863
Yankee Clipper Contest Club.....	331,489,157
Potomac Valley Radio Club (W3/4).....	169,644,326
Northern California CC.....	116,712,815
Florida Contest Group.....	71,416,703
North Texas Contest Club.....	60,216,014
Southern California Contest Club.....	50,222,126
Society of Midwest Contesters (W9/O).....	49,255,436
North Coast Contesters (W3).....	48,707,192
Minnesota Wireless Assn.....	45,082,827
Southeast Contest Club (W4).....	43,925,777
Mad River RC (W8).....	27,515,488
Western Washington DX Club.....	24,430,389
Willamette Valley DX Club (W7).....	24,430,389
Carolina DX Assoc. (W4).....	23,246,423
Hudson Valley DXCC (W2).....	20,877,990
Central Texas DX & Contest Club.....	20,611,505
Tennessee Contest Group.....	16,932,596
Grand Mesa Contesters (W0).....	13,415,575
Rochester DXA (W2).....	11,152,776
Texas DX Society.....	6,042,677
Kansas City DX Club.....	5,844,893
Central AZ DXA.....	5,255,175
Spokane DXA (W7).....	4,263,065
Eastern Iowa DXA.....	3,836,154
Northern Illinois DXA.....	3,658,372
Kentucky Contest Group.....	3,206,487
Oklahoma DXA.....	2,621,279
North Alabama DXC.....	2,601,155
Western NY DXA.....	2,303,243
Sterling Park ARC (W4).....	1,922,490
North Florida DXA.....	1,375,887
Northern Rockies DXA (W7).....	1,323,333
Salt City DXA (W2).....	1,268,991
Bergen ARA (W2).....	1,196,225
Redwood Empire DXA (W6).....	731,940
Northern Arizona DXA.....	559,550
West Park Radio Ops (W8).....	523,666
Order of Boiled Owls of NY.....	402,239
South Jersey DXA (W2).....	394,398
Metro DX Club (W9).....	385,864
Northern Ohio DXA.....	302,387
Great South Bay ARC (W2).....	295,817
South Texas DXCC.....	235,711
Boring ARC (W7).....	223,631
Central Oregon DX Club.....	189,274
Southeastern DX Club (W4).....	142,116
CT RI Contest Group.....	132,135

A index going to 60! Wow! . . . **N6IC**. This was an amazing contest, full of surprises. . . . **N6WG**. Strange propagation. I could easily work ZL and 3D2 from Florida with 4 watts but had trouble into the normally easy parts of Europe! . . . **NA4CW**. My first time in WW DX CW, and I had a blast! Thanks to the many ops who were understanding about my sending. . . . **NO6E**. What strange conditions! 78 countries with only 75 watts and an aluminium rain gutter for an antenna. I love CW! . . . **W3UTD**. A great team. Integrated networking made a difference. A special hats off to AA7CQ for his low band efforts! . . . **W7VJ**. Small problem: XYL left the microwave oven door open; picked up RF and acted as a monitor. First case I ever heard of MO!! . . . **W9LYA**. Fifty-four years of contesting and I still enjoy putting in 40 hours in this one. . . . **WA7LT**. My first time using N3FJP contest software. Slick! Propagation was strange here in Michigan with aurora flutter and sigs in and out like twinkling stars! Wkg Madeira Island on 10 meters QRP through a pile-up using a dipole 6 feet off the ground was a huge thrill. Special tx to several DX stns who hrd my weak sig and sent an as to other stns in order to complete the exchange. . . . **WA8REI**. Full-size 80 meter vertical not finished but did well with only four radials! Had lots of interruptions from kids and guests. Murphy hit hard when I was in the shower Sunday AM, though. Water pressure died! Only got washed on the right side (no kidding) before the pressure went to zero. Seems the windmill overcharged the batteries and the system shut down during the night! Had it rewired and operational in about an hour, but never made it back to the shower — after all, the bands were open and I was actually dressed. Spent the rest of the day precariously favoring the clean side. Quick note for next year: Turn the lights on when you enter the shack so when it gets dark and the action is hot you don't have to sit in the dark hoping the XYL will look in so she can turn them on! PS: Put deoderant in the shack for emergency usage. . . . **WT6G**. The ops from Croatia had excellent fists! Best I heard all weekend. . . . **WW9R**.

