

Sunset at the OL7M antenna farm where Jan, OK2ZAW, won Single Op 80 Meters High Power as OL9A.

perators in 165 countries around the world made over 1.6-million QSOs in the 27th consecutive running of this event. Over 15,500 participants and a record number of 3411 submitted logs provided lots of RTTY activity for everyone to enjoy. Solar conditions were down slightly from 2012, but did not significantly affect operating. All five bands performed well in their openings during the weekend.

9A1A, ES9C, and OHØV each logged 36 zones on 20 meters, the highest number of zones on any band. 9A1A and ES9C tied for the highest total band-zone count of 145. ES9C worked 465 band-countries, far beyond any other participant. P49X captured the most band-QTHs (US states and VE areas), 268.

Sixty-seven new Continental records were set out of a total of 240. Thirteen of the 40 World records were broken. These statistics are down slightly from 2012, but of course records become harder to break as they continue to be lifted! This was the second year for the QRP categories and entries grew from 91 to 129. Being new, these categories are ripe for record setting. Here is a summary of the new records set:

	World		Cont	inent
	New	Avail.	New	Avail.
SO10	2	6	10	36
SO15	1	6	10	36
SO20	3	6	11	36
SO40	2	6	10	36
SO80	2	6	6	36
SOAB	2	6	13	36
MS		2	3	12
M2		1	2	6
MM	1	1	2	6
Total	13	40	67	240

(Assisted and unassisted categories combined)

Single-Op High Power (558 logs submitted)

Single-Op All Band High Power (409). Oyvind, LB8IB, won with 4.9M. John, K1FWE, took second with 4.7M despite oversleeping Sunday morning and missing some of the peak





Twelve-year-old Adrian, HE9AKG, hunting multipliers while Mike, DL1II, proudly looks on.

rate on 10 and 15. He reports, though, that Saturday was the most fun he's ever had with a radio (actually TWO radios!). Chris, SN7Q (SP7GIQ), was a close third with 4.6M and then came Terry, AB5K, 4.3M; Jeff W7RN (WK6I), 4.1M; Wanderley, ZZ2T (PY2MNL), 4.0M; Andy, UU7J (UUØJM), 3.9M, EM0I 3.5M; Lee, VE7CC, 3.4M; and Stefan, DL1IAO, 3.2M.

Single-Op 80 Meters High Power (8). Jan, OL9A (OK2ZAW @OL7M), topped the category with 189K.

Single-Op 40 Meters High Power (30). Miroslaw, SO4M (SP4MPG), won with 627K, but fell short of the record he set in 2010. Third place Glenn, WØGJ, won North America, and ninth place Serge, UAØSR, set a new Asia record at 132K.

Single-Op 20 Meters High Power (33). Kari, OHØV (OH4KA), took first place with 983K and Gennadiy, UN1L, was second with 808K. Fifth place Jerry, N9AW, won North America with 365K.

Single-Op 15 Meters High Power (47). Carlos, CT3FQ, was first with 889K; Vaho, 4L8A, was second with 861K; and



Susanne, HAØ/KDØRYB drove her OM's station (HAØNAR/HGØR) in her favorite mode of RTTY to capture fourth place in 20 Meters Low Power Assisted.



Przemek, SQ9ORQ, won Europe 15 Meters Low Power Assisted with this modest station.

third-place Remigijus, LY8O ,set a new Europe record with 826K.

Single-Op 10 Meters High Power (31). Rene, AY2H (LU7HN), set a new World record with 853K, while Bertrand, FG8OJ, took second place with 483K.

Single Operator Low Power (1404 logs submitted)

Single-Op All Band Low Power (1037). Phil, FG5LA, led this most popular category with 2.5M, where nearly a third of the logs are received. Rimas, LY6A, was close behind, also with 2.5M, followed by Kristjan, S50XX, with 2.4M. Don, AA5AU, took fourth with 2.3M and Kazu, MJ5Z (JK3GAD), took fifth with 2.1M.

Single-Op 80 Meters Low Power (17). Gyorgy, HA1WD, won with 59K after setting the first world record in 80-meter QRP in 2012.

Single-Op 40 Meters Low Power (52). Evgeni, 4Z5UN (UU2JM), set a new Asia record with 222K (twice his 2012 score) to win. Bela, HA8BE, was second with 159K.

Single-Op 20 Meters Low Power (113). Juan, YW5T (YV5JBI), won with the second-highest all-time score of 525K and set a new South America record. Vlad, RZ1ZZ, was second with 370K and Nick, UN7JX, was third with 300K.





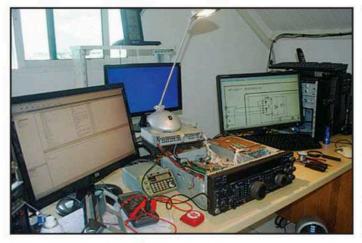
Enrico, 6V7X (home call IK2FIL, top), who operated from 6W7RV (above) since 2010, won Single Op 10 Meters Low Power.

Single-Op 15 Meters Low Power (121). Francisco, EE7Y, scored the third highest all-time with 499K for a new Europe record. Gabry, IT9RGY, and Packo, EA3GLB, were next with 388K and 383K, respectively. Fourth place Yana, YB1AR, set a new Oceania record with 326K.

Single-Op 10 Meters Low Power (64). Enrico, 6V7X (IK2FIL@6W7RV), set a new world record with 649K. He had nearly 29 hours of band opening with tremendous pileups at times. With 3 elements on Europe and 7 on North America, the roar could at least be split in half! Wayne, PJ2/K8LEE, was second with 387K, and third-place Oscar, EA1DR, set a new Europe record with 379K. Danu, YD1GCL, set a new Oceania record with 120K.

Single Operator QRP (99 logs submitted)

Single-Op All Band QRP Power (53). Ymanol, YW2LV (YV5YMA), set an impressive new World record with a score of 2.4M, close to the top Low Power All Band score in this





Phil, FG5LA's FT1000 failed just three days before the contest, but he repaired it successfully and in time to win World Single-Op Low Power All Band.

contest. Rudolf, F5VBT, and Antonn, OK7CM, were next with 606K and 571K, respectively, while Dave, K2YG, was close behind in fourth place with 567K. Sergey, UAØZS, set a new Asia record with 86K, while Bob, KH6KG, set a new Oceania record with 57K.

