# The 2013 ARRL International DX Contest CW Results

**This was an interesting year, starting with unfounded propagation concerns and ending with photo finishes and record scores.**

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Just hours before the kickoff of the 2013 ARRL International DX Contest CW weekend, a large meteor blazed across the daytime sky over Russia's Ural Mountains and exploded. The shockwave broke windows, damaged buildings and injured hundreds. Not long after that incident and fewer than 5 hours before the contest starting bell, Asteroid 2012 DA14 streaked past Earth in a record-setting near-miss flyby. Rumors that these two events portended ominously for the contest turned out to be unfounded.

The *real* blast and record-setting began February 16 at 0000 UTC, when the bands exploded with the activity of thousands of hams around the globe, enjoying what turned out to be marvelous conditions. More than 4100 logs were submitted, scores by and large were substantially larger than last year's and participants set some new records.

Among the more thrilling results were the astonishing razor-thin margins between HK1NA and PJ4X for the top two spots in the DX Multioperator High Power category, and between TI5W and VP2ME in the DX Multioperator, Two Transmitter category. In addition, Scott, KØDQ, established yet another W/VE benchmark in the Single Operator, High Power category. The drama in most other entry categories on either side of the contest was greatly subdued, with clear winners claiming most top spots.

## The Bands Are Open Online

The online extended version of WW1ME's write-up includes more details about the leaders in each category, many more photos, and sidebars about a remotely-operated multi-multi, how KØDQ pulled off his record-setting win, the inside story about those photo-finish DX multiops, operating from a kitchen in the South Pacific and more personal stories. See you there!

## Propagation Worries

A day before the contest **spaceweather.com** reported that the Polar Light Center in Norway observed a magnetic storm that caused wild swings in the local magnetic field and "some fantastic auroras" overhead. As it turned out, *no* storms occurred during the contest.

With a sunspot number of 25, a solar flux around 100 and an A index of 10 as zero hour approached, conditions appeared favorable for 20, 40, 80 and 160, not so much for 15 and — even worse — 10 meters. As it turned out, operators on both sides of the competition often found 15 meters most productive. Stations in Asia and Oceania were scarce this year among the leaders.

## Sponsored Plaque Winners

Thanks to the generous sponsorship of numerous clubs and individuals, we are pleased to announce the winners of a sponsored ARRL DX CW plaque. The ARRL wishes to thank the plaque sponsors for their continued commitment to the ARRL Plaque Program. Without their support and dedication, the Plaque Program would not be possible. Unsponsored plaques may be purchased by the plaque winner. If you wish to purchase an unsponsored plaque or order a duplicate plaque, contact ARRL Contest Branch Manager Mike DeChristopher, N1TA at (860) 594-0232 or by e-mail at n1ta@arrl.org. The cost for plaques is $75 (includes shipping).

| Plaque Category | Plaque Sponsor | Mode | Winner |
|---|---|---|---|
| W/VE 1.8 MHz CW | Jerry Rosalius, WB9Z | CW | W4ZV |
| W/VE 21 MHz CW | Carl Luetzelschwab, K9LA | CW | K3RV |
| W/VE 28 MHz CW | Richard Bennett, K0XG | CW | K2SSS |
| W/VE Single Operator Low Power CW | Andy Faber, AE6Y | CW | N1UR |
| W/VE Single Operator QRP CW | Sean Kutzko, KX9X | CW | K3PH |
| W/VE Single Operator Assisted, High Power CW | Harold Ritchey, W3WPG Memorial | CW | K3WW |
| World Single Operator High Power CW | North Jersey DX Association | CW | 6Y2T (VE3DZ, op) |
| Europe Single Operator High Power CW | Jim George, N3BB | CW | CR2X (OH2UA, op) |
| North America Single Operator High Power CW | Potomac Valley Radio Club | CW | 6Y2T (VE3DZ, op) |
| World 1.8 MHz CW | Fred Race, W8FR, In Memory of DL1FF | CW | S59A |
| World 14 MHz CW | Jeff Hartley, N8II | CW | FY5KE (F6FVY, op) |
| World 21 MHz CW | Caribbean Contesting Consortium PJ2T | CW | J35X |
| World 28 MHz CW | W7EW / W7AT | CW | CR1Z (OH2BH, op) |
| World Single Operator QRP CW | Jerry Griffin, K6MD/DK6MX | CW | GJ2A (MJ0ASP, op) |
| World Single Operator Assisted, High Power CW | Southern California DX Club | CW | CE3CT (LU5DX, op) |
| World Multioperator Single Transmitter, High Power CW | John Patterson WC0W/V31TP | CW | CR3A |
| World Multioperator Unlimited CW | H Stephen Miller N0SM | CW | HK1NA |
| Great Lakes Division Single Operator CW | North Coast Contesters | CW | N8AA |
| Japan Single Operator Low Power CW | Western Washington DX Club | CW | JH4UYB |
| Seventh Call Area Single Operator High Power CW | Willamette Valley DX Club | CW | N9RV |
| Canada Single Operator Low Power CW | Contest Club Ontario | CW | VE1RGB |
| Pacific Division Single Operator Low Power CW | Central California DX Club, Inc. W6MEL | CW | K7ACZ |
| Central Division Single Operator High Power CW | Northern Illinois DX Association | CW | K9NW |
| Pacific Division Single Operator 20 Meters CW | Jim Davis, NN6EE | CW | N6LL |
| World Multioperator, Single Transmitter, Low Power CW | John Patterson WC0W/V31TP | CW | V31TP |
| Asia Single Operator QRP CW | Sean Kutzko, KX9X | CW | JQ1NGT |

