

Results of the 2008 CQ WPX RTTY Contest

BY GLENN VINSON,* W6OTC, AND PAOLO CORTESE,† I2UIY

The 14th annual CQ WPX RTTY Contest was held February 9–10, 2008, with yet another record number of entrants—1,846 logs from 104 countries (including A5, 3V8, XW, D2, D3, SV5, T7)—by far the largest number of entries for any RTTY contest ever. One can only wonder what the results will be when 15 and 10 meters open again in the next few years.

Again, many new world records were set, including World Single Op All Band High Power, Single Op 21 MHz, SO 7 MHz, and Single Op 3.5 MHz, as were many important regional records. In addition, U.S. multi-op stations moved closer to parity with their European competitors. Total QSOs increased to 764,485 this year (vs. 681,000 in 2007) with 15,069 different callsigns (vs. 14,231 in 2007) in the database. Let's watch these numbers go up over the next few years as the solar flux improves dramatically over this year's number of 70, approximately the same as it was in 2007.

For log-checking, Paolo, I2UIY, was aided this year by the veteran and expert team of I2EOW, RW3FO, and N5KO. The most used software was N1MM Logger, followed by MixW, and then by WriteLog, collectively accounting for two-thirds of all logs submitted. Far behind the top three, but growing in popularity, is Win-Test, while a few of us hardheads continue to use the old reliable RTTY by WF1B.

Single Operator

Single Operator, Low Power (SOL). Winning SOL this year, Mohamed, 5C5W (op: CN8KD), moved up from second place last year, and just missed setting a new world record with a score of 4,169,452 points (1,610 Q's, 6,926 pts, 602 mults). As it was, Mohamed increased the Africa SOL record for the second year in a row. In world second was Roger, P40R (aka: N4RR), who scored 3,660,636 points, making a significant contribution to the club score of the Society of Midwest Contesters. A bit farther north, from the Caribbean, Ted, HI3T (op: HI3TEJ), was world third, setting a new NA SOL record for the second year in a row with a score of 3,444,939 points. Setting a new Europe SOL record was world fourth, Sam, UT9FJ, who scored



World second-place Single Op All Band Low Power Roger, P40R (N4RR).

3,314,126 points, significantly exceeding TM6A's (op: F6IRF) 2006 Europe record of 2,747,824 points. Of at least equal significance, KS1Y (op: N1BAA), in world fifth place, trounced the USA SOL record (1,887,187 points) formerly held by Don, AA5AU, with a score of 2,978,766 points (1,625 Q's, 4,527 pts, 658 mults). Don was not idling. He also broke his old USA record with a score of 2,032,008 (1,634

Q's, 3,784 pts, 537 mults), but despite Don's QSO rate, he could not match KS1Y's points and mults. World sixth, and setting a new Asia SOL record, RT9S scored 2,906,568 points (1,391 Q's, 5,688 pts, 511 mults).

Single Operator, High Power (SOH). But wait. New SOH records were at least as significant as those in SOL. As in 2007, Ed, W0YK, operating as P49X, set another



North America winner (outside U.S.) Andrei, EW1AR, at YN2S.

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er new World SOH record, this year scoring 10,055,636 points (2,997 Q's, 13,756 pts, 731 mults), the difference being in this year's mults, 731 versus last year's 723. World second was AO8A (op: RD3AF), who set a new Africa SOH record of 8,047,575 points (2,520 Q's, 11,415 pts, 705 mults), beating by almost 90% the Africa SOH record set in 2006 by 7XØRY. Next Tyler, K3MM, continued his dominance of USA/NA by setting another NA record, his fifth title, with 6,859,587 points (2,597 Q's, 8,897 pts, 771 mults). In world fourth, D4C also exceeded the previous Africa record with a score of 6,523,509 points, a great result, but not close to AO8A. However, world fifth, UA9CLB, exceeded his own Asia SOL record with a score this year of 6,007,579 points, an

increase of about 40% over his 2007 record score. Mike, K4GMH, was world sixth, and USA winner with a score of 5,146,737 points. Europe was won by world seventh finisher DL3TD, who scored 4,359,264 points.

Single Operator, Single Band 28 MHz (28). Ten meters continued to have relatively little single-band activity, with the winner, LU1HF, scoring 46,041 points, a substantial increase over 2007. But just wait until next year!

Single Operator, Single Band 21 MHz (21). Fifteen meters shows how much propagation has, in fact, improved already, despite the relatively low solar flux. Here LS1D (op: LW9EOC) won for the second year in a row, but this time set a new SO 21 World record, with a score of

2008 CQ WPX RTTY CONTEST PLAQUE SPONSORS AND WINNERS

Single Operator High Power

World: Sponsored by John (Bob) Orton, WA6BOB. Winner: **P49X (Op: Ed Muns, WØYK)**

Africa: Sponsored by Andrei Stchislenok, EW1AR-NP3D (in Memory of EU1MM). Winner: **AO8A (Op: Valery Komarov, RD3AF)**

Asia: Sponsored by Tyler Stewart, K3MM. Winner: **Vadim Ovsyannikov, UA9CLB**

Europe: Sponsored by DL-DX RTTY Contest Group. Winner: **Lothar Wilke, DL9TD**

N.A.: Sponsored by Ed Muns, WØYK. Winner: **Tyler Stewart, K3MM**

N.A. Outside K/VE: Sponsored by Alex Priluk, K2PAL. Winner: **YN2S (Op: Andrei Stchislenok, EW1AR-NP3D)**

USA: Sponsored by Glenn Vinson, W6OTC. Winner: **Mike Sims, K4GMH**

Single Operator Low Power

World: Sponsored by Mike Sims, K4GMH. Winner: **5C5W (Op: Mohamed Kharbouche, CN8KD)**

Asia: Sponsored by Trey Garlough, N5KO. Winner: **Yuri Kotelnikov, RT9S**

Europe: Sponsored by Paolo Cortese, I2UIY. Winner: **Sam Sorokin, UT9FJ**

N.A.: Sponsored by Wayne King, N2WK. Winner: **HI3T (Op: Ted Jimenez, HI3TEJ)**

Oceania: Sponsored by Steve (Sid) Ceasar, NH7C. Winner: **Felimon Morano, Jr., 4D75J**

USA: Sponsored by Jim Reisert, AD1C. Winner: **KS1Y (Op: Jose Castillo, N1BAA)**

Single Operator Single Band

3.5 MHz World: Sponsored by Doug Faunt, N6TQS. Winner: **Tone Crv, S53E**

7 MHz World: Sponsored by Don Reed, K2OGD. Winner: **Jose Duarte Sousa Goncalves, CT3KY**

14 MHz World: Sponsored by Fabi Bertolotto, VA2UP. Winner: **Zelimir Klasan, 9A2DQ**

21 MHz World: Sponsored by Jim Steel, MØZAK. Winner: **LS1D (Op: Silvio Martin, LW9EOC)**

28 MHz World: Sponsored by Steve Hodgson, ZC4LI. Winner: **John Morandi, LU1HF**

Multi-Op Single Transmitter

World: Sponsored by Steve Merchant, K6AW. Winner: **T93M (Ops: T93M, T93Y, T94KC, T97M)**

Asia: Sponsored by CT3 Madeira Contest Team/CQ9K/CT9M. Winner: **RK9CWA (Ops: RW9CF, RV9COX)**

Multi-Op Two Transmitter

World: Sponsored by HC8N RTTY Team. Winner: **NP3U (Ops: KI1G, NG1G, N1HRA, WE1H, KP4VP, WP4U)**

N.A.: Sponsored by Ed Muns, WØYK. Winner: **N2WK (Ops: N2WK, WA2TMC)**

Multi-Op Multi-Transmitter

World: Sponsored by Neal Campbell, K3NC. Winner: **Z37M (Ops: Z31MM, Z32ID, Z35T, Z35X, Z36N, Z36W, Roberto)**

N.A.: Sponsored by KA4RRU RTTY Team. Winner: **WW4LL (Ops: WW4LL, KI5XP, K1ZZI, K9JS, K9MUG)**

USA: Sponsored by Fred Dennin, WW4LL. Winner: **KA4RRU (Ops: KA4RRU, N4DXS, K3UI, K14ZKJ, K5OF, K14VUQ, K14ZKI, N3WSO, W4MLD, KG4URW, N3XJN, WA4TK, KD6AKC)**

Club Competition

World: Sponsored by Potomac Valley Radio Club. Winner: **Bavarian Contest Club (DL)**

N.A.: Sponsored by Northern California Contest Club. Winner: **Northern California Contest Club**

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2,165,968 points. The veteran contester Wanderley, ZX2B (op: PY2MNL), also exceeded the old (2002) world record of 5U8B (op: I2UIY) with a score of 1,945,581 points. CT3FQ was world third, scoring 1,448,172 points.

