Results of the 2013 CQ WPX RTTY Contest

BY ED MUNS,* WØYK

Beginning with this contest report, the complete score listings for all CQ contests are being published online only. To view the full score listing, visit the CQ Home Page at http://www.cq-amateur-radio.com and click on the link under "Current Issue Highlights."

— W2VII

WPX RTTY is always fun! . . . KØGEO

ood propagation provided lot of fun for the 11,534 participants in the 19th annual CQ WPX RTTY Contest. Whether your interest was making some RTTY QSOs or going all out to see how many contacts, countries, and prefixes you could work, the weekend held lots of possibilities for all.

The popularity of RTTY contesting demands more and more of the amateur spectrum with stations packed in as tightly as in CW and SSB. Accordingly, more attention is focused on transmitted bandwidth and the attendant QRM to neighbors, similar to key clicks on CW or splatter on SSB. Some radio manufacturers are enhancing their transmitters with narrower transmit filtering to address this rising issue.

Active callsigns rose 13%, yielding a few more total QSOs than last year. A few more countries were represented at 188. Multi-Multi 9A1A surpassed their 2012 world record of 1168 prefixes by logging 1210 this year out of the active 2124 prefixes.

Conditions and activity shifted down slightly from the high bands, but there was a good balance across all five bands:

Band	2010	2011	2012	2013
80	13%	15%	11%	11%
40	27%	28%	23%	26%
20	36%	35%	27%	28%
15	23%	21%	30%	29%
10	0.5%	1%	9%	6%

High rates were experienced on the three high bands during the day and 40m was excellent at night. Single operators had some interesting strategic choices about where to invest their 30-hour time limit. The double QSO points for 40m and 80m are also critical to consider, as is the value of the high bands in picking up more prefix multipliers. One of the great things about the CQ WPX contests is the constant flow of new multipliers right through the end of the contest.

The Single-Op QRP categories continued at about the same level in their third year of existence. Activity in the Rookie and Tribander-Wires overlay categories remained about the same at 68 and 465 logs, respectively. Thanks to Rudy N2WQ for sponsoring the first TB-Wires plaque.

The overall quality of RTTY operating and contesting skills continues to improve. There were 43 new World and Continent records set this year, many in the "younger" QRP categories. This is tribute to stations on both sides of the QSO as operating efficiency increases.

	Wo	orld	Con	tinent
	New	Avail	New	Avail
SO10	1	3	5	18
SO15	2	3	8	18

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	Wo	orld	Continent		
	New	Avail	New	Avail	
SO20	_	3	3	18	
SO40	2	3	7	18	
SO80	1	3	1	18	
SOAB	2	3	9	18	
MS	_	1	1	6	
M2	_	1		6	
MM	_	1	2	6	
Total	8	21	35	126	

Single-Operator (2949 entries)

There are plenty of Single-Operator categories to satisfy a wide range of interests and station capability. Here are the numbers of logs submitted in the categories:

	80	40	20	15	10	SB	AB	SO
QRP	8	13	9	22	5	47	67	114
LP	31	95	119	135	57	437	1349	1786
HP	31	63	56	75	28	253	796	1049
Total	70	171	184	222	90	737	2212	2949

All Band (2212)

All Band High Power was won by P49X after the embarrassment of mistakenly remembering the minimum time-off as 30 minutes. After taking two breaks for equipment problems, he started up much sooner than the required 60-minute minimum off-time. Accordingly, 162 QSOs and 16 multipliers were removed from his score since they were past the 30-hour maximum single-op time period. *Moral:* Reread the rules carefully as a refresher no matter how experienced you are. In fact, experience may work against you since rules like this vary among contests and it is easy to mix them up.

Roman UW2M (URØMC) set a new European record for second place in SOABHP. CQ WW RTTY SOABHP world-record holder Alexandr UA5C took third place, while Bud AA3B won North America



ED1R took first place in Multi-Single Europe: (left to right) EA4SV, EC4DX, EA1AR, EA2CJ, EA2CYJ, EC1KR, EA4AOC.

2013 CQ WPX RTTY CONTEST TROPHY SPONSORS AND WINNERS

Single Operator All Bands High Power

World: Sponsored by Glenn Vinson, W6OTC. Winner: P49X (op: Ed Muns, WØYK) Asia: Sponsored by Vladimir Gleizer, UN7ZL. Winner: Yuri Kurinyi, RG9A Europe: Sponsored by DL-DX RTTY Contest Group. Winner: UW2M (op: Roman

Tkachenko, URØMC)

Canada: Sponsored by Steve Frick, N6QEK/VY1. Winner: Rudy Bakalov, N2WQ USA 7th Call Area: Sponsored by Hank Lonberg, KR7X (in memory of Bob Wruble, W7GG). Winner: KS7AA (op: Jeff Stai, WK6I)

Single Operator All Bands Low Power

World: Sponsored by Mike Sims, K4GMH. Winner: Fabi Bertolotto, VA2UP Asia: Sponsored by Doug Faunt, N6TQS. Winner: UP6P (op: Yuri Loparev, UN6P) Europe: Sponsored by Trey Garlough, N5KO. Winner: EO3Q (op: Ruslan Chernyavcskye, UR3QCW)

North America: Sponsored by Wayne King, N2WK. Winner: John Bayne, KK9A Japan: Sponsored by JA6ZPR GOMAGARA Contest Club. Winner: Masaki Okano, JH4UYB

USA: Sponsored by Jim Reisert, AD1C. Winner: WE4M (op: Mark Sihlanick, N2QT)
CONO SUR (CE-CX-LU): Sponsored by LU-CG Contest Group. Winner: Sebastian
Torti, LU7FTS

TB-Wires, Canada/Mexico/48 USA States: Sponsored by Rudy Bakalov, N2WQ. Winner: AK4K (op. Tom Schaeffer, W4CU)

Single Operator Single Band

- 3.5 MHz World High Power: Sponsored by Sue Cook, Al6YL/P40YL. Winner: Tine Brainik. S50A
- 7 MHz World High Power: Sponsored by Randy Hatt, AA8R. Winner: YT8A (op. Dusan Ceha. YU1EA)
- 7 MHz World Low Power: Sponsored by Don Reed, K2OGD. Winner: Andrei Kopanchuk, UZ7HO
- 7 MHz North America Low Power: Sponsored by Mike Jacoby, N3MA. Winner: Juan Carlos Molina, CO2JD
- 14 MHz World High Power: Sponsored by Steve "Sid" Caesar, NH7C. Winner: Victor Yarovoy, UW1M
- 14 MHz World Low Power: Sponsored by Kenny Young, AB4GG. Winner: 5C5W (op. Mohamed Kharbouche, CN8KD)
- 21 MHz World High Power: Sponsored by Steve Jarrett, K4FJ. Winner: TM6M (op. Stephane Van Langhenhoven, F4DXW)
- 28 MHz World High Power: Sponsored by Steve Hodgson, ZC4LI. Winner: Carlos Neves, CT3FQ
- 28 MHz North America Low Power: Wray Dudley, AB4SF. Winner: EE8E (op. Pekka Kolehmainen, EA8AH)

Multi-Op Single Transmitter

World: Sponsored by Steve Merchant, K6AW. Winner: ED1R (ops: EA1AR, EC1KR, EA2CJ, EA2CYJ, EA4SV, EA4AOC, EC4OX)

North America: Sponsored by KK7OO – Rolling Ranch Contest Club. Winner: WIØWA (ops: NØAC, NØMGK, NØNI, NØXR, WIØH @NØNI)

USA: Sponsored by NR4M Goat Farm Contest Team. Winner: K1SFA (ops: K1MK, K1SFA @K1TTT)

Africa: Sponsored by CR3A/CQ9K Madeira Contest Team. Winner: 5X8C (ops: F8BJI, F5EOT, F5NHJ, DL1YFF)

Multi-Op Two Transmitter

World: Sponsored by Roger Hoffman, N4RR. Winner: LX7I (ops: LX2A, DL8DR, DL6ZBN, DF8XC, DL2YCA, DK1QH, DL6SFR, DC2VE, DF7ZS)

North America: Sponsored by Ed Muns, WØYK. Winner: NP2/N5RZ (ops: N5RZ, K5RZA, WP2XX)

USA: Sponsored by CTRI Contest Group. Winner: K9CT (ops: AI9T, K9CT, K9WX, K9ZO, N7MB)

Multi-Op Multi-Transmitter

World: Sponsored by Fred Dennin, WW4LL. Winner: 9A1A (ops: 9A2DQ, 9A5E, 9A5W, 9A6A, 9A7IMR, 9A7R, 9A9A)

North America: Sponsored by Steve Bookout, NR4M. Winner: NR4M (ops: NR4M, K7SV, K4EU, K4EC, N3ZV, K4GM, N4JOW, N4NW)

Canada: Sponsored by KA4RRU Contest Group. Winner: VE7UF (ops: VE7FO, VE7IO, VA7HDJ, UWØCN, VA7FC, VE7NDE, VE7UF)

Club Competition

World: Potomac Valley Radio Club. Winner: Bavarian Contest Club

North America: Northern California Contest Club. Winner: Potomac Valley Radio Club

for fourth place. North America record-holder Mike K4GMH was fifth and Yuri RG9A won Asia for sixth place. Nestor EA8CNB won Africa, while ZL1G won Oceania.

In All Band Low Power, Fabi VA2UP set a new North America record to take first place. John KK9A finished first in USA for second place overall. Sue P40YL (Al6YL) was third as the South America winner. Mark WE4M (N2QT) took fourth and Ruslan EO3Q (UR3QCW) was fifth with the European win. Yuri UP6P (UN6P) won Asia and Max KH6ZM set a new Oceania record.

100% pure QRP fun! First log ever submitted in my ham life . . . IK2CAW

All Band QRP has a new world record set by Ymanol YW2LV (YV5YMA) and second place Rudolf TM3T (F5VBT), the previous winner and world record holder, set a new Europe record. Not far behind was Ludek OK3C (OK2ZC) in third. Julius N2WN won North America, Jose EA9CD set a new Africa record, Nobu JH7UJU set a new Asia record, and Ahmed YB8EXL set a new Oceania record.

Single Band (737)

On 10m High Power, five of the first six places were on different continents, substantiating the effectiveness of this band when it is open. Carlos CT3FQ won Africa for first place; Joel KG6DX won Oceania for second place; Sulaiman 7Z1SJ won Asia for third; and Luis XE2B won North America for fourth. Oleg RK8I was fifth and Massimo IZ4DPV won Europe for sixth. Uncharacteristically, there were no South America entries this year.

Ten-meter Low Power was ironically more competitive than High Power, with Pekka EE8E (EA8AH) setting a new world record ... on both Low and High Power! Waldir PY2WC was second with a new South America record and Vyacheslav RA9RR was fifth with a new Asia record. Derek J35X won North America and Jose CT1AOZ took sixth place with a new Europe record.

Ten-meters QRP was won by Jose CO6EC for a new North America record and Francesco I1UZF won Europe for second place.

Stephane TM6M (F4DXW) won 15m High Power with a new Europe record and Grecam PT2CM (PT2FE) won South America for second. Bob N7AT (K8IA) won North America and Steve ZC4L set a new Asia record. Jose CT3DZ won Africa and Karsono YBØNDT set a new Oceania record.

As with 10m Low Power, 15m LP has a new world record set by Dunia EA8MT and Fernando PU1MKZ won South America. Third place Oscar EA1DR set a new Eureope record, Dimitri 4Z5CP won Asia, Kermit AB1J won North America, and Andi YB8HI won Oceania.

Fifteen-meters QRP has a new world record set by Stefano IZ3NVR. Isamu JE1CAC won Asia, Warren KFØGX set a new North America record, and Tenny YD1MKQ set a new Oceania record.

Victor UW1M won 20m High Power for a new Europe record and Salim HK1T won South America for second place. Bill VY2LI set a new North America record, Jose CT3BD won Africa, Yoshi JA9CWJ won Asia, and Peter VK4IU won Oceania.

