

# Results of the 1998 CQ WW CW Contest

BY BOB COX\*, K3EST

Contesters were hoping that conditions would improve. At least they were hoping that CW would be better than the variable phone weekend had been a month earlier. As the CW weekend approached, thousands of contesters from all over the world were putting the final touches on all their preparations to do well in the contest. What happened during the CW weekend was unexpected and wonderful. For most of the world, conditions were fantastic on all bands. The 1998 CQ WW CW will be remembered for some of the best conditions across the spectrum many of us have seen in a long time. This is best summed up by "a contest to remember for all time"—W9RE (N9RV).

After all the logs were counted, there were a total of 3345 CW logs, which is only a little down from the SSB total. It seems that CW can generate a lot of fun for many people. So how did it all turn out? Keep reading to find out.

## High Power

The battle for the top spot this year was as competitive as ever. Who are the best operators in the world? Each year the box of top ten finishers in the WW gives an answer to that age old question. These operators travel to places around the globe where the propagation might be a little bit better than at your QTH. But once they get there, they have to do everything right, because the pressure of the competition is tremendous.

Jose, CT1BOH (P40E), handled the pressure pretty well. He jumped on a jet and made his way to the QTH of Jacky, P43P, which is located on the north shore of Aruba. This is a wonderful station in an ideal location. P40E's big low band numbers helped him not only grab the top spot in the world AB, but led to a new all-time record as well. Fighting off the sea's corrosion on the towers and antennas long enough to finish in second place was Ville, OH2MM, who has won the CQ WW more times than one can remember. It was only a little over a year ago when nothing existed at the HC8N QTH except shrubbery. Now Trey, N5KO, has keyed this well-crafted new station to third world high, and the view isn't bad either. Kudos are also due to top ten finishers K4BAI (John set a new North American record.) and DL6FBL—operators of 8P9Z and CN8WW, respectively—for their extremely accurate logs.

The outstanding conditions allowed almost every corner of the European continent a shot at the SOAB standings. GI0KOW and S58A slugged it out for 48 hours, and when it was all done, it was Andy, GI0NWG at KOW who prevailed. The British Isles stations used their low



Jan, 4X1VF.

band advantage to capture four of the top ten spots, but super efforts on the higher bands helped the central and southern EU boys to the glory as well.

What was happening in the USA? A lot! Three stations finished with over 7 million points. The competition was the best it has been in years. Top USA honors went to Greg, W1KM. He edged out Bill, W4AN, who in turn just edged out Jeff, K1ZM. Special mention must go to W9RE operated by Pat, N9RV. What a terrific score from Indiana.

## Low Power

You can sure work a lot of stations running a hundred watts. Just look at the score of AA3B, who keyed V26K to victory. Bud set an all-time low power record with his fine accuracy and skills. In 1997 it was VP2EEB, and now V26K. What will Bud try this year?

In the low power USA category the old record was totally demolished by Jeff, N5TJ, with over 3.1 megapoints. Is there anything this guy can't win? We took some time to ask Jeff why he has ventured into the low power category; his answers are very interesting: "I am a two-radio man, and if I operate QRO too much inter-station QRM to use 2 radios. One radio = no fun. QRO and neighbors don't go together for 48 hours when living on a one-third acre lot. I can't be competitive QRO from home."

We also asked about antennas: "A single crankup w/160 shunt fed, 80 meter sloper,

Force 12 402/204 interlaced, homebrew (NW3Z design) 515/510 interlace, A3 on side-mount at 30 feet." While that's not a trapped dipole in the attic, it sure isn't stacked monobanders either. Incredible job, Jeff! Second place went to W2TZ with 2.6 meg, and third slot went to N8AA with 2.4 meg.

In Europe after the dust settled Franc, S59AA, operating from his home in the suburbs of Ljubljana, pushed his station to claim top honors. At the other end of zone 15, second-place Europe went to Gediminas, LY3BA. Third place was won by HA1CW. But the real story in Europe was that all ten top scorers finished within 500K of each other. That's intense!

## QRP

QRP is an interesting category. One entrant runs 100 mW while the next runs 5 W. No other category has such power differences. That's what makes QRP fun. It's a personal challenge.

The QRP scores are once again crossing the mega-point level. Congratulations to HA2SX for winning it worldwide with just over 1 meg. Second-place world and first-place USA went to N6MU from ... California! John has done the seemingly impossible; he won both modes QRP USA from the West Coast. Wow! And his score of 857k is nothing to be embarrassed about either. Third-place world and second-place Europe went to LY2FE with just under 800k points. These are very impressive scores for stations running just 5 watts. Second- and