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Number groups after call letters denote following: Band (A=All), Final Score, Number of QSOs, Zones, and Countries. An asterisk (\*) before a call indicates low power. Certificate winners are listed in bold. (All country territory reflects the DXCC list at the time of the contest.)

**2004 CW RESULTS  
SINGLE OPERATOR  
NORTH AMERICA**

**UNITED STATES**

KZSD/1	A	6,070,659	3204	154	523
WK1M		4,513,080	2881	137	435
K1DG		4,334,442	2554	149	492
K1WJ		4,209,712	2696	140	452
K1ZZ		3,940,670	2348	147	479
(OP: N6ZZ)					
K02M/1	A	3,649,088	2350	141	451
W1WFEF		3,572,316	2266	140	457
WC1M		2,912,970	2045	137	397
W1FJ		1,915,086	1518	117	354
K1JB		1,819,184	1261	127	409
W1C1U		1,660,606	1057	137	443
K5MA/1		1,501,007	1250	133	335
K1NO		1,461,908	1265	114	365
W1ECT		1,353,352	1377	90	274
W1UK		1,263,988	998	120	386
W1ZX		586,608	613	100	263
N1RR		502,590	614	91	239
K1BV		347,643	551	64	209
N1ZZ		324,684	544	96	246
W1FM		254,196	411	74	202
K1KO		218,280	380	71	184
K1PH		210,474	408	44	154
KG1E		210,080	325	75	185
W1IA		145,470	345	49	146
W6ZF/1		105,872	218	56	152
W1YRC		95,207	214	66	137
W1AJMP		91,196	180	77	149
K1AM		83,888	373	57	139
W1Z		44,289	135	49	84
AA1QD		18,432	75	35	61
K1LZ	3.5	140,990	572	22	93
K3F/1		28,613	150	18	70
N1N1	1.8	27,432	170	15	57
*W1MU	A	2,125,404	1468	122	394
*N1UR		1,822,503	1474	117	372
*W1AO		1,570,465	1196	112	369
*K5J		1,318,296	1191	96	317
*W1JW/1		1,188,892	804	103	328
*W1UJ		782,866	779	92	306
*K1HT		696,136	634	109	292
*W1EO		605,556	638	92	264
*W1KT		439,838	462	89	264
*N1DC		397,210	530	80	234
*K1TN		369,404	482	87	229
*K1TEP		349,256	486	76	222
*N1W		301,624	439	83	207
*K1KU		152,822	291	58	154
*AE1T		121,604	243	63	139
*W1TECH		60,040	170	53	99
*KX1E		43,520	158	55	115
*K1RB		17,100	90	20	56
*K1KAV		13,446	72	34	49
*AE1D		12,994	61	37	52
*K1SWG		9,800	63	47	43
*W1LE		35,752	35	24	52
*N1HRA		2,940	35	12	23
*K1Z10		2,520	29	17	28
*AA1ZT		60	11	3	3
*W1END		18,200	167	20	50
*K1ATFD		13,504	81	18	46
*K1UQT	21	6,095	61	15	38
		1,100	20	14	
(OP: W7OT)					
*K1V5J	14	24,882	114	26	70
*N1LW		15,762	88	21	50
*W1RM	7	264,920	708	33	115
*K1B1B	1.8	30	4	2	3

*W2RG		72,674	233	57	146
*W2BMH		71,968	167	55	118
*K2UT		71,434	163	56	131
*K2YLH		68,904	201	61	113
*N2ZN		64,796	172	52	115
*K2K		45,224	193	64	84
*K2ML		44,694	135	36	81
*W2VZ		40,963	119	46	91
*N2OOR		31,104	126	38	90
*N2CK		28,702	102	41	72
*W2EZ		27,776	125	42	86
*W2TX		25,620	95	42	63
*K2ZS		13,284	63	27	55
*K2ZNCG		6,097	111	35	56
*W2BIAV		4,554	52	27	39
*W2BWH		4,353	37	20	31
*N2OPW		2,464	29	16	28