Mohamed 5C5W (CN8KD) set a new Africa record on 15m Low Power, coming close to the world record. Victor USØMS won Europe for second place overall, with Vlad UN6LN winning Asia. Lock W1ZD won North America, Carlow PY4XX won South America, and Hendra YB1HK won Oceania.

Mario TG9ADQ won 20m QRP, following in the footprints of TG9ANF who won this category the first two years. Second place Rik IK2CAW set a new Europe record for second place and Kazuo JR0BUL won Asia.

In 40m High Power, Dusan YT8A (YU1EA) set a new world record, Vlad UN1L (UN7ZL) set a new Asia record, Dick WT4O (K9OM) set a new North America record, and Rivai YE3AA set a new Oceania record.

Kopanchuk UZ7HO won 40m Low Power, Daniel YY4DNN won South America, Juan CO2JD won North America, Evgeni 4Z5UN won Asia, and Derry YC2WMD won Oceania.

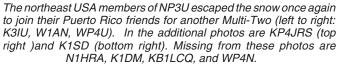
Gulyas HG6C (HA6IAM) set the 40m QRP world record, Jose NX3U (N3BAA) won North America, and Hiro JA2MOG set a new Asia record.

S50A won 80m High Power, Steve K4FJ won North America, and Ivan UN9LU won Asia.

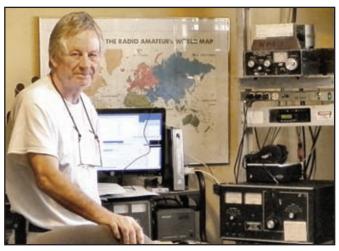
Eighty-meters Low Power was won by Bela HA8BE, Randy