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## TEAM CONTESTING

1. **The Team:** 55,395,494. P40E (CT1BOH), EA8EA (OH2MM), CN8WW (DL6FBL), C4A (9A3A), WP3R (DL2CC).
2. **Handkey Team #2:** 27,107,560. K6LA, N2NT, W1KM, WC4E, W9RE (N9RV).
3. **Handkey Team #3:** 23,826,619. V26K (AA3B), W4AN, K1TO, N4ZR.
4. **Handkey Team #1:** 21,760,658. DK0MM (DJ7IK), VP5GN (K5GN), AA4S, W6AX (N6IG), N4AF.
5. **Contest Club Finland #1:** 21,620,846. OH5LF (OH1WZ), OH1MM, PZ5JR (OH0XX), OH6RX, XX9X (OH2PM).
6. **Handkey Team #4:** 14,026,178. N5TJ, NA2U, K3MD, WT1O, W1WEF.
7. **Team Nippon:** 13,160,991. FG5BG (JF2DQJ), V8A (JO1RUR), 9M2TO (JA0DMV), 9M8YY (JR3WXA), 9M6NA (JE1JKL).
8. **Moscow Contest Team:** 10,534,747. RZ3BW, RZ3AZ, RA3CW, RX3APM, RO3A.
9. **The Dream Team:** 6,874,159. LY2KM, LY2MM, LY2OX, LY5W (LY1DR), LY6M (LY1DS).
10. **Team Chihuahua Uno:** 4,818,784. W4PA, WO4O, N4IR, NN4T, N4KN.
11. **ZA-TE Plus Team:** 4,275,169. 9A9A, 9A5W, 9A6A, 9A3GW, 9A2EU.
12. **Russian Woodpeckers:** 3,931,262. UA1OMS, UA1OZ, RA1OJ, UA1OMX, RW1ON.
13. **Contest Club Finland #4:** 3,671,941. OH3WW, OH8BQT, OH8LAE, OH2LU.
14. **\*\*Contest Club Finland #3:** 3,043,554. OH0JJS (OH6LI), EA8/OH2BCI, OH0Z (OH2MAM), OH1F (OH1NOA), OH1F (OH1MDR).
15. **Contest Club Finland #2:** 2,717,112. OH4JFN, OH5BM, VR2/OH6YF, OH9DX.
16. **Contest Club Finland #5:** 1,746,629. OH2BSQ, OH0JJS (OH4JLV), OH6KN, OH1ZAA.

\*\*Single Band Team.

third-place USA went to N1TM and K1RC, respectively.

### Assisted

It took a while, but the winner of the assisted category beat the all band high power category and by quite a bit. All those years of learning what to do, when to look at the packet screen, when to avoid screen chasing, paid off big time for Charlie, K3WW. Not only did he win, he set a new USA record. Second place went to Yankee Clipper power house K1G, and Noah, K2NG, took third. The top European scorer was Igor, RZ3BW. This was the first time that the assisted category was won so far east in Europe. Second place went to Bernd, DF3CB, operating from Munich next to a recording studio. Quite a FB effort, Ben! Special mention must be made of the far Pacific effort of KH2/N2NL. Stationed on Guam, he made good use of his location.

### Multi-Single

The multi-single category is one of the most competitive. There were over 275 entrants who spent long hours building their stations and training their operators. The 1998 contest final MS results produced some of the most interesting final scores in this category in many years. The world winner was K1AR. Yes, a USA MS took the world top slot. Not only did the three-man crew do that, they set a new North American record. It has been a long time since a USA station finished #1. The #2 world and #1 Europe station was TM2Y operating from F6BEE's station in the French countryside. Their log was very accurate. Third-place world was Sig, N3RS, and his crew in eastern Pennsylvania. Second-place Europe and #4 world was EA6IB operating from the lovely isla Ibiza. Congratulations to all the winners, who showed us what is possible when conditions really are good.

### Multi-Multi

The multi-multi stations are the beacons of contesting. They provide benchmarks for all of us. A sure sign of improving conditions was that 12 stations broke 20 million, compared to only the top three last year. In a reversal of fortunes, the

6Y2A team defeated the Voodoo group at 5V7A. The 6Y2A crew planned for months what their strategy would be. They used verticals, almost exclusively, set up on the beach of the north coast of Jamaica. Their hard work sure paid off with a new world multi-multi CW record, accomplished from a two-point area! Second place went to the "Voodudes" who did a marvelous job after scrambling to relocate when their hotel was not available.

Three North American stations finished in the top six box, with TI1C operating at TI2CF's QTH coming in third and J6DX at number six. The crew at EA9EA finished second in Africa and number four overall. A61AJ at number five was the highest scoring multi-multi from Asia setting a new Asian record. For the USA championship, Matt and his team at KC1XX finished first again this year, just ahead of W3LPL and K3LR. Europe was lead by DF0HQ, the famous quad station located in eastern Germany. They

just edged out the OH2U team formerly known as OH2HE.

In Japan at the mountain QTH of JA5BJC, they cranked up their towers, set up the station, and keyed their way to a new all-time Japanese multi-multi record. Congratulations.

### Team Contesting

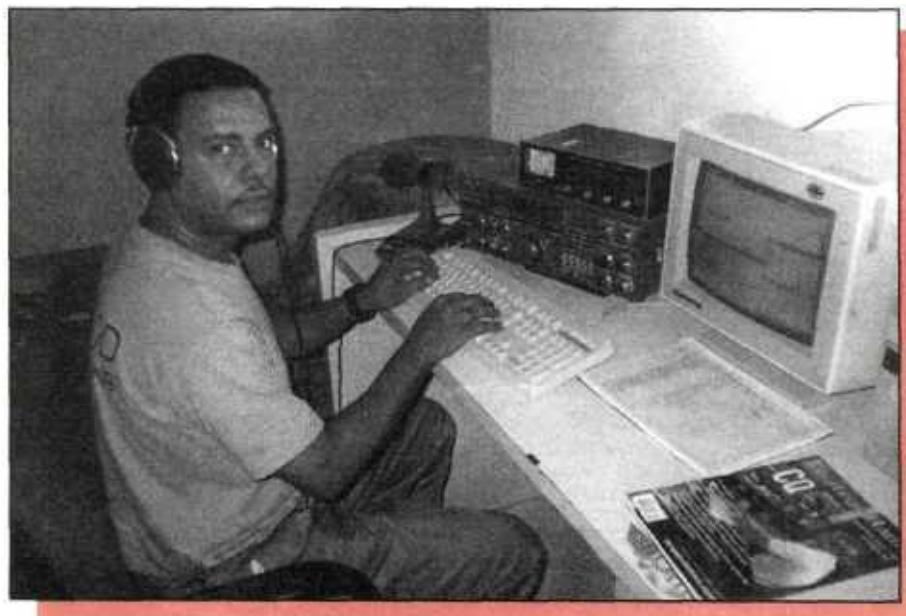
Get five contestants together from anywhere in the world and you have a team entry in the CQ WW. That's just about what "The Team" did with representatives from four continents. Doubling the total score of the second-place team, "The Team," had four finishers in the top ten world box. In terms of real competition, the battle for second through fourth place among Handkey teams was intense. Team Handkey #2 took second place with a group from five USA call areas.