*K2YR		2,196	24	14	22
*K2YW		2,009	42	12	29
*W2VQV		1,276	20	13	16
*W2WLV		1,049	20	10	16
*W2ZXY		858	15	11	15
*K2SFF	21	220,180	588	30	117
*W2SXY		134,563	357	31	102
*K2RAA		37,583	173	21	70
*W2ASQ	14	12,154	76	16	53
*N2P1		880	34	9	13
*N2R2		580	11	10	10
*K3BUZ	7	143,550	393	33	117
*K2TA	3.5	27,010	147	14	60
*K2SZ		70	5	4	4

K3CR	A	4,976,188	2821	149	495
(OP: L24A)					
AA1K/3		4,214,421	2722	137	454
W3BGN		3,499,650	2203	148	458
N3AD		3,141,226	1950	146	483
N3JA		2,231,598	1844	118	353
N1BB		1,188,568	1117	99	305
W3CE/3		529,995	510	102	295
K3TR		480,797	509	105	268
N3KR		439,488	530	86	241
W3PT		415,380	421	105	315
N3RJ		361,746	568	70	191
W3AP		351,616	505	84	244
K3BT3		301,716	432	90	216
W3KV		211,400	274	76	226
W3CZ		170,683	328	69	167
W3WV		153,923	239	62	142
N3RW		141,932	336	79	195
W3RT		107,868	247	60	142
W3BYX		99,552	277	60	144
N3NZ		48,664	144	53	105
N3NV		38,750	119	39	86
W3BVA		34,224	119	35	89
W3ET		20,720	96	40	70
W3FE		9,625	84	22	53
W3WA		9,153	70	26	56
W3AAAN	21	61,672	240	24	80
W3MC		14,616	88	16	47
K3YJ	7	473,026	1109	35	128
W3MC		43,990	219	20	63
K3JGJ	3.5	46,872	202	19	74
W8P1/3		18,130	123	17	57
W3AZ		5,499	58	13	34
W3G	1.8	53,939	209	22	83
*W3EF		1,427,736	1245	117	339
*K3XO		640,683	694	103	285
*N3II		399,655	472	90	246
*K3B3M		302,470	429	76	214
*W3IUU		246,339	343	81	190
*K1EF/3		215,512	331	65	183
N3KJF		163,317	294	63	168
*W3BBO		122,400	257	62	142
*N3YC		100,716	210	62	152
*W2ZG/3		22,227	98	35	58
*AAOCY/3		10,656	60	27	47
*N3FR		8,736	80	29	55
(OP: K3ASK)					
*W3EH		5,500	48	18	37
*K3KZY		2	2	2	2
*W3RV	28	6,240	53	17	35
*K3GJ3	7	33,575	150	19	69
*NS3T	3.5	8,967	86	10	39

W4RX	A	2,023,364	1531	124	384
K3OM/4		1,385,268	1112	114	368
N4V		1,253,331	1061	121	350
K4SV		1,230,576	944	120	376
W9WU/4		1,217,111	1096	111	302
K1GU/4		1,072,568	950	116	312
N4G		945,030	813	111	338
N4GN		740,922	679	119	294
K4XK		733,096	726	116	308
K5DM/4		732,475	694	110	305
N4RA		676,984	694	109	293
W4XJ/4		629,748	668	97	260
N4R		606,726	677	87	246
N4AA		566,400	537	111	273
W4ARM		556,368	645	90	256
N4GI		524,520	636	77	233
W4YE		466,147	520	90	251
N4ZZ		408,774	810	53	140
W200/4		403,788	484	90	232
K4AMC		398,750	491	78	212
K4DJ		382,764	468	91	243
K4RM		353,508	418	99	232
K7CS/4		343,824	596	81	231
N4MM		325,783	391	83	221
W7QF/4		248,251	364	88	209
K4P		237,943	337	88	189
K4CC		127,144	259	50	134
AA3VA/4		121,549	259	62	135
W4/G4BEU		87,756	275	42	100
W4HR		83,998	178	54	123
K6ETM/4		71,158	195	63	127
*K6EB		69,531	156	51	121
K4GJ		66,552	154	61	127
K6COP/4		66,265	193	42	103
W5V1		58,926	159	51	110
W4DLR		55,645	167	43	112