Single Operator, Single Band 14 MHz (14). The results this year on 20 meters were good, but no new world record was set. The winner was 9A2DQ, scoring 2,124,825 points. Very close behind, in second place, LZ9W scored 2,012,023 points. In world third place, LZ8A scored 1,943,928 points.

Single Operator, Single Band 7 MHz (7). The conquest of new SO7 records continued this year with another new SO7 world (and Africa) record, this year set by CT3KY with a score of 3,686,144 points (1,132 Q's, 6,776 pts, 544 mults). In world second, YT5C scored 2,435,520 points, while world third was GW4SKA with a score of 2,124,752 points. Other notable scores were a new SO7 Oceania record set by AH6OZ, with a score of 1,817,924 points, and another new SO7 USA record set by AE5AA (op: N5ZM), who scored 1,715,778 points.

Single Operator, Single Band 3.5 MHz (3.5). On 80 meters, the quest for new records has been intense for several years, and yet again this year that quest was rewarded. Returning for his fifth 80-meter win, and reclaiming the SO3.5 world record, Tone, S54E, set the new world record of 2,225,056 points (985 Q's, 4,486 pts, 496 mults). Very close behind was OK3R (op: OK1DVM), who also broke last year's world record of 1,936,118 points, with his own score this year of 2,151,016 points. In world third, CT3EE almost equaled the old record with his score of 1,902,712 points.

Multi-Operator

Multi-Operator Multi-Transmitter (MOM). The three top finishers in MOM had remarkably close numbers of QSOs, each higher than the highest number (3,254) made in 2007. However, the multiplier totals this year were not as high as OM8A's winning number in 2007 (877). Last year's third-place winner, Z37M (ops: Z31MM, Z32ID, Z35T, Z35X, Z36N, Z36W, Roberto), moved to world first this year with a score of 9,792,090 points (3,262 Q's, 12,089 pts, 810 mults), more than 500,000 points above their 2007 score. RW0A (ops: RA0AM, RA0AHC, RA0ALM, RU0AB, RU0AM, RU0AT, RU0AIG, RV0AR, RV0AX, RW0AR, RX0AE, RZ0AF, RZ0AT) was world second, scoring 9,238,341 points (3,257 Q's, 12,957 pts, 713 mults). WW4LL (ops: WW4LL, K4ZJ, K15XP, K1ZZI, K9JS, K9MUG), in world third, smashed their own 2007 U.S./N.A. MOM record of 4,699,200 points with a very impressive leap to the world-class level of 8,084,176



World Multi-Two champion team NP3U (left to right): N1HRA, WE1H, K11G, NG1G, WP4U.

points (3,293 Q's, 10,156 pts, 796 mults).

Multi-Operator Single Transmitter (MOS). After 2007's record-breaking scores in MOS, no new world record was set this year, but big scores were logged by a number of stations. In world first and setting a new Europe MOS record, T93M (ops: T93M, T93Y, T94KC, T97M) scored 7,185,772 points (2,520 Q's, 9,119 pts, 788 mults). World second was UF3CWR (ops: RZ3AZ, RX3DU), scoring 6,627,418 points (2,631 Q's, 8,686 pts, 763 mults). Very close behind, in world third, OM8A (ops: 9A7R, OM3NA, OM3RM, OM7JG) scored 6,468,024 points (2,212 Q's, 8,466 pts, 764 mults). RL3A was world fourth with 6,261,164 points. In world fifth, and setting a new USA MOS record, K1LZ (ops: KG6KZK, KE5KHS) smashed NN6NN's 2005 record of 2,973,030 points with a score of 5,581,185 points (2,247 Q's, 7,635 pts, 731 mults). Like WW4LL's score in MOM, this result moves the top U.S. entry closer to parity with the big guns in Europe and Africa.

Logging Note for RTTY WPX MOS: Remember, in WPX RTTY (unlike CQWW RTTY), only a single transmitter is used to make all contacts. Accordingly, MOS stations must use a *single sequence of serial numbers*, not separate numbers for each band or for any other purpose.

Multi-Operator Two Transmitter (M2). M2 continue what seems to have become a tradition by achieving the highest score in any category, with NP3U (ops: K11G,

NG1G, N1HRA, WE1H, KP4VP, WP4U) scoring 14,053,680 points (4,387 Q's, 15,720 pts, 894 mults), and establishing a new NA M2 record. Not surprisingly, this group was led by Rick Davenport, K11G, who was already the USA/NA M2 champion and record-holder in CQWW RTTY as well as in WPX RTTY from his home station. In world second, OG8X (ops: OH8JT, OH8MWD, OH6KXL, OH8KVY, OH8GZN, OH6CT, OH8GZQ, OH8BQT) scored 7,465,920 points (2,746 Q's, 9,240 pts, 808 mults). World third was TM7Z (ops: F5MOO, F4EGD, F5CWU, F6FYA) with a score of 7,265,205 pts (2,602 Q's, 9,497 pts, 765 mults).

Rookie of the Year

Forty-one operators entered as Rookies this year, and IZ1LBG set a new World Rookie record, entering in SOH and scoring 2,437,044 points. Moving up from world third to world second place was RK9AJZ, entered in SOL, who scored 1,607,022 points, an improvement of 500,000 points for him. World third was XE3RBA, who scored 847,584 points. *Please remember that those entering the Rookie class must have been licensed for no more than three years as of the time of the WPX RTTY contest.*

SWL

The SWL winner this year was I1-12387, who logged 680 Q's for 930,204 points.

Important On-Line Resources

To prepare for the 2009 contest, please refer to the following on-line resources:
 Contest rules: <www.cq-amateur-radio.com>
 Contest records: <www.rttycontesting.com/records/cqwprrtty.html>
 Operating, logging, and log submission tips: <www.i2uiy.it/wpx.html>
 Cabrillo specifications: <www.kkn.net/~trey/cabrillo/spec.html>
 Cabrillo template for this contest: <www.kkn.net/~trey/cabrillo/wpx-rtty.txt>
 Log Submissions: <wpxrtty@kkn.net>
 List of logs received: <www.cqwprrtty.com>

Clubs

As one might expect in a year of a record number of log entries, club entries also increased from 55 to 62. Repeating as the decisive winner was the Bavarian Contest Club, increasing its score substantially from 32-million points to 46-million points, and winning the World Club plaque sponsored by the Potomac Valley Radio Club. PVRC was again world second, with 30-million points, winning the new North America plaque sponsored by the Northern California Contest Club. Contest Club Finland repeated in world third with 21.6-million points, while the Yankee Clipper Contest Club was fourth with 19.5-million points. *Please remember to write the full name of your club in the Cabrillo header. Otherwise, we may not recognize the abbreviation of your club's name.*

Summary

CQ WPX RTTY Contest participation and scores were exceptional this year, and suggest that future growth in RTTY contesting will be very impressive as the solar flux has now begun to increase. Again this year about 60% of all logs were submitted within the first week after the contest, and more than 85% within the first two weeks after the contest. As noted before, in both RTTY WW and WPX the master call files created for each contest are split about one-third U.S. calls and two-thirds non-U.S. calls. Strong International participation is clearly a significant factor in increasing scores. This year logs were received from 100 countries and 6 continents.

If you operate using a special call-sign, please submit your log using that call-sign and show your normal call-sign in the Cabrillo header on the "operator" line. **Do not submit the log under your own call-sign.**

The 30 hour time limit for SO classes: Remember that in CQ WPX RTTY all single operator classes are limited to 30 hours of operation, with minimum breaks of 60 minutes. When submitting Cabrillo-format logs, nothing need be marked in the log to show off-times. The log-checking software will automatically calculate the operating time. However, if you exceed 30 hours of operation (as about 60 operators did this year), we will delete all contacts made after 30 hours for purposes of calculating your score.