## W/VE Single Operator

Scott, KØDQ, doesn't believe in "close enough." Far out in front in SOHP with 6.58 million points in 2012, he was still just shy of the 6.588 million point record. Once again operating SO2R from the WW1WW "Battleship New Hampshire" superstation, he soldiered on (or, in Scott's case, perhaps we should say "sailed on") to 5170 contacts with 524 multipliers for 8.08 million points. Forty meters was his money band with 20 and 15 not far behind.

His 2013 score not only breaks the previous W/VE SOHP record but sets an all-time record for a CW single operator for both W/VE and DX, topping PJ4A's 2011 score (RD3A, op) of 7.48 million points. From his perspective, the biggest difference was propagation.

Picking off the top spot in the SOLP category was Vermont's N1UR, who pulled way ahead in the crowd of 432 contestants, racking up 3224 contacts with 429 mults for 4.11 million points. Battling illness last year, Ed still managed a strong second place finish; this time he dominated once more, beating his old first district record of 3.47 million points, set in 2011, but still falling short of the overall 4.24 million point SOLP record that N2NL set from K4XS in 2001.

Once again leading the flea power (SOQRP) crowd was Bob, K3PH, in Eastern Pennsylvania, who edged out John, W2ID in Northern New Jersey for the top spot, 1.1 million to 1.09 million points. Bob logged 1168 contacts with 315 mults, while W2ID had 1159 contacts with 313 multipliers — close in anyone's book!

## W/VE Single-Operator Unlimited

Going head to head for another year were Eastern Pennsylvanians (and fellow FRCers) Chas, K3WW and Bud, AA3B in the SOUHP category. K3WW prevailed once

## Top Ten — DX

**Single Operator, High Power**

| | |
|---|---|
| 6Y2T (VE3DZ, op) | 6,739,200 |
| ZF2AM (K6AM, op) | 6,379,800 |
| TO5X (R5GA, op) | 6,267,861 |
| CR2X (OH2UA, op) | 5,916,003 |
| 6V7S (RK4FF, op) | 4,727,709 |
| PY2NDX | 3,965,826 |
| NP2N (W2VJN, op) | 3,846,456 |
| G6PZ (GIØRTN, op) | 3,620,295 |
| DL6FBL | 3,589,074 |
| 9A6XX | 3,552,660 |

**Single Operator, Low Power**

| | |
|---|---|
| P4ØW (W2GD, op) | 5,223,456 |
| VP9/W6PH | 4,056,156 |
| EF8R (EA8RM, op) | 3,766,116 |
| J88DR (G3TBK, op) | 3,732,183 |
| HQ2N (JA6WFM, op) | 2,716,623 |
| HC2/RC5A | 2,589,120 |
| MD2C (MDØCCE, op) | 2,196,150 |
| PY2YU | 1,694,115 |
| PY2NY | 1,253,079 |
| F6EYB | 1,094,016 |

**Single Operator QRP**

| | |
|---|---|
| GJ2A (MJØASP, op) | 728,739 |
| VQ5RP (KØUU, op) | 479,220 |
| HB9BMY | 380,460 |
| OK3C (OK2ZC, op) | 360,570 |
| HI/K8MR | 302,940 |
| YUØW | 280,449 |
| F/E73CQ | 192,852 |
| G4DBW | 145,536 |
| UU2CW | 144,324 |
| EA7AAW | 127,368 |

**Single Operator, 10 Meters**

| | |
|---|---|
| CR1Z (OH2BH, op) | 314,529 |
| EA8CN | 251,871 |
| XQ1KZ | 241,164 |
| CE3DNP | 195,576 |
| LU6UO | 171,216 |
| LW8DQ | 169,455 |
| PY2MTS | 160,272 |
| PS2R | 120,726 |
| LU5FR | 114,345 |
| CT1AOZ | 89,964 |

**Single Operator, 15 Meters**

| | |
|---|---|
| J35X | 302,064 |
| KL7RA | 289,674 |
| PX2C (PY2BK, op) | 228,969 |
| 6W/HAØNAR | 226,896 |
| TF3Y | 222,666 |
| C6ASP (W6KW, op) | 218,022 |
| SSØK | 214,368 |
| OT1A (ON4CCP, op) | 202,188 |
| TMØR (F5MNK, op) | 188,271 |
| EA8NC | 187,758 |