Single-Op 80 Meters QRP (4). Dmitru, UT3N, won with 23K, and Shunichiro, JH7IMX, established the Asia record with just 21 points!

Single-Op 40 Meters QRP (7). Gabor, 4O/HG3IPA (HA3JB), set a new world record with 74K, and 5th place Juan, CO2JD, set a new North America record with 32K.

Single-Op 20 Meters QRP (14). Piotr, SP6QKP, topped this field with 65K, and 5th place Ken, VE3HLS, set a new North America record with 24K.

Single-Op 15 Meters QRP (13). Vittorio, IZ2JPN, won with 72K, and 5th place Ted, N5UE, set a new North America record.

Single-Op 10 Meters QRP (8). Abdullah, HZ1BW, set a new Asia record with 129K to win this year, and second place Santiago, LW2EE, set a new South America record with 89K.

Single-Op Assisted High Power (518 logs submitted) Single-Op Assisted All Band High Power (390). Yuri, RG9A, took top honors with 6.0M from Asia, and if you've wondered how to be loud everywhere and win a worldwide contest from the Urals, take a look at the RG9A profile on www.cqwwrtty.com. Second-place Victor, UW1M, set a new Europe record with 5.9M. Third, fourth, and fifth went to Bud, AA3B, Fabi VA2UP, and Alexandr, UA5C, with 5.8M, 5.7M, and 5.2M each.

Single-Op Assisted 80 Meters High Power (10). Dave, 9A5BWW, won with 142K in this his second CQ WW RTTY contest. He lost 4–5 hours just two hours into the contest when "Mr. Murphy was chatting with my software."

Single-Op Assisted 40 Meters High Power (16). Alexander, A65BP (RV6LNA), set a new Asia record with 395K to win, and Petri, OH6R (OH3FM), won Europe for second place with 331K.

Single-Op Assisted 20 Meters High Power (29). Stephane, F4DXW, set a new World record with 1.1M. Alex, DR1D (DL1NX/PY1KS/PY2SEX @DL3KO), and Joel, VE6WQ (@ VE6JY), were second and third with 840K and 781K.

Single-Op Assisted 15 Meters High Power (44). Satoru, 9A5Y (9A3NM), won with 911K and set a new Europe record,

while second-place Norm, 5B4AIF, set a new Asia record with 875K.

Single-Op Assisted 10 Meters High Power (29). Arturo, LV6E (LU6TEB), set a new South America record with 655K to win, and second-place Joel ,NH2DX (KG6DX), set a new Oceania record with 420K.

Single-Op Assisted Low Power (445 logs submitted) Single-Op Assisted All Band Low Power (319). Mark, N2QT, won with 2.8M, while second place Yuri, UN6P, set a new Asia record with 1.9M. Third and fourth places also came from Asia with Yuri, RT9S, and Hani, HZ1HN, scoring 1.6M and 1.5M each. Fifth-place Dieter, DF2SD, won Europe with 1.1M

Single-Op Assisted 80 Meters Low Power (13). Dunia, EA8MT, set a new World record with 94K, and second place

2013 WW RTTY DX CONTEST TOP SCORES IN VERY ACTIVE ZONES

TOP SCORES IN	VERY ACTIVE ZONES
Zone 3	OM5ZW3,319,008
W7RN4,059,872	IZ6TSA3,231,922
VE7CC3,404,394	IN3VVK3,002,550
K6LL/72,850,570	OE6MDF2,961,244
N6RO2,024,860	
VA7K01,923,705	Zone 16
	UW1M5,875,792
Zone 4	UA5C5,246,100
AB5K4,280,430	UU7J3,912,740
VE5MX2,938,100	EMØI3,482,900
ACØC2,870,175	UR7G03,138,600
KØKX2,362,542	
*AA5AU2,262,050	Zone 20
2	LZ8E3,894,030
Zone 5	Y03CZW1,719,690
AA3B5,822,172	LZ6K1,489,054
VA2UP5,686,272	Y03APJ1,473,760
K1FWE4,691,368	YQ6A739,505
N1QD3,422,793	(=::::
VA2AM3,039,986	Zone 25
Zone 14	JH4UYB2,853,840
LB8IB4,923,285	JS3CTQ2,388,204
LN503,620,180	JM1XCW2,109,156
DL1IAO3,180,060	JR40ZR2,023,584
EA1AKS2,693,839	JA10VD1,466,138
DD2ML2,594,400	*Low Power
Zone 15	LOW FOWEI
SN7Q4,582,795	

Send your voice to the world with a digital mobile radio.

Work a D-STAR repeater and you're tied in to worldwide communications, whether you're using a D-STAR mobile or handheld radio. Enjoy advanced digital communication with D-STAR transceivers.



IC-9100

HF + 6m + 2m + 70cm + 23cm All-Around Transceiver

D-ST/AR optional

- 100/100/100/75/10 Watt Output
- RX: 0.030-60.000², 136.000-174.000² 420.000-480.000², 1240.000-1320.000²³MHz*
- AM³, FM, SSB, RTTY, CW, & DV
- Satellite (Mode B/J/L)
- +30dBm TOI²
- Two Independent 32-bit DSP Systems
- 3kHz/6kHz 1st IF "Roofing" Filters' (HF/6m)
- Double Conversion Superheterodyne with Image Rejection Mixer
- USB Port for PC Control and Audio In/Out



IC-7100

HF + 6m + 2m + 70cm Mobile Multi-bander

D-STAR ready

- 100/100/50/35 Watt Output*
- RX: 0.03–199.999, 400–470MHz*
- 1205 Alphanumeric Memory Channels
- · Touch Screen with Built-in Speaker
- 32-bit IF-DSP
- External GPS Option





IC-2820H

Feature-Rich 2m + 70cm + Optional GPS

D-STAR optional

- 50/15/5 Watt Output
- RX: 118-549.995, 118-173.995. 375-549.999, 810-999.990MHz*
- 522 Alphanumeric Memory Channels
- One Touch Reply Function
- Digital Voice/GPS (Optional UT-123 Required)
- Low Speed Data (Optional OPC-1529R Required)



ID-880H

ENTRY-CLASS 2m + 70cm DIGITAL MOBILE

D-STAR ready

- 50/15/5 Watt VHF/UHF
- FM, AM (Receive only), DV
- RX: 118-999.99MHz*
- 1052 Alphanumeric Memory Channels
- Free Programming Software![†]

†www.icomamerica.com/amateur/DSTAR for details about free software



GO DIGITAL ON 23cm

D-STAR ready

- 10 Watt on 23cm (FM, DV, DD)
- RX: 1240-1300MHz*
- 100 Alphanumeric Memory Channels
- USB Rig Control, Ethernet Plug for DD
- Black Box Operation
- · Remote Control Head, Remote Speaker and Cables Included
- PC Software Included

Information & Downloads

AMATEUR TOOL KIT | COMIC BOOKS | VIDEOS | WWW.ICOMAMERICA.COM

Electronic advertisements feature active links for each radio.