No self-spotting is allowed: Remember that while spotting networks are permitted for all classes, self-spotting is not permitted for any class.

Summary sheets: No summary sheet is required for any log submitted in Cabrillo format.

All-time CQ WPX RTTY Records: To check these records, go to <www.rttycontesting.com/records/cqwpxrtyt>.

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Turning radius	26 ft / 8.0 m
Boom length	35' 10" ft / 11.1 m
Heat clamps (incl.)	2.0 in / 5.08 cm
Power rating	1 KW
Wind rating	100 mph E1A-222-C
Frequency coverage	**3.4 MHz - 54 MHz
Cable requirements	16 conductor 22 gauge shielded
Tuning rate	1.33 ft/sec - .4 m/sec

Band	dBi Gain	F/R dB
80m	1.35	N/A
40m	7.2	21
30m	8.2	38
20m	9.27	21.5
17m	9.88	26.5
15m	10.21	27.1
12m	10.43	21.1
10m	10.65	11.0
6m	4.0*(12.75)	1.78(27.0)

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USA Multi-Two champion team N2WK: WA2TMC (front) and N2WK.

html> hosted and maintained by Don, AA5AU, a great friend to all RTTY contesters.

Expanded Results: For comments by participants, see the QRM sections that follow here, and also go to <www.cq-amateur-radio.com> for expanded QRM and a list of the ops of the multi stations.

The 2009 CQ WPX RTTY Contest

The 15th Annual CQ WPX RTTY Contest will be run on February 7-8, 2009 (the second full weekend of February). *Please note that Cabrillo-format logs are highly encouraged for all entrants with e-logs required from all potential high scoring entrants in any category. Also, any computer-generated log with more than 50 contacts must be submitted via e-mail or on a 3.5-inch diskette via snail mail.* For those who submit diskettes, please remember to send the diskettes in a protective envelope. E-mail is clearly the most reliable and easiest mode for log submissions, but we welcome all logs, including (subject to the restrictions described above) paper logs, no matter how they may be sent. Finally, the **deadline for log submissions is March 6, 2009**. The full text of the 2009 rules will be published in the January 2009 issue of CQ and on the CQ website at <www.cq-amateur-radio.com>. Please read the rules carefully prior to the contest, and please note that **all logs submitted via e-mail go to <wpxrtty@kkn.net>**.

Plaques. The plaque program for CQ WW RTTY and CQ WPX RTTY is chaired by four-time SOH USA CQ WPX RTTY winner Mike Sims, K4GMH. Be sure to contact Mike (k4gmh@arrl.com) if you would like to sponsor a plaque for either contest.

73, Glenn, W6OTC, and Paolo, I2UIY

DX QRM

5C5W: Nice conditions on the first day on low bands helped the score. I worked 30 hours. Thanks to all participants. **9A2EU:** Limited time this year. I did just for fun couple of hours. Good propagation on 80 and 40 meters. **CT1AOZ:** Many thanks for all QSOs I made. Once again Mr. Murphy was here. I was prepared for the contest but linear fry, QRP fry, then take my old IC-720 from junkbox. When try to drive it, FSK switch was "kaput." Really was not my good day and went and had a walk around for one hour of time before repairing the FSK switch. **DJ3WE:** First time participation in a RTTY contest. Well, I just got my feet wet and had to stop just when I started to understand how it works. Seems to be a fairly relaxed way to participate in a contest. **DL4EAX:** Nice conds on 15m and 20m. Nothing on 10m. Equipment: FT-847 and 80m horizontal loop. See you next year! **DU1UGZ:** The propagation was very unpredictable. The band would open to Europe for 5 minutes and suddenly everybody was gone, even regional stations such as JA, YB, VK, and others. **EF5J:** This call will be used for all CQ WW contests this year. I hope you can enjoy with this prefix, not usual in Spain. In next contest I try to activate the prefix more times.

TOP SCORES

Single Op High Power

P49X (op: W0YK).....	10,055,636	D4C	6,523,509
AO8A (op: RD3AF).....	8,047,575	UA9CLB	6,007,579
K3MM	6,859,587		

Single Op Low Power

5C5W (op: CN8KD).....	4,169,452	UT9FJ.....	3,314,126
P40R (op: N4RR).....	3,660,635	KS1Y	2,978,766
HI3T (op: HI3TEJ).....	3,444,939		

Multi-Op Single Transmitter

T93M	7,185,772	RL3A	6,261,164
UF3CWR	6,627,418	K1LZ	5,581,185
OM8A	6,468,024		

Multi-Op Two Transmitter

NP3U	14,053,680	DA0BCC.....	7,137,858
OG8X	7,465,920	J40WPX	5,306,224
TM7Z	7,265,205		

Multi-Op Multi-Transmitter

Z37M	9,792,090	OH6R	7,731,220
RW0A	9,238,341	KA4RRU	4,591,668
WW4LL.....	8,084,176		

Single Op 3.5 MHz

S54E.....	2,225,056	IV3SKB.....	1,718,528
OK3R (op: OK1DVM) ...	2,151,016	I4AVG	1,717,100
CT3EE	1,902,712		

7.0 MHz

CT3KY	3,686,144	UT7U (op: UT7UV).....	2,091,376
YT5C (op: YT7AW)	2,435,520	UW5Q.....	1,945,084
GW4SKA	2,124,752		

14 MHz

9A2DQ.....	2,124,825	I4IKW.....	1,863,225
LZ9W (op: LZ2HM).....	2,012,023	VE2RYY	1,810,074
LZ8A (op: LZ2BE)	1,943,928		

21 MHz

LS1D (op: LW9EOC)....	2,165,968	UR6F (op: UX0FF).....	714,688
ZX2B (op: PY2MNL)....	1,945,581	ZS6DXB	555,489
CT3FQ.....	1,448,172		

28 MHz

LU1HF	46,041		
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G0HVQ: My first WPX RTTY. Great fun. Didn't expect to work the Caribbean on 10m at the bottom of the cycle. Will be back next year with better antennas and more planning. Was too conscious of the 30 hr rule for single-ops and only ended up operating 24 hrs in the end. **GW4SKA:** Fantastic contest wth huge activity. Came so close to the magic 1000 contacts on a single band. **HZ1PS:** Many thanks to all for the QSOs. New antenna made a lot of difference but need to get the 40m antenna up and running. Thanks to CQ for the contest. **JH8KYU/1:** I had a fun time with a barefoot radio and 1 meter short whip antenna. **KL8DX:** What a blast! Saturday was standing room only on 20 meters, if that! Stations were lined up from 14065 thru 14130, and then came Sunday! A high solar wind nearly rendered the bands useless. Stations were workable over the pole but lots of polar flutter made many hard to copy. Saturday was easy but Sunday, that was a challenge. That's contesting! **LV5V:** Nice contest as usual. Had problem with my 15 meter Yagi so lost much time repairing it. Only 12 hours operation. Mny tnx to all and hope we see you agn in 2009. 73 Jorge, LU5VV.

M0GBP: Rookie operator, licenced Feb. 2007. Wall to wall stations all the time. I'm afraid I cherry picked the juicy DX in the time I had. Thanks everyone for taking part and CQ for organising. **NL7V:** Condx better than last year. **OM8A:** We worked NP3U on all 5 bands. Thanks to whoever was manning the contest station there! That is the first DX 5 band contact I have had in a contest for a couple of years. Maybe a sign of propagation improving finally! Equipment/software worked flawlessly. **P40R:** My most favorite contest. Need to increase operating time for single operators to 36 hours because of the increasingly higher activity. **PA0-**

FAW: Condx Saturday not okay, on Sunday better. Worked on 15m LU and PY with 5 watts and an indoor longwire. **RM9RZ:** Many peoples worked in this year. Very fine weekend. Cu next year. **RZ4HZW:** Murphy was present all weekend. Lost 80/40 dipole balun on Saturday night. Remote antenna switch burned out on Sunday morning. Hooked SteppIR straight into rig; resurrected the 80/40 antenna during the day. All in all I enjoyed the contest. It was my second contest in doing RTTY.