		201	3 CQ W	W WPX RTTY TO	OP WOR	LD SCORES			
WORLD	1	28 MHz		S01D (SP1JPQ)	23.229	7 MHz		7 MHz	
SINGLE OPERA		*EE8E (EA8AH)	2.154.369	KFØGX		IZ20DM	1.404	WT40 (K90M)	2.991.120
HIGH POWER ALI		*PY2WC		K6VHF	15,960	SQ3PMI		S57YX	
P49X (WØYK)		*XQ7UP		YD1MKQ				UW2F (UTØFT)	
UW2M (URØMC)		*PY2EB				LOW POWER		UN4PG	477,312
UA5C		*RA9RR		14 MHz		ALL BAND		W1AJT/4	
AA3B		*J35X		TG9ADQ		*IZ8VMV		KEØL	
K4GMH	7,120,058	*CT1A0Z		IK2CAW		*UR5ZIW		JR1BAS	54
RG9A		*EA8/IK1PMR (IK1PMR)		IZ7DMT		*SN1T			
EA5RS (UT5UDX)		*LU7BTO		EA1GFY		*EF5B (EA5HRT) *WW1MM (N1EN)		3.5 MHz	4 000 400
DM1A (DL1IAO)		*R3AA	132,405	EA3HCJ	9,240	*W4TTM		HA3LI	1,220,436
SN7Q (SP7GIQ)		21 MHz		W9CF/7		*UR6LEY		DN2SAX (DL2SAX)	207,466
KM1W (W1UE)	5,439,564		1 000 010	PC4C JRØBUL		*YU1RP		LOW POWE	
		*EA8MT *PU1MKZ		IZ7SLF		*N7TEW		ALL BAND	
28 MHz		*EA1DR		9A5BWW		*K9HX0/8		*DL9YAJ	
CT3FQ		*HG5D (HA8QZ)		3A3D****			,	*RT9S	
KG6DX		*4Z5CP		7 MHz		21 MHz		*S56A	
7Z1SJ	239,358	*JR3RIY		HG6C (HA6IAM)	495 000	*PU1MKZ	1,108,728	*GM1C (GM1BSG)	
XE2BRK8I		*YW5T (YV5JBI)		E73TTT		*MØ0SH		*YW2LV (YV5YMA)	
IZ4DPV		*UA3QJJ		NX3U (N4BAA)		*IZØUME	183,000	*RN6MA	1 500 198
E01I (UT1IA)		*LU1DP		UU4JIM		*C02GL	181,152	*OK8DD	
EA1KY		*RU9AZ		CT2GMH		*IT9CLN	99,003	*UR4U (UR4UDI)	
KL7RA			,	E73RZ		*14JEE		*ON5GQ	
DF9ZP		14 MHz		9A9L		*YD10CG	8	*IK4QJF	1,345,675
021		*5C5W (CN8KD)	1,914,778	SP4BPH	101,032	4.5			
04 8411-		*USØMS	1,048,318	DJ3GE	99,660	14 MHz	04.040	28 MHz	
Z1 MHz	0.000.000	*RZ1ZZ	783,522	IZ2QKG		*AD4SB		*XQ7UP	420.604
TM6M (F4DXW) PT2CM (PT2FE)		*EC7ZK	747,712			*RN3DNG *PDØJMH		*LU7BT0	137,725
9A5Y (9A3LG)		*UN6LN		3.5 MHz		*PD8SL		*VA7FC	54,436
3Z5N (SP5GRM)		*LZ5XQ		IK3SSJ		*HA1NR		*IKØPEA	24,012
R7LV		*YU8NU		UT3N (UT3NK)		*IZ7SLF		*UN3Z	22,533
N7AT (K8IA)		*UU9JQ		HA1WD		127321	10	*IKØPRP	16,632
YT2T		*DL1DTL		SP6EIY		7 MHz		*K03T	
9A6NA		*RV9CP	475,020	UT5DJ		*9A3BWW	286 296	*LU6DC	
ZC4LI				DD1LD		*SP30L		*HA6NN	
UXØFF		7 MHz		DM9K (DO4DXA)		*DL6JF		*N5EE0/4	1
		*UZ7H0		DL7CX	132	*IW1PPM			
14 MHz		*YU2A				*IZ7SIA	952	21 MHz	
UW1M	3.090.216	*IW4EGX		MULTI-OPERATO				*F4GDI	310,331
HK1T		*EA7ISH		SINGLE TRANSMIT		3.5		*HA5BSW	303,996
SP4MPG		*E79D		ED1R		*0Z1A00	68,200	*R5ACQ	
VY2LI		*EA3EZD		IQ1RY				*AB1J	
IZ6TSA		*0K2RU		HG7T		TRIBANDER/SINGLE EI	EMENT	*EA3NO	
RT3P (UA3PAB)	1,642,800	*SQ2NNN *YT5W (YT2PFR)		WIØWA K1SFA		HIGH POWER		*S54X	
WA5ZUP	1,575,123	*YY4DNN		S51MA		ALL BAND		*0Q4B (0N4BHQ)	
YL2UI	1,524,186	114DNN	1,002,400	WW4LL		6Y2T (VE3DZ)		*VE10P	
DL3BQA	1,440,633	3.5 MHz		Z37M		ZZ2T (PY2MNL)		*DK1IP	
4M5L (YV5LI)	1,406,976	*HA8BE	955 320	NV9L		DM5TI		*ZM3T (W3SE)	81,300
		*SQ2RGB		LZ13FDAY		YU1UN			
7 MHz		*SP6GCU				EU1AZ AK4K (W4CU)		14 MHz	4 0 40 0 40
YT8A (YU1EA)		*HA8BT		MULTI-OPERATO	ND.	AN4N (VV4GU)			1.048.318
S53M (S51FB)	2 501 026				JK		2 107 010	*USØMS	
		*Y04RDW		TWO TRANSMITT		SV2BFN		*IZ8EFD	398,454
UN1L (UN7ZL)	3,084,528	*Y04RDW *Z32ØN	490,144		ER	SV2BFN YL9T (YL2TW)	2,165,900	*IZ8EFD *W1ZD/7	398,454
UN1L (UN7ZL) WT40 (K90M)	3,084,528		490,144	TWO TRANSMITT	ER 15,381,356	SV2BFNYL9T (YL2TW) WA2ETU	2,165,900	*IZ8EFD *W1ZD/7 *IW9FDD	398,454 325,600 322,095
UN1L (UN7ZL) WT40 (K90M) EE1Z (EB1LA)	3,084,528 2,991,120 2,718,460	*Z32ØN *IK2DZN *SM7MX (SM5MX)	490,144 449,848 408,954 331,936	TWO TRANSMITT LX71HA3ØSNP2/N5RZ	ER 15,381,356 13,928,536 13,884,849	SV2BFN YL9T (YL2TW)	2,165,900	*IZ8EFD *W1ZD/7 *IW9FDD *VE3IAE	398,454 325,600 322,095 313,605
UN1L (UN7ZL) WT40 (K90M) EE1Z (EB1LA) RA9DF	3,084,528 2,991,120 2,718,460 2,264,462	*Z32ØN *IK2DZN *SM7MX (SM5MX) *IK2VTJ	490,144 449,848 408,954 331,936 267,216	TWO TRANSMITI LX71HA3ØSNP2/N5RZNP3U	ER 15,381,356 13,928,536 13,884,849 12,075,172	SV2BFNYL9T (YL2TW) WA2ETU	2,165,900	*IZ8EFD *W1ZD/7 *IW9FDD *VE3IAE *Y050HY	398,454 325,600 322,095 313,605 254,609
UN1L (UN7ZL) WT40 (K90M) EE1Z (EB1LA) RA9DF	3,084,528 2,991,120 2,718,460 2,264,462 2,028,952	*Z32ØN *IK2DZN *SM7MX (SM5MX)	490,144 449,848 408,954 331,936 267,216	TWO TRANSMITT LX71	ER15,381,35613,928,53613,884,84912,075,17211,850,025	SV2BFN	2,165,900 2,122,078 2,022,884	*IZ8EFD *W1ZD/7 *IW9FDD *VE3IAE *Y050HY *JI3BFC	398,454 325,600 322,095 313,605 254,609 230,620
UN1L (UN7ZL)WT40 (K90M)E12 (EB1LA)RA9DFW17PNJUN1FNJ	3,084,528 2,991,120 2,718,460 2,264,462 2,028,952 1,917,952	*Z32ØN *IK2DZN *SM7MX (SM5MX) *IK2VTJ *UX5UU	490,144 449,848 408,954 331,936 267,216	TWO TRANSMITT LX71	ER15,381,35613,928,53613,884,84912,075,17211,850,02510,627,029	SV2BFN YL9T (YL2TW) WAZETU DJ3NG	2,165,900 2,122,078 2,022,884	*IZBEFD. *W1ZD/7. *IW9FDD *VE3IAE. *Y050HY *JI3BFC. *JH8SIT.	398,454 325,600 322,095 313,605 254,609 230,620 124,160
UN1L (UN7ZL)	3,084,528 2,991,120 2,718,460 2,264,462 2,028,952 1,917,952 1,870,080	*732ØN *IK2DZN *SM7MX (SM5MX) *IK2VTJ *UX5UU QRP	490,144 449,848 408,954 331,936 267,216	TWO TRANSMITT LX71. HA30S NP2/N5RZ. NP3U K9CT. 322X. DLØCS.	15,381,356 13,928,536 13,884,849 12,075,172 11,850,025 10,627,029 9,251,613	SYZBFN YL9T (YL2TW) WA2ETU DJ3NG 28 MHz 7Z1SJ AABR URSMBA	2,165,900 2,122,078 2,022,884 239,358 65,570 11,340	*IZ8EFD *W1ZD/7 *IW9FDD *VE3IAE *Y050HY *JI3BFC	398,454 325,600 322,095 313,605 254,609 230,620 124,160 83,888
UN1L (UN7ZL)WT40 (K90M)E12 (EB1LA)RA9DFW17NJUN16R (0H3FM)	3,084,528 2,991,120 2,718,460 2,264,462 2,028,952 1,917,952 1,870,080	*Z32ØN *IK2DZN *SM7MX (SM5MX) *IK2VTJ *UX5UU QRP ALL BAND	490,144 449,848 408,954 331,936 267,216 235,320	TWO TRANSMITI LX71. HA30S. NP2/NSRZ. NP3U. K9CT. 322X. DLØCS. DP9A.	15,381,356 13,928,536 13,884,849 12,075,172 11,850,025 10,627,029 9,251,613 9,014,394	SV2BFN VL9T (V12TW). WA2ETU	2,165,900 2,122,078 2,022,884 239,358 65,570 11,340 5,593	*1Z8EFD *W1ZD/7 *1W9FDD *V53IAE *Y050HY *J138FG *JH8SIT *N7DB	398,454 325,600 322,095 313,605 254,609 230,620 124,160 83,888
UNIL (UNZL) WT40 (K90M) EE12 (EB1LA) RA9DF IW1PNJ OH6R (OH3FM) 9A2UZ IV3TMV	3,084,528 2,991,120 2,718,460 2,264,462 2,028,952 1,917,952 1,870,080 1,861,708	*Z328N *IKZDZN *SM7MX (SM5MX) *IKZYTJ *UX5UU ORP ALL BAND YW2LV (YV5YMA)	490,144 449,848 408,954 331,936 267,216 235,320	TWO TRANSMITI LX7I. HA30S	15,381,356 13,928,536 13,928,536 12,075,172 11,850,025 10,627,029 9,251,613 9,014,394 8,491,392	SYZBFN YL9T (YL2TW) WA2ETU DJ3NG 28 MHz 7Z1SJ AABR URSMBA	2,165,900 2,122,078 2,022,884 239,358 65,570 11,340 5,593	*1Z8EFD *W1ZD/7 *1W9FDD *V53IAE *Y050HY *J138FG *JH8SIT *N7DB	398,454 325,600 322,095 313,605 254,609 230,620 124,160 83,888
UNTL (UN7ZL). WT40 (K90M). EE1Z (EB1L4). RA9DF. IW1PNJ. OH6R (OH3FM). 9A2UZ. IV3TMV. 3.5 MHz		*Z320N *IK2DZN *SM7MX (SM5MX) *IK2VTJ *UX5UU QRP ALL BAND YW2LV (YV5YMA) TM3T (F5VBT)	490,144 449,848 408,954 331,936 267,216 235,320 1,513,095 1,493,586	TWO TRANSMITI LX71. HA30S. NP2/NSRZ. NP3U. K9CT. 322X. DLØCS. DP9A.	15,381,356 13,928,536 13,928,536 12,075,172 11,850,025 10,627,029 9,251,613 9,014,394 8,491,392	SV2BFN YL9T (YL2TW) WA2ETU DJ3NG. 28 MHz 7Z1S.J AA8R URSMBA ED5.J (EA5DM) JA3EGE	2,165,900 2,122,078 2,022,884 239,358 65,570 11,340 5,593	*128FD. *W12D/7 *IW9FDD. *VE3IAE. *Y050HY *JI3BFC. *JH8SIT. *N7DB. *JR4GPA.	398,454 325,600 322,095 313,605 254,609 230,620 124,160 83,888 50,944
UNTL (UN7ZL) WT40 (K90M) EE1Z (EB1LA) RA90F IW1PNJ OH6R (OH3FM) 9A2UZ IV3TMV 3.5 MHz	3,084,528 2,991,120 2,718,460 2,264,462 2,028,952 1,917,952 1,877,080 1,861,708	*23/20N *IK2DZN. *SM7MX (SM5MX) *IKZYTJ. *UX5UU ORP ALL BAND YW2LV (YV5YMA) TM3T (F5VBT) OK3C (0K2ZC)		TWO TRANSMITT LX71. HA30S. NP2N5RZ. NP3U K9CT 322X. DL0CS. DP9A VE7SV SZ1A.	ER15,381,35613,928,53613,928,53613,884,84912,075,17211,850,02510,627,0299,251,6139,014,3948,491,3927,689,591	SV2BFN YL9T (YL2TW) WA2ETU DJ3NG 28 MHz 7Z1SJ AABR URSMBA EDSJ (EA5DM) JA3EGE 21 MHz		*128FD. *W1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JI3BFC. *JH8SIT. *N7DB. *JR4GPA.	398,454 325,600 322,095 313,605 254,609 230,620 124,160
UNTL (UN7ZL) WT40 (K90M) EE1Z (EBILA) RA90F IW1PNJ OHBR (OH3FM) 9A2UZ IV3TMV 3.5 MHz S5ØA OL9A (OK2ZAW)	3,084,528 2,991,120 2,718,460 2,264,462 2,028,952 1,917,952 1,877,080 1,861,708	*Z32ØN *IKZDZN *SM7MX (SM5MX) *IKZYTJ *UX5UU ORP ALL BAND YW2LV (YV5YMA) TM3T (F5VBT) OK3C (OK2ZC) F5BEG		TWO TRANSMITI LX71. HA30S. NP2/N5RZ. NP3U K9CT. 322X. DL0CS. DP9A VE7SV SZ1A. MULTI-OPERATIC	ER15,381,35613,928,53613,928,53613,884,84912,075,1721850,02510,627,0299,251,6139,014,3948,491,3927,689,591	SYZBFN YL9T (YL2TW) WA2ETU DJ3NG 28 MHz 7Z1S.J AASR UR5MBA ED5. (EA5DM) JA3EGE 21 MHz UA3FF	2,165,900 2,122,078 2,022,884 239,358 65,570 1340 5,593 2,852	*128FFD. *W1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JI3BFC. *JH8SIT. *N7DB. *JR4GPA. *YU2A. *IW4EGX. *EA7ISH.	388,454 325,600 322,095 3313,605 254,609 254,609 124,160 83,888 50,944 1,725,630 1,502,676
UNTL (UN7ZL) WT40 (K90M). EE12 (EB1L4). RA90F. IW1PNJ. OH6R (OH3FM) 9A2UZ. IV3TMV 3.5 MHz S50A. US4 (OK2ZAW). DM7C (OL8CX).	3,084,528 2,991,120 2,718,460 2,264,462 2,028,952 1,917,952 1,870,080 1,861,708	*23/20N *1K2DZN *5M7MX (SM5MX) *1K2VTJ. *UX5UU		TWO TRANSMITI LX71. HA30S	ER15,381,35613,928,53613,928,53613,884,84912,075,17211,850,02510,627,0299,251,6139,014,3949,014,3949,014,3947,689,591	SV2BFN VL9T (V12TW). WA2ETU		*128FD. *W1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JIBSFC. *JH8SIT. *N7DB. *JR4GPA. 7 MH2 *YU2A. *IW4EGX. *EA/ISH.	388,454 325,600 322,095 313,605 254,609 230,620 124,160 83,888 50,944 1,725,630 1,502,676 1,382,648 1,239,770
UNTL (UN7ZL) WT40 (K90M) EE1Z (EBILA) RA90F IW1PNJ OH6R (DH3FM) 9A2UZ IV3TMV 3.5 MHz S50A U.9A (OK2ZAW) DM7C (DL6CX) LY2FN	3,084,528 2,991,120 2,718,460 2,264,462 2,028,952 1,917,952 1,870,080 1,861,708 2,344,650 2,097,048 1,920,000 1,351,920	*23/20N *IKZDZN *SM7MX (SM5MX) *IKZYTJ *UX5UU ORP ALL BAND YW2LV (YV5YMA) TM3T (F5VBT) OK3C (0K2ZC) F5BEG IZ8JFL/1 S53MJ		TWO TRANSMITI LX7I. HA30S	ER	SV2BFN VL9T (VL2TW). WA2ETU. DJ3NG. 28 MHz 7Z1SJ AABR UR5MBA. ED5J (EA5DM) JA3EGE. 21 MHz UA3RF KZ7X (W7WW) WK7S (K6LL).		*128FD. *W1ZD/7 *IW1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JI3BFC. *JIHSSIT. *N7DB. *JR4GPA *YU2A *YU2A *IW4EGX *EA7ISH. *OKZRU. *26/SS2DD.	38.454 325,600 322,095 313,605 254,609 230,620 124,160 83,888 50,944 1,725,630 1,502,676 1,382,648 1,239,770 881,552
UNTL (UN7ZL) WT40 (K90M). EE12 (EB1L4). RA90F. IW1PNJ. OH6R (OH3FM) 9A2UZ. IV3TMV. \$50A. \$0.59A (OK2ZAW). DM7C (DL8CX). LY2FN.	3.084.528 2.991,120 2.718,460 2.264.462 2.028.952 1.917.952 1.870.080 1.861,708	*23/20N *IK2DZN *SM7MX (SMSMX) *IK2VTJ *UX5UU ORP ALL BAND YW2LV (YV5YMA) TM3T (F5VBT) OK3C (OK2ZC) F5BEG IZ8JFL/1 SS3MJ N2WN/4		TWO TRANSMITI LX71. HA39S. NP2/N5RZ. NP3U K9CT 322X. DL0CS. DP9A VE7SV. SZ1A. MULTI-OPERATI MULTI-TRANSMIT 9A1A. NR4M.	ER	SYZBFN YL9T (YL2TW) WA2ETU DJ3NG 28 MHz 7Z1S.J AASR UR5MBA ED5. (EA5DM) JA3EGE 21 MHz UA3FF KZTX (WYWW) WK7S (K6LL) M7P (G6NHU) M7P (G6NHU)		*128FD. *W1ZD/7 *W1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JI3BFC. *JH8SIT. *N7DB. *JR4GPA. 7 MHz *YU2A *IW4EGX. *EA7ISH. *OKZRU. *Z6/SSZDD. *DL5KUD.	388.454 325.600 322.095 313.605 254.609 230.620 124.160 124.160 1.725.630 1.502.676 1.382.648 1.239.770 851.552 767,970
UNTL (UN7ZL) WT40 (K90M) EE1Z (EBILA) RA90F IW1PNJ OH6R (OH3FM) 9A2UZ IV3TMV S50A OL9A (OK2ZAW) DM7C (DL8CX) LY2FN HA3LI 328T (S0SJX),	3.084.528 2.991,120 2,718,460 2,264.462 2.028.952 1,917,952 1,870,080 1,861,708 2,344,650 2,097,048 1,920,000 1,351,920 1,220,436 1,206,840	*23/20N *IK2DZN. *SM7MX (SM5MX) *IKZYTJ. *UX5UU ORP ALL BAND YW2LV (YV5YMA) TM3T (F5VBT) OK3C (OK2ZC) F5BE6 IZ8JFL/1. S53MJ NZWN/4 K2YG		TWO TRANSMITI LX71. HA30S. NP2N5RZ. NP3U. K9CT. 322X. DL0CS. DP9A. VETSV. SZ1A. MULTI-TRANSMIT 9A1A. NR4M. RW0A.	ER	SV2BFN YL9T (YL2TW). WA2ETU		*128FD. *W1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JISBFC. *JH8SIT. *N7DB. *JR4GPA. 7 MHz *YU2A *IW4EGX. *EA7ISH. *OKZRU. *26/SS2DD. *DL5KUD. *DF2SD.	398.454 325.600 322.095 313.605 254.609 230.620 124.160 83.888 50.944 1,725.630 1,502.676 1,382.648 1,239.770 851.552 767.970
UNTL (UN7ZL) WT40 (K90M) EE12 (EBILA) RA90F WI1PNJ OHBR (DH3FM) 9A2UZ IV3TMV 3.5 MHz S50A OL9A (0K2ZAW) DM7C (DL8CX) LY2FN HA3LL 328T (S08JX) M7T (G3VYO)	3.084.528 2.991.128 2.718.460 2.264.462 2.028.952 1.917.952 1.870.080 1.861,708	*23/20N *IKZDZN *SM7MX (SM5MX) *IKZYTJ *UX5UU.		TWO TRANSMITI LX71. HA30S. NP2M5RZ. NP3U K9CT. 322X. DL0CS. DP9A VE7SV S21A. MULTI-OPERATE MULTI-TRANSMIT 9A1A. NR4M. RW0A. DM5EL.	ER15,381,35613,928,53613,984,84912,075,17211,850,02510,627,02910,627,0299,251,6139,014,3949,251,6139,014,3947,689,591	SV2BFN YL9T (YL2TW). WA2ETU DJ3NG. 28 MHz 7Z1S.J		*128FD. *W1ZD/7 *W1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JI3BFC. *JIHBSIT. *N7DB. *JR4GPA. 7 MHz *YU2A *YU2A *IW4EGX. *EA7ISH. *OKZRU. *Z6/SSZDD. *DL5KUD. *DF2SD. *C*TIEEK.	38.454 325,600 322,095 313,605 254,609 230,620 124,160 124,160 1,725,630 1,502,676 1,382,648 1,239,770 867,870 667,870
UNTL (UN7ZL) WT40 (K90M) EE12 (EBILA) RA90F IW1PNJ OH6R (OH3FM) 9A2UZ IV3TMV 3.5 MHz S50A OL9A (OK2ZAW) DM7C (OL6XX) LY2FN HA3LI 328T (S08JX) M7T (G3YYO)	3.084.528 2.991,120 2.718.460 2.264.462 2.028.952 1.917.952 1.870.800 1.861.708 2.097.048 2.097.048 1.920.000 1.351.920 1.202.436 1.005.840 649.992	*23/20N *IK2DZN. *SM7MX (SM5MX) *IKZYTJ. *UX5UU ORP ALL BAND YW2LV (YV5YMA) TM3T (F5VBT) OK3C (OK2ZC) F5BE6 IZ8JFL/1. S53MJ NZWN/4 K2YG		TWO TRANSMITI LX71. HA30S	ER15,381,35613,928,53613,928,53613,884,84912,075,17211,850,02510,627,029251,6139,014,3948,491,3927,689,591	SVZBFN VL9T (V12TW). WA2ETU		*128FD. *W1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JIBBFC. *JH8SIT. *N7DB. *JR4GPA. 7 MH2 *YU2A. *IW4EGX. *EA/ISH. *OKZRU. *26/SS2DD. *DL5KUD. *DF2SD. *C11EEK. *I4UUL.	398.454 325.600 322.095 313.605 254.609 230.620 230.620 124.160 83.888 50.944 1,725.630 1,502.676 1,382.648 1,239.770 851.552 767.970 667.870 640.912 228.284
UNTL (UN7ZL) WT40 (K90M) EE12 (EBILA) RA90F WI1PNJ OHBR (DH3FM) 9A2UZ IV3TMV 3.5 MHz S50A OL9A (0K2ZAW) DM7C (DL8CX) LY2FN HA3LL 328T (S08JX) M7T (G3VYO)	3.084.528 2.991,120 2.718,460 2.264.462 2.028.952 1.917,952 1.870,080 1.861,708 2.344,650 2.097,048 1.920,000 1.351,920 0.120,436 1.005,840 649.992 539.994 407,266	*23/20N *IK2DZN *IKZDZN *SM7MX (SMSMX) *IKZYTJ *UX5UU. ORP ALL BAND YW2LV (YV5YMA). TM3T (F6VE). OK3C (5VEZ). F5BEG IZ8JFL/1 S53MJ N2WIVI4 K2YG DR20 (DL8MBS). NW2K		TWO TRANSMITI LX7I. HA30S. NP2/N5RZ. NP3U K9CT. 322X. DL0CS. DP9A. VE7SV SZ1A. MULTI-OPERATO MULTI-TRANSMIT 9A1A. NR4M. RW9A. DM5EL LN50 OH2K.	ER15,381,35613,928,53613,984,84912,075,17218,850,02510,627,0299,251,6139,014,3949,014,3949,014,3949,014,3949,014,39413,138,70413,138,70413,138,70414,318,70414,318,7044,354,3444,354,3444,354,3444,354,3444,354,720	SV2BFN VL9T (VL2TW). WA2ETU		*128FD. *W1ZD/7 *W1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JI3BFC. *JIHBSIT. *N7DB. *JR4GPA. 7 MHz *YU2A *YU2A *IW4EGX. *EA7ISH. *OKZRU. *Z6/SSZDD. *DL5KUD. *DF2SD. *C*TIEEK.	398.454 325.600 322.095 313.605 254.609 230.620 230.620 124.160 83.888 50.944 1,725.630 1,502.676 1,382.648 1,239.770 851.552 767.970 667.870 640.912 228.284
UNTL (UN7ZL) WT40 (K90M) EE1Z (EBILA) RA90F IW1PNJ OH6R (OH3FM) 9A2UZ IV3TMV 3.5 MHz S50A OL9A (OK2ZAW) DMTC (DL8CX) LY2FN HA3LI 32BT (S0SJX) MT7 (G3YYD) HA5OV.	3.084.528 2.991,120 2.718,460 2.264.462 2.028.952 1.917,952 1.870,080 1.861,708 2.344,650 2.097,048 1.920,000 1.351,920 0.120,436 1.005,840 649.992 539.994 407,266	*7329N *1K2DZN *5M7MX (SM5MX) *1K2VTJ *UX5UU ORP ALL BAND YW2LV (YV5YMA) TM3T (F5VBT) OK3C (OK2ZC) F5BEG IZ8JFL/1 SS3MJ N2WN/4 K2YG DR20 (DL8MBS) NW2K		TWO TRANSMITI LX71. HA30S	ER15,381,35613,928,53613,984,84912,075,17218,850,02510,627,0299,251,6139,014,3949,014,3949,014,3949,014,3949,014,39413,138,70413,138,70413,138,70414,318,70414,318,7044,354,3444,354,3444,354,3444,354,3444,354,720	SV2BFN VL9T (V12TW). WA2ETU DJ3NG 28 MHz 721SJ AA8R URSMBA ED5J (EA5DM) JA3EGE 21 MHz UA3RF KZ7X (W7WW) WK7S (K6LL) M7P (G6NHU) JR1NHD UA6LUB JA1BPA RA9UN N7US/9		*128FD. *W1ZD/7 *W1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JI3BFC. *JIHBSIT. *N7DB. *JR4GPA. 7 MHz *YU2A *YU2A *IW4EGX. *EA7ISH. *OK2RU. *Z6/S52DD. *DL5KUD. *DFSSD. *CT1EEK. *I4UUL. *CT2GMH.	398.454 325.600 322.095 313.605 254.609 230.620 230.620 124.160 83.888 50.944 1,725.630 1,502.676 1,382.648 1,239.770 851.552 767.970 667.870 640.912 228.284
UNTL (UN7ZL) WT40 (K90M) EE1Z (EBILA) RA90F IW1PNJ OH6R (OH3FM) 9A2UZ IV3TMV 3.5 MHz S50A OL9A (OK2ZAW) DMTC (DL8CX) LY2FN HA3LI 32BT (S0SJX) MT7 (G3YYD) HA5OV.	3.084.528 2.991,120 2.718.460 2.264.462 2.028.952 1.917.952 1.870.800 1.861,708 2.097.048 1.920.000 1.351.920 1.220.436 1.005.840 649.992 539.994 407.266 3.324,500	*23/20N *IK2DZN *IKZDZN *SM7MX (SMSMX) *IKZYTJ *UX5UU. ORP ALL BAND YW2LV (YV5YMA). TM3T (F6VE). OK3C (5VEZ). F5BEG IZ8JFL/1 S53MJ N2WIVI4 K2YG DR20 (DL8MBS). NW2K		TWO TRANSMITI LX7I. HA30S. NP2/N5RZ. NP3U K9CT. 322X. DL0CS. DP9A. VE7SV SZ1A. MULTI-OPERATO MULTI-TRANSMIT 9A1A. NR4M. RW9A. DM5EL LN50 OH2K.	ER15,381,35613,928,53613,984,84912,075,17218,850,02510,627,0299,251,6139,014,3949,014,3949,014,3949,014,3949,014,39413,138,70413,138,70413,138,70414,318,70414,318,7044,354,3444,354,3444,354,3444,354,3444,354,720	SV2BFN VL9T (VL2TW). WA2ETU		*128FD. *W1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JISBFC. *JH8SIT. *N7DB. *JR4GPA. 7 MHz *YU2A *IW4EGX. *EA7ISH. *OKZRU. *26/552DD. *DL5KUD. *DF2SD. *CT1EEK. *I4UUL. *CT2GMH.	398,454 325,600 322,095 313,605 254,609 230,620 124,160 83,888 50,944 1,725,630 1,502,676 1,382,648 1,239,770 851,552 767,970 667,870 6640,912 228,284 204,408
UNTL (UN7ZL) WT40 (K90M) EE12 (EBILA) RA90F IW1PNJ OH6R (OH3FM) 9A2UZ IV3TMV 3.5 MHz S50A 0L9A (OK2ZAW) DM7C (OL8CX) LY2FN HA3LI 328T (S08JX) M7T (G3YYO) EW8DZ K4FJ	3.084.528 2.991,120 2,718.460 2,264.462 2.028.952 1,917,952 1,870,080 1,861,708 2,344,650 2,097,048 1,920,000 1,351,920 1,220,436 649,992 539,994 407,266 324,500	*23/20N *IK2DZN *SM7MX (SM5MX) *IKZVTJ *UX5UU *U		TWO TRANSMITI LX71. HA30S. NP2/N5RZ. NP3U K9CT. 322X. DL0CS. DP9A VE7SV SZ1A. MULTI-OPERATO MULTI-TRANSMIT 9A1A NR4M. RW0A. DM5EL. LN50 OH2K. S50XX.	ER15,381,35613,928,53613,984,84912,075,17218,850,02510,627,0299,251,6139,014,3949,014,3949,014,3949,014,3949,014,39413,138,70413,138,70413,138,70414,318,70414,318,7044,354,3444,354,3444,354,3444,354,3444,354,720	SV2BFN YL9T (VL2TW). WA2FTU DJ3NG. 28 MHz 7Z1SJ		*128FD. *W1ZD/7 *W1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JI38FC. *JH8SIT. *N7DB. *JR4GPA 7 MHz *YU2A *IW4EGX *EA7ISH. *OK2RU. *Z6/SS2DD. *DL5KUD. *DF2SD. *CT1EEK. *I4UUL. *CT2GMH.	398.454 325.600 322.095 313.605 254.609 230.620 124.160 1,725.630 1,502.676 1,382.648 1,299.770 667.870 667.870 640.912 228.284 204.408
UNTL (UN7ZL) WT40 (K90M) EE1Z (EBILA) RA90F IW1PNJ OH6R (OH3FM) 9A2UZ IV3TMV 3.5 MHz S50A OL9A (OK2ZAW) DM7C (OL8CX) LY2FN HA3U JAZET (SOSJX) M7T (G3YYO) HA50V EW8DZ K4FJ LOW POWE ALL BAND *VA2UP	3.084.528 2.991,120 2.718,460 2.264.462 2.028,952 1.917,952 1.870,080 1.861,708 2.344,650 2.097,048 1.920,000 1.351,920 1.220,436 4.407,266 3.24,500 ER	*23/20N *IK2DZN *IKZDZN *SM7MX (SMSMX) *IKZYTJ *UXSUU *IMPA ALL BAND *YW2LV (YV5YMA) *TM3T (F5VBT) *OKSC (OK2ZC) *F5BEG *IZ8JFL/1 *S53MJ *N2WN/4 *K2YG DR2Q (DL8MBS) *NW2K *UXW1/4 *COEC *IØUZF *Y08DDP *IWZW1		TWO TRANSMITI LX71. HA30S. NP2/N5RZ. NP3U. K9CT. 322X. DL0CS. DP9A. VE7SV. SZ1A. MULTI-OPERATI MULTI-TRANSMITI 9A1A. NR4M. RW0A. DM5EL. LN5O. OH2K. S50XX. ROOKIE HIGH POWER	ER15,381,35613,928,53613,984,84912,075,17218,850,02510,627,0299,251,6139,014,3949,014,3949,014,3949,014,3949,014,39413,138,70413,138,70413,138,70414,318,70414,318,7044,354,3444,354,3444,354,3444,354,3444,354,720	SV2BFN VL9T (V12TW). WA2ETU		*128FD. *W1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JISBFC. *JH8SIT. *N7DB. *JR4GPA. 7 MHz *YU2A *IW4EGX. *EA7ISH. *OKZRU. *26/552DD. *DL5KUD. *DF2SD. *CT1EEK. *I4UUL. *CT2GMH.	398.454 325.600 322.095 313.605 254.609 230.620 124.160 1,725.630 1,502.676 1,382.648 1,299.770 667.870 667.870 640.912 228.284 204.408
UNTL (UN7ZL) WT40 (K90M) EE12 (EBILA) RA9DF IW1PNJ OH6R (OH3FM) 9A2UZ IW3TMV 3.5 MHz S50A 3.5 MHz S50A UP2FN HA3LI J32BT (S08JN) M7T (G3YYD) HA5UV EW8DZ K4FJ LOW POWE ALL BAND	3.084.528 2.991,120 2.718,460 2.264.462 2.028,952 1.917,952 1.870,080 1.861,708 2.344,650 2.097,048 1.920,000 1.351,920 1.220,436 4.407,266 3.24,500 ER	*23/20N *IKZDZN *SM7MX (SMSMX) *IKZYTJ *UX5UU ORP ALL BAND YW2LV (YV5YMA) TM3T (F5V8T) OK3C (0K2ZC) F5BEG IZ8JFL/1 S53MJ NZWW/4 K2YG DR20 (DL8MBS) NW2K 28 MHz CO6EC IOUZF		TWO TRANSMITI LX71. HA30S. NP2/N5RZ. NP3U K9CT. 322X. DL0CS. DP9A VE7SV SZ1A. MULTI-OPERATO MULTI-TRANSMIT 9A1A NR4M. RW0A. DM5EL. LN50 OH2K. S50XX.	ER15,381,35613,928,53613,928,53613,984,84912,075,17218,550,02510,627,0299,251,6139,014,5949,216,6139,014,5949,216,6139,014,5949,216,6139,014,5949,216,6139,014,5949,216,6139,014,5949,216,6139,014,5949,216,6139,014,5949,216,6139,014,5949,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,6139,216,613,216,613,216,613,216,613,216,613,216,613,216,613,216,613,216,613,216,613,216,613,216,613,216,613,216,613,216,613,216,613,216,613,216,613,216,613,216,613,216,613,216,613,216,613,	SV2BFN YL9T (VL2TW). WA2FTU DJ3NG. 28 MHz 7Z1SJ		*128FD. *W1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JISBFC. *JH8SIT. *N7DB. *JR4GPA. 7 MHz *YU2A. *IW4EGX. *EA7ISH. *OKZRU. *26/SS2DD. *DL5KUD. *DF2SD. *CT1EEK. *I4UUL. *CT2GMH. *3.5 MHz *OKZT (OK1FHI). *K3IT	398.454 325.600 322.095 313.605 254.609 230.620 124.160 15.02.676 1.382.648 1.725.630 1.502.676 1.382.648 204.408 204.408
UNTL (UN7ZL) WT40 (K90M) EE12 (EBILA) RA90F IW1PNJ OH6R (DH3FM) 9A2UZ IV3TMV 3.5 MHz S50A 0L9A (0K2ZAW) DM7C (0L8CX) LY2FN HA3LI 328T (S08JX) M7T (G3YY0) EW8DZ K4FJ LOW POWE ALL BAND *VA2UP *KK9A/4 *P40YL	3.084.528 2.991,120 2.718.460 2.264.462 2.028.952 1.917.952 1.870.800 1.861,708 2.097.048 2.097.048 4.07.266 3.244.650 2.097.048 4.07.266 3.24,500 ER 1.5558.630 5.5558.630 5.956.294 4.925.699	*23/20N *IK2DZN *IKZDZN *SM7MX (SMSMX) *IKZYTJ *UXSUU QRP ALL BAND YW2LV (YV5YMA). TM3T (F5VBT). OK3C (OK2ZC) F5BE6. I28,FL/T S53MJ. N2WN/4 K2YG. DR20 (DL8MBS). NW2K 28 MHz CO6EC I9UZF Y08DDP K03T K82HSH		TWO TRANSMITI LX71. HA30S	ER	SV2BFN VL9T (V12TW). WA2ETU DJ3NG 28 MHz 7Z1SJ AASR URSMBA ED5J (EA5DM) JA3EGE 21 MHz UA3RF KZTX (W7WW). WK7S (K6LL) M7P (GSNHU) JAT1NHD UAGLJB JAT18PA RA9UN N7US/9 PY2CDR 14 MHz VY2LL DL3B0A M0VAA		*128FD. *W1ZD/7 *IW1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JI3BFC. *JIHSSIT. *N7DB. *JR4GPA. 7 MHz *YU2A *IW4EGX. *EA7ISH. *OKZRU. *Z6/SS2DD. *DL5KUD. *DF2SD. *CT1EEK. *I4UUL *CT2GMH. *3.5 MHz *W3T. *CMTT (0K1FHI). *K3IT *DF2SD.	38.454 325,600 322,095 313,605 254,609 230,620 124,160 124,160 15,02,676 1,382,648 1,239,770 667,870 669,972 228,284 204,408
UNTL (UN7ZL) WT40 (MOM) EE1Z (EBILA) RA90F IW1PNJ OH6R (OH3FM) 9A2UZ IV3TMV 3.5 MHz S50A OL9A (OKZZAW) DM7G (DL8CX) LY2FN. HA3LI 328T (SOSJX). M7T (G3YYD) HA50V. EW80Z K4FJ LOW POWE ALL BAND *VA2UP *K49A/4 *P40YL *WE4M (N2CIT)	3.084.528 2.991,120 2.718,460 2.264.462 2.028.952 1.917,952 1.870,080 1.861,708 2.344,650 2.097,048 1.920,000 1.351,920 1.220,436 1.920,000 1.351,920 1.220,436 6.49,992 5.39,994 4.07,266 3.24,500 ER	*23/20N *IK2DZN *IKZDZN *SM7MX (SMSMX) *IKZYTJ *UX5UU. ORP ALL BAND YW2LV (YV5YMA). TM3T (F5VBT). OK3C (OK2ZC). F5BEG IZ8JFL/1 \$S3MJ. N2WN/4 K2YG DR20 (DL8MBS). NW2K 28 MHz CO6EC. IØUZF Y08DDP K03T KB2HSH.		TWO TRANSMITI LX71. HA30S. NP2N4SFZ. NP3U K9CT. 322X. DL0CS. DP9A VE7SV S21A. MULTI-OPERATE MULTI-TRANSMIT 9A1A. NR4M. RW0A. DM5EL. LN5O. OH2K. S50XX. ROOKIE HIGH POWER ALL BAND OK3KW.	ER	SV2BFN YL9T (Y12TW) WA2ETU DJ3NG 28 MHz 721SJ AA8R URSMBA ED5J (EA5DM). JA3EGE 21 MHz UASRF KZ7X (W7WW) WK75 (K6LL). M7P (G6NHU) JR1NHD UAGLJB. JA1BPA RAGUN. N7US/9 PY2CDR. 14 MHz VY2L. DL3BOA. MØVAA. RO1B		*128FD. *W1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JISBFC. *JH8SIT. *N7DB. *JR4GPA. 7 MHz *YU2A *IW4EGX. *EA7ISH. *OKZRU. *26/S52DD. *DL1SKUD. *DF2SD. *CT1EEK. *ASS. *AS	398.454 325.600 322.095 313.605 254.609 230.620 124.160 83.888 50.944 1.725.630 1.502.676 1.382.648 1.239.770 851.552 767.970 667.870 640.912 282.824 204.408
UNTL (UN7ZL) WT40 (K90M). EE12 (EB1LA). RA9DF. IW1PNJ. OH6R (OH3FM) 9A2UZ. VSTMV 3.5 MHz S50A. 3.5 MHz S50A. USA (OK2ZAW). DM7C (OL8CX). LY2FN. HA3LI. 3281 (S08JX). M7T (G3YYD). HA5DV. EW8DZ K4FJ. LOW POWE ALL BAND *KX9A'4. *P40YL *WE4M (N2QT). *E030 (UR3QGW).	3.084.528 2.991,120 2.718.460 2.264.462 2.028.952 1.917.952 1.870.080 1.861.708 2.344.650 2.097.048 1.920.000 1.351.920 1.202.436 1.005.840 4.07.266 3.24,500 5.508.630 5.508.630 5.508.630 4.925.699 4.056.360 4.001.140	*23/20N *IK2DZN *IK2DZN *SM7MX (SMSMX) *IK2VTJ. *UX5UU *IMPA ALL BAND *YW2LV (YV5YMA) *TM3T (F5VBT) *OK3C (OK2ZC) *F5BEG *IZ8JFL/1 *S53MJ *N2WN/4 *K2YG *DR2Q (DL8MBS) *NW2K *Z8 MHz *COECC *IØUZF *Y08DDP *K03T *KB2HSH *Z1 MHz *IZ3NVR		TWO TRANSMITI LX71. HA39S. NP2/N5RZ. NP3U K9CT. 322X. DL0CS. DP9A VE7SV. SZ1A. MULTI-OPERATI MULTI-TRANSMIT 9A1A. NR4M. RW0A. DM5EL LN50. OH2K. S50XX. ROOKIE HIGH POWER ALL BAND OKSKW KK4EIR. H21XB. M0STL.	ER15,381,35613,928,53613,928,53613,884,84912,075,17211,850,02510,627,0299,251,6139,014,3948,491,3927,689,591	SVZBFN VLST (V12TW). WA2ETU DJ3NG. 28 MHz 7Z1S.J AABR URSMBA EDS.J (EASDM) JA3EGE. 21 MHz UA3RF KZTX (W7WW) WK7S (K6LL) M7P (G6NHU) JATINHO UAGLJB JATBPA RA9UN N7US/9. PYZCDR 14 MHz VYZLI DL3BOA MØVAA RO1B NU4Y	2.165,900 2.122,078 2.122,078 2.022,884 239,358 65,570 11,340 5,593 2.852 955,350 917,580 699,885 691,812 629,460 494,864 170,400 170,052 154,880 151,515 1.964,402 1,440,633 940,722 398,310 384,917	*128FD. *W1ZD/7 *W1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JI3BFC. *JH8SIT. *N7DB. *JR4GPA 7 MHz *YU2A *IW4EGX *EA7ISH. *OK2RU. *26/SS2DD. *DL5KUD. *DF2SD. *CT1EEK. *I4UUL. *CT2GMH *S3.5 MHz *OK7T (OK1FHI). *K3IT. *DF2SD. *CT1EEK. *I4UUL.	398.454 325,600 322,095 313,605 254,609 230,620 124,160 1,725,630 1,502,676 1,382,648 1,239,770 667,870 667,870 640,912 228,284 667,870 667,870 667,870 667,870 667,870
UNIL (UN7ZL) WT40 (K90M) EE12 (EBILA) RA90F IW1PNJ OH6R (OH3FM) 9A2UZ IV3TMV 3.5 MHz S5ØA 0L9A (0K2ZAW) DM7C (OL6XX) LY2FN HA3LI HA3LI HA5UV EW8DZ K4FJ LOW POWE ALL BAND *VA2UP *K8A9A4 *P440YL *WE4M (N2OT) *E030 (UR3COW)	3.084.528 2.991,120 2.718,460 2.264.462 2.028,952 1.917,952 1.870,080 1.861,708 2.344,650 2.097,048 4.092,000 1.351,920 1.220,436 4.407,266 3.24,500 3.24,500 3.27,506,204 4.07,266 3.24,500 3.27,506,204 4.07,266 3.24,500 3.27,202	*3290N *1K2DZN *1K2DZN *SM7MX (SMSMX) *1K2VTJ *UXSUU		TWO TRANSMITI LX7I. HA30S. NP2/N5RZ. NP3U K9CT. 322X. DL0CS. DP9A. VE7SV SZ1A. MULTI-OPERATO MULTI-TRANSMIT 9A1A. NR4M. RW0A. DM5EL. LN5O. OH2K. S50XX. ROOKIE HIGH POWER ALL BAND OKSKW KK4EIR. HZ1XB. NØSTL WSUNT (KF5SOQ).	ER15,381,35613,928,53613,928,53613,884,84912,075,17218,50,02510,627,0299,251,6139,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,	SV2BFN YL9T (YL2TW). WA2ETU		*128FD. *W1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JISBFC. *JH8SIT. *N7DB. *JR4GPA. 7 MHz *YU2A *IW4EGX. *EA7ISH. *OKZRU. *26/S52DD. *DL1SKUD. *DF2SD. *CT1EEK. *ASS. *AS	398.454 325,600 322,095 313,605 254,609 230,620 124,160 1,725,630 1,502,676 1,382,648 1,239,770 667,870 667,870 640,912 228,284 667,870 667,870 667,870 667,870 667,870
UNTL (UN7ZL) WT40 (K90M). EE12 (EB1LA). RA9DF. IW1PNJ. OHBR (OH3FM) 9A2UZ. IV3TMV. \$50A. \$0.19A (OK2ZAW). DM7C (DL8CX). LY2FN. HA3LI. WT7 (G3YYD). HA5OV. EW802. K4FJ. LOW POWE ALL BAND *VA2UP. *KK9A/4. *P40YL *WE4M (N2CT). *E03Q (UR3QCW). *DL4MGF.	3.084.528 2.991,120 2.718,460 2.264.462 2.028,952 1.917,952 1.870.080 1.861,708 2.344,650 2.097,048 1.920,000 1.351,920 1.202,436 1.005,840 4.072,866 324,500 5.558,630 5.596,294 4.925,699 4.066,380 4.001,140 3.272,302 3.037,969	*23/20N *IK2DZN *SM7MX (SMSMX) *IK2VTJ *UX5UU ORP ALL BAND YW2LV (YV5YMA) TM3T (F5VBT) OK3C (OK2ZC) F5BEG IZ3NIVI N2WN/4 K2YG DR20 (DL8MBS) NW2K COBEC IBUZF Y08DDP K03T KB2HSH 21 MHz IZ3NVR HG3IPA (HA3JB) IZ2NVN		TWO TRANSMITI LX71. HA39S. NP2/N5RZ. NP3U K9CT. 322X. DL0CS. DP9A VE7SV. SZ1A. MULTI-OPERATI MULTI-TRANSMIT 9A1A. NR4M. RW0A. DM5EL LN50. OH2K. S50XX. ROOKIE HIGH POWER ALL BAND OKSKW KK4EIR. H21XB. M0STL.	ER15,381,35613,928,53613,928,53613,884,84912,075,17218,50,02510,627,0299,251,6139,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,	SV2BFN VLST (V12TW). WA2ETU DJ3NG 28 MHz 721S.J AABR		*128FD. *W1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JISBFC. *JH8SIT. *N7DB. *JR4GPA. 7 MHz *YU2A *IW4EGX. *EA7ISH. *OKZRU. *26/SS2DD. *DL5KUD. *DL5KUD. *CT2GMH. 3.5 MHz *VAUTER. **CT2GMH. **CT2GMH. **CT2GMH. **CT2GMH. **CT2GMH.	398.454 325,600 322,095 313,605 254,609 230,620 124,160 1,725,630 1,502,676 1,382,648 1,239,770 667,870 667,870 640,912 228,284 667,870 667,870 667,870 667,870 667,870
UNIL (UN7ZL) WT40 (K90M) EE12 (EBILA) RA90F IW1PNJ OH6R (OH3FM) 9A2UZ IV3TMV 3.5 MHz S50A 0L9A (OK2ZAW) DM7C (OL8CX) LY2FN HA3LI 328T (S08JX) M7T (G3YYO) EW8DZ K4FJ LOW POWE ALL BAND "VA2UP "KK9DA'4 "P40YL "WE4M (N2CI) "E030 (UR3SOW) "DL4MCF. "L16A. "DL9AJJ.	3.084.528 2.991,120 2.718.460 2.264.462 2.028.952 1.917.952 1.870,080 1.861,708 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,048 2.097,	*23/20N *IK2DZN *IKZDZN *SM7MX (SMSMX) *IKZYTJ *UXSUU		TWO TRANSMITI LX7I. HA30S. NP2M5RZ. NP3U K9CT 372X. DL0CS. DP9A VE7SV SZ1A MULTI-OPERATE MULTI-TRANSMIT 9A1A. NR4M. RW0A. DM5EL LN50 OH2K. S50XX. ROOKIE HIGH POWER ALL BAND OK3KW. KK4EIR HZ1XB. NØSTL WSUNT (KFSSOQ) IW9FI.	ER15,381,35613,928,53613,928,53613,884,84912,075,17218,50,02510,627,0299,251,6139,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,5949,014,	SV2BFN YL9T (YL2TW). WA2ETU DJ3NG 28 MHz 7Z1SJ AASR UR5MBA ED5J (EA5DM) JA3EGE 21 MHz UA3RF KZTX (W7WW) WK75 (K6LL) M7P (G6NHU) JAT1NHD UAGLJB JAT1BPA RA9UN N7US/9 PY2CDR 14 MHz VY2LI DL3B0A MØVAA RO1B N1U4Y JA9CWJ IV3JICC EU1DX	2.165,900 2.122,078 2.122,078 2.022,884 2.393,358 65,570 11,340 5,593 2.852 955,350 917,580 917,580 494,864 170,400 170,052 154,880 151,515 1.964,402 1,440,633 940,722 398,310 384,917 373,120 297,528 280,233	*128FD. *W1ZD/7 *W1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JI38FC. *JI48SIT. *N7DB. *JR4GPA 7 MHz *YU2A *IW4EGX *EA7ISH. *OK2RU. *Z6/SS2DD. *DL5KUD. *DF2SD. *CT1EEK. *I4UUL. *CT2GMH. *S3.5 MHz *OK7T (OK1FHI). *K3IT. *DF2SD. *CT1EEK. *I4UUL. *3.5 MHz	398.454 325,600 322,095 313,605 254,609 230,620 124,160 1,725,630 1,502,676 1,382,648 1,299,770 667,870 667,870 640,912 228,284 204,408
UNIL (UN7ZL) WT40 (K90M) EE1Z (EBILA) RA90F IW1PNJ OH6R (OH3FM) 9A2UZ IV3TMV 3.5 MHz S50A OL9A (OK2ZAW) DM7C (OL8CX) LY2FN HA3U S2BT (SOSJX) M7T (G3YYD) HA50V EW8DZ K4FJ LOW POWE ALL BAND *VA2UP *KK9A/4 *P40/L *P40/L *P40/L *USA/A *P10L *USA/A *USA/A *P10L *USA/A *U	3.084.528 2.991,120 2.718,460 2.264.462 2.028,952 1.917,952 1.870,080 1.861,708 2.344,650 2.097,048 1.920,000 1.351,920 1.220,436 4.920,939 4.925,699 4.925,699 4.925,690 4.001,140 4.925,690 4.001,400 3.272,302 3.037,969 2.472,915 2.415,987	*7329N *1K2DZN *SM7MX (SMSMX) *1K2VTJ *UX5UU ORP ALL BAND YW2LV (YV5YMA) TM3T (F5VBT) OK3C (OK2ZC) F5BEG IZ8JFL/1 SS3MJ N2WN/4 K2YG DR20 (DL8MBS) NW2K 28 MHz CO6EC IGUZF Y08DDP K03T K82HSH 21 MHz IZ3NVR HG3IPA (HA3JB) IZ2JPN SP4LVK SP4LVK LSMRX (SMSMX) SP4LVK SP4LVK LSMRX (SMSMX) **SMSMX		TWO TRANSMITI LX7I. HA30S. NP2/N5RZ. NP3U K9CT. 322X. DL0CS. DP9A VE7SV S21A. MULTI-OPERATO MULTI-TRANSMIT 9A1A. NR4M. RW0A. DM5EL. LN50 OH2K. S50XX. ROOKIE HIGH POWER ALL BAND OK3KW KK4EIR. HZ1XB. NØSTI. WSUNT (KF5SOQ). IIW9FI.	ER15,381,35613,928,53613,984,84912,075,17211,850,02510,627,0299,251,6139,251,6139,214,384,849,3927,689,591	SV2BFN YL9T (Y12TW) WA2ETU DJ3NG 28 MHz 7Z1SJ AA8R UR5MBA ED5J (EA5DM) JA3EGE 21 MHz UA3RF KZ7X (W7WW) WK75 (K6LL) M7P (G6NHU) JR1NHD UA6LIB JA1BPA RA9UN N7US/9 PY2CDR 14 MHz VY2LL DL3BOA MØVAA RO1B N14Y JA9CWU IV3JCC EUIDX VK4IU		*128FD. *W1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JI38FC. *JH8SIT. *N7DB. *JR4GPA. 7 MH2 *YU2A. *IW4EGX. *EA7ISH. *OKZRU. *26/552DD. *DL5KUD. *DESD. *CT1EEK. *I4UUL. *CT2GMH. *OKZT (OK1FHI). *SBSD. *CT1EEK. *I4UUL. *CT2GMH.	398.454 325,600 322,095 313,605 254,609 230,620 124,160 1,725,630 1,502,676 1,382,648 1,299,770 667,870 667,870 640,912 228,284 204,408
UNTL (UN7ZL) WT40 (K90M) EE12 (EBITA) RA99F IW1PNJ OHBR (OH3FM) 9A2UZ IV3TMV 3.5 MHz S50A OL9A (OK2ZAW) DM7C (OL8CX) LY2FN HA3UI 328T (S08JX) M7T (G3YYD) EW8DZ K4FJ LOW POWE ALL BAND *VA2UP *WE4M (N2CT) *E030 (UR3SOW) *DL4MGF. *L16A. *DL9AUJ	3.084.528 2.991,120 2.718,460 2.264.462 2.028,952 1.917,952 1.870,080 1.861,708 2.344,650 2.097,048 1.920,000 1.351,920 1.220,436 4.920,939 4.925,699 4.925,699 4.925,690 4.001,140 4.925,690 4.001,400 3.272,302 3.037,969 2.472,915 2.415,987	*23/20N *IK2DZN *IKZDZN *SM7MX (SMSMX) *IKZYTJ *UXSUU		TWO TRANSMITI LX7I. HA30S. NP2M5RZ. NP3U K9CT 372X. DL0CS. DP9A VE7SV SZ1A MULTI-OPERATE MULTI-TRANSMIT 9A1A. NR4M. RW0A. DM5EL LN50 OH2K. S50XX. ROOKIE HIGH POWER ALL BAND OK3KW. KK4EIR HZ1XB. NØSTL WSUNT (KFSSOQ) IW9FI.	ER15,381,35613,928,53613,984,84912,075,17211,850,02510,627,0299,251,6139,251,6139,214,384,849,3927,689,591	SV2BFN YL9T (YL2TW). WA2ETU DJ3NG 28 MHz 7Z1SJ AASR UR5MBA ED5J (EA5DM) JA3EGE 21 MHz UA3RF KZTX (W7WW) WK75 (K6LL) M7P (G6NHU) JAT1NHD UAGLJB JAT1BPA RA9UN N7US/9 PY2CDR 14 MHz VY2LI DL3B0A MØVAA RO1B N1U4Y JA9CWJ IV3JICC EU1DX		*128FD. *W1ZD/7 *W1ZD/7 *IW9FDD. *VE3IAE. *Y050HY *JI38FC. *JI48SIT. *N7DB. *JR4GPA 7 MHz *YU2A *IW4EGX *EA7ISH. *OK2RU. *Z6/SS2DD. *DL5KUD. *DF2SD. *CT1EEK. *I4UUL. *CT2GMH. *S3.5 MHz *OK7T (OK1FHI). *K3IT. *DF2SD. *CT1EEK. *I4UUL. *3.5 MHz	398.454 325,600 322,095 313,605 254,609 230,620 124,160 1,725,630 1,502,676 1,382,648 1,299,770 667,870 667,870 640,912 228,284 204,408