*Frequency specs may vary. Refer to owner's manual for exact frequency specs.

'Optional UX-9100 required. *HF (14MHz) *See manual for AM output power.

©2014 Icom America Inc. The Icom logo is a registered trademark of Icom Inc.

The D-PRS logo is a trademark of Icom Inc. All specifications are subject to change without notice or obligation. 30909



	2013	CQ WW RTTY DX	CONTEST TOP SC	ORES	
WORLD SINGLE OPERATOR ALL BAND HIGH POWER	28 MHz LV6E	MULTI-OPERATOR TWO-TRANSMITTER CR3A11,759,480 P49X11,640,496	28 MHz KU5B	14 MHz OHØV 940,866 YL2CI 516,132 IK4GNI 426,351	9A5M
LB8IB 4,923,285 K1FWE 4,691,368 SN7O 4,582,795 AB5K 4,280,430 W7RN 4,059,872	21 MHz 9A5Y 910,845 5B4AIF 874,825 DF9ZP 726,869	W1UE	21 MHz N7AT 644,826 WA5ZUP 517,450 K4MM 454,410	7 MHz SO4M	SP8K
28 MHz AY2H	F4DXW	ES9C 16,321,906 HK1NA 15,262,260 9A1A 14,391,440 CR3L 11,010,000 IQ9U 10,960,464	W9ILY	3.5 MHz 0L9A 189,072 IZ5NRF 64,944 HA3HZ 49,538	*DF2SD. 1,134,420 *UT8EL 1,132,785 *UT2IO. 993,461 *F4FDA 863,135 *YL5X 862,920
21 MHz CT3FQ	7 MHz A65BP	UNITED STATES SINGLE OPERATOR ALL BAND HIGH POWER K1FWE	3.5 MHz W8AKS	LOW POWER ALL BAND *LY6A 2,459,972 *S5ØXX 2,437,120 *MJ5Z 2,077,146 *E030 1,492,920	*IØUZF 226,455 *CR5D 207,966 *EA3EZD 93,225
0HØV	9A5BWW 141,588 SP8K 97,020 DL2SAX 96,252	AB5K 4,280,430 W7RN 4,059,872 ACØC 2,870,175 K5ZD/1 2,312,926	*N2QT/4	*R7MM1,387,386 28 MHz *EA1DR378,898 *YT2U78,812	*\$Q90RQ 272,214 *0H7MN 223,080 *R5ACQ 146,560
7 MHz SO4M	LOW POWER ALL BAND *N2QT/4	28 MHz N7US/9	*W6HGF/430,800 *W7PP174,423	*LZ2JA	*HG5D
3.5 MHz OL9A	28 MHz *LW5DW	21 MHz WR9D265,780 14 MHz N9AW365,064	*K5ND	*RZ1ZZ	*YT2B
*FG5LA 2,528,400 *LY6A 2,459,972 *S50XX 2,437,120 *AA5AU 2,262,050 *MJ5Z 2,077,146	*LU7HF	W3RTY 109,746 W7PU 101,530 7 MHz WØGJ 302,632 W1TY/2 128,780	*W4LC	7 MHz *HA8BE	*SP50XJ58,888 *YU1XX30,464 *IT9RZU21,900 QRP ASSISTED
*6V7X	*HG5D	N2HR/3	*AB9YC	*HA1WD56,181 *IC8TEM45,227 *OK2SAR44,605	OK3C
*EE7Y	*YT2B 178,176 *SV5DKL 144,304 *W3FIZ 108,486	NN4K	QRP ASSISTED ALL BAND N6MA/7	QRP ALL BAND F5VBT	28 MHz YO8DDP12,100 UT2AB6,288
*YW5T	*EA8MT 93,670 *SP50XJ 58,888 *YU1XX 30,464	*WATFCN/41,052,504 *AD5XD950,235 *K1IMI877,584	WA8HSB/4	UA7G	F5HRH
*4Z5UN	QRP ASSISTED ALL BAND OK3C	*WE6EZ/5 30.699 *WB3LHD 20,540 *KK4MIN 5,328 21 MHz *K6GHA 182,160	POWER W2FU	RV6LX 18,525 IK7XNF 13,268 SQ5TB 2,490 21 MHz IZ2JPN 71,940	DK2AB
*HA1WD	N6MA7 296,010 CO2IZ 151,956 28 MHz YO8DDP 12,100	*N2YBB	MULTI-OPERATOR SINGLE-TRANSMITTER LOW POWER *WJ4N1,274,639	14 MHz SP6QKP	DJ2RG
QRP ALL BAND YW2LV 2,399,320 F5VBT 606,195 OK7CM 571,482 K2YG 566,892	UT2AB	*N6JV127,743 *N5PU34,977 7 MHz *AA8R119,784	*AD50W 487,275 *N3WZR 405,790 *WQ6X 78,960 *WN1G/475,750	IK4UXA	MULTI-OPERATOR SINGLE-TRANSMITTER HIGH POWER 14DZ
W6QU	VE3XD	*N4IJ/5	MULTI-OPERATOR TWO-TRANSMITTER W1UE	UX5UU	UZ2M 6,807,906 YR1A 5,748,429 3Z2X 5,291,886 SJ2W 5,199,790
RV6LX	DIZAB	*N7UR	WW4LL	OK1WCF	MULTI-OPERATOR SINGLE-TRANSMITTER LOW POWER *S5ØW
JAØVTK	3.5 MHz MØVAA19,437	AC50 61,748 K7HBN 28,910 AI9K 25,986	NATU 9,035,090 NØNI 6,730,932 NK7U 6,211,492 KA4RRU 5,398,770 N2PA 2,268,000	UW1M 5,875,792 UA5C 5,246,100 L28E 3,894,030 LN5O 3,620,180 OM52W 3,319,008	*CS5CRE2,349,189 *OH5EHC1,910,216 *UX4E1,140,912 MULTI-OPERATOR
FS1LS	MULTI-OPERATOR SINGLE-TRANSMITTER HIGH POWER 14DZ	WD9FTZ/8	EUROPE SINGLE OPERATOR HIGH POWER ALL BAND LB81B	28 MHz TK5MH	TW0-TRANSMITTER ED1R 9,242,354 LX71 8,857,935 101RY 7,540,729 LZ5R 6,941,538
3.5 MHz UT3N	EF8U	W1CSM	UU7J 3,912,740 EMØI 3,482,900 DL1IAO 3,180,060 28 MHz DL3BQA 205,900	9A5Y 910,845 DF9ZP 726,869 SP8CUR 719,475	MULTI-OPERATOR MULTI-TRANSMITTER ES90
ASSISTED HIGH POWER ALL BAND RG9A. 5.971.822 UW1M. 5,875,792 AA3B. 5,822,172	*VP91	ASSISTED HIGH POWER ALL BAND AA3B 5,822,172 N10D 3,422,793 K6LL/7 2,850,570	F1AKK	14 MHz F4DXW 1,118,685 DR1D 840,000 IT9ZMX 731,721	9A1A 14,391,440 109UI 10,960,464 HA3ØS 10,296,513 OH2K 3,907,956
VA2UP 5,686,272 UA5C 5,246,100	*CS5CRE2,349,189 *OH5EHC1,910,216	W4PK2,754,526 W3FV2,600,245	GM3W	7 MHz OH6R331,390	*Low Power