**Single Operator, 20 Meters**

| | |
|---|---|
| FY5KE (F6FVY, op) | 394,887 |
| CE1/K7CA | 275,268 |
| OH8X (OH6KZP, op) | 239,058 |
| C6AZZ (KQ8Z, op) | 238,242 |
| 9A3TR | 232,812 |
| OK7K (OK1GK, op) | 225,378 |
| OH8R (OH8WW, op) | 209,304 |
| S53MM | 205,542 |
| 5C5W (CN8KD, op) | 201,666 |
| OH8L (OH8LQ, op) | 201,318 |

**Single Operator, 40 Meters**

| | |
|---|---|
| C6AKQ (N4BP, op) | 326,598 |
| EA8CMX (OH2BYS, op) | 288,840 |
| CQ8X (OH2PM, op) | 270,396 |
| YU1LA | 262,218 |
| S57AL | 229,158 |
| E77W | 227,430 |
| SSØC (S53RM, op) | 219,066 |
| S57Z | 218,709 |
| EF8N | 199,056 |
| SN3R (SP3HRN, op) | 196,968 |

**Single Operator, 80 Meters**

| | |
|---|---|
| C6APG (K4PG, op) | 241,338 |
| F5CQ | 135,432 |
| E71A | 109,074 |
| DM7C (DL6CX, op) | 103,350 |
| CO3IT | 100,128 |
| UU7J (UUØJM, op) | 93,933 |
| YUØT | 92,448 |
| HA8A (HA8DZ, op) | 92,160 |
| OK1IC | 91,953 |
| CO8ZZ | 89,352 |

**Single Operator, 160 Meters**

| | |
|---|---|
| S59A | 56,304 |
| YU7AV | 34,770 |
| SV3RF | 33,720 |
| DJØMDR | 30,894 |
| CO6LP | 21,645 |
| OK2W | 19,530 |
| LY7M | 16,833 |
| OK1AXB | 15,456 |
| UYØZG | 9,144 |
| EW1DO | 5,874 |

**Single Operator Unlimited, High Power**

| | |
|---|---|
| CE3CT (LU5DX, op) | 3,424,065 |
| SN7Q (SP7GIQ, op) | 2,973,267 |
| DL5AXX | 2,863,950 |
| IR2C (IK2JUB, op) | 2,794,806 |
| II9P (IT9GSF, op) | 2,715,282 |
| G9W (MØDXR, op) | 2,576,286 |
| HB9FAP | 2,364,600 |
| OQ5M (ON5ZO, op) | 2,200,752 |
| EA7TG | 1,847,316 |
| OL5Y | 1,774,404 |

**Multioperator, Single Transmitter, High Power**

| | |
|---|---|
| CR3A | 6,551,010 |
| P4ØL | 6,511,512 |
| KP2M | 5,955,672 |
| KP3Z | 5,470,575 |
| XE7S | 5,384,610 |
| VP5S | 5,029,065 |
| EF8USA | 4,555,524 |
| EI7M | 4,287,825 |
| LX7I | 4,284,960 |
| EA5RS | 3,921,876 |

**Multioperator Two Transmitters**

| | |
|---|---|
| TI5W | 9,492,102 |
| VP2ME | 9,461,772 |
| PJ2T | 8,617,176 |
| TM6M | 7,053,984 |
| KH7X | 6,847,995 |
| EF7X | 5,878,152 |
| M5E | 5,522,457 |
| OL7M | 4,500,876 |
| DL1A | 3,996,342 |
| DR4A | 3,654,384 |

**Multioperator, Unlimited Transmitters**

| | |
|---|---|
| HK1NA | 10,696,152 |
| PJ4X | 10,638,459 |
| KH6LC | 7,194,795 |
| 9A1A | 5,853,960 |
| LZ9W | 4,511,367 |
| HA3ØS | 3,665,310 |
| JA3YBK | 2,834,166 |
| JE1ZWT | 1,443,918 |
| 9A5CW | 131,040 |

**Multioperator, Single Transmitter, Low Power**

| | |
|---|---|
| V31TP | 5,653,260 |
| P49V | 4,450,797 |
| PY1SL | 1,614,750 |
| 3D2RX | 1,489,665 |
| OL1C | 1,024,632 |
| SSØXX | 1,009,086 |
| LZ9R | 402,150 |
| 5C5T | 367,200 |
| YE1ZAT | 153,780 |
| DK5TX | 89,544 |

**Single Operator Assisted, Low Power**

| | |
|---|---|
| KP4EE | 4,352,616 |
| S53F | 1,521,795 |
| GIØRQK | 1,432,458 |
| EC4TA | 1,306,818 |
| DK5DQ | 1,063,620 |
| HI3TT | 811,797 |
| SP1NY | 799,008 |
| HA6NL | 666,855 |
| OK6Y (OK2PTZ, op) | 605,655 |
| LU7HZ | 482,664 |