S56G: Just couple of hours for setup and

software testing. Thanks to all good ops who managed to decode me! **SP0DXC:** A lot of fun, a small WWYC gathering. We were using SP DX club callsign (big thanks to SP5UAF). **T77NM:** We tested homemade 4-square verticals. Had good experience and a lot of fun. Now we start to build 80m system. We operated only on 40m and only 24 hr. **VE3AP:** Thanks again to VE3RM for being host. Thanks again to LW8EXF for her support. SO2R with WF1B is a real challenge. **VE3FZ:** Fun contest this year and was great to see 15m open. **VE7FCO:** Still

in the learning curve of this method. Thanks for everyone's support. **VK4EJ:** Terrific conditions for this great contest. Worked 4 continents at the same time on 40 meters, all this with no sunspots. Roll on Cycle 24 for next year. **VU2LBW:** The best thrills were to hear ZM2A call me and working OY3JE for an all time new one! **XE2RV:** This was my first RTTY WPX contest. It was really fun getting new DXCC and U.S. states for my list. I really enjoyed it. I am looking forward to next RTTY contest. **ZS2EZ:** Very enjoyable contest! 20m was a big disappointment on Sunday night, but 15 was in good shape for the first time in quite a while. Improved my score from last year but could have been much better!

CLUB COMPETITION

BAVARIAN CONTEST CLUB (DL)	46,192,426
POTOMAC VALLEY RADIO CLUB	30,151,456
CONTEST CLUB FINLAND (OH)	21,570,313
YANKEE CLIPPER CONTEST CLUB	19,517,374
RHEIN RUHR DX ASSOCIATION (DL)	17,046,233
NORTHERN CALIFORNIA CONTEST CLUB	16,087,370
CTRI CONTEST GROUP	14,892,345
URAL CONTEST GROUP (UA9)	14,663,570
RUSSIAN CONTEST CLUB (UA)	14,296,832
UKRAINIAN CONTEST CLUB (UR)	13,218,803
ALABAMA CONTEST GROUP	13,112,013
CENTRAL SIBERIA DX CLUB (UA0)	10,940,337
SOUTH URAL CONTEST CLUB (UA9)	10,861,927
CONTEST CLUB ONTARIO (VE3)	10,849,097
HA DX CLUB (HA)	9,568,914
SOCIETY OF MIDWEST CONTESTERS	8,260,851
MADEIRA CONTEST TEAM (CT3)	7,242,394
CONTEST GROUP DU QUEBEC VE2)	7,014,454
LATVIAN CONTEST CLUB (YL)	6,625,128
BLACK SEA CONTEST CLUB (UR)	6,409,775
FLORIDA CONTEST GROUP	6,071,339
SP DX CLUB (SP)	6,040,718
YU CONTEST CLUB (YU)	5,968,009
LU-CG CONTESTER GROUP (LU)	5,944,587
FRANKFORD RADIO CLUB	5,536,935
DRCG (DL)	5,225,677
ROCHESTER (NY) DX ASSN	4,988,796
WORLDWIDE YOUNG CONTESTERS (*)	4,598,181
KIEV CONTEST GROUP (UR)	4,480,343
TENNESSEE CONTEST GROUP	3,789,862
TEMIRTAU CONTEST CLUB (UN)	3,293,202
MINNESOTA WIRELESS ASSN	3,229,400
GRAND MESA CONTESTERS OF COLORADO	3,162,282
MARITIME CONTEST CLUB (VE)	2,976,739
SKY CONTEST CLUB (YU)	2,776,828
BRITISH COLUMBIA DX CLUB (VE7)	2,480,113
TULA REGION CLUB (UA3)	2,444,573
ORDER OF BOILED OWLS OF NEW YORK	2,263,252
KRIVBASS (UR)	2,077,844
TIKKIRIKI CONTEST CLUB (I)	2,006,116
SLOVENIA CONTEST CLUB (S5)	1,983,283
DXXE DX GROUP (XE)	1,963,501
EPC (UA9)	1,934,211
SOUTHERN CALIFORNIA CONTEST CLUB	1,785,837
KKKK (UA6)	1,770,114
SIAM DX GROUP (HS)	1,467,922
GMDX GROUP (GM)	1,437,514
ORENBURG CONTEST CLUB (UA9)	1,367,292
BARTG (G)	1,213,633
WILLAMETTE VALLEY DX CLUB	1,142,176
MAIKOP RADIO CLUB (UA6)	1,140,250
CAROLINA SHINE	1,070,173
WESTERN WASHINGTON DX CLUB	833,961
LOW COUNTRY CONTEST CLUB	663,910
RTTY CONTESTERS OF JAPAN (JA)	540,870
CENTRAL TEXAS DX AND CONTEST CLUB	386,672
DAUBERVILLE DX ASSOCIATION	381,872
SPOKANE DX ASSOCIATION	328,330
VLADIMIRSKIJ RADIO CLUB (UA3)	326,703
SOUTH EAST CONTEST CLUB	310,854
KENTUCKY CONTEST GROUP	277,890
NANAIMO AMATEUR RADIO ASSOCIATION (VE7)	192,083
RIO DX GROUP (PY)	43,173

(*) Listed for completeness, however, not within Club Competition rules.

USA QRM

AA5AU: My best WPX RTTY ever! What a great contest! **AA7FK:** Had a blast! 40 and 20 were the best bands at this QTH. Only a handful of stations seen on 15. Looking forward to the next one and improvement in the cycle! **K0BX:** The WPX RTTY gets bigger and bigger each year. Sure is a lot of fun. **K4XD:** First SO2R experience. Poor man's version. Just used WriteLog to run two RTTY windows and hooked up the second radio to one of my Cobra ultralight multiband antennas. About 10.5% of the Q's were on the second radio. Did help to keep me awake! Thanks all for the fun and Q's. **K7RE:** Conditions to Europe up this far north were very spotty, and poor especially on Sunday morning. The QSB was horrendous and at times surrealistic. At times there were no signals at all showing on the display! I got that sinking feeling more than once that something on my end had failed, especially with the band noise being so incredibly loud. **K7XC:** A fun contest! Even 10m opened for a few hours Sunday afternoon! **KG4OLG:** Each contest is a learning opportunity. I hope I improve with each contact. Thanks to the ops who take the time to help a new RTTY contester.

KI4NSP: This was my first contest and also my first RTTY contact! I had a great time! Thanks very much for conducting the contest! **KY5G:** Had a great time this year after a log malfunction right at the first. Needed my 400 ft 120 ft high double zepp, but wasn't able to get it fixed during the contest. Even though I couldn't spend a lot of time in the chair it was fun. Thanks to everyone for the Q's. **N9TF:** Just played a bit Sunday. Was looking to fill in some RTTY DXCC and hand out some points. Good sigs from EU Sunday morning on 20 but had hard time getting my 100 watts into mini beam to be heard. **NN6NN:** Part-time effort. However, my pile-up fix was satisfied for now. **W0RAA:** Things started out slow but picked up. I was beginning to wonder if my FT-950 was getting out. I did better than I thought but not as good as I wanted to do. Thanks to all who gave me a contact. **W4ZE:** This contest was really fun. I hit my 30 hour mark at 1817Z and had a really good run going on 15m. Speaking of 15m, what a pleasure to see Cycle 24 starting up and to have such good conditions on 20/15 for a change. I tried my hand at SO2R. **WG8Y:** Lost Friday night fixing balky blower on amp. Computer locked up Saturday AM. Keyboard trouble. WriteLog saved file. Had S9+ snow static part of Sunday AM. Lost power for 42 min. at end of test. Guess what? Still had a great time.

(Continued on page 107)

RTTY Results (from page 31)

Number groups after call signs denote the following: QSOs, Points, Prefixes, and Final Score. Certificate winners are listed in boldface.