Jacek, SP5OXJ, set a new Europe record with 59K. North America and Asia records were also set by Glenn, NA5NN (K2FF), and Khalid, A61BK, with 16K and 7K, respectively.

Single-Op Assisted 40 Meters Low Power (12). Bozidar, YT2B, won with 178K, and third-place Pat, W3FIZ, set a new North America record with 108K. Eighth-place Toshi, JE2UFF, set a new Asia record with 41K, and Arifin, YB8JOY, set a new Oceania record with 34K.

Single-Op Assisted 20 Meters Low Power (29). Lali, HG5D (HA8QZ), set a new World record to win with 464K, and third place Hiro, WHØRU (JG7PSJ), set a new Oceania record with 423K. Fourth-place Barry, VE6BMX, set a new





How about using the west tower of the Castle in Ptuj, the oldest town in Slovenia, to support your Yagi? Radioklub Ptuj S50W does just that and will celebrate its 60th anniversary this year.

2013 WW RTTY DX CONTEST CLUB SCORES UNITED STATES

UNITED STATES		
CLub POTOMAC VALLEY RADIO CLUB	#Entrants	Score
POTOMAC VALLEY RADIO CLUB	39	37,579,876
YANKEE CLIPPER CONTEST CLUB	28	34,168,438
SOCIETY OF MIDWEST CONTESTERS		
MINNESOTA WIRELESS ASSN	50	17,750,737
NORTHERN CALIFORNIA CONTEST CLUB	25	17,574,985
FRANKFORD RADIO CLUB	13	13 650 932
NORTH COAST CONTESTERS	7	12,092,954
CTRI CONTEST GROUP	4	11 789 942
WILLAMETTE VALLEY DX CLUB	18	10,825,172
DFW CONTEST GROUP	9	8.984.789
FLORIDA CONTEST GROUP	19	8.686.077
ARIZONA OUTLAWS CONTEST CLUB	22	7.701.971
WESTERN WASHINGTON DX CLUB	11	7.554.143
ALABAMA CONTEST GROUP	16	7 470 730
MOTHER LODE DX/CONTEST CLUB	9	7.360.679
TENNESSEE CONTEST GROUP	13	5 993 625
KANSAS CITY CONTEST CLUB		
LOUISIANA CONTEST CLUB	5	3 796 160
GRAND MESA CONTESTERS OF COLORADO	7	3.169.684
ROCHESTER (NY) DX ASSN	7	2 848 557
BERGEN ARASOUTHERN CALIFORNIA CONTEST CLUB	7	2 647 986
SOUTHERN CALIFORNIA CONTEST CLUB	9	2 613 500
ORLEANS COUNTY AMATEUR RADIO CLUB	7	2 457 545
CENTRAL TEXAS DX AND CONTEST CLUB	4	2 087 346
ORDER OF BOILED OWLS OF NEW YORK		
MISSISSIPPI VALLEY DX/CONTEST CLUB	3	1.843.822
SPOKANE DX ASSOCIATION	4	1.809.019
CAROLINA SHINE	4	1 740 648
CAROLINA DX ASSOCIATION	7	1,618,761
SOUTH EAST CONTEST CLUB	7	1.460.986
BRISTOL (TN/VA) ARC	5	929.276
HUDSON VALLEY CONTESTERS AND DXERS	3	717.907
ALLEGHENY VALLEY RADIO ASSOCIATION	3	657.330
NIAGARA FRONTIER RADIOSPORT	5	434,295
METRO DX CLUB	4	428.315
KANSAS CITY DX CLUB	3	224.539
MAD RIVER RADIO CLUB		
599 DX ASSOCIATION		