## W/VE Single Operator Region Leaders

**Boxes list call sign, score, and power (A = QRP, B = Low Power, C = High Power).**

### Northeast Region

**(New England, Hudson and Atlantic Divisions; Maritime and Quebec Sections)**

| | | |
|---|---|---|
| KØDQ | 8,084,796 | C |
| K3CR (LZ4AX, op) | 7,134,810 | C |
| N2NT | 6,906,060 | C |
| VY2TT (K6LA, op) | 6,722,772 | C |
| NN3W | 6,338,514 | C |
| N1UR | 4,110,678 | B |
| K3AJ | 1,618,650 | B |
| K1VSJ | 1,477,701 | B |
| W1JQ | 1,346,748 | B |
| VE1RGB | 1,153,848 | B |
| K3PH | 1,099,980 | A |
| W2ID | 1,080,789 | A |
| N1IX | 816,024 | A |
| K8CN | 772,200 | A |
| N1TM | 619,776 | A |

### Southeast Region

**(Delta, Roanoke and Southeastern Divisions)**

| | | |
|---|---|---|
| AD4Z | 4,196,760 | C |
| K4RO | 3,490,362 | C |
| K1TO | 3,440,625 | C |
| KØZR | 2,493,810 | C |
| K4AB | 2,493,210 | C |
| N4YDU | 2,111,910 | B |
| N4UA | 2,108,832 | B |
| K5KU | 1,145,238 | B |
| W4AA | 1,137,786 | B |
| NN4X | 1,120,278 | B |
| W9WI | 976,950 | A |
| N4CW | 759,600 | A |
| AA4GA | 207,060 | A |
| N4AU | 131,859 | A |
| KS4X | 125,202 | A |

### Central Region

**(Central and Great Lakes Divisions; Ontario East, Ontario North, Ontario South and Greater Toronto Area Sections)**

| | | |
|---|---|---|
| VB3E (VE3AT, op) | 4,693,380 | C |
| N8AA | 3,963,360 | C |
| K8GL | 3,472,896 | C |
| K9NW | 3,351,765 | C |
| K1LT | 2,995,272 | C |
| N4TZ | 3,061,056 | B |
| NA8V | 2,382,615 | B |
| N9CK | 1,912,950 | B |
| KV8Q | 1,142,712 | B |
| WB8JUI | 754,728 | B |
| VA3SB | 790,938 | A |
| KT8K | 458,880 | A |
| W8RTJ | 365,484 | A |
| WA8REI | 214,230 | A |
| VE3HG | 160,272 | A |

### Midwest Region

**(Dakota, Midwest, Rocky Mountain and West Gulf Divisions; Manitoba and Saskatchewan Sections)**

| | | |
|---|---|---|
| K5GN | 5,579,925 | C |
| N2IC | 5,259,366 | C |
| K5WA | 3,928,905 | C |
| WXØB (AD5Q, op) | 3,699,810 | C |
| KØRF (WØUA, op) | 3,649,878 | C |
| N5AW | 3,024,120 | B |
| WØUO | 1,742,895 | B |
| NAØN | 1,021,293 | B |
| WØETT | 673,182 | B |
| WD5K | 661,200 | B |
| KØOU | 362,082 | A |
| VE5VA | 81,312 | A |
| N8LA | 30,240 | A |
| NTØZ | 22,515 | A |
| WA5RML | 20,520 | A |

### West Coast Region

**(Pacific, Northwestern and Southwestern Divisions; Alberta, British Columbia and NWT Sections)**

| | | |
|---|---|---|
| N9RV | 4,379,625 | C |
| W6YI (N6MJ, op) | 3,859,728 | C |
| K6XX | 2,756,073 | C |
| K7RAT (N6TR, op) | 1,054,920 | C |
| K6NR | 1,000,350 | C |
| N7ZG | 1,234,341 | B |
| K7BG | 1,225,269 | B |
| WJ9B | 857,805 | B |
| N6RV | 741,426 | B |
| VE6EX | 627,450 | B |
| N7IR | 577,404 | A |
| W6JTI | 464,928 | A |
| W6QU (W8QZA, op) | 217,752 | A |
| KM6Z | 149,985 | A |
| WA6DBC | 111,750 | A |

## Top 10 — W/VE

**Single Operator, High Power**

| | |
|---|---|
| KØDQ | 8,084,796 |
| K3CR (LZ4AX, op) | 7,134,810 |
| N2NT | 6,906,060 |
| VY2TT (K6LA, op) | 6,722,772 |
| NN3W | 6,338,514 |
| K1ZZ | 6,332,172 |
| K5GN | 5,579,925 |
| N2IC | 5,259,366 |
| AA1K | 4,904,256 |
| WC1M | 4,755,195 |