Joining a team does not in any way prevent you from submitting your score for your local club. Team contesting allows for some interesting global alliances and more fun for everyone.

### Clubs

A lot of club spirit plus getting everyone on the air, coupled with DXpeditions, is the formula for a winning club effort. The number one club this year was the Yankee Clipper Contest Club. Through a well-orchestrated campaign of phone calls and just plain hard work, this NE USA giant set the all-time club record of 460 million points! Not far behind was perennial club winner, the Frankford Radio Club. The YCCC, FRC, and third-place Potomac Valley Radio Club launched many DXpeditions. Last year we predicted that it might not be long before the top three clubs would top a billion points. Well, this year 1.06 billion points were accumulated by the top three alone!

Setting a new DX club record with over 164 million points generated by a determined club effort was the Bavarian Contest Club. When you look at the results, you will find many DXpeditions mounted by the BCC, second-place finisher Contest Club Finland, and frequent winner, the Rhein-Ruhr DX Association. The



Julio, HI3K.

## TROPHY WINNERS AND DONORS CW

<b>SINGLE OPERATOR, ALL BAND</b>			
World	World - 3.5 MHz	Africa	
P40E (Opr. Jose Carlos Cardoso Nunes, CT1BOH)	Martin Huml, IH9/OL5Y	D44BC (Oprs. D44BC, DL2OBF, DK7YY)	
Donor: Albert Kahn, K4FW	Donor: Fred Capossela, K6SSS	Donor: Harry Booklan, RA3AUU	
W9IOP Memorial			
World Low Power	World - 1.8 MHz	Asia	
V26K (Opr. Joseph Trench, AA3B)	VA1A (Opr. Yuri Blanarovich, K3BU)	8Q7DV (Oprs. UA9CI, UA9CDC, UA9CDV, UA9CLB, UA9CFF, UA9CKP)	
Donor: Slovenia Contest Club	Donor: Kenneth Byers, Jr., K4TEA	Donor: Steve Merchant, K6AW	
World QRPp	USA - 28 MHz	Europe	
Peter Kalocsa, HA2SX	Robert Patten, N4BP	TM2Y (Oprs. F6BEE, F6ARC, F6FGZ, F6FVY, F5MUX, F5NLY)	
Donor: Gene Walsh, N2AA	Donor: Wireless Institute of the Northeast Treasury	Donor: Bob Cox, K3EST	
World Single Operator Assisted	USA - 21 MHz	Oceania-Pacific Rim	
Charles Fulp, Jr., K3WW	David Donnelly, K2SS/1	AH2R (Oprs. KH2/JH0USD, KH2/JR0BQD, JR7OMD/WI3O)	
Donor: Snake River Contest Club	Donor: Wayne Carroll, W4MPY	Donor: Junichi Tanaka, JH4RHF	
U.S.A.	USA - 14 MHz	South America	
Gregory Cronin, W1KM	Walter Kornienko, K2WK	CE3F (Oprs. CE3/SM3SGP, CE3FIP)	
Donor: Frankford Radio Club	Donor: Northern Illinois DX Association	Donor: Tyler Stewart, K3MM	
U.S.A. Low Power	USA - 7 MHz	MULTI-OPERATOR, MULTI-TRANSMITTER	
Jeffrey Steinman, N5TJ	David Blaschke, W5UN	World	
Donor: North Coast Contesters	Donor: W6AM Memorial (Jan Perkins, N6AW)	6Y2A (Oprs. K2KW, N6BT, N6TV, N6BV, AF7Y, K7CO, W4SO, KE7X, AG9A, W9QA)	
U.S.A. - Zone 3	USA - 3.5 MHz	Donor: K2GL Memorial (Doug Zwiebel, KR2Q)	
W6AX (Opr. James Pratt, N6IG)	Robye L. Lahlium, W1MK	U.S.A.	
Donor: Bill Fisher, W4AN	Donor: Bill Feidt, NG3K	KC1XX (Oprs. KC1XX, KM3T, K1GQ, K1DG, N1RR, N2IC, T93M, Christine)	
U.S.A.- Zone 4	USA - 1.8 MHz	Donor: N6RJ Memorial (Bob Ferrero, W6RJ)	
W9RE (Opr. Patrick Barkey, N9RV)	Wallace Eckles, W8LRL	Europe	