DX

BAVARIAN CONTEST CLUB	104	68 054 216
RHEIN RUHR DX ASSOCIATION	104	61 200 740
HILLIAM CONTECT OF THE	30	61,399,740
UKRAINIAN CONTEST CLUB		
CONTEST GROUP DU QUEBEC	11	17,359,908
CROATIAN CONTEST CLUB	16	17.171.626
CONTEST CLUB ONTARIO	32	16 779 771
BLACK SEA CONTEST CLUB	26	15 150 222
CONTECT OF THE LINE AND	20	14 407 000
CONTEST CLUB FINLAND	15	14,407,393
ORCA DX AND CONTEST CLUB	7	11,885,729
ARAUCARIA DX GROUP	14	10,967,933
SOUTH URAL CONTEST CLUB	5	9.665.486
RADIO CLUB HENARES		
LU CONTEST GROUP	10	0.007.040
LU CONTEST GROUP	18	9,367,640
SP DX CLUB	22	9,306,848
LA CONTEST CLUB	4	8,921,430
HA-DX-CLUBWORLD WIDE YOUNG CONTESTERS	6	6.075.536
WORLD WIDE YOUNG CONTESTERS	a	6.074.153
LATVIAN CONTEST CLUB	44	E 446 000
KALINIA CUNTEST CLUB]	
KAUNAS UNIVERSITY OF TECHNOLOGY RADIO CLUB.	5	4,914,242
DL-DX RTTY CONTEST GROUP	7	4,647,787
599 CONTEST CLUB	7	4.355.662
CLIPPERTON DX CLUB	3	4 169 291
SAUDI CONTEST GROUP		4 161 700
OLOVENIA CONTEST CILID	5	4,161,799
SLOVENIA CONTEST CLUB	11	4,054,113
MARITIME CONTEST CLUB	7	3,956,022
RTTY CONTESTERS OF JAPAN	13	3,685,067
BELARUS CONTEST CLUB	9	3 547 574
RUSSIAN CONTEST CLUB	12	2 871 087
KRIVBASS		2 742 405
KNIVDAGG	0	2,743,405
YO DX CLUB	/	2,505,642
GRIMSBY AMATEUR RADIO SOCIETY	5	2,408,228
URAL CONTEST GROUP	6	2.199.931
ARCK	4	2 179 847
CSTA BUCURESTI	3	1 085 240
ALRS ST PETERSBURG	d	1,000,270
ALRO ST PETERSBURG	4	1,866,378
YB LAND DX CLUB	9	1,835,605
CONTEST CLUB SERBIA	12	1,637,530
DANISH DX GROUP	5	1.521.523
VK CONTEST CLUB		
CHILTERN DX CLUB	5	1 262 247
DONDAGE CONTECT OF ID	2	1,000,047
DONBASS CONTEST CLUBVYTAUTAS MAGNUS UNIVERSITY RADIO CLUB	/	1,211,513
VYTAUTAS MAGNUS UNIVERSITY RADIO CLUB	5	1,206,917
RUSSIAN CW CLUB	3	1,188,686
ARIPA DX TEAM	4	1.142.558
LITHUANIAN CONTEST GROUP	3	918 487
MEDITERRANEO DX CLUB		004.050
WEDITERRANEO DA CLUB	4	904,059
CE CONTEST GROUP	4	652,613
CE CONTEST GROUPUNIVERSITY OF TOKYO CONTEST CLUB	3	650,316
PERUGIA CONTEST CLUB	5	549,641
PERUGIA CONTEST CLUBGUARA DX GROUP	4	531 030
RU-QRP CLUB	4	500,000
ADLCACTELL DOMANII		000,600
ARI CASTELLI ROMANI		
RIO DX GROUP		
CHILEAN PACIFIC DX GROUP	5	193,401
SK6AW HISINGENS RADIOKLUBB	3	138.863