**Single Operator, Low Power**

| | |
|---|---|
| N1UR | 4,110,678 |
| N4TZ | 3,061,056 |
| N5AW | 3,024,120 |
| NA8V | 2,382,615 |
| N4YDU | 2,111,910 |
| N4UA | 2,108,832 |
| N9CK | 1,912,950 |
| WØUO | 1,742,895 |
| K3AJ | 1,618,650 |
| K1VSJ | 1,477,701 |

**USCW Single Operator, QRP**

| | |
|---|---|
| K3PH | 1,099,980 |
| W2ID | 1,080,789 |
| W9WI | 976,950 |
| N1IX | 816,024 |
| VA3SB | 790,938 |
| K8CN | 772,200 |
| N4CW | 759,600 |
| N1TM | 619,776 |
| N7IR | 577,404 |
| W6JTI | 464,928 |

**Single Operator Unlimited, High Power**

| | |
|---|---|
| K3WW | 7,783,977 |
| AA3B | 7,204,194 |
| K5ZD | 6,693,312 |
| K1AR | 5,464,800 |
| N3RR | 4,293,168 |
| N2MM | 4,275,534 |
| N8BJQ | 3,502,680 |
| W1GD | 3,344,229 |
| N2SR | 3,339,708 |
| KO7AA | 3,225,150 |

**Single Operator Unlimited, Low Power**

| | |
|---|---|
| K4XS | 4,616,514 |
| W3KB | 2,373,030 |
| WD4AHZ | 2,116,500 |
| WO1N | 2,088,801 |
| WW3S | 1,940,400 |
| W9XT | 1,766,937 |
| N5DO | 1,674,090 |
| WE9R | 1,396,236 |
| KE7X | 1,349,400 |
| K2ZC | 1,284,981 |

**Single Operator, 10 Meters**

| | |
|---|---|
| K2SSS | 220,320 |
| W3EP | 166,725 |
| WB9Z | 136,890 |
| K2PS | 108,612 |
| K6TA | 104,640 |
| VE3KZ | 102,573 |
| N4OX | 88,740 |
| K4WI | 81,198 |
| N2WN | 67,392 |
| K9WZB | 59,976 |

**Single Operator, 15 Meters**

| | |
|---|---|
| K3RV | 643,926 |
| KI1G | 615,942 |
| KD2RD | 540,756 |
| N4PN | 531,573 |
| K9OM | 429,948 |
| N7AT (K8IA, op) | 397,872 |
| NE8P | 393,366 |
| N2WQ/VE3 | 358,455 |
| K4FJ | 356,304 |
| W5TM | 280,692 |

**Single Operator, 20 Meters**

| | |
|---|---|
| K2XA | 656,544 |
| N2PP | 530,424 |
| N4TB | 470,322 |
| N4ZZ | 360,600 |
| WØEWD | 261,096 |
| N8AGU | 260,580 |
| W9ILY | 247,848 |
| K9IL | 138,699 |
| K5UTD (HK1A, op) | 132,066 |
| WR2G | 112,992 |

**Single Operator, 40 Meters**

| | |
|---|---|
| W7WA | 338,724 |
| W3BGN | 192,276 |
| N6MA | 191,808 |
| K9NR | 188,376 |
| VE6WQ | 179,118 |
| N7WA | 172,320 |
| K7WP | 163,116 |
| WA1FCN | 161,925 |
| W8WA | 88,800 |
| K4VU | 77,034 |

**Single Operator, 80 Meters**

| | |
|---|---|
| W1MK | 286,650 |
| WX4G | 166,608 |
| N3IQ | 154,704 |
| KØKT | 72,210 |
| K3JGJ | 65,268 |
| W1MO | 63,156 |
| W1XX | 56,628 |
| N8II | 49,536 |
| VE3OSZ | 49,446 |
| K9KU | 48,348 |

**Single Operator, 160 Meters**

| | |
|---|---|
| W4ZV | 83,808 |
| W4SVO | 40,635 |
| N4XD | 34,404 |
| W8TOP (W8UVZ, op) | 29,484 |
| W2MF | 16,995 |
| W3GH | 16,854 |
| N7GP | 11,070 |
| NØTT | 9,828 |
| K4EJQ | 8,103 |
| N2GC | 7,965 |

**Multioperator, Single Transmitter, High Power**

| | |
|---|---|
| W2FU | 9,055,458 |
| W2RE | 8,527,356 |
| K2QMF | 5,944,560 |
| K8AZ | 5,883,768 |
| K5TR | 4,648,518 |
| K1HI | 4,373,460 |
| N3BNA | 3,974,940 |
| K5RX | 3,580,962 |
| KØTV | 3,567,174 |
| NØNI | 3,130,116 |