UNITED STATE			246,100
HIGH POWER	•		
ALL BAND			3.5 MHz
AA3B	7 354 935	K4FJ	324,500
K4GMH			320,112
KM1W (W1UE)			69,168
KS7AA (WK6I)	4 776 828		54,502
W4PK	4.650.554	W4TTY	1,716
W3FV			
ABØRX		I	.OW POWER
KE91			ALL BAND
N8BJQ			5,096,294
K3WI			4,056,360
	,,	*K9NR	2,138,608
28 MHz			2,117,836
AA8R	65.570		1,564,612
NSØM			1,336,125
KD4JMV	1.512		1,256,600
	**		985,416
21 MHz			915,300
N7AT (K8IA)	1,502,475	*AD5XD	907,600
KZ7X (W7WW)			
WK7S`(K6LL)	699,885		28 MHz
N6ML		*K9WZB/7	103,834
NG6S (W4UAT)	474,640		74,415
KSØAA	167,968		55,554
N7US/9	154,880		46,565
ND2T/6	44,426		297
N8AGU			3
NØSMX	24,156	"N5EEU/4	1
			21 MHz
14 MHz		*AD1 I	235,824
WA5ZUP			221.440
AA5AU	1,170,180		50,784
NC7J (W7CT)	1,120,096		46.816
W6WRT			39,390
NU4Y			23,364
WA8RPK			19.260
KA4RRU			2,844
WV6I (N6WM)	37,797		2.088
W1PLKG6YHH	14,924		940
KGOTHH	12,130		
7 MHz			14 MHz
WT40 (K90M)	2 991 120	*W17D/7	325,600
N2MM	1.307.028		113.307
N6MA/7			83,888
W7RY			50.468
W1AJT/4			34,348
K6ND/1			25,056
W1TY/2			8,960
K7WP			6,370
			-,