2013 WW RTTY DX CONTEST BAND-BY-BAND BREAKDOWN—TOP ALL BAND SCORES

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

WORLD TOP SINGLE OP ALL BAND

USA TOP SINGLE OP ALL BAND

Station	80	40	20	15	10	Station	80	40	20	15	10
LB8IB	330/48/11/19	791/71/20/48	802/72/25/53	971/76/29/54	196/54/26/39	K1FWE	199/36/12/41	480/61/20/39	997/82/28/45	1155/80/25/38	333/59/19/14
K1FWE	199/36/12/41	480/61/20/39	997/82/28/45	1155/80/25/38	333/59/19/14	AB5K	177/11/7/43	633/54/22/50	1025/67/25/54	1372/74/25/45	292/48/17/19
SN7Q	244/40/11/20	622/63/22/48	776/74/29/53	799/73/29/48	420/58/26/41	W7RN	237/11/9/44	578/51/23/51	794/63/24/51	1233/76/26/52	406/41/19/37
AB5K	177/11/7/43	633/54/22/50	1025/67/25/54	1372/74/25/45	292/48/17/19	ACØC	257/21/10/45	406/55/18/48	593/71/22/46	921/72/24/33	266/52/17/5
W7RN	237/11/9/44	578/51/23/51	794/63/24/51	1233/76/26/52	406/41/19/37	K5ZD/1	116/31/11/33	281/47/17/38	400/63/25/26	647/72/22/32	294/56/19/14
	WORLD TO	P SINGLE O	PERATOR AS	SISTED ALL	BAND	7	USA TOP	SINGLE OP	ERATOR ASS	ISTED ALL B	AND
RG9A	271/44/7/0	721/82/25/20	833/92/32/54	897/94/29/42	714/73/24/4	AA3B	298/39/13/44	754/69/23/50	941/94/30/44	1006/88/27/32	518/70/24/19
UW1M	172/44/10/5	706/74/22/46	1202/93/35/54	1325/86/30/54	317/67/27/29	N1QD	117/29/11/34	398/60/18/41	744/83/28/41	703/84/26/34	335/58/18/18
AA3B	298/39/13/44	754/69/23/50	941/94/30/44	1006/88/27/32	518/70/24/19	K6LL/7	75/6/5/36	385/57/18/43	472/72/26/53	1166/81/27/54	159/42/20/30
VA2UP	325/44/13/44	773/64/21/51	1033/80/26/47	1051/79/26/42	309/53/17/10	W4PK	114/24/10/27	299/51/15/37	548/69/23/32	782/80/25/25	325/62/20/14
UA5C	173/45/10/5	649/80/23/45	888/91/33/51	1128/83/28/52	377/64/28/32	*N2QT/4	149/11/10/41	400/57/17/45	659/80/28/38	587/72/25/27	301/59/20/14
1	WORLD ML	ILTI-OP SING	LE TRANSMI	TTER HIGH I	OWER		USA MUL	TI-OP SINGL	E TRANSMIT	TER HIGH PO	WER
I4DZ	233/51/13/27	682/86/27/54	1041/106/34/57	1266/98/32/57	480/79/33/48	W2FU	323/50/17/48	776/88/29/51	1116/103/34/51	1036/106/30/51	388/90/31/44
W2FU	323/50/17/48	776/88/29/51	1116/103/34/51	1036/106/30/51	388/90/31/44	K1SFA	287/50/16/48	677/85/29/50	900/102/33/54	1044/106/32/52	374/84/31/37
EF8U	81/40/11/21	675/64/18/50	614/85/31/51	1100/89/27/53	1150/81/27/48	K4FJ	176/27/12/44	412/68/21/41	590/91/30/42	810/91/29/26	570/79/27/29
UZ2M	163/49/13/16	756/88/26/50	1054/99/32/55	1367/101/33/54	431/85/33/27	WØLSD	126/11/10/42	612/76/27/49	741/82/29/51	883/85/27/49	133/63/24/23
K1SFA	287/50/16/48	677/85/29/50	900/102/33/54	1044/106/32/52	374/84/31/37	W1DX	69/35/12/30	482/71/21/41	408/86/32/39	1069/89/29/35	133/68/26/13
2	WORLD MI	JLTI-OP SING	GLE TRANSM	ITTER LOW F	OWER	//	USA MUL	TI-OP SINGL	E TRANSMIT	TER LOW PO	WER
*VP9I	134/29/11/38	616/63/23/50	583/80/29/50	606/79/28/41	187/56/21/21	*WJ4N	35/8/6/29	436/48/22/46	166/59/19/33	503/55/18/37	199/49/21/13
*S5ØW	215/45/10/10	551/75/24/45	483/90/32/48	425/84/29/50	230/64/30/36	*AD50W	73/3/4/31	202/34/17/40	152/41/15/34	221/55/21/20	59/28/16/6
*DD1A	216/47/12/13	516/73/21/49	523/83/31/48	514/82/29/51	119/54/27/28	*N3WZR	89/6/6/34	233/45/18/39	80/33/14/20	142/48/19/12	55/29/11/7
*CS5CRE	21/21/5/2	443/54/14/38	681/70/23/49	705/72/25/48	236/43/18/19	*WQ6X	26/4/5/14	24/5/6/13	83/19/13/30	90/30/18/22	31/11/9/11
*OH5EHC	137/39/9/1	264/56/16/14	424/85/29/46	472/76/27/40	176/55/25/21	*WN1G/4	15/1/3/13	28/5/6/17	46/15/12/18	80/41/21/13	36/18/13/6
	W	RLD MULTI	OP TWO TRA	NSMITTER			U	ISA MULTI-O	P TWO TRAN	ISMITTER	
CR3A	300/45/14/36	882/80/25/49	1346/85/31/57	1806/91/29/56	1096/84/28/50	W1UE	454/54/15/50	956/88/28/52	1308/105/34/53	1461/108/31/52	619/86/28/34
P49X	228/27/13/45	1023/72/24/53	1013/78/30/57	1921/93/32/57	1220/75/30/56	K11G	399/51/14/48	926/87/28/50	1160/97/33/51	1383/97/32/43	564/82/29/30
W1UE	454/54/15/50	956/88/28/52	1308/105/34/53	1461/108/31/52	619/86/28/34	K9CT	379/36/15/48	1041/81/29/50	1215/96/30/55	1475/97/31/49	633/74/27/24
ED1R	340/50/14/31	1043/77/24/54	1339/98/31/54	1401/97/32/52	823/83/31/53	WW4LL	172/27/12/41	672/72/24/47	899/79/26/50	1229/93/30/47	690/75/26/28
LX7I	508/51/12/27	1052/80/24/53	1343/101/34/56	1246/90/31/54	623/77/29/46	N7BV	68/6/7/29	281/34/20/39	658/71/26/49	898/80/30/44	279/36/18/39
	W0	RLD MULTI-	OP MULTI-TR	ANSMITTER			US	SA MULTI-OF	MULTI-TRA	NSMITTER	
ES9C	744/56/14/16	1775/102/31/54	2471/113/36/56	2100/109/33/57	891/85/31/46	NR4M	577/51/17/49	1155/78/27/54	1367/98/33/51	1457/95/30/40	941/81/26/44
HK1NA	367/46/15/42	1200/73/24/53	1702/92/32/54	1946/99/31/55	1515/83/28/53	NØNI	425/33/15/53	909/67/26/49	1127/84/28/51	1399/85/29/41	550/66/24/25
9A1A	741/53/13/25	1550/90/29/51	1916/108/36/57	1782/99/33/57	1066/89/34/55	NK7U	309/13/12/48	779/66/25/53	1181/83/27/56	1495/98/30/47	512/58/23/40
CR3L	303/51/14/32	777/67/21/49	1510/87/30/54	1284/88/30/52	1336/89/33/53	KA4RRU	348/30/13/49	551/60/20/49	1045/89/30/48	1156/86/28/32	570/69/26/25
IQ9UI	656/56/14/28	1237/83/23/50	1859/101/32/54	1549/88/31/56	790/82/32/48	N2PA	168/21/10/40	454/51/15/48	642/67/24/43	546/62/22/30	223/43/15/9

North America record with 207K, while Enkhbayar, JT1DA, and Francisco, 4M5L (YV5LI), set new Asia and South America records with 86K and 45K.

Single-Op Assisted 15 Meters Low Power (42). Marcelo, LU7HF, set a new South America record for first place with 330K and Dimitry, 4Z5CP, set a new Asia record for second place with 329K, a very close race! Third-place Przemek, SQ9ORQ, won Europe with 272K and Dick, W7PP, won North America with 174K.

Single-Op Assisted 10 Meters Low Power (30). Jorge, LW5DW, set a new South America record with 348K and fifth place Hariy, YBØMWM, set a new Oceania record with 184K.

Single-Op Assisted QRP (30 logs submitted)

Single-Op Assisted All Band QRP (18). Ludek, OK3C (OK2ZC), set the new World record with a nice score of 713K. Fourth-place Paul, N6MA, set a new North America record with 296K. Jose, EA9CD, and Kazu, JK1TCV, set new Africa and Asia records with 60K and 47K, while David, VK5DG, and Eger, PY2EX, set Oceania and South America records with 14K and 10K.

Single-Op Assisted 80 Meters QRP (1). This category had its first, and only, all-time entry by Gerry, MØVAA, with 19K.

Single-Op Assisted 40 Meters QRP (10). Klaus, DJ2RG, pushed up the World record to 62K.

Single-Op Assisted 20 Meters QRP (3). Mia, OX5M, lifted the World record to 82K and Jens, DK2AB, set a new Europe record with 29K.

Single-Op Assisted 15 Meters QRP (3). Stefano, IZ3NVR, won with a new World record of 63K and Don, VE3XD, set a new North America record of 41K.

Single-Op Assisted 10 Meters QRP (3). Arsene, YO8DDP, won with 12K.