**Multioperator, Single Transmitter, Low Power**

| | |
|---|---|
| K2PO | 1,966,536 |
| VE9ML | 1,862,574 |
| W3YI | 548,301 |
| VA7DZ | 450,177 |
| KØUK | 357,048 |
| W3WN | 180,297 |
| WDØGTY | 158,412 |
| W1TM | 54,693 |

**Multioperator, Two Transmitters**

| | |
|---|---|
| N3RS | 11,809,854 |
| NY4A | 10,990,662 |
| K5GO | 10,811,604 |
| K9CT | 9,855,360 |
| VE3JM | 9,612,504 |
| W4RM | 9,086,820 |
| KB1H | 8,933,604 |
| K4TCG | 7,215,831 |
| K2AX | 5,902,671 |
| W7RN | 5,162,289 |

**Multioperator, Unlimited Transmitters**

| | |
|---|---|
| K3LR | 18,046,977 |
| W3LPL | 17,296,773 |
| K1LZ | 15,810,600 |
| NR4M | 14,169,168 |
| NQ4I | 13,774,563 |
| WK1Q | 11,852,292 |
| WØAIH | 7,264,770 |
| K1RX | 6,021,432 |
| N6RO | 5,886,609 |
| K1KI | 5,755,263 |

Vassilis, SV1DPJ, was Single Operator Unlimited, High Power from the Radio Association of West Greece contest station SZ1A. Kostas, SV1DPI, reports that Vassilis had "a great time and made a great score," possibly a record from Greece. His official tally was 913,824 points (1354 contacts with 228 mults). [Kostas Stamatis, SV1DPI, photo]

again, racking up 7.8 million points to AA3B's 7.2 million. Chas made 4757 contacts with 551 mults, while Bud compiled 4510 contacts with 534 mults.

Only two of the top five finishers from 2012 showed up in the top five for SOULP this year, and neither managed to snag top honors. This time around Bill, K4XS, in Northern Florida, succeeded with 4.6 million points (2914 contacts with 531 mults).

### W/VE Multioperator Roundup

In the Multioperator, Single Transmitter, High Power category, the operators at W2FU in Western New York pulled off the win with 9.06 million points. Repeating this year in second place, the W2RE team in Northern New York was not too far off the mark with 8.53 million points — the biggest deciding factor likely being the 20 additional mults the W2FU team logged (the two teams were just 110 contacts apart).

In the MS Low Power category, which attracted just eight entries, K2PO vanquished the field with an impressive 1.97 million points. That's nearly 1 million points ahead of the W1TM first place finish in 2012.

The Multioperator, Two Transmitter category saw the superb N3RS team in Eastern Pennsylvania repeat in the top spot with 11.81 million points. This was about 1 million ahead of last year's finish and bests the N3RS Third District record of 11.5 million set in 2001.

Within a shallow 15-entry field in the Multioperator, Multitransmitter category, the competition once again focused on the Battle of the Titans, pitting the team at K3LR in Western Pennsylvania against the equally talented W3LPL crew in the Maryland-DC Section. In a turnaround from 2012's MM battle, the K3LR team this time overtook the W3LPL ops by a healthy 750,000 point margin, setting a new world record in the process.

The K4VV team placed just 13th out of the pool of competitors this year, but its style of operation may set a new trend in MM contesting. K4VV consisted of three operators at four discrete locations in different states! Team member Mike, WØYR, reported that things went "very, very well." Read all about it in the online sidebar "K4VV Remote Contest Station Maiden Voyage."

### W/VE and DX Single-Band Entries

To paraphrase Clint Eastwood's "Dirty Harry" character, contesters gotta know their limitations *and* those of their stations, but they have to know the *strengths* of both as well. Not everyone can field a bodacious DX contest signal on *every* band, but some otherwise modest setups do excel on one or two bands. Enter the Single-Banders! Each band's winning stations are listed in the Top 10 Single Operator, Single Band tables and, of course, the extended version of this article features much more about all single-band categories.

### DX Single Operator

Stations in North America again took the top three places in the SOHP category from the DX side. The top two stations flipped positions from 2012. Jamaica's 6Y2T with Yuri, VE3DZ, at the helm, took the top spot this year in a close race, posting 6.74 million points, while ZF2AM, piloted by John, K6AM, was a close second from the Caymans with 6.38 million points. Yuri had 115 more contacts and one more multiplier, although the record of 6.8 million points that John set last year stands.

Dropping back by approximately 12 dB did not seem to hurt contesting pro John, W2GD, who ran up 5.2 million points at P4ØW to lead a crowded DX SOLP category, in the process topping his own South American record of 4.77 million points set in 2004.