W4ZYT		48,960	145	43	93
N4UH		35,224	130	37	82
W4ATL		26,790	121	33	61
N4V1		194	10	1	16
W4VM	28	220,296	678	31	106
K4M2		67,574	231	27	83
K4OAO	21	264,465	706	30	105
K4RV		60,800	164	35	125
K4XS	7	534,842	1357	34	117

N4CC		225,120	495	40	128
AA4VV		58,716	177	28	98
W4YV		27,200	133	21	64
K4DLJ	3.5	27,232	157	20	72
N4HX		24,055	118	18	67
N4BK		15,204	70		









*SM3D	*	117	8	6	7	*YU8OK1CRM	*	505,254	1166	82	239	*LUA4HKN	*	57,015	345	23	40	KGSU	*	210,154	364	75	163	R26HX	*	107,457	481	32	97		
*T5TV	14	166,500	618	36	114	*YU7AM	*	480,004	842	82	234	*LUBADX	3.5	864	18	11	13	EACZAR	*	206,448	373	72	200	J11AQY	*	98,208	404	31	68		
*SM3JUR	7	10,416	176	10	46	*YU1ED	*	68,322	255	46	131			ARUBA				EATCAW	*	205,842	581	39	135	UA9MAZ	*	96,480	472	20	60		
*SM5AOI	3.5	2,300	66	6	32	*YU1JW	*	14,464	213	34	94			P400	A	10,597,877	6406	141	448	G4BWB	*	195,567	606	49	170	SP9H	*	91,728	347	30	87
SWITZERLAND						*YU1YR	*	454,020	1369	36	125			P43JB	21	176,015	743	26	81	OL3M	*	192,768	729	52	199	K7ZD	*	86,536	282	32	84
HB9CP	A	362,260	751	67	240	*YU1IG	*	192,172	973	25	82			P43JB	21	176,015	743	26	81	OL3M	*	192,768	729	52	199	J01NGT	*	74,841	304	29	72
HB9APJ	A	172,702	530	63	160	*YU1IE	*	158,873	551	33	110			P43JB	21	176,015	743	26	81	OL3M	*	192,768	729	52	199	J1R1NKN	*	61,337	303	25	58
HB9IOB	14	167,314	715	32	101	*YU1EL	*	130,698	504	32	105			P43JB	21	176,015	743	26	81	OL3M	*	192,768	729	52	199	W91JL	*	49,453	205	24	83
*HB9CZF	A	1,123,402	1476	107	299	*YU1IH	*	27,141	200	23	60			PT2ZEG	A	39,298	194	35	63	G4BWB	*	195,567	606	49	170	J44DOX	*	44,240	236	23	56
*HB9ARF	*	904,285	1196	103	312	*YU1IY	*	18,928	473	30	82			PS2E	28	415,758	1106	34	99	OL3M	*	192,768	729	52	199	JL3SBE	*	32,682	178	21	57
*HB9DCM	*	582,912	814	109	305	*Y2ZA	14	489,372	1783	37	119			PT2ZEG	A	39,298	194	35	63	OL3M	*	192,768	729	52	199	W6WCU	*	30,189	206	23	64
*HB9HGX	*	90,246	456	33	136	*YU7KM	*	52,042	343	25	76			PS2E	28	415,758	1106	34	99	OL3M	*	192,768	729	52	199	JM2RUV	*	28,211	146	29	54
*HB9AUS	*	7,344	66	26	42	*Y21W	7	515,732	2204	35	128			PS2E	28	415,758	1106	34	99	OL3M	*	192,768	729	52	199	J7E1RT	*	20,306	168	27	51
*HB9CRB	14	45,632	294	23	69	*YU7YM	*	508,680	1975	32	125			PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	M00	*	24,766	194	17	41
UKRAINE						*YU1LA	*	228,816	1064	31	113			PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	ES1CR	*	19,672	156	22	53
UV5U	A	2,001,926	1976	141	430	*YU1L1	*	107,734	640	23	95			PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	LW5DR	*	18,574	144	22	52
UV5HF	*	1,174,500	1402	120	402	*Y6YF	*	30,515	289	17	68			PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	KR2Q	*	16,796	91	17	51