Multi-Operator (152 logs submitted)

Multi-Single High Power (67). The I4DZ (I4DZ, I4EWH, I4FYF, I4IFL, IK3QAR, IK3STG, IK4DCW, IK4HVR, IK4MGP, IK4WMH, IR4M, IW4EGX, IZ4GWE) team won and set a new Europe record with 7.6M while second place W2FU (KØSM, N2ZN, NW2K, W2FU, W6TR, WB2ABD) set a new North America record with 7.5M. EF8U (EA8RY, EA8NL, EA8ZS, EA8CNR, EA8DP, EA8AGF, EA8RT, EA8CQN,

EUROPE TOP SINGLE OP ALL BAND

Station	80	40	20	15	10
LB8IB	330/48/11/19	791/71/20/48	802/72/25/53	971/76/29/54	196/54/26/39
SN7Q	244/40/11/20	622/63/22/48	776/74/29/53	799/73/29/48	420/58/26/41
UU7J	211/46/11/13	693/63/18/42	992/90/30/51	896/73/23/51	182/48/21/16
EMØI	258/47/9/7	697/76/22/44	585/74/28/43	1011/82/30/52	102/37/23/6
DL1IA0	265/42/10/22	EN AIRE HOUAH	478/63/26/46	687/67/23/55	293/56/26/37
		514/55/16/41 P SINGLE OI	PERATOR AS		
		VETVICE ACTION OF	AC 71000000000000000000000000000000000000		
		VETVICE ACTION OF	AC 71000000000000000000000000000000000000		
	EUROPE TO	P SINGLE O	PERATOR AS	SISTED ALL	BAND
UW1M	EUROPE TO 172/44/10/5	P SINGLE 01	PERATOR AS 1202/93/35/54	SISTED ALL 1325/86/30/54	BAND 317/67/27/29
UW1M UA5C	EUROPE TO 172/44/10/5 173/45/10/5	P SINGLE 01 706/74/22/46 649/80/23/45	PERATOR AS 1202/93/35/54 888/91/33/51	SISTED ALL 1325/86/30/54 1128/83/28/52	BAND 317/67/27/29 377/64/28/32

EUROPE MULTI-OP SINGLE TRANSMITTER HIGH POWER

I4DZ	233/51/13/27	682/86/27/54	1041/106/34/57	1266/98/32/57	480/79/33/48
UZ2M	163/49/13/16	756/88/26/50	1054/99/32/55	1367/101/33/54	431/85/33/27
YR1A	171/43/9/7	766/73/20/46	980/95/32/50	1116/85/30/57	355/75/31/38
3Z2X	190/45/12/8	777/81/27/51	789/95/33/52	806/89/29/51	353/76/30/34
SJ2W	215/49/11/19	575/88/28/49	774/98/32/53	939/90/32/54	310/67/26/34

EUROPE MULTI-OP SINGLE TRANSMITTER LOW POWER

*S5ØW	215/45/10/10	551/75/24/45	483/90/32/48	425/84/29/50	230/64/30/36
*DD1A	216/47/12/13	516/73/21/49	523/83/31/48	514/82/29/51	119/54/27/28
*CS5CRE	21/21/5/2	443/54/14/38	681/70/23/49	705/72/25/48	236/43/18/19
*OH5EHC	137/39/9/1	264/56/16/14	424/85/29/46	472/76/27/40	176/55/25/21
*UX4E	61/22/5/0	409/62/19/26	359/58/21/18	321/54/23/35	128/38/24/12

EUROPE MULTI-OP TWO TRANSMITTER

ED1R	340/50/14/31	1043/77/24/54	1339/98/31/54	1401/97/32/52	823/83/31/53
LX7I	508/51/12/27	1052/80/24/53	1343/101/34/56	1246/90/31/54	623/77/29/46
IO1RY	474/49/12/27	843/76/22/52	976/100/34/56	1090/91/30/56	613/80/32/46
LZ5R DQ4W	474/49/12/27 457/53/13/21 470/51/12/22	929/79/23/50 672/82/26/44	923/90/31/54 974/101/33/54	1161/85/29/57 1065/94/32/56	468/76/30/38 373/72/28/39

EUROPE MULTI-OP MULTI-TRANSMITTER

ES9C	744/56/14/16	1775/102/31/54	2471/113/36/56	2100/109/33/57	891/85/31/46
9A1A	741/53/13/25	1550/90/29/51	1916/108/36/57	1782/99/33/57	1066/89/34/55
IQ9UI	656/56/14/28	1237/83/23/50	1859/101/32/54	1549/88/31/56	790/82/32/48
HA3ØS	662/60/13/27	1265/91/27/51	1205/104/34/55	1362/97/32/57	771/80/28/51
OH2K	65/24/4/0	808/67/22/39	1026/71/28/49	740/66/26/51	312/57/24/36

EA8AHM, EA8BEX, EA8CYQ, EA8BQM, EA8AXB, EA8RM) won Africa with 7.1M and KH7M set a new Oceania record with 4.1M.

Multi-Single Low Power (37). The VP9I team (ND8L, WW3S, K3GP) won with 3.2M, edging out S50W (S51MA, S51DI, S51NM, S51I, S52OP, S52GC, S57XZ) with 3.0M. Sandi, S52OP, built a low power "quadplexer" to use with their single 4-band Yagi. Eighty meters is covered with a wire dipole. DD1A (HB9BJL, DL3GA, DO5FM, DO1GAR, DL1II) was a close third with 2.9M, staffed with a number of younger contesters whose licenses restrict them to 100 watts. ZW8T (PS8BR, PS8HF) won South America with 731K and RX9SR won Asia with 442K. Club station IQ4RN took 8th with five (IZ4WBA, IK4PLK, IZ4WAS, IK4FMZ, IZ4AFJ) of their six members (leader IK4DCX) enjoying their first contest. This category is well-suited for developing new contesters in a team environment.

Multi-Two (27). The CR3A team (CT3BD, CT3DL, CT3DZ, CT3EE, CT3EN, CT3KY) won with 11.6M while P49X (W6OTC and WØYK) took second with 11.1M. Third-place W1UE (W1UE, W1UJ, K3JO, K5ZD) set a new North America record with 9.6M. ED1R (EA1AR, EC1KR, EA2CJ,



20th ANNIVERSARY SPECIAL Six Motors, A Guide

by Ken Neubeck WB2AMU

io The Magic I

The fourth edition of the ultimate book on Six Meters is still available! The original edition was published by Worldradio, Inc. in 1994. The 2008 fourth edition is the most complete version with information on propagation, equipment and antennas for the Magic Band.



Special 20th anniversary price of \$18.00 includes shipping and handling and personalization by the author.