Donor: Bill Fisher, W4AN	Donor: Dave Patton, NT1N, & Mark Obermann, AG9A	DF0HQ (Oprs. DK8YY, DL1AUZ, DL3ALI, DL3OI, DL3TD, DL4ALB, DL5ANT, DL5AXX, DL5LYM, DL5MX, DL7URH, DL7VOA, DL8WAA)	
Canada	Canada (28 MHz)	Donor: Finnish Amateur Radio League	
Phil Goetz, N6ZZ/VE2	Lajos Laki, VA3RU	Japan	
Donor: CQ Magazine	Donor: Radio Amateurs of Canada	JA5BJC (Oprs. JA5BJC, JA5FDJ, JA5JCC, JA5THU, JH5RXS, JR5JAQ, JR5VHU)	
Caribbean/C.A.	Carib./C.A. (28 MHz)	Donor: Ryozo Goto, JH3JYS	
8P9Z (Opr. John Laney III, K4BAI)	WP2Z (Opr. David Harper, WD5N)	World - SSB/CW Combined	
Donor: Chuck Shinn, W7MAP	Donor: Snake River Contest Club	KH7R: 47,345,300	
Europe	Europe - 28 MHz	Donor: Alpha/Power, Inc.	
GIØKOW (Opr. Andrew Williamson, GIØNWG)	9HØA (Opr. G. Morris, 9H1EL)	CONTEST EXPEDITIONS	
Donor: Edward Bissell, W3AU	Donor: John Pryor, K4OGG	World Single Operator	
Europe - Low Power	Europe - 21 MHz	Thomas Poland, 3A/N9NC	
Franc Bogataj, S59AA	IR4T (Opr. Stefano Brioschi, IK2QE1)	Donor: Yankee Clipper Contest Club	
Donor: Scott Jones, N3RA, & Tim Duffy, K3LR	Donor: Robert Naumann, N5NJ	World Multi-Single	
Africa	Europe - 14 MHz	VK9LX (Oprs. K6KM, N4RU, NØTT, NM7N, VK2ICV)	
EA8EA (Opr. Ville Hillesmaa, OH2MM)	OHØZ (Opr. Jukka Kulha, OH2MAM)	Donor: Carl Cook, AI6V	
Donor: Gordon Marshall, W6RR	Donor: G3FXB Memorial (Maud Slater)	World Multi-Multi	
Asia	Europe - 7 MHz	XZ1N (Oprs. WA6CDR, NS1A, AF7O, N7MB, K7SP, WF5T)	
C4A (Opr. Ivo Pezer, 5B4ADA)	Zdravko Balen, 9A9A	Donor: Bill Schneider, K2TT	
Donor: Chuck Shinn, W7MAP	Donor: Ivo Pezer, T93A/5B4ADA	SPECIAL - SINGLE OPERATOR AWARDS	
Japan	Europe - 3.5 MHz	World SSB/CW Combined	
Satoshi Hara, JH5FXP	Tine Brajnik, S50A	CN8WW (Opr. Bernd Och, DL6FB)	
Donor: Japan Crazy Contesters Club	Donor: K3VW Memorial (Frankford Radio Club)	Donor: Hrane Milosevic, YT1AD	
Oceania	Europe - 1.8 MHz	World All Band: Under 21 years old	
9M6NA (Opr. Saty Nakamura, JE1JKL)	IR4T (Opr. Gabriele Macchi, IK4UPB)	Marcus Ilvonen, OF3KCB	
Donor: Peahi Contest Club	Donor: Pat Barkey, N9RV, & Terry Zivney, N4TZ	Donor: Chuck Shinn, W7MAP	
South America	Japan - 21 MHz	SPECIAL EVENT AWARD	
HC8N (Opr. Trey Garlough, N5KO)	Akito Nagi, JA5DQH	JT1A (Oprs. JT1BH, JT1BV, JT1CD, OH1RX, OH2BH, OH8PF)	
Donor: Venezuela DX Club	Donor: DX Family Foundation	Donor: CQ Contest Magazine	
SINGLE OPERATOR, SINGLE BAND	Japan - 14 MHz	CLUB	
World - 28 MHz	Syuichi Sato, JA7FTR	World SSB/CW	
ZW5B (Opr. Randall Thompson, K5ZD)	Donor: Mitsuhiro Nishimura, JA7WME	Yankee Clipper Radio Club: 460,442,158	
Donor: Joel Chalmers, KG6DX		Donor: W1WY Memorial (CQ Magazine)	
World - 21 MHz	MULTI-OPERATOR, SINGLE TRANSMITTER	NON-USA SSB/CW	
5X1Z (Opr. Mats Persson, SM7PKK)	K1AR (Oprs. K1AR, K1EA, W2RQ)	Bavarian Contest Club: 164,991,164	
Donor: Don Busick, K5AAD (N5JJ Memorial)	Donor: Anthony Suse, W3AOH	Donor: N6AUU Memorial (No. Calif. Contest Club)	
World - 14 MHz	N3RS (Oprs. N2SR, N3ED, N3RD, N3RS)		
Jaromir Klimosz, 5NØ/OK1AUT	Donor: Douglas Zwiebel, KR2Q		
Donor: W2JT Memorial (North Jersey DX Assn)			
World - 7 MHz	Canada		
V8A (Opr. Hajime Kato, JO1RUR)	VE6SV (Oprs. VE6EX, VE6EKP, VE6EZ, VE6AKY, VE6NTF, VE6NAP)		
Donor: Alex M. Kasevich, VP2MM/4	Donor: Eastern Canadian DX Assn.		