2008 WPX RTTY RESULTS

Single Operator All Band High Power				
P49X	2997	13,756	731	10,055,636
A08A	2520	11,415	705	8,047,575
K3MM	2597	8897	771	6,859,587
D4C	2343	9201	709	6,523,509
UA9CLB	2320	9551	629	6,007,579
K4GMH	2347	7363	699	5,146,737
DL3TD	1749	6487	672	4,359,264
UW2M	1825	6661	637	4,243,057
AJ1J	2012	5902	716	4,225,832
RG9A	1771	7118	391	4,206,736
VE3AP	1579	5834	588	3,430,392
E1AKS	1498	5681	562	3,192,722
YN2S	1728	5505	570	3,137,850
Y09HP	1501	5167	583	3,012,361
JS3CTQ	1418	5429	545	2,958,805
I2UIY	1451	5329	538	2,867,002
RA3CM	1550	5085	562	2,857,770
JH4UYB	1327	5107	539	2,752,673
WB9Z	1600	4501	605	2,692,855
VA3DX	1367	4924	542	2,668,808
VE3JTT	1283	4626	564	2,609,064
UW2N	1287	4488	552	2,477,376
I21LBG	1313	4321	564	2,437,044
UZ7G	1432	528	528	2,402,400
KH6ZM	1462	5892	405	2,386,260
SP4TXI	1224	4318	550	2,374,900
RD4WA	1496	4324	549	2,373,876
YL2CI	1379	4318	546	2,357,628
UA9QG	1351	4680	490	2,293,200
W3MF	1344	4004	559	2,238,236
YL6W	1208	4310	514	2,215,340
RG3K	1375	4112	538	2,212,256
SP9LJD	1190	4349	491	2,135,359
W4ZE	1456	3657	580	2,121,060
UA4HOX	1358	4061	511	2,075,171
W4PK	1230	3929	528	2,074,512
DJ60T	1084	4105	502	2,060,710
425ML	998	4267	449	1,915,883
HG4I	1074	3717	508	1,889,236
S06C	1006	3731	506	1,887,886
329U	1124	3772	490	1,848,280
LU4DX	1105	3877	464	1,798,928
OK2SFP	1103	4075	439	1,788,925
JM1XCW	998	4000	444	1,776,000
I1C0B	1129	3687	478	1,762,386
DL4R	1098	3621	486	1,759,806
K3MO	1166	3454	509	1,758,086
RW4PL	1141	3369	504	1,697,976
OH2BP	1143	3649	465	1,696,785
RN3ZC	1119	3509	476	1,670,284
Y2TU	1063	3490	474	1,654,260
XE2WWW	1321	4021	410	1,648,610
K0TG	1275	3336	485	1,617,960
OQ6R	3402	3402	458	1,558,116
EASDKU	1019	3427	454	1,555,850
Y06A	989	3431	453	1,554,243
WA2ETU	1139	3067	493	1,512,031
VY2LI	992	3237	444	1,437,228
WX4TM	1283	3135	455	1,426,425
IK2SND	940	3133	446	1,397,318
DD5FZ	886	3323	417	1,385,691
NQ1W	1054	2784	491	1,366,944
EF3A	972	3036	447	1,357,092
W3FV	972	2981	441	1,314,621
OH2LU	944	3027	428	1,295,556
OH2HAN	866	2949	434	1,279,866
K4ZD	945	2699	474	1,279,326
EF3R	861	2877	429	1,234,233
RA3ON	937	2858	421	1,203,218
DH0GHU	844	2829	409	1,157,061
VE2FK	887	2890	395	1,141,550
KRAF	978	2582	439	1,133,498
RW6CR	904	2778	404	1,122,312
KH6FI	933	3553	315	1,119,195
RL3WX	808	2847	391	1,113,177
HF4K	789	2511	432	1,084,752
DK6CO	811	2589	416	1,077,024
UA30GT	826	2587	403	1,042,561
OV1A	768	2689	386	1,037,954
RV3VT	763	2727	380	1,036,260
EA1CJ	755	2656	388	1,030,528
DF4WC	752	2722	378	1,028,916
NR6R	764	2495	410	1,022,950
RZ3EC	764	2398	403	968,994
NAZZ	943	2508	380	953,040
F5CO	652	2434	371	903,014
JR3NZC	706	2437	365	889,505
A16YL	909	2717	327	888,459
OH2MZB	738	2360	366	863,760
RV6FG	802	2248	383	860,984
K14MF	726	2102	398	836,596
G6BOX	682	2292	363	831,996
K3WI	748	2122	392	831,824
W1BYH	794	2147	375	805,125
N8TDL	826	2002	400	800,800
RX9SA	589	2477	320	792,640
S54O	659	2138	368	786,784
RM9RZ	600	2444	321	784,524
N6CK	980	2222	352	782,144
ZM2B	600	2374	329	781,046
VK4AN	703	2299	338	777,062
LY3VU	685	2173	350	760,550
OK2PF	622	2346	315	738,990
LV5V	684	2158	342	738,036
HB9AAA	545	2162	337	728,594
RV3WD	647	2105	343	722,015
LR4E	691	2028	355	719,940
YL2NN	630	2108	340	716,720
NT2A	644	1934	369	713,646
DL5MEV	611	2094	338	707,772
NC7J	977	2133	328	699,624
US6IOT	541	2198	311	683,578
OK1KT	557	1929	351	677,079
RA6XV	691	1997	334	666,998
K0FY	772	1852	351	664,092
UA9BS	585	2193	308	663,124
UA0YAY	697	2172	304	660,288

AA3B	595	1862	348	647,976
YU1BN	714	1686	384	647,424
KR7X	949	1921	335	646,885
OK1HMP	556	1996	317	632,732
PG3M	578	1883	332	625,156
NEQQ	768	1870	330	617,100
9M6XRO	617	2375	259	615,125
WA5ZUP	1049	2073	292	605,316
JH4UTP	541	2004	300	601,200
SP3EPX	530	1857	322	597,954
GW7X	675	1607	371	596,197
VO1TA	577	1797	328	589,416
DL8SCG	575	1871	314	587,494
KH6GMP	709	2192	266	583,072
RX9LW	513	2077	275	571,175
OH3OJ	590	1902	294	559,188
W2YE	604	1642	338	554,996
NA2AM	734	1628	334	543,752
OG4X	575	1817	298	541,466
UR8OR	522	1869	289	540,141
W9NGA	620	2004	267	535,068
VE7CC	629	2207	240	529,680
G0H0V	543	1887	280	528,360
UW1M	589	1645	315	518,175
LA9TY	498	1730	296	512,080
DK3GI	494	1636	312	510,432
ZS2EZ	499	1715	294	504,210

KZ5AM	651	1471	260	382,460
NF6A	535	1264	302	381,728
VR2PX	451	1392	272	378,624
A1BP	533	1376	274	377,024
V31GW	406	1710	219	374,490
AF6T	743	1395	265	369,675
RU0LL	541	1521	241	366,561
XW1B	486	1420	257	364,940
PA3ADG	412	1448	252	364,896
UA3SAQ	451	1299	280	363,720
F8CRS	412	1389	258	358,362
VA2WDD	454	1557	226	351,882
T1ZJCY	497	1427	245	349,615
K7AR	571	1287	271	348,777
DL1EJA	376	1371	254	348,234
DJ2IA	414	1342	258	346,236
DF5BK	412	1384	250	346,000
RX9TX	373	1548	217	335,916
W7OOQ	633	1341	248	332,568
K0JJR	583	1286	257	330,502
UA3LEO	460	1065	305	324,825
EFSJ	479	1129	283	319,507
VA3PC	384	1127	280	315,560
K4CZ	471	1116	281	313,596
DL4PY	389	1194	259	309,246
W6HIG	374	1153	268	309,004
OT7N	361	1287	238	306,306