*ABØYM	61.992
*ABØYM*NK5G	30 162
**D/7*!	33,102
*NY7N	34,200
*N9TF	23,814
*WZ2L	6.528
*NRØL	1.836
3.5 MHz	
*NA5NN (K2FF)	140 624
*VAIDT	62,000
KØIDT *K5DHY* *KC8IMB	03,000
*K5DHY	27,000
*KC8IMB	25,872
*K3IT	20
NOT	
ORP	
ALL BAND	
N2WN/4	600,264
K2YG	
NW2K	250 245
W8QZA/6	
N4CW	220,720
N5IJE	194.920
N4UA	
WD9FTZ/8	100,000
NTØZ	
KG4IGC	14,784
28 MHz	
MOST	0.000
K03TKB2HSH	4.000
KB2HSH	1,682
21 MHz	
KFØGX	16 108
VEVILE	15.060
K6VHFK3TW/4	15,300
K31W/4	5,616
14 MHz	
	2 904
14 MHz W9CF/7	2,904
W9CF/7	2,904
W9CF/7 7 MHz	
W9CF/7	
W9CF/7 7 MHz	
W9CF/7	248,600 DR
W9CF/7	248,600 DR
W9CF/7 7 MHz NX3U (N4BAA) MULTI-OPERATI SINGLE TRANSMI	248,600 DR ITER
W9CF/7	248,600 DR ITER 7,237,458
W9CF/7	248,600 DR ITER 7,237,458 7,176,312
W9CF/7	248,600 DR ITER 7,237,458 7,176,312