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## New All-Time CW Records

**World:** AB P40E (CT1BOH); 28 ZW5B (K5ZD); LA V26K (AA3B); Q3.5 HA8LUH; A28 KH2D; A21 OH0JJS (OH6LI); A14 LA9GX; A3.5 YT0A (YT7AO); MM 6Y2A.

**Africa:** AB EA8EA (OH2MM); L21 EA8NN; MM 5V7A.

**Asia:** AB C4A (5B4ADA); 21 5B4AGC; A28 JH1FSF; MM A61AJ.

**Europe:** AB GIØKOW (GIØNWG); 28 9HØA (9H1EL); L28 9A7R; L21 9A6A; Q28 GØTDX; Q21 OH7NVU; Q3.5 HA8LUH; AA RZ3BW; A21 OHØJJS (OH6LI); A14 LA9GX; A3.5 YT0A (YT7AO); MS TM2Y.

## CLUB SCORES

### USA

Yankee Clipper Contest Club .....	460,442,158
Frankford Radio Club.....	432,136,542
Potomac Valley Radio Club .....	194,995,771
North Coast Contesters .....	92,006,148
Society of Midwest Contesters .....	77,380,640
Southern California Contest Club .....	75,484,465
Northern California Contest Club .....	67,112,309
Mad River Radio Club.....	34,331,846
Southeast Contest Club.....	33,155,304
Central Arizona DX Assn. ....	31,423,961
North Texas Contest Club .....	31,247,010
Florida Contest Group .....	26,284,422
Southwest Ohio DXA .....	25,968,544
Florida Contest Club .....	21,697,656
Western Washington DXC .....	21,374,682
Minnesota Wireless .....	19,914,334
Tennessee Contest Group .....	14,312,616
Southern California DX Club .....	13,874,813
Texas DX Society .....	12,379,560
River City Contesters .....	11,063,399
Oklahoma Dx Assn. ....	9,536,853
Willamette Valley (W7) .....	9,029,390
Central Texas DX & Contest club .....	8,859,146
San Diego Dx Club .....	8,482,368
Mile High DX Assn. (WØ) .....	8,354,164
Carolina DX Assniation .....	8,201,653
North Florida DX Assn. ....	8,072,273
Rochester DX Assn. ....	8,050,648
Grand Mesa DX Club .....	7,649,925
Western New York DXA .....	7,138,765
Central Florida DX Assn. ....	4,615,468
Kentucky Contest Group .....	3,579,724
Northern Ohio DX Assn. ....	3,060,619
CT & RI Contest Group .....	2,960,756
Hoosier Contesters .....	2,743,635
Kansas City DX Club .....	2,509,171
CA Central Coast DX Club .....	2,502,153
Salt City DX Club (W2) .....	2,125,217
Ozaukee Radio Club (W9) .....	1,844,240
Southeast DX Club .....	1,720,140
Eastern Iowa DX Assn. ....	1,671,843
World Radio Staff ARC .....	1,616,619
Mother Lode Contest & DXC (W6) .....	1,122,346
Northern Arizona DXA .....	1,065,454
Sterling Park ARC (W4) .....	826,844
Northern California DX Club .....	820,657
West Park Radio Ops (W8) .....	777,153
Central West VA Club .....	772,382
Northrop-Grumman RC .....	669,070
Redwood Empire DXA .....	660,754
Order of Boiled Owls NY .....	580,634
Athens (Ohio) .....	551,952
Heartland DXA (WØ) .....	527,549
American Red Cross EC .....	485,542
Yoder ARC (WØ) .....	460,671
Metro DX Club (W9) .....	449,585
Mississippi Valley DXCCC .....	446,992
Northern Illinois DXA .....	391,851
Weekend Warriors Contest Club (W3) .....	193,800
Tolersville ARC (W4) .....	56,047
Northern Shenandoah DXA .....	50,694

### DX

Bavarian Contest Club .....	164,991,164
Contest Club Finland .....	128,830,292
Rhein-Ruhr DX Assn. ....	110,563,813
Russian Contest Club .....	52,841,713
Slovenian Contest Club .....	50,130,827
Marconi Contest Club (I) .....	42,255,503

**North America:** AB 8P9Z (K4BAI); 1.8 VA1A (K3BU); LA V26K (AA3B); L28 WP2Z (WD5N); AA K3WW; A21 AA8U; MS K1AR; MM 6Y2A.

**Oceania:** L28 WH0V; QA N0KE/KH6; Q7 W8QZA/KH6; AA KH2/N2NL; A28 KH2D; MS AH2R.

**South America:** AB P40E (CT1BOH); 28 ZW5B (K5ZD); L28 CX5AO; Q28 PY2TNT; A28 LU1APG; A21 LU7EAR.

## Special Mention

The CQ WW brings out intrepid travelers from all over the world who head out to far-flung QTHs. A fast count of the number DXpeditions for the contest yielded about 100! Of course, there are many that go unnoticed if an exotic callsign is not involved. Why don't you try a DXpedition this year? You can travel light, set up with a vertical on the beach or hotel roof, and work thousands of QSOs. Once you take

that first trip and find yourself knee deep in your own pile-up, you will want to go back and back.

All of those operations put their calls into a lot of logs. A group of W5, 6, and 7's made a lot of contestants and DXers happy with XZ1N. Phil, N6ZZ, traveled up to zone 2 and set a new zone record with his effort. Out in the west of the USA, the competition in the seventh call area was fierce. Five stations finished above two million points. N7DR and W7GG finished in a dead heat, with N7DR winning by the point value of one multiplier. Out in the western USA, W6YA and W6NL shifted their efforts to 28 MHz. Jim, W6YA, just edged out Dave, W6NL.