Just two operators who were in last year's Top 10 in the challenging SOQRP category repeated this year, and only one was at the same station. Eight of the Top 10 stations were in Europe this year; the other two were in North America — quite a change from the geographical distribution in the other SOAB sub-categories. Well ahead of the pack in the top spot was GJ2A on Jersey (Island, not

## Continental Leaders

| Class | Call | Score |
|---|---|---|
| **Africa** | | |
| Single Operator, High Power | 6V7S (RK4FF, op) | 4,727,709 |
| Single Operator, Low Power | EF8R (EA8RM, op) | 3,766,116 |
| Single Operator Unlimited, High Power | CT3BD | 4,320 |
| Single Operator Unlimited, Low Power | CN8WW | 277,140 |
| Single Operator, 10 Meters | EA8CN | 251,871 |
| Single Operator, 15 Meters | 6W/HA0NAR | 226,896 |
| Single Operator, 20 Meters | 5C5W (CN8KD, op) | 201,666 |
| Single Operator, 40 Meters | EA8CMX (OH2BYS, op) | 288,840 |
| Multioperator, Single Transmitter, High Power | CR3A | 6,551,010 |
| Multioperator, Single Transmitter, Low Power | 5C5T | 367,200 |
| **Asia** | | |
| Single Operator, High Power | 5B/UW2M (UR0MC, op) | 2,763,996 |
| Single Operator, Low Power | JH4UYB | 706,848 |
| Single Operator, QRP | JR4DAH | 84,240 |
| Single Operator Unlimited, High Power | JS3CTQ | 1,108,530 |
| Single Operator Unlimited, Low Power | UA0IT | 139,590 |
| Single Operator, 10 Meters | JA1BPA | 46,956 |
| Single Operator, 15 Meters | RU0FM | 152,790 |
| Single Operator, 20 Meters | JF1NHD | 135,432 |
| Single Operator, 40 Meters | JA1XMS | 91,260 |
| Single Operator, 80 Meters | JH1AEP | 21,312 |
| Single Operator, 160 Meters | JA8NFV | 1,056 |
| Multioperator, Single Transmitter, High Power | C4N | 1,864,800 |
| Multioperator, Two Transmitters | RT0C | 1,659,792 |
| Multioperator, Unlimited Transmitters | JA3YBK | 2,834,166 |
| **Europe** | | |
| Single Operator, High Power | CR2X (OH2UA, op) | 5,916,003 |
| Single Operator, Low Power | MD2C (MD0CCE, op) | 2,196,150 |
| Single Operator, QRP | GJ2A (MJ0ASP, op) | 728,739 |
| Single Operator Unlimited, High Power | SN7Q (SP7GIQ, op) | 2,973,267 |
| Single Operator Unlimited, Low Power | S53F | 1,521,795 |
| Single Operator, 10 Meters | CR1Z (OH2BH, op) | 314,529 |
| Single Operator, 15 Meters | TF3Y | 222,666 |
| Single Operator, 20 Meters | OH8X (OH6KZP, op) | 239,058 |
| Single Operator, 40 Meters | CQ8X (OH2PM, op) | 270,396 |
| Single Operator, 80 Meters | F5CQ | 135,432 |
| Single Operator, 160 Meters | S59A | 56,304 |
| Multioperator, Single Transmitter, High Power | EI7M | 4,287,825 |
| Multioperator, Single Transmitter, Low Power | OL1C | 1,024,632 |
| Multioperator, Two Transmitters | TM6M | 7,053,984 |
| Multioperator, Unlimited Transmitters | 9A1A | 5,853,960 |
| **North America** | | |
| Single Operator, High Power | 6Y2T (VE3DZ, op) | 6,739,200 |
| Single Operator, Low Power | VP9/W6PH | 4,056,156 |
| Single Operator, QRP | VQ5RP (K0UU, op) | 479,220 |
| Single Operator Unlimited, High Power | KL2R (N1TX, op) | 775,890 |
| Single Operator, 10 Meters | V31YN (DJ4KW, op) | 60,444 |
| Single Operator, 15 Meters | J35X | 302,064 |
| Single Operator, 20 Meters | C6AZZ (KQ8Z, op) | 238,242 |
| Single Operator, 40 Meters | C6AKQ (N4BP, op) | 326,598 |
| Single Operator, 80 Meters | C6APG (K4PG, op) | 241,338 |
| Single Operator, 160 Meters | CO6LP | 21,645 |
| Multioperator, Single Transmitter, High Power | KP2M | 5,955,672 |
| Multioperator, Single Transmitter, Low Power | V31TP | 5,653,260 |
| Multioperator, Two Transmitters | TI5W | 9,492,102 |
| **Oceania** | | |
| Single Operator, High Power | ZL3IO | 2,295,657 |
| Single Operator, Low Power | VK7CW | 181,440 |
| Single Operator, QRP | N7ET/DU7 | 9,135 |
| Single Operator Unlimited, High Power | NH2T | 1,259,298 |
| Single Operator Unlimited, Low Power | KH6/W0ZT | 83,385 |
| Single Operator, 10 Meters | NH2DX (KG6DX, op) | 85,104 |
| Single Operator, 15 Meters | VK4TJF | 19,224 |
| Single Operator, 20 Meters | VK7GN | 60,489 |
| Single Operator, 40 Meters | KH7M (KH6ZM, op) | 181,272 |
| Single Operator, 80 Meters | WB4JTT/KH6 | 55,008 |
| Multioperator, Single Transmitter, Low Power | 3D2RX | 1,489,665 |
| Multioperator, Two Transmitters | KH7X | 6,847,995 |
| Multioperator, Unlimited Transmitters | KH6LC | 7,194,795 |
| **South America** | | |
| Single Operator, Low Power | P40W (W2GD, op) | 5,223,456 |
| Single Operator, High Power | PY2NDX | 3,965,826 |
| Single Operator Unlimited, High Power | CE3CT (LU5DX, op) | 3,424,065 |
| Single Operator Unlimited, Low Power | LU7HZ | 482,664 |
| Single Operator, 10 Meters | XQ1KZ | 241,164 |
| Single Operator, 15 Meters | PX2C (PY2BK, op) | 228,969 |
| Single Operator, 20 Meters | FY5KE (F6FVY, op) | 394,887 |
| Single Operator, 40 Meters | YV5OIE | 36,378 |
| Multioperator, Single Transmitter, High Power | P40L | 6,511,512 |
| Multioperator, Single Transmitter, Low Power | P49V | 4,450,797 |
| Multioperator, Two Transmitters | PJ2T | 8,617,176 |
| Multioperator, Unlimited Transmitters | HK1NA | 10,696,152 |