2013 CC) WW W	PX RTTY		IITED S	TATES SC	ODES		
				_				
		*N6XI				2,645,560	W8UL	
	82,908	*N6DZR		119		2,223,488	WIBIH	
3.5 MHz			7 MHz		AA4YL	1,778,325		28 MHz
	204 500	*ABØYM		61,992	MIII.	TI-OPERATOR	AAOD	28 WHZ
		*NK5G		39,162		TRANSMITTER	AAON	
		*NY7N		34,200		11,850,025		21 MHz
		*N9TF		23,814		5.678.400	V77V (M/7M/M)	Z I WINZ
		*WZ2L		6,528		3.810.963		
		*NRØL		1,836		2.839.668		
LOW POWER			3.5 MHz			2.022.900		
ALL BAND		*NA5NN (K2FF)		140 624		526.618	140/100	
	5 096 294	*KØIDT				394.670		14 MHz
QT)		*K5DHY				274.512	NH4Y	
		*KC8IMB				185.546		
P0)	2 117 836	*K3IT			***************************************	100,040	***************************************	
		NOT1		20	MUL.	TI-OPERATOR		7 MHz
			QRP			-TRANSMITTER	WT40 (K90M)	
			ALL BAND			14.318.704	W1A.IT/4	
NP)		N2WN/4		600 264				
	915.300	K2YG				ROOKIE		
		NW2K				GH POWER		LOW POWER
		W8QZA/6				ALL BAND		ALL BAND
28 MHz		N4CW				778.914	*WA7I NW	
202	103 834	N5IJE				41,292		
		N4UA			W5UNT (KF5SOO)	10,106		
WI)		WD9FTZ/8			1100111 (1110000)			
		NTØZ			10	W POWER	*AB4SF	
	297	KG4IGC				ALL BAND	*N2WN/4	
		1104100		17,707		303.303		
			28 MHz			228,459	*KA2D	
		K03T		2 880	*N7TFW	168,402	*KCØDFB	
21 MHz		KB2HSH		1 682		112.896		
	235.824	NDEHOH				109,956		
			21 MHz			62,377		28 MHz
	50.784	KFØGX		16 198		29.754	*K03T	
		K6VHF				27.342		
	39.390	K3TW/4		5 616	*KD8SN7	26.410		
					*WZ9Z	26,220		21 MHz
			14 MHz				*AB1J	
		W9CF/7		2 904		14 MHz		
		***************************************			*AD4SB	34,348		14 MHz
	940		7 MHz				*W1ZD/7	
		NX3U (N4BAA)		248.600	TRIBANDEI	R/SINGLE ELEMENT	*N7DB	
14 MHz		(HI	GH POWER	*KA9JAC	
	325 600	MUL	TI-OPERATOR			ALL BAND	*W9CF/7	
			E TRANSMITTE	R	AK4K (W4CU)	2,226,879		
		WIØWA			WA2ETU	2,122,078		7 MHz
		K1SFA				1,993,411	*N9TF	
		WW4LL				1,575,081		
		NV9L				1,355,826		3.5 MHz
		KFØUR			NO2T	1,351,404	*K3IT	
		WX3SKY				1,285,470		
		KQ7W		2,937,020	W2YE/4	1,265,710	*Low Power	