Dave, K2SS/1, and George, W0UA (W0UN), put their considerable talents into 21 MHz. The scores were close, with Dave taking top place. Take a look at the heated competition in Slovenia on 7 MHz. S57AL just edged out S57DX and S52O.

Marti, OH2BH, and friends, and with the efforts of JT contestants, put together a special

event station from JT1A. Thanks to the JT's and OH's, many contestants worked the elusive zone 23 for the first time.

A real special mention is made of KH7R, who reprised their outstanding 1997 effort in 1998. They had the highest combined SSB/CW multi-multi total in the contest. Operating from zone 31 and winning the highest MM combined trophy is tough.

The two Russian multi-op groups (mostly UA9's) again headed to south Asia. The P3A group finished just behind A61AJ, while 8Q7DV blasted through on all bands.

Special mention must be made of new QSO records set in the contest. Jose, CT1BOH (P40E), made 6853 QSOs, and the MM station 6Y2A had a 40 meter QSO total of 3896 on 7 MHz for a new band record.

## Comments

Last year the first UBNs were released to everyone who submitted an electronic log. We

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

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

## WORLD TOP SINGLE OPERATOR, ALL BAND

Station	160	80	40	20	15	10
P40E	351/15/52	727/25/74	1188/30/92	1232/37/114	1821/37/120	1521/32/99
EA8EA	152/13/41	512/24/72	1161/30/84	1295/35/107	1254/38/119	2166/36/120
HC8N	98/13/22	406/23/61	1099/31/89	1223/35/109	1517/37/117	2317/32/120
P40W	281/14/45	803/24/85	988/28/92	970/31/103	1268/31/105	1952/31/109
CN8WW	157/9/33	829/19/71	1260/23/83	1067/31/99	1078/32/101	2100/29/102
8P9Z	302/15/45	694/19/66	1223/31/87	1213/33/87	1386/32/87	1681/25/82
C4A	385/17/64	718/21/72	1373/29/97	913/32/87	743/32/87	1376/31/96
A45XR	187/13/44	315/18/65	1084/28/92	871/32/93	1146/35/111	1219/34/121
3V8BB	243/11/57	782/19/75	1107/26/83	1023/31/95	798/32/94	1077/30/81
6V6U	40/7/11	214/15/45	602/22/70	1253/28/89	1196/27/93	2012/29/92

## USA TOP SINGLE OPERATOR, ALL BAND

Station	160	80	40	20	15	10
W1KM	104/14/47	690/22/79	902/29/89	731/31/96	764/31/90	835/28/87
W4AN	53/12/31	241/20/67	1021/35/99	907/34/106	746/31/104	873/30/102
K1ZM	98/19/56	440/23/76	1134/31/98	503/35/93	598/31/89	1059/30/104
W9RE	26/10/19	157/20/62	1040/31/99	884/36/103	941/33/97	889/27/88
K1T0/4	38/13/30	218/18/64	827/29/100	881/36/101	927/33/108	610/28/92
KQ2M/1	47/10/33	402/20/72	1003/29/90	595/34/106	771/31/101	605/25/98
N2NT	59/12/38	403/17/77	684/30/88	738/35/110	1059/32/99	519/26/88
K3ZD	42/11/31	296/18/64	771/32/91	691/34/99	985/33/100	656/26/85
N2LT	49/12/32	278/16/64	641/34/95	744/27/94	785/31/101	793/27/94
K1RU	20/9/15	220/17/57	840/28/82	700/29/91	898/30/92	812/23/74

## WORLD MULTI-OPERATOR SINGLE TRANSMITTER

K1AR	49/13/46	569/27/101	1384/35/136	991/38/151	999/36/135	1083/32/132
TM2Y	208/18/68	568/25/99	1303/36/127	943/35/127	1132/39/136	1326/35/121
N3RS	53/16/51	425/29/100	1202/34/125	793/37/145	892/36/126	1085/37/126
E61B	77/14/57	640/21/89	1581/35/119	1371/36/128	1169/39/129	1307/34/121
N2NU	59/15/58	198/29/97	912/34/120	912/37/145	1085/37/131	1161/36/130
K8AZ	47/17/44	225/25/97	987/34/139	958/30/127	178/25/90	201/13/35

## USA MULTI-OPERATOR SINGLE TRANSMITTER

K1AR	49/13/46	569/27/101	1384/35/136	991/38/151	999/36/135	1083/32/132
N3RS	53/16/51	425/29/100	1202/34/125	793/37/145	892/36/130	1085/37/126
N2NU	59/15/58	198/29/97	912/34/120	912/37/145	1085/37/131	1161/36/130
K8AZ	47/17/44	225/25/97	987/34/139	958/30/127	178/25/90	201/13/35
K1ZZ	67/17/56	418/26/100	741/34/121	931/37/140	919/35/131	1161/36/130
K8LX	42/13/35	178/25/90	807/33/113	797/37/138	1061/36/130	1410/31/120

## WORLD MULTI-OPERATOR MULTI-TRANSMITTER

GY2A	1139/20/82	1867/28/106	3896/35/132	4099/38/151	3433/31/147	3175/32/120
5V7A	208/15/48	683/25/79	2298/35/118	3526/38/146	4485/39/151	3182/35/137
T1C	768/17/63	1689/28/97	2976/32/119	3459/38/147	3217/39/147	3304/35/138
EA8EA	52/5/22	1804/22/94	2815/37/132	3225/38/147	2732/38/144	2213/36/124
A61AJ	530/21/67	1359/28/95	2957/35/133	2946/39/146	2331/36/141	2569/36/136
J6DX	627/17/54	1368/26/84	2372/31/103	2986/36/121	3795/36/135	3148/33/123