UV5YZ	*	888,000	1226	121	359	*YU7HC	3.5	192,572	1188	29	91			PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	E1B2P	*	15,180	129	15	31
UR6GS	*	857,120	1293	108	332	*Y2ZA	*	159,430	1225	21	86			PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	W6WCU	*	14,250	112	18	32
US511	*	771,096	1024	122	389	*Y21W	*	138,075	1169	22	83			PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	GU4YBV	*	11,826	118	14	40
UT2UB	*	651,744	110	107	331	*YU1BN	1.8	23,622	373	10	52			PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	F5VBT	*	10,927	132	16	33
UR7EO	*	627,900	1330	76	274	*YU1RA	1.8	25,515	417	9	54			PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	B04ALC	*	8,112	81	19	29
UT4EK	*	611,292	986	93	270	*YU1ST	*	8,976	217	6	38			PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	K7J1AJ	*	6,383	66	18	29
UT5ECZ	*	216,916	620	59	195									PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	US56NPV	*	4,639	54	19	32
UY3OW	*	132,924	745	31	128									PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	OK1JX	*	3,003	101	10	19
UT0IL	*	56,924	298	32	101									PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	Y04ATW	*	3,234	44	11	22
US7IB	*	39,295	163	45	100									PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	DU1SDT	*	1,624	36	7	10
UR5AW	21	294,600	1226	35	115									PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	KL7GN	*	937	24	8	9
US5WV	*	110,998	534	32	95									PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	IZ1DBY	*	330	18	8	9
USWF	14	305,456	1269	31	105									PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	SP2FAP	*	320	12	7	9
UU1JO	*	16,605	166	18	52									PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	JM6XU/1	*	210	10	7	8
UT4ZG	3.5	75,050	771	16	63									PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	S66A	14	201,035	724	35	120
US2WU	*	70,406	665	21	86									PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	G3G6G	*	139,656	609	31	101
UX7IA	*	56,120	484	20	72									PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	K11MAX	*	129,270	507	31	108
UR4ZWL	*	43,384	572	12	56									PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	OK2YWB	*	115,080	504	27	93
AUSTRALIA						*VK1KI	A	5,137,182	3622	161	352			PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	H3A3U	*	104,535	544	29	86
UR5AW	21	294,600	1226	35	115	*VK1GJ	A	178,996	241	90	202			PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	LD1DQY	*	78,711	327	30	94