..1,265,025 ..1,152,825

..65,570

..2,991,120388,354246,100

...915,300 ...845,468 ...819,927 ...695,921 ...618,103 ...600,264 ...565,095 ...499,120 ...470,940 ...470,900

.235,824

.325,600 ...83,888 ...25,0562,904

..23,814



Zack KC8IMB took on 80m Low Power, despite Europe's dominance in this contest, and had a great time!

NA5NN (K2FF) won North America, and Victor UN7EW won

Luigino IK3SSJ set a new 80m QRP world record and the remaining seven entries were also from Europe.

Multi-Operator (111)

Multi-Single is the most popular multi-operator category as it is in many other contests (category followed by number of entries): MS 80, M2 24; MM 7.

The seven-man team at ED1R led the world and the nine-man team at IQ1RY was not far behind in second place. With this much operator depth, the active operator can be fresh and running at top efficiency. In the US, the wife-husband team (K1SFA and K1MK) at the K1TTT super-station had an amazingly low error rate but didn't quite catch the five-man WIØWA team at NØNI's station. Both stations broke the prior North America MS record.

In Multi-Two, the very active contest station LX7I achieved the third highest all-time score with its seven operators to win first place

2013 CQ WW WPX RTTY TOP EUROPE SCORES SINGLE OPERATOR *DL4MCF 3.272.302 MULTI-OPERATOR 14 MHz 658.903 DR2Q (DL8MBS) HA7YS 537,280 328,338 MULTI-TRANSMITTER DI 3ROA 1 440 633 ALL BAND 24,268,970 UW2M (URØMC) .8.227.247 *G8APB .2.220.660 ON2AD. .234.000 DM5EL 10.108.504 R01B .398.310 .7,535,736 .6,568,620 *IIT5FPF 1 907 074 F77TA 223 944 1 N50 4 954 944 IV3.ICC 297 528 EA5RS (UT5UDX) DM1A (DL1IAO)... *R7MM S56A. .6,041,360 1,842,942 S5ØXX ...285,696 SN7Q (SP7GIQ) 5.500.044 *GM1C (GM1BSG) 1.746.435 7 MHz 28 MH: OG8X (OH6UM) EMØI (UT2IZ) ... 1,709,370 ROOKIE UW2F (UTØFT) HIGH POWER .653,304 Y08DDP ...4,662 OM57W 4.718.300 28 MHz ALL BAND M8 IO ..4,685,250 ..4,037,440 *CT1A07 193 492 3.5 MHz HA8JV. 132,405 IW9FI. ..9.360 IZ3NVR 113,430 *EA5FDM ..96.123 DN2SAX (DL2SAX) ..207.466 *RD4F. *UT2IV ..75,841 ..33,245 HG3IPA (HA3JB) 98 610 7 MHz 140,610 1720DM E01I (UT1IA) . EA1KY 139,860 *UY2IF .24,910 SP4LVK .55,552 ALL BAND SQ3PMI 126.474 *FA4AG .24.510 SO1D (SP1JPQ) ..23,229 *DI 9YAJ 2.472.915 *S56A.... *GM1C (GM1BSG) 1,842,942 1,746,435 LOW POWER ALL BAND EA7ZY .73.568 *IKØPRF .16.632 14 MHz 172HM 49 545 *IKØFIF 14 204 *RN6MA 500 198 143.980 *178VMV 461.593 M3I (GØORH) *OK8DD ,393,061 ..44,608 ..22,366 177DMT OF5ØAD (OH6FSG) .23,618 EA1GFY EA3HCJ *UR4U (UR4UDI) 1,379,007 SN1T 418,794 23.085 *ON5GO 1.357.280 1,070,865 *EA1DR *EF5B (EA5HRT) 360,297 *IK4QJF *LZ2ZY. 1,345,675 1,242,216 SP1MGM *HG5D (HA8QZ) .868.972 PC4C ..1,400 *UR6LEY .205,156 *UA3QJJ .449,290 YU1RP *OK7V (OK1VRF) 1.164.882 .420,134 DO4DXA *IW1F7R 111.981 TM6M (F4DXW) 2.636.088 *172JA 411.840 1,789,728 *F4GDI .310,331 375N (SP5GRM) 1.776.828 *IKØPFA 24.012 'HA5BSW .303,996 HG6C (HA6IAM) 495 000 *IT9BDR .78.960 .16,632 590,600 *R5ACQ. .283.338 *SP200T 267 840 .230.256 UU4JIM 21 MHz 9A6NA 1,408,704 .228,864 .204,408 .197,980 .167,544 CT2GMH E73RZ.... *малсн 187 066 HXØFF 1 287 972 21 MHz *F4GDI *HA5BSW 310,33 IT9CLN .99,003 UX5I0 .303,996 1.048.318 *USØMS SP4BPH 101.032 *I4JEE .15,631 F4ERS. 1.132.914 *R5ACQ .283.338 *RZ1ZZ 783 522 *EA3NO ..228,864 IZ2QKG 14 MHz ..26,896 *LZ5XQ .635,040 DDØVS ...9.900 *RN3DNG .22.041 *004B (0N4BHQ) UW1M 3.090.216 167.696 *YU8NU .592.450 *PDØJMH *PD8SL17,765 .17,472 SP4MPG IZ6TSA... .2,291,904 *DK1IP *R2AF. .106,506 .525,712 *HA1NR RT3P (UA3PAB) 1.642.800 *HAØGK .20.828 *178FFD 398.454 YI 2III 1 524 186 UT3N (UT3NK). .324.848 *PAØMIR ...3.040 *OK2PCL *IW9FDD 334 628 HA1WD SP6EIY .272,118 .177,408 DL3BQA 1,440,633 .322,095 7 MHz EI7KD 1,345,344 14 MHz *9A3RWW 286 296 FS4RD 1.297.338 UT5DJ 123,984 *USØMS 1.048.318 .93,520 .14,756 SP30L DD1I D *UZ7HO 1,810,614 *DL6JF .39,168 RU5TT (RN3TE) ..815.244 *IW9FDD .322.095 *YU2A 1.725.630 *IW1PPM .15,600 DL7CX .132 *Y050HY 254 609 *IW4EG> *MØMDR *YT2AAA *EA7ISH. 1.382.648 5.642.870 ...5,724 MULTI-OPERATOR *F79D 1 339 338 3 5 MHz S53M (S51FB) 3.521.836 *739A ...3,240 SINGLE TRANSMITTER *0Z1A00 .68.200 EE1Z (EB1LA) IW1PNJ *DM3PKK FD1R 8 512 826 *OK2RU. 1,239,770 TRIBANDER/SINGLE ELEMENT *SQ2NNN 1.142.080 OH6R (OH3FM) 7 MHz 1.917.952 *YT5W (YT2PFR) 1,126,026 HG7T 7,364,180 1,870,080 1,861,708 9A2H7 *Y112A 725 630 S51MA 7 006 912 *E75C .946,330 'IW4EGX DM5TI .2.958.500 OK2SFP 1.785.560 *EA7ISH 1.382.648 LZ13FDAY .5,322,798 YU1UN EU1AZ .2,355,920 3.5 MHz .1,778,856 *0K2RU.... *Z6/S52DD 1,239,770 ...851,552 OK1KSL ..5.026.298 *HA8BF .955.320 IV3YER ED7T. 5,018,880 *SQ2RGB *SP6GCU .847,968 .681,414 SV2BFN .2.197.910 *DL5KUD .767,970 YL9T (YL2TW) DJ3NG2,165,900 3.5 MHz *DF2SD .667.870 IV3YIM 4.495.654 *HA8BT .663.986 2,344,650 *Y04RDW .490.144 EI2GLB 1,992,278 OL9A (OK2ZAW) .2.097.048 .228.284 MULTI-OPERATOR URØHO 1.857.848 DM7C (DL8CX) 1 920 000 *CT2GMH 204 408 LY2FN. HA3LI. *IK2DZN 1,351,920 .408.954 TWO TRANSMITTER GM8SBH (GMØFGI). . 15,381,356 .13,928,536 *SM7MX (SM5MX) 331.936 I X7I .1,732,325 1,220,436 3.5 MHz HA3ØS. *OK7T (OK1FHI). 378T (SQ8,JX) 1.005.840 .56.026 ..649,992 ..539,994 *UX5UU M7T (G3YYD) .235,320 372X 10.627.029 UR5MBA DLØCS ED5J (EA5DM) 5.593 EW8DZ .407.266 *Low Power ALL BAND SZ1A. UT4EK ..246,696 7,689,591 TM3T (F5VBT) OK3C (OK2ZC) 21 MHz 1,493,586 FD2Y 4 756 496 **UA3RF** .955.350 LOW POWER .1,378,712 M7P (G6NHU) 691 812 *E03Q (UR3QCW)..... F5BFG 980.265 .2.616.754 UA6LJB..