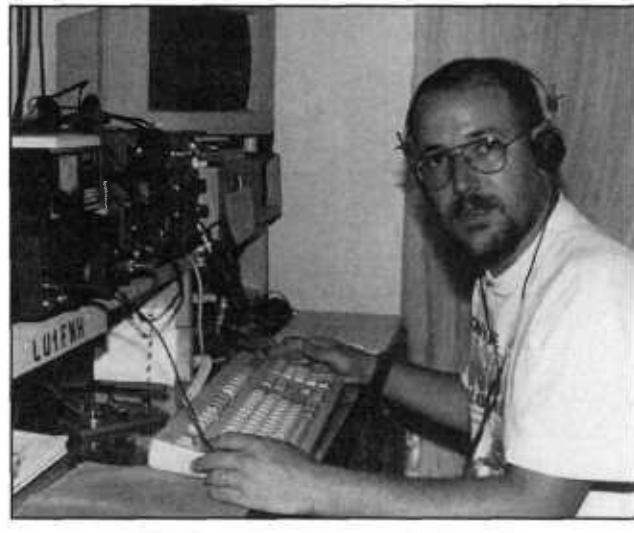
## USA MULTI-OPERATOR MULTI-TRANSMITTER

KC1XX	238/21/75	971/29/113	2120/37/142	2228/38/157	1812/39/143	1565/35/133
W3PL	208/22/70	1003/31/115	1798/37/139	2104/39/158	1743/39/148	1445/34/133
K3LR	200/21/67	660/29/110	1971/38/144	1942/37/156	1773/37/145	1554/35/140
K1KI	144/16/59	809/29/106	1664/37/137	1833/38/152	1764/37/138	1121/33/128
K2LE/1	108/13/41	572/21/95	1389/33/127	1769/37/139	1223/35/123	1104/34/123
K9NS	76/18/36	406/28/95	1229/37/133	1676/39/149	1441/36/134	1075/31/120

## ZONE LEADERS SINGLE OPERATOR

Zone	Call	Score	Zone	Call	Score
1	KL7AC	1,263,542	21	A45XR	9,067,345
2	VE2/N6ZZ	7,023,425	22	AT2AJ	34,532
3	W6AX	4,417,426	23	JT1CO	1,235,806
4	W9RE	6,875,625	24	XX9X	3,795,670
5	W1KM	7,379,711	25	JH5FXP	4,857,376
6	6D2X	4,338,864	26	3W7TK	2,720,442
7	3E1AA	7,002,610	27	DU1/DL5ZAH	889,680
8	8P9Z	9,991,863	28	9M6NA	5,979,138
9	P40E	14,372,964	29	VK6VZ	451,584
10	HC8N	12,971,803	30	VK2AYD	1,386,240
11	ZW5B	1,991,895	31	NH7A	2,648,535
12	*CE3AA	735,715	32	KH8/N5OLS	2,889,842
13	*LT1F	1,824,312	33	EA8EA	13,717,801
14	GI0KOW	6,961,240	34	5A1A	450,865
15	S58A	6,628,059	35	6V6U	8,127,504
16	EW8EW	2,665,131	36	No Entry	
17	EX8W	4,373,712	37	5H3US	791,427
18	RZ9UA	3,927,066	38	ZS6EZ	5,379,840
19	UA0JQ	2,220,574	39	3B8/DL9GFB	1,024,920
20	C4A	9,904,510	40	No Entry	

\* Low Power



LU1FNH, number one on 21 MHz Argentina.

did the same this year. The difference between the two years is that the contest community is becoming more and more knowledgeable about how errors can occur. With the ever increasing number of tools available to validate the scores and allow the winners to really celebrate their win, there might be a tendency to lose focus about what contesting is about. The UBN is a learning tool which if you take the time can help you become a better contestor.

The reason you enter a contest is to have fun! To repeat from last year's writeup, "The buzz of the bands coming to life is a siren's song that can't be resisted. The new ones you might work, finding that your signal can work a lot of people, and your personal motivation to do well are just the tip of the iceberg. Each con-

test is a learning experience about propagation, your own skills, and learning from others."

Please send us your log in electronic format. No matter how small or large, mail your CW log via the Internet to <cw@cqww.com> and your SSB log to <ssb@cqww.com>. It is cheaper and less trouble to e-mail your log. Each log helps to make the whole contest better and truer. You can check the CQ WW home page at <<http://www.cqww.com>>. There you will find the latest rules and other interesting information including directions on how to submit an e-mail log entry.

## Power

Everyone knows that when you enter a con-

test, you are on your honor to run the power that your category allows. It is unsettling to see logs that claim low power but clearly are running more than what is allowed. It is a false victory to beat other competitors when they all are running 100 W or less and you decide to run 500 W. We all have heard many reasons to justify this type of thinking: "I live too far from competitive areas.", "How can that top station win? He must be cheating. I have to cheat to be competitive.", "I'll run 500 W because my antenna is not very good." It sure makes life easier and your score bigger if you cheat by running high power. The truth is that almost everyone really does obey the power limitations. It is much more satisfying to obey the rules and find out just how well you can do from your QTH.