US5WV	*	110,998	534	32	95	*VK1GN	A	43,648	195	40	48			PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	G3LJH	*	72,362	423	21	76
USWF	14	305,456	1269	31	105	*VK2CZ	28	15,540	95	24	46			PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	LY4BF	*	65,439	405	22	77
UU1JO	*	16,605	166	18	52	*VK6LW	14	1,055,835	2236	39	126			PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	Y04RPL	*	4,752	91	11	33
UT4ZG	3.5	75,050	771	16	63	*VK6XMI	3.5	103,140	487	25	65			PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	Y04RPL	*	4,752	91	11	33
US2WU	*	70,406	665	21	86	*VK2NZU	*	391,552	535	92	212			PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	Y04RPL	*	4,752	91	11	33
UX7IA	*	56,120	484	20	72	*VK8AV	*	371,841	435	99	218			PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	Y04RPL	*	4,752	91	11	33
UR4ZWL	*	43,384	572	12	56	*VK2GR	*	111,162	298	67	124			PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	Y04RPL	*	4,752	91	11	33
COCOS-KEELING ISLAND						*VK3DBO	*	27,474	139	45	69			PS2T	21	994,004	2237	38	126	OL3M	*	192,768	729	52	199	Y04RPL	*	4,752	91	11	



N4RV	4,143,328	2237	155	543	FINLAND					N3RS	9,921,186	4878	175	626
K4JLD	1,633,023	1195	133	396	OH7M	6,284,820	3945	173	572	W3PP	4,187,709	2458	155	544
W5VX	2,362,912	1469	119	497	OH5Z	4,808,790	3318	174	591	K3DI	2,020,876	1395	143	429
W64Q	511,920	634	115	245	FRANCE					K4JA	12,901,632	5737	182	674
W6YRA	14,300	80	42	58	F6KHM	2,310,741	2312	119	430	N4WW	5,658,241	3177	166	561
W7VJ	2,423,673	1781	150	377	F6KAR	2,236,929	2510	121	393	W5KFT	4,260,454	2589	167	515
K8AZ	5,732,240	2864	175	615	F8KGH	370,527	903	86	253	W6VI	5,561,792	3084	181	507
N8PR	1,916,145	1390	137	416	F6KJX	326,349	1109	61	182	W6YX	3,104,244	2005	160	434
N9AG/B	1,667,012	1087	146	450	F5NCU	213,690	605	59	196	W6OAT	2,772,972	1723	171	441
WN9O	2,307,285	1508	154	479	GERMANY					W6FA	736,560	786	129	243
N0NI	3,516,498	2017	169	525	DF3CB	5,739,976	3530	178	658	W6TE	580,328	710	108	236
KT5E/O	1,304,317	1548	121	268	DK3DM	4,075,088	3085	160	592	W8VA	4,636,816	2622	161	555
4U1UN	863,902	1886	72	151	DK0BN	2,800,182	2594	144	483	W8ZA	1,581,440	1115	136	424
VP2VV	637,296	1173	73	191	DKOMN	1,299,408	1915	104	324	K0RF	2,986,901	2363	153	418
VE7GL	3,738,515	3565	150	355	DL4WA	1,029,680	1277	120	368	KT0R	1,524,762	1209	136	386
VE7UF	2,786,952	3110	133	291	DF0CI	875,145	1298	141	474	BELIZE				
VO2AAA	2,598,638	3168	104	315	DL0IT	334,521	900	65	214	V31RM	7,452,504	6664	142	392
VE6AO	1,944,052	2479	109	265	HUNGARY					VP9I	7,398,003	5790	123	450
VE20J	2,560	136	4	6	HG1S	7,440,275	4875	180	649	BERMUDA				
VP2MZM	6,772,428	5972	134	388	HG1R	1,612,254	2873	112	371	CANADA				