Please indicate callsign and name for personalization when ordering.

Please make check or money order to:

Ken Neubeck
1 Valley Road
Patchogue, NY 11772

EA2CYJ, EA4TD, EA4AOC, EC4DX, DK7AH) won Europe for fourth place with 9.2M.

Multi-Multi (21). The two top teams both broke the World record: ES9C (ES2ADF, ES2ADO, ES2MA, ES2MC, ES4RD, ES5GP, ES5HTA, ES5JR, ES5QA, ES5RY, ES5TF, ES5TV, OH2BP, YL1ZF, YL2GQT, YL2KF, YL3AD, YL3DW) with 16.3M and HK1NA (HK1R, HK1T, HK1N, LU8EOT, HK6NVV, HK6F) with 15.2M for a new South America record. Third-place 9A1A (9A2DQ, 9A5DDT, 9A5E, 9A5W, 9A6A, 9A6TKS, 9A7C, 9A7R, 9A9A) also broke the prior European record, held by themselves from last year with 14.4M.

Clubs

Europe. Amongst the familiar top two clubs, the Bavarian Contest Club (BCC) prevailed with 104 logs and 68M over the Rhein Ruhr DX Association (RRDXA) with 58 logs and 61M. Third-place Ukranian Contest Club (UCC) made 35M with its 31 logs.

United States. The Potomac Valley Radio Club (PVRC) pooled 39 logs for third in the world to win the US with 38M over Yankee Clipper Contest Club (YCCC) with 28 logs and 34M. The next three US clubs were very close to the fourth and fifth place DX clubs, all at 17-18M.

Plaques

At the time of publication we were still receiving confirmations of plaque sponsorships and winners. The current list is at http://www.cqwwrtty.com/plaques.htm and is updated as each sponsor commits to a plaque. Thank you to everyone who sponsors a plaque! A plaque can be sponsored for just about any category at the world or regional or country level. Take a look and think about a plaque you would like to

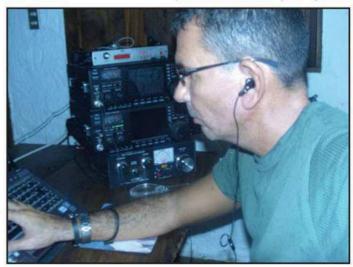
sponsor. You can have your pick of any one that is not already committed as a sponsor.

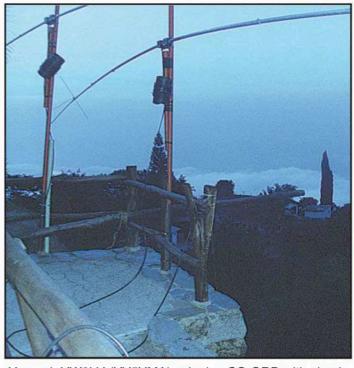
Logs

Log statistics were almost identical to 2011 and 2012. There were enough logs such that 86.7% of all QSOs were cross-checked and 97% of those QSOs were deemed good. 0.9% of all QSOs had busted (incorrect) callsigns and 0.5% of the QSOs had busted exchanges, either Zone or QTH. Another 1.6% were not found in the other station's log. Individual Log Check Reports (LCRs) are available upon request to <w0yk@cqwwrtty.com> where you can see how your log stacks up.

Website

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



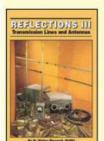


Ymanol, YW2LV (YV5YMA), winning SO QRP with simple dipole antennas 1700 feet above the Caribbean Sea.

REFLECTIONS III

by Walter Maxwell, W2DU

Here's a sampling of what you'll find inside this fully revised and updated third edition!



- ◆ Too Low an SWR Can Kill You
- The View into the Conjugate Mirror
- Standing-Wave Development and Line Impedance
- ◆ Using the Smith Chart
- ◆ The Line Match Problem
- Computer Programs for Impedance Matching
- ♦ The Quadrifilar Helix Antenna
- Antennas in Space from an Historical and Archival Perspective . . . and more!

This 424-page edition is a must-have!

Order today for only \$39.95

Shipping & Handling: USA - \$7 for 1st book, \$3.50 for 2nd, \$2 for each add'I CN/MX- \$15 for 1st, \$7 for 2nd, \$3.50 for each add'I.

All Other Countries- \$25 for 1st, \$10 for 2nd, \$5 for each add'I.



CQ Communications, Inc.
25 Newbridge Rd., Hicksville, NY 11801
http://store.cq-amateur-radio.com
Order Toll-Free 800-853-9797



geographical breakdown and all-time records).

Thanks

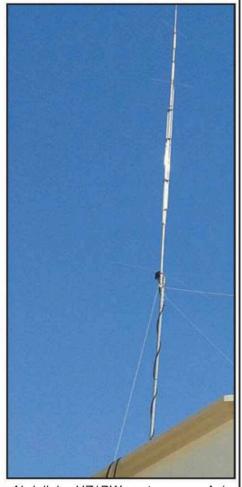
Thanks to all participants who, together, make this a fun weekend for everyone. Thanks also to the team of volunteers behind the scene who make it all possible:

- Gail, K2RED, Managing Editor of *CQ*, for all she does for the contests.
- Rules translators: Boyan, LZ2BE;
 Vasek, OK1VRF; Herman, ON4QX;
 Tapani, OH2LU; Fabi, VA2UP; Kostas,

- SV1DPI; Kazu; JK3GAD/MØCFW; Marcos, PY2WS; Vlad, VE3IAE; Diana, XE2DN; and Hector, XE2K.
- Ken, K1EA, provides the log-check software and consulting during log check.
- Mark, K6UFO, laboriously typed in paper logs.
- Ray, ND8L, manages the CQ RTTY contest plaque program. (And a big thanks to Mike, K4GMH, who managed the plaque program for the past decade. It's a huge job and Mike well-deserves a break!)
- Barry, W5GN, manages the certificate printing and mailing.
- Randy, K5ZD, for his continual support on a wide range of issues.

For expanded results of the contest, including QRM, operators of multi stations, expanded tables, plaque information, and more, go to <www.cq-amateur-radio.com> and <www.cqwwrtty.com>. I look forward to seeing everyone again in the 28th annual CQ WW RTTY DX Contest on 27–28 September 2014. 73, Ed, WØYK





Abdullah, HZ1BW, set a new Asia record to win 10 Meters QRP.