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K0WA	823	1560	318	496,080
K8AJ5	591	1433	343	491,519
N3BM	555	1531	318	486,858
VA7ST	602	1790	256	486,240
DK8EY	467	1543	295	455,185
K4XD	591	1473	306	450,738
S07B	462	1611	272	438,192
HB9DHG	496	1538	280	430,640
DL6NCY	436	1437	298	428,226
RA3TT	527	1305	327	426,735
UA0FAI	554	1722	247	425,334
9M2CNC	463	1575	270	425,250
FL5GF	473	1477	287	423,899
AB9H	613	1443	291	419,913
K8ZZ	654	1486	279	414,594
W11TO	453	1330	311	413,630
YL2PA	398	1474	279	411,246
SC16S80Z	457	1512	270	408,240
NL7V	493	1299	311	403,989
UN6G	459	1665	242	402,360
PA0VHA	448	1437	280	402,330
GM0FGI	443	1428	280	399,840
WR3G	524	1531	261	399,591
W9KB	595	1452	271	393,492
WM6A	604	1311	300	393,300
RX3AEX	477	1392	281	391,152
N4KG	452	1462	265	387,430
K3WW	374	1204	254	305,816
OK2SAR	360	1244	243	302,292
NT0V	549	1134	266	301,644
DL5YM	403	1209	248	299,832
FGLSA	556	1209	248	299,832
VE1MC	391	1180	254	299,720
DL5RBR	388	1212	245	296,940
DL1ECG	380	1195	248	296,360
O04B	381	1229	233	286,357
7L0JL	416	1255	226	283,630
DJ9MH	367	1199	234	280,566
9A4W	385	1066	262	279,292
RM4WZ	389	1167	239	278,913
N6GX	560	1133	246	278,718
JATCOI	424	1233	221	272,493
WA9VH	462	1099	244	268,156
RW0LT	350	1122	237	265,914
K1FEW	356	989	263	260,107
M0EG	580	1006	258	259,548
NO2T	366	1055	243	256,365
PA9DD	334	1170	216	252,720
I2OKBR	418	938	266	249,508
W1EQ	423	976	251	244,976
KL8DX	416	1003	244	244,732
DL4ME	341	1165	209	243,485
W5BEN	410	982	244	239,608
DJ4OC	332	1010	234	236,340
JA7ZP	311	1160	202	234,320
N4LV	340	1037	225	233,325
UA0AZ	348	1147	201	230,547
YT2FA	317	1145	201	230,145
K5ZD/1	322			

K9BJM	226	478	134	64,052	IZ7CRW	829	2494	440	1,097,360	DF8XC	409	1279	275	351,725	AB8XG	378	987	192	189,504
W6SX	222	503	127	63,881	D05M	815	2741	393	1,077,213	JASSUD	410	1515	232	351,480	SP9PHM	266	1023	185	189,255
K5HDU	198	460	130	59,800	E21YDP	791	2828	373	1,054,844	YL2PJ	397	1457	241	351,137	OE3DMA	285	957	197	188,529
K2TV	158	418	140	58,520	ON4GX	790	2473	423	1,046,079	AC9X	539	1304	268	349,472	JABEU	348	1038	181	187,878
W4GHD	197	452	120	54,240	AA4U	920	2446	419	1,024,874	VO1KVT	443	1359	256	347,904	VE9IQ	300	957	196	187,572
VA7DM	190	505	107	54,035	T91S	803	2573	384	988,032	SM7RJB	418	1318	261	343,998	N3XL	343	859	217	186,403
DP4N	136	461	116	53,476	IZ1VAA	760	2563	379	971,377	RW6HJV6	456	1328	258	342,624	W7NNN	477	917	203	186,151
N6IE	176	436	121	52,756	YU5AA	721	2667	351	936,117	SP3DSC	407	1343	252	338,436	SP4DM	327	1000	185	185,000
H3LO	144	412	132	52,324	OK3EN	775	2824	395	924,200	RN4C	347	1405	237	332,985	RN4CA	299	996	187	184,260
K0AD	219	414	126	52,164	SP9H	684	2616	355	928,680	Y050HY	391	1458	228	332,424	F1NWH	278	958	192	183,936
OH4MVC	137	434	116	50,344	YL2LJ	744	2603	349	908,447	W3KB	488	1293	257	332,301	WB200Q	312	921	197	181,437
AE4EC	167	430	117	50,310	OH1TN	776	2597	349	906,353	WN6K	637	1258	261	328,338	SP2JW	287	833	217	180,761
N0RN	163	433	115	49,795	R03PM	813	2143	421	902,203	K4HAL	565	1231	266	327,446	BD1BYV	299	1167	154	179,718
N0AT	197	352	139	48,928	OK1FPS	697	2584	348	899,232	EB2CYQ	392	1239	263	325,875	RA9CCO	269	1074	167	179,358
JA2AXB	134	499	98	48,902	WA1EHK	749	2137	411	878,307	S53F	396	1399	232	324,568	7N2UOC	372	952	188	178,976
SV1DPI	147	493	123	48,339	UT8EL	759	2394	364	871,416	UA3YAA	401	1366	236	322,376	W6FFFH	454	806	222	178,932
RW0AQ	199	456	106	48,336	UA9AFS	688	2505	347	869,235	DF7ZS	429	1274	252	321,048	OH2LZI	289	933	187	174,471
JA21XS	149	456	103	46,968	UR7EQ	710	2390	362	865,180	SP3BJK	405	1337	240	320,880	OK1ZP	273	891	195	173,745
NSDD	136	441	102	44,982	EE7E	801	2219	388	860,972	Y08RFS	362	1385	229	317,165	EA2RU	279	938	185	173,530
N3NZ	172	353	125	44,125	OM5TX	713	2395	357	855,015	RZ10M	467	1185	266	315,210	MM0CBL	289	866	199	172,334
NA6W	190	380	114	44,080	XE3RBA	908	2592	327	847,584	AE1P	504	1185	266	315,210	DL1TS	260	871	195	169,845
N2BJ	157	375	117	43,875	EAS5A	710	2422	344	832,284	RZ3PS	390	1235	255	314,925	OM1TC	275	944	179	168,976
EA1ASC	125	412	105	43,260	DJ8EW	681	2258	359	810,622	RZ3DT	385	1351	233	314,783	RK9UC	283	870	194	168,780
N0LHL	171	384	112	43,008	WB4YDL	886	2193	368	807,024	RU6YJ	380	1276	246	313,896	H7(AK2P	355	957	176	168,432
WB6JJ	161	393	106	41,658	VE2AXO	689	2183	369	805,527	Y06CFB	351	1317	237	312,129	JA1BNW	315	944	175	165,200
N6MA	116	413	99	40,887	DL1ZBO	676	2294	345	791,430	DC80T	421	1303	238	310,114	KACZYR	383	820	201	164,820