Shore), with Mathieu, MJØASP, in the chair, posting a very respectable 728,739 points. Over the course of his 34 hours on the air, Mathieu capitalized on good conditions on 20, 15 and 10, and eschewed 160 altogether.

### DX Single-Operator Unlimited

In a SOUHP field of nearly 350 entrants, the leader was from South America. CE3CT in Chile, operated by Argentine Martin, LU5DX, took first place with 3.42 million points. The rest of the Top 10 was in Europe.

Single Operator Unlimited, Low Power competitors had almost as large a field as their high power competition. Joachim, KP4EE, was king of the hill with 4.35 million points.

### DX Multioperator Roundup

In the DX Multioperator, Single Transmitter, High Power race, the CR3A team earned the trophy with 6.55 million points. It was a tight race, however, with runner-up P4ØL falling short with 6.51 million points. The major difference was in contacts; P4ØL worked one more mult.

In the Multioperator, Single Transmitter, Low Power competition, the V31TP team scrambled to the top of the heap with 5.65 million points. Last year, V31TP placed second in the MSHP category. P49V repeated in second place with 4.45 million points, well short of their 2012 score.

It was another tight race to the top between the teams at TI5W and VP2ME in the DX Multioperator, Two Transmitter category. Final scores put the three-operator TI5W team at 9.49 million points, a mere 30,330 points up on the five operators at VP2ME. TI5W snagged just 10 more contacts but harvested one additional — and crucial — multiplier.

The claim to the DX Multioperator, Multi-transmitter crown turned on error rate. *Claimed* scores had PJ4X edging out HK1NA by 16,299 points in a battle for top honors. After log checking, the official score revealed that HK1NA had topped PJ4X by a more generous margin of 57,693 points — still close. The final tally had HK1NA with 10.7 million points and PJ4X with 10.64 million points.

If ever there was a dramatic demonstration that careful logging counts, this is surely it. While the PJ4X team's error rate was a highly respectable 0.8 percent, the HK1NA group held theirs to just 0.5 percent, "and that made all the difference," to paraphrase Robert Frost (see the online "Accuracy Leaders" tables for a closer look at this factor).

### Logging Accuracy

In a contest such as this one, accuracy is important. It's no surprise that the scoring leaders and the operators with the best logging accuracy coincide year after year. Scott, KØDQ, not only repeated as Single Operator, High Power leader this year, but he also had the highest accuracy (see the "Accuracy Leaders" tables online), according to our calculated Accuracy Index. This index measures the accuracy of a particular operator's log, taking log size into account. Error rate, while a useful individual benchmark, does not, and error rates for logs containing greater than 100 contacts ranged as high as 29.7 percent on the W/VE side to 17.4 percent on the DX side.

On the DX side, let's not forget that the MM battle for supremacy hinged on error rate. PJ4X's error rate has always been good, but HK1NA won the trophy as a result of superb accuracy. Ditto for the TI5W and PJ2T teams. Yuri, VE3DZ, led the Single Operator accuracy index list from 6Y2T this year just as he did last time, despite being "sleep deprived."

Meteors, asteroids and solar flares aside, for those who have never dipped a toe in the water for this event, the ARRL International DX Contest (CW or phone) is a terrific opportunity to log some new ones, since DX participants *only* work the US and Canada. Even with a modest setup and no special contesting skills it is feasible to attain DXCC in a weekend! Mark your calendars for February 15-16, 2014!