KP4US	3,766,020	3991	125	335	H88KVK	1,428,269	2196	104	345	VE1JF	7,412,000	4915	155	525
AFRICA					IRELAND					VE7SCC	487,278	1218	84	123
C91F	1,299,800	1551	93	242	EI7M	5,090,005	4510	139	516	J0J	8,873,865	7597	148	443
MOZAMBIQUE					IU2R	5,691,996	3873	170	604	DOMINICA				
ASIATIC RUSSIA					IR2C	5,342,382	3681	174	605	TURKS & CAICOS ISLANDS				
UA9AYA	10,647,435	5048	182	613	IO3GA	279,360	895	79	212	VP5W	8,828,424	7292	142	426
RY9C	8,225,880	4433	172	608	IR3J	206,180	821	41	128	WP2Z	12,582,528	8625	161	511
RZ9OZO	5,879,700	3399	162	543	RW2F	7,225,119	4583	196	705	U.S. VIRGIN ISLANDS				
RK9JWV	2,143,632	2179	111	315	LX7I	6,214,453	4849	162	587	MADEIRA ISLANDS				
RK9AVN	1,796,000	1605	108	341	Z37CXV					AFRICA				
RZ9WXX	1,041,656	1163	77	279	MACEDONIA					CT9L	22,157,172	10275	165	607
RZ9UWZ	635,700	877	79	246	1,015	17	13	16	ASIATIC RUSSIA					
4K7Z	2,333,019	2176	113	376	NETHERLANDS					RT9W	13,556,710	6403	178	637
JA7YAA	4,145,097	2593	184	443	PI4D	2,490,384	2689	130	484	UA0AZA	8,763,748	5291	176	557
JE1ZWT	3,612,245	2534	175	420	PI4CC	2,442,168	2640	138	496	CHINA				
JAZ2JW	2,256,815	2208	135	272	NORWAY					B1Z	439,990	1227	82	148
JA1YPA	1,120,240	1431	105	230	LN8W	4,383,083	4060	160	567	YI9KT	2,313,383	2276	90	299
JO1ZIW	87,010	250	53	101	LA2AB	159,464	474	59	189	IRAQ				
JA1ZGP	4,578	41	20	22	SP6KFA	274,364	962	49	177	JA8RWU	5,536,020	3638	176	412
UO1P	1,946,490	1575	121	362	SP9KJT	109,728	420	60	156	JA12LO	3,643,656	3187	145	326
6L0NJ	31,373	501	64	73	SP1YGL	10,950	59	33	42	JF3GKE	1,975,652	1557	155	363
807DV	9,244,364	5255	165	541	SP3KPN	1,639	30	17	27	ROMANIA				
JT1JA	3,885,056	3809	138	374	YO6KNY	175,801	509	58	203	SLOVAK REPUBLIC				
4U1VIC	4,280,214	4157	146	496	OM7M	9,028,838	4924	202	729	OM8A	8,877,313	5035	194	699
OE2S	6,453,202	4691	177	641	OM4A	1,939,920	2598	111	361	SLOVENIA				
OE4A	5,187,704	3884	173	605	S50A	8,046,400	4440	188	668	S50C	6,782,344	4297	181	643
EA6IB	11,026,533	6705	194	709	S50G	4,870,400	3436	181	619	S57AD	5,655	146	6	33
OT4L	4,529,910	3452	160	582	SPAIN					EA1CS	2,075,766	2547	110	352
OT4P	1,178,360	2285	109	336	EA10S	2,075,766	2547	110	352	SK6AW	165,189	550	56	181
ON4BBD	738,540	1488	84	289	EA11S	2,075,766	2547	110	352	HE3RSI	1,835,780	2981	103	277
9A1P	5,342,870	4041	170	560	EA12S	2,075,766	2547	110	352	HB90K	1,035,134	2120	81	268
9A6C	48,825	695	15	60	EA13S	2,075,766	2547	110	352	UT7L	2,795,760	2433	160	560
OK5W	6,681,264	4067	192	680	EA14S	2,075,766	2547	110	352	UV7M	674,928	1741	81	263
OL3A	5,554,172	3910	173	620	EA15S	2,075,766	2547	110	352	UT41YV	316,404	789	68	238
OL3Z	4,960,460	3519	177	611	EA16S	2,075,766	2547	110	352	UR4LWY	308,484	618	83	259