SP9ROH	123	423	94	39,762	VE3GSI	685	2138	365	780,370	RAOACM	444	1306	237	309,522	Y22CLN	286	899	183	164,517
JA2BHJ	155	386	103	39,758	S58P	607	2305	335	772,175	UR11M	404	1349	229	308,921	UX31W	261	872	188	163,936
RK3VWB	142	303	122	36,966	HA2ESM	629	2247	337	757,239	R3WRW	484	1345	229	308,005	H35BMX	328	1004	161	161,644
NC2P	124	328	105	34,440	N4IG	815	1963	385	755,755	DL2RUG	357	1316	232	305,312	UA0LKD	328	944	171	161,424
SP2FTL	140	318	107	34,026	UT8IM	684	2216	339	751,224	G4DBW	393	1266	241	305,106	RA9MH	295	938	172	161,336
PA3EJ	115	332	101	33,532	Y03APJ	650	2065	361	745,465	JP10DH	425	1313	232	304,616	VA7AM	373	906	178	161,280
K3PH	117	365	89	32,485	EA4TD	637	2129	346	732,634	JHTXJ	399	1364	222	302,808	DL3JBW	264	882	182	160,524
UY5ZZ	101	368	83	30,544	N0CK	828	1917	373	715,941	D0PST	360	1243	241	299,563	DL3DRN	259	891	180	160,368
RZ9IR	123	337	87	29,319	DH6HB	643	2090	342	714,780	MM0CRI	400	1151	259	298,109	G65AYC	291	966	165	159,390
PY2IO	116	311	94	29,234	KE4KWE	971	2110	337	711,070	S09CND	371	1292	230	297,160	AA2NA	352	808	196	158,368
PA1WL	121	275	101	27,775	WB2RHM	789	2007	350	702,450	SM6BSK	297	1000	297	297,000	SP6JG	227	951	166	157,866
UA0AGC	99	354	75	26,550	DL5KUD	581	2090	334	698,060	SP6E1Y	383	1226	242	296,692	SP3NYR	244	861	181	155,841
K06LU	154	247	107	26,429	DM2RG	619	2072	326	675,472	RZ3DC	386	1172	252	295,344	EW7LE	241	808	192	155,136
W4BCG	128	274	96	26,304	EAK8K	471	2377	282	670,314	NZKI	484	1140	257	292,980	W0VX	330	790	196	154,840
K6OI	110	305	86	26,230	RA3BB	683	1853	359	665,227	RX9DJ	382	1341	218	292,338	N4YZ	298	977	194	154,618
W5JE	107	298	87	25,926	YL3CU	599	2164	306	662,184	IK2YSJ	378	1282	228	292,296	KC0NKW	403	827	186	153,822
IZ2EMW	91	323	77	24,871	E4BT	617	1799	367	660,233	VE4ER	457	1439	203	292,177	HK6P	238	948	162	153,576
K3KO	93	264	90	23,760	PA3DBS	626	1973	333	657,009	IK7VEK	372	1200	243	291,600	G6MKLN	298	729	209	152,361
SP2HT	64	237	81	23,714	A47S	645	2074	242	645,788	GM7TUD	381	1195	242	287,410	DL3RMO	234	751	187	140,430
VE3EJ	97	277	79	21,883	4XZT	522	2263	289	654,007	UK8AKK	375	1314	220	289,080	UT7EJ	246	899	169	151,931
6W1SE	87	290	74	21,460	RW6HP	653	1834	348	638,232	9A2BW	376	1211	236	285,796	VE7BSM	341	892	169	150,748
VE3RTG	95	246	85	20,910	SP3RBB	564	1921	328	630,088	DM5Z	383	1197	237	283,689	KR1ST	325	823	181	148,963
W1KQ	75	276	75	20,700	EU2MM	531	1946	315	612,990	JA1XRH	416	1275	220	280,500	JH1GUO/4	293	852	174	148,248
RN4ABD	99	252	81	20,412	AD5XD	900	1927	312	601,224	EA2BNU	361	1149	243	279,207	G3KNU	245	770	191	147,070
K7KAR	126	234	87	20,358	NO6J	919	1771	323	572,033	XE2YBG	504	1145	242	277,090	OM1VA	239	794	185	146,890
A19T	105	256	72	18,432	SV8RX	531	1724	325	560,300	UT5UKY	347	1217	226	275,042	YU2NKS	232	833	176	146,608
KCV7	121	187	94	17,578	VE3JJ	545	1835	305	559,675	RA9SN	333	1198	228	273,144	N9BHH/7	413	821	178	146,138
W7WHY	98	204	82	16,728	K7RE	840	1670	333	556,110	YB0E1N	363	1221	223	272,283	K7JNX	290	813	179	145,527
SP4KEV	72	263	63	16,569	MOCHK	507	1557	353	549,621	DM3HZN	372	1160	234	271,440	XE1GRR	318	856	168	145,808
W6AEA	107	174	90	15,660	K51J	593	1595	342	545,490	UA2FT	331	1286	211	271,346	EA1BFA	244	804	175	140,700
KA3VJ	77	149	83	15,278	S21AY	539	1817	299	542,883	GM7TUD	381	1195	242	287,410	DL3RMO	234	751	187	140,430
W0ZV	99	179	81	14,999	UA9OLO	522	1956	277	541,812	WAUEF	431	1193	223	266,039	KW7N	373	750	187	140,250
J11ALP	71	220	60	13,200	UR5MBA	519	1916	282	540,312	WB4MSG	463	1103	241	265,823	UA3BT	249	756	185	139,860
EE4E	64	234	56	13,104	GM0NBM	572	1749	305	533,445	G4OGB	351	1139	231	263,109	XE1ZVO	291	837	167	139,779
UU2JG	55	255	50	12,750	ZL1BYZ	542	1654	322	532,588	OK2BMC	370	1149	228	261,972	WR3H	269	679	203	137,837
L22DF	60	219	58	12,702	OK2SVL	534	1758	301	529,158	KP4ED	441	1265	206	260,590	DL1CW	254	761	181	137,741
EA3JW	86	188	64	12,032	RV3LO	516	1755	299	524,745	IK5KFF	334	1179	221	260,559	K0GEO	368	820	167	136,940
KE1FO	77	176	67	11,792	Y13PGO	537	1558	336	523,488	KE5K	405	1094	238	260,372	K12W	299	768	178	136,704
VE9GLF	72	181	61	11,041	RN05S	644	1767	293	517,731	R3PUJ	333	1188	219	260,172	ON4KFL	278	723	189	136,647
N8NOE	82	164	67	10,988	OM7AG	540	1822	284	517,448	RZ6AK	384	1125	231	259,875	UA4FCO	245	833	164	136,612
IK1VEF	70	163	60	10,432	SP9AJV	507	1775	289	512,975	RV4LC	361	1090	238	259,420	G6GKU	254	747	182	135,954
UA0SMF	64	162	51	8,262	E55ARP	485	1754	292											