.675,920

SM6NFT

1 565 654

2013 WPX RTTY CLUB SCORES United States # Entrants 52....44.... Score POTOMAC VALLEY RADIO CLUB...... .48.560.918 NORTHERN CALIFORNIA CONTEST CLUB................44..........40,751,627 SOCIETY OF MIDWEST CONTESTERS 29 FRANKFORD RADIO CLUB 19. YANKEE CLIPPER CONTEST CLUB 29. 29 867 270 .26,944,674 SLOVENIA CONTEST CLUB. 12. 10,155,258 ARAUCARIA DX GROUP 13. 10,042,548 SOUTH URAL CONTEST CLUB. 3. 9,506,620 599 CONTEST CLUB. 6. 8,653,300 WORLD WIDE YOUNG CONTESTERS 7. 8,304,092 LATVIAN CONTEST CLUB. 11. 7,884,716 Z37M CONTEST TEAM 3. 6,955,800 KAUNAS UNIVERSITY OF TECHNOLOGY RADIO CLUB. 3. 6,722,209 LU CONTEST GROUP 13. 6,665,716 URAL CONTEST GROUP 8. 6,276,091 FOX CONTEST GROUP 3. 6,254,452 .23,690,591 TENNESSEE CONTEST GROUP 13. 6,489,950 FLORIDA CONTEST GROUP 8. 5,784,423 MINNESOTA WIRELESS ASSN 27. 4,616,449 MINNESOTA WIRELESS ASSN. 27. 4,616,449 MISSISSIPPI VALLEY DX/CONTEST CLUB. 4. 4,136,572 DFW CONTEST GROUP. 11. 3,976,635 FOX CONTEST CLUB 3 CHILTERN DX CLUB 8 6.254.452 .5,976,450 \(\text{VI CONTEST CLUB.} \) \(\text{7} \) \(\text{RTTY CONTEST BS OF JAPAN.} \) \(\text{12} \) \(\text{DL-DX RTTY CONTEST GROUP.} \) \(\text{17} \) \(\text{LITHUANIAN CONTEST GROUP.} \) \(\text{3} \) 4,965,109 DFW CONTEST GROUP 11. 3,976,635 CAROLINA SHINE 9. 3,793,507 KANSAS CITY DX CLUB 3. 3,186,606 SPOKANE DX ASSOCIATION 9. 3,067,257 NORTH COAST CONTESTERS. 7. 3,033,949 BERGEN ARA. 3. 2,656,833 SOUTH EAST CONTEST CLUB. 6. 2,450,012 SOUTHERN CALIFORNIA CONTEST CLUB. 11. 2,405,637 ALABAMA CONTEST GROUP 9. 2,361,313 NORTH CAROLINA DX AND CONTEST CLUB. 3. 2,084,301 CENTRAL TEXAS DX AND CONTEST CLUB. 6. 1,974,678 CAROLINA DX ASSOCIATION. 4. 1,821,678 METRO DX CLUB. 5. 1,726,763 .4,757,625 .4,312,557 4,072,844 .4.030.871 3.282.874 .3.105.120 MARITIME CONTEST CLUB......5....... 2 752 115 MARITIME CONTEST CLUB 5. VK CONTEST CLUB 4. VYTAUTAS MAGNUS UNIVERSITY RADIO CLUB 5. ALRS ST PETERSBURG 4. MEDITERRANGO DX CLUB 8. 2.641.602 2,393,406 CARDLINA DX ASSOCIATION 4. 1,821,932 METRO DX CLUB 5. 1,726,763 LOUISIANA CONTEST CLUB 4. 1,707,183 TEXAS DX SOCIETY 3. 1,566,395 BRISTOL (TN/VA) ARC 5. 1,523,277 .2.312.148 .2,086,349 MEDITERRANEO DX CLUB 8. 2,086,327 CSTA BUCURESTI 4. 1,938,277 BELARUS CONTEST CLUB 4. 1,871,331 VRHNIKA CONTESTERS 5. 1,632,023 BALATON RADIOAMATEUR DX CLUB 3. 1,357,557 FALKOPINGS RADIOCLUB 4. 1,354,455 BIO DX GROUP 5. 1,220,550 KANSAS CITY CONTEST CLUB 4 1,276,991 ORDER OF BOILED OWLS OF NEW YORK 5 1,262,262 HUDSON VALLEY CONTESTERS AND DXERS 3 1,138,246 HUDSON VALLEY CONTESTERS AND DXERS. 3. 1,138,246 ROCHESTER (NY) DX ASSN. 5. 896,581 MAD RIVER RADIO CLUB. 5. 825,398 LOW COUNTRY CONTEST CLUB. 4. 788,563 ORLEANS COUNTY AMATEUR RADIO CLUB. 4. 662,478 RADIO CLUB OF REDMOND. 3. 479,634 MERIDEN ARC. 3. 310,379 599 DX ASSOCIATION. 3. 213,018 WEST PARK RADIOPS. 3. 27,052 FALKOPINGS HADIOCLUB 4 1,354,412 RIO DX GROUP. 5 1,320,550 OMSK RADIO CLUB 4 982,489 DOMODEDOVO 3 963,119 VU CONTEST GROUP 4 959,206 GRUPO DXXE 4 930,896 TOP OF EUROPE CONTESTERS 3 915,424 TOP OF EUROPE CONTESTERS 3. .915,424 YO DX CLUB 4. .874,669 BITTERN DX GROUP 3. .817,488 YB LAND DX CLUB 5. .619,059 CSM CLUJ-NAPOCA 3. .542,862 DX USM CLUJ-MAPOLA 3. 542,862 IVANOVO DX CLUB 4. 431,188 PERUGIA CONTEST CLUB 6. 423,665 UNIVERSITY OF TOKYO CONTEST CLUB 3. 243,805 RU-ORP CLUB 4. 205,682 VOLYN CONTEST GROUP 3. 176,018 BAVARIAN CONTEST CLUB86......104,667,426 RHEIN RUHR DX ASSOCIATION 50. 51,555,687 CROATIAN CONTEST CLUB 16. .36,547,117 UKRAINIAN CONTEST CLUB 31 .29,936,374 WATERLAND.....

this year. Another "significant-other" couple (K5RZA and N5RZ) teamed up with WP2XX at KP2M to set a new North America record, taking third place overall and posting the sixth highest all-time score. Their lower error rate almost put them past the second-place team at HA3OS. Gator N5RZ emailed an hour before the start about his logging software not properly assigning serial numbers, saying he was off to take a pre-contest nap. By reply email, he was alerted to a hot-fix and actually got it installed and working by 0000 Zulu!

The nine operators at 9A1A significantly improved their 2012 score and approached the Multi-Multi world record to set the second highest all-time score and set a new Europe record ... at a very high mark. In a similar vein, the NR4M "Goat Farm Contest Team" also improved their 2012 effort to take second place and set the new North America record. RWØA placed third, making the top three spots from three different continents.

Club Competition

World. The Bavarian Contest Club took no prisoners this year by accumulating over 104M points, more than twice that of second-place Rhein Ruhr DX Association, its annual rival. Part of their secret was amassing many more entries than any other club.

North America. The Potomac Valley Radio Club was third, winning North America, and fourth place Northern California Contest Club rounded out this club foursome that has dominated the competition in recent years.

New to RTTY contesting, had a ball! . . . W4IOU

Closing

There are far more casual and part-time operations in this and other contests than there are serious competitors. The contest environment provides everyone the means to operate their station and improve their skills. Accuracy and speed must be optimally balanced to maximize score, which is a measure of the total effectiveness of operator(s) and station. Thanks to present-day computer technologies, extremely accurate and insightful log checking can help operators learn how they performed. Then, strategies can be set for changes to try out in the next contest. It's a continuous learning and improvement cycle if one chooses to take advantage of it.

The key tool is the individual LCR, or "Log Check Report," that is available by request to <w0yk@cqwpxrtty.com>. This shows the detail of every error that was detected during the log-check process, including the errors that *other* stations made in their QSO with you. Often, patterns can be seen that may suggest a change in operating strategy or tactics. While contesting is fun, it is also a tremendous opportunity to improve one's amateur radio expertise.

A number of people volunteer to bring contests to us. In this case, Steve N8BJQ, Mark K6UFO, and Rusty W6OAT all helped to fix log formatting problems prior to final log checking. Ken K1EA and Randy K5ZD continue to improve and support the log-checking and website technologies. KM3T, K5TR, and N5KO quietly manage the infrastructure behind the log-submittal robots, log storage, and logchecking software. The WWROF (WorldWide Radio Operators Foundation) provides financial support for the IT services required among other support for contesting in general. All of us can help with our donations to WWROF, so please consider this way to give back to the radiosport we all love. Gail K2RED at CQ magazine does a wonderful job of assembling these contest articles. Barry W5GN performs the huge task of getting certificates out. Mike K4GMH manages the plaque program, which is another opportunity for us to give back by becoming a plaque donor. You can choose from unsponsored plaques for the normal categories or for any category that follows from the results.

Can't wait for next one . . . 2E1AYS

Good luck in the next CQ WPX RTTY Contest on 8–9 February 2014! 73, Ed, WØYK