OL3Z	1,743,665	2389	129	410	EA17S	2,075,766	2547	110	352	US0Q	97,149	290	45	114
OL1C	1,678,066	2183	120	346	EA18S	2,075,766	2547	110	352	UT4UWX	475	27	7	18
OK1KDO	1,023,780	1456	108	345	EA19S	2,075,766	2547	110	352	OCEANIA				
OL2U	965,440	1687	97	334	EA20S	2,075,766	2547	110	352	GUAM				
OL1P	689,850	1372	82	268	EA21S	2,075,766	2547	110	352	AH2R	10,283,700	5279	188	512
OL2A	446,400	756	88	222	EA22S	2,075,766	2547	110	352	YB0ZZ	2,235,522	2099	112	290
OL9S	224,238	594	67	199	EA23S	2,075,766	2547	110	352	ZM1A	5,590,774	4181	141	377
OK5SWL	6,069	74	15	36	EA24S	2,075,766	2547	110	352	DX1DBT	669,515	1218	88	147
G6PZ	5,763,352	4331	161	615	EA25S	2,075,766	2547	110	352	SOUTH AMERICA				
M2A	2,735,775	3214	135	444	EA26S	2,075,766	2547	110	352	ARGENTINA				
RL3A	6,308,208	4499	185	667	EA27S	2,075,766	2547	110	352	7,962,240	4646	159	479	
RO4M	4,773,612	3670	173	623	EA28S	2,075,766	2547	110	352	LU8XX	776,820	1493	62	152
RK3RXK	3,275,640	3735	158	516	EA29S	2,075,766	2547	110	352	P40L	13,592,412	6690	169	578
RF3A	3,163,027	3273	157	564	EA30S	2,075,766	2547	110	352	CP6CW	7,636,455	4606	145	470
RK3FVA	3,094,245	2644	160	505	EA31S	2,075,766	2547	110	352	ZY7C	4,596,160	3496	138	404
RZ1QZZ	2,597,770	2453	143	486	EA32S	2,075,766	2547	110	352	VP8WWW	1,233,765	2252	77	170
RZ4CWW	1,649,050	2495	125	434	EA33S	2,075,766	2547	110	352	UKRAINE				
RL4W	1,520,530	2432	118	388	EA34S	2,075,766	2547	110	352	12,076,290	8576	196	722	
RK4UWA	879,222	1325	115	374	EA35S	2,075,766	2547	110	352	SOUTH AMERICA				
RK3RWA	655,326	1128	107	334	EA36S	2,075,766	2547	110	352	GALAPAGOS ISLANDS				
RK3AWK	488,576	1084	77	275	EA37S	2,075,766	2547	110	352	30,971,500	12429	196	679	
RW3VWWW	458,304	924	63	229	EA38S	2,075,766	2547	110	352	NETHERLANDS ANTILLES				
RK30WM	296,964	749	63	229	EA39S	2,075,766	2547	110	352	22,440,300	10188	177	609	
RZ4AWR	284,647	933	57	172	EA40S	2,075,766	2547	110	352	HUNGARY				
RZ3AWM/3	93,060	416	39	141	EA41S	2,075,766	2547	110	352	86,879	402	43	120	
RK3DZV	11,151	124	13	50	EA42S	2,075,766	2547	110	352	AFRICA				



EM1HO put Antarctica on the map for the contest.

LY7A	6,915,660	5914	173	617	LITHUANIA				
GM5A	10,975,578	8518	172	645	SCOTLAND				
UV2L	2,979,880	3251	144	488	UNITED STATES				
3D2XA	12,659,168	7408	178	430	K3LR	15,170,944	6222	198	730
ZL6QH	12,772,892	7434	165	463	W3LPL	15,067,008	6687	190	712
					KC1XX	13,408,500	6069	185	690
					K9NS	10,441,362	5047	195	671
					K1TTT	9,651,102	4626	174	648
					K1RX	9,397,960	4623	176	630
					N04I	8,858,460	4712	181	639
					K3IH	7,893,699	4120	166	587
					K				