R04HD	214	626	166	103,916	KSOM	176	453	130	56,290	SM3ETC	114	287	94	26,978	SM5OSZ	56	176	48	8,448
N6PC	327	647	160	103,520	N1NOX	205	413	136	56,168	W5SSNM	115	307	87	26,709	DL5AJO	69	148	57	8,436
DK7UM	238	634	163	103,342	SM7CWI	144	452	124	56,048	DL1ARD	116	293	91	26,663	IK3ASM	58	156	54	8,424
B03APX	270	700	147	102,900	UA3DPM	137	481	116	55,796	K9OH	121	293	91	26,663	N3RDV	75	153	54	8,262
HG5ACZ/P	179	740	138	102,120	JE4AEJ/1	159	555	100	55,500	Y5OZ	93	325	80	26,000	TA1BM	59	155	53	8,215
KH6/N0CO	208	629	123	101,967	N1MD	159	433	127	54,991	W0AO	126	260	100	26,000	UA3RW	69	139	59	8,201
W0PC	290	867	151	100,717	OM7YL	145	469	117	54,873	F5UO	108	272	94	25,568	K8ZTJ	69	141	57	8,037
DK1AUP	208	648	155	100,440	SP2IKP	144	440	124	54,560	PY1ZV	90	335	76	25,460	JH8KYU/1	65	166	48	7,968
F5VJW	219	591	163	99,624	EA6AC	148	505	108	54,540	JASFX	110	242	73	24,964	NC4P	87	120	64	7,680
H43RB	240	609	168	99,267	UN7JX	127	561	97	54,417	KB1JUF	135	254	98	24,892	PY1NB	53	154	48	7,392
IK2BUB	210	634	156	98,904	SM3JUR	176	396	136	53,856	PA3EJW	100	279	89	24,831	VK4EJ	55	175	41	7,175
KB9DVC	266	642	154	98,868	DP5X	149	480	112	53,760	PA3HGF	99	313	79	24,727	WB7BME	50	140	49	6,860
XE2RC	229	675	146	98,550	KM4JA	189	437	119	52,003	K3MZ	92	299	81	24,219	JA0KJE	50	154	44	6,776
KA1HC	239	646	152	98,192	RA3FF	147	422	123	51,906	YU1RP	99	299	81	24,219	ER3ZZ	47	152	43	6,536
K2PAL	270	681	144	98,064	DL1NRC	157	384	135	51,840	NO7R	135	260	93	24,180	WB1DM	60	137	47	6,439
DG0KS	212	592	165	97,680	JAT1XUY	157	483	107	51,681	K6BIR	130	279	86	23,994	J8BNTJ	61	141	45	6,345
DL3ARK	217	628	154	96,712	G0RPM	145	480	107	51,360	2E0EBV	96	282	85	23,970	UJ2JUA	50	162	39	6,318
RW3XW	193	677	142	96,134	9M4DXX	166	422	121	51,062	D06GZ	93	277	85	23,545	K3TD	61	122	51	6,222
DJ0UP	206	631	151	95,281	AB5C	210	413	123	50,799	OZ1DGO	102	254	92	23,368	UA4ANZ	50	133	45	5,985
JR9IQ	199	646	157	94,962	JK2KNR	152	529	96	50,784	UX2IO	89	298	78	23,244	JF2IU	57	129	46	5,934
N9LF	267	620	153	94,860	RA6FUJZ	145	456	111	50,616	IZ7UEB	102	277	78	23,166	K01H	49	129	45	5,805
W7YLL	353	642	147	94,374	NAVZ	146	450	112	50,400	NFGN	129	258	89	22,962	DL1DOJ	41	147	39	5,733
6W7RV	193	611	154	94,094	NZ80	211	413	122	50,386	KG9IL	114	282	81	22,842	EA7KS	36	163	35	5,705
JG3FEA	199	752	125	94,000	JAI1Z	155	449	112	50,288	KG6YH	142	238	95	22,610	N8PUG	54	131	41	5,371
CT1BYK	177	616	152	93,632	IW8PQ	131	441	114	50,274	UA9UNJ	103	288	78	22,464	AD7BN	47	145	37	5,365
UA9APA	156	751	124	93,124	9A2EU	113	526	95	49,970	K4SV	122	236	95	22,420	I25BSA	46	125	42	5,250
DK1AX	193	642	145	93,099	DL6UAM	130	480	104	49,920	BG4CXZ	97	322	69	22,218	K3GM	54	105	50	5,250
AB0S	293	658	141	92,778	IZ2LSL	140	441	113	49,833	DO1BEN	92	291	76	22,116	IK0LNN	38	135	38	5,130
NG7Z	306	634	146	92,564	VE3FZ	144	488	102	49,776	VE6EPK	101	263	84	22,092	VE3LXL	53	125	41	5,125
DL5MAT	197	605	152	91,960	DO3UWE	132	438	113	49,494	XE1CT	93	292	75	21,900	F1TIM	48	118	43	5,074
DL3BBY	201	603	151	91,053	K3PP	168	418	118	49,324	N0UX	133	263	83	21,829	I25HOB	50	115	43	4,945
RV9MN	190	664	137	90,968	AD4YO	166	447	110	49,170	JL8MBF	134	286	75	21,450	WA2EMF	41	129	37	4,773
UA3UHZ	199	626	145	90,770	EA4ERZ	145	387	126	48,762	AD5OB	115	274	78	21,372	RK0SV	44	126	37	4,662
VU2LBW	217	607	149	90,443	KB2NB	148	419	115	48,185	DL1WIE	105	270	79	21,330	LU6QJ	40	145	32	4,640
DK9ETM	205	649	138	89,562	F5LTU	128	436	110	47,960	DJ3EF	88	287	74	21,238	JF1HJX	51	120	38	4,560
N4GVA	246	613	146	89,498	NZ1SO	168	413	115	47,495	YC8XL	93	263	80	21,040	N9TF	42	113	40	4,520
K7ON	318	564	158	89,112	VE3RZ	151	461	103	47,483	SP3JA	86	283	74	20,942	PY2BRZ	43	112	40	4,480
DL2FK	188	610	146	89,060	EB3CML	133	445	106	47,170	K7JE	86	282	74	20,868	JL7FR	42	127	35	4,445
DK7MCX	207	561	156	87,516	DL6UYA	139	416	113	47,008	WA0BNX	132	220	93	20,460	JA2GHP	47	137	32	4,384
W0SM	321	538	162	87,156	NJ1H	156	387	121	46,827	UA1WBV	88	275	73	20,075	DL5KUR	40	118	37	4,366
VA6XDR	205	662	131	86,722	N9WKW	187	421	111	46,731	RA9AC	94	244	79	19,276	G4MKP	34	140	31	4,340
D55KJR	241	764	113	86,332	RU3VD	118	444	105	46,620	J11BFN	83	282	68	19,176	EA5YI	36	124	34	4,216
KA5EYH	300	551	156	85,956	OK2FE	134	420	109	45,780	K9HCK	102	230	83	19,090	SP9RY	38	123	34	4,182
IK3CSY	196	591	145	85,695	G6CSY	122	450	101	45,450	WA7FSP	115	278	68	18,904	KA6GDT	47	103	39	4,077
H450MM	180	591	128	85,504	WA7WAZ	122	450	101	44,694	NL7JZ	85	263	71	19,090	N9ID	49	122	37	3,956
KA90	243	582	144	83,808	PY4BI	139	391	114	44,574	ABOYM	121	233	80	18,640	N3CZ	40	119	33	3,927
IZ6HRT	183	576	145	83,520	KN40	196	384	116	44,544	W3DSL	100	235	79	18,565	DL6UAA	37	111	35	3,885
WA4QSD	250	588	142	83,496	IO3ME	121	454	98	44,492	XE2RV	100	243	76	18,468	GW3YVC	39	99	38	3,762
DK1LRS	190	543	153	83,079	PA3CWO	142	402	110	44,220	JN4JUS	82	287	63	18,081	P19PA	40	99	37	3,663
DL6RBH	182	563	147	82,761	XE1ZTW	170	445	99	44,055	W7TMT	122	231	78	18,018	UT0EZ	29	125	28	3,500
OH2BBT	171	568	145	82,360	D5SDYM	143	546	80	43,680	DF6WE	97	251	71	17,821	SP3BGD	35	112	31	3,472
RX3DFW	171	608	135	82,080	VE3DZ	149	383	114	43,662	W0JAR	110	210	84	17,640	SP1DGT	29	117	28	3,276
SP5GMM	157	611	133	81,263	KR7RK	167	341	128	43,648	K9YRK	103	208	83	17,264	ON5KDX	30	105	30	3,150
VA3HJ	206	591	137	80,967	KM4RK	128	420	103	43,260	W6RO	107	223	77	17,171	HA30U	33	112	28	3,136
ON8NT	177	566	143	80,938	F5KLF	114	426	101	43,026	WBSNMZ	99	220	78	17,160	RW9WW	27	120	25	3,000
N3XLS	224	550	147	80,850	GMDAYK	116	451	99	42,845	KG9JY	96	204	84	17,136	K3UK	38	96	29	2,850
JA3JM	212	561	131	80,841	AM3A	148	343	118	42,840	NL2BK	108	231	74	17,090	DL2AWB	106	25	2,650	
DF900	165	597	134	79,998	LZ1MC	130	375	112	42,000	UR5EIT	76	251	68	17,068	AI4C	40	75	35	2,625
WA0LPV	293	484	165	79,860	WAROT	145	387	108	41,796	M0COP	68	282	60	16,920	N3JNX	38	71	36	2,556
EA7AZA	182	570	140	79,800	Z3BZ	115	400	102	40,800	W9VQ	102	206	82	16,892	KJUB	38	74	32	2,368
DL4EAX	193	547	144	78,768	KGANET	160	361	113	40,793	W4DDR	86	227	74	16,798	DO1MCX	25	91	24	2,184
KA3FZN	214	490	160	78,400	KSOT	146	370	109	40,330	DL1JB	90	232	72	16,704	DK6EL	31	70	31	2,170
VA3SWG	205	607	129	78,303	W6SA	175	363	111	40,293	PA0FAW	80	237	70	16,590	WP3GW	28	83	25	2,075
DL7BW	160	575	136	78,200	AB0UK	208	330	121	39,930	M0AEJ	103	213	76	16,188	RA0AY	25	86	22	1,892
WW2J	178	590	132	77,880	W0TUP	187	366	109	39,894	OK2SWD	76	228	71	16,188	NA6G	37	65	29	1,885
DF2AP	166	536	145	77,720	JA2QVP	146	411	97	39,867	DL4RU	129	249	65	16,185	SP6NVK	29	67	28	1,876
DL5JWL	172	563	138	77,694	AE5MM	162	360	110	39,600	KB1CJ	101	210	76	15,960	H89GF	26	76	24	1,824
G8MJA	185	551	141	77,691	SP4TKO	119	405	97	39,285	N9GGO	100	216	73	15,768	SP6HE	22	101	18	1,818
DL340	241	500	155	77,500	KE5AOD	355	110	39,050	DF1WV	72	286	66	15,730	W3EAE	60	90	20	1,800	
N9LYE	285	572	134	76,648	PV1UW	171	427	91	38,857	WB8AKS	79	229	68	15,572	HK3IZOZGP	26	68	25	1,700
DJ5ZWS	196	543	140	76,020	RA1WZ	110	409	95	38,855	AA0AW	96	209	74	15,466	LU7FWW	27	68	25	1,700