## EUROPE TOP SINGLE OPERATOR, ALL BAND

Station	160	80	40	20	15	10
GIØKOW	249/13/57	662/19/77	1166/32/97	716/37/107	1066/35/110	929/28/103
S58A	113/15/56	416/17/78	1563/34/109	905/35/103	772/33/99	772/34/114
G4BUO	177/15/52	591/18/71	583/25/73	846/31/93	761/31/94	608/28/84
GU6UW	350/8/49	576/15/65	852/23/74	681/24/72	733/27/79	1002/30/89
4N9BW	180/11/51	369/18/66	989/32/92	873/28/85	928/33/102	760/33/94
DL4NAC	66/12/43	220/17/67	1085/34/99	626/29/80	660/32/100	559/30/98
GØIVZ	270/11/52	550/16/65	778/22/72	779/27/92	657/30/97	701/29/85
OH1MM	100/9/40	360/17/77	524/29/89	1080/27/82	820/32/105	495/29/88
OM5M	60/7/35	437/18/67	932/31/89	671/29/80	783/32/86	511/33/81
OH5LF	104/10/49	259/18/62	375/28/83	880/33/90	829/34/101	647/33/107

## EUROPE MULTI-OPERATOR SINGLE TRANSMITTER

TM2Y	208/18/68	568/25/99	1303/36/127	943/35/127	1132/39/136	1326/35/121
EA6IB	77/14/57	640/21/89	1581/35/119	1371/36/128	1169/39/129	1307/34/121
RU1A	126/19/75	753/35/128	843/38/136	1321/37/139	1085/39/140	451/35/133
SQ6Z	181/18/66	608/26/95	1397/35/125	1304/36/127	992/38/122	660/35/117
DL2NBU	140/18/70	607/25/96	1171/33/112	774/37/130	883/38/131	648/35/125
OM8A	198/17/72	468/18/74	1345/37/122	1232/37/138	791/38/123	635/34/120

## EUROPE MULTI-OPERATOR MULTI-TRANSMITTER

DF0HQ	832/23/85	1837/32/111	2461/37/138	1976/37/138	1805/37/142	1378/37/137
OH2U	638/23/88	1088/31/120	2101/37/145	2439/39/158	1825/38/146	1287/37/145
RW2F	895/28/94	1622/31/117	2121/38/143	2158/39/146	1275/38/135	1181/37/145
SL3ZV	826/23/89	1092/33/114	2045/35/132	2385/37/137	1593/39/140	673/33/116
DL0CS	731/22/90	1257/33/120	1541/37/130	1519/36/133	1458/38/138	851/36/130
EA4ML	613/16/63	1223/22/82	2106/31/113	2235/36/121	1469/36/120	1102/32/94

## TOP SCORES IN VERY ACTIVE ZONES

ZONE 3		ZONE 14	
W6AX	4,417,426	GIØKOW	6,961,240
W6RU	3,141,840	G4BUO	5,073,750
K6LA	2,851,800	GU6UW	5,047,170
*XO7X	2,584,983	DL4NAC	4,872,882
N7DR	2,568,104	GØIVZ	4,722,406
W7GG	2,561,988	G4BJM	3,826,284
W2VJN/7	2,133,130	OZ1LO	3,779,440
N7TT	2,053,425	CU2V	3,728,724
K4XU/7	2,015,248	EA3NY	3,215,612
AA7A	1,992,810	TM9C	2,928,660

ZONE 4		ZONE 15	
W9RE	6,875,625	S58A	6,628,059
KØRF	4,029,435	4N9BW	5,016,810
W4PA	3,555,681	OH1MM	4,374,240
K5YAA	2,959,691	OM5M	4,157,721
K9MA	2,887,213	OH5LF	3,994,272
K9AN	2,781,072	HA8FM	3,734,322
WBØO	2,511,587	SP4Z	3,658,850
KØEU	2,495,724	LY5W	2,988,110
KØCAT/9	2,375,505	HA8JV	2,865,016
NA5B	2,251,855	OH6RX	2,725,254

ZONE 5		ZONE 25	
W1KM	7,379,711	JH5FXP	4,857,376
W4AN	7,141,453	JH4UYB	4,470,430
K1ZM	7,119,308	JH7AFR	3,788,148
K1TO/4	6,293,104	JH7WKQ	3,494,880
KQ2M/1	6,112,282	JS3CTQ	2,842,494
N2NT	6,086,220	JA8RWU	2,712,231
K3ZO	6,054,048	JH7XGN	2,057,950
N2LT	5,831,100	JH1OGC	1,979,356
K1RU	5,214,551	*JEØUXR	1,533,600
W3BGN	5,008,964	*JL1ARF	1,530,450

\*Low Power

(Continued on page 70)



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## Thanks

Once again thanks to the CQ WW log checkers who helped validate the winners and provided insight into many contesting topics. The 1998 crew included: K1DG, K3UA, K3WW, K6NA, KR2Q, N2NC, N3ED, N6ZZ, N9RV, W7EJ. Special advisors were K3ZO, N8BHQ, N2AA, K3LR, N5TJ. Decoding problem logs was led by W3ZZ and his crew of N5NJ, JE1CKA, and I2UIY. Our DX advisors were helpful in offering good advice, providing information, and sorting out potential problems: CT1BOH, DL6RAI, EA3DU, F6BEE, G3SXW, HS0/G4UAV, I2UIY, JE1CKA, OH2KI, OH2MM, ON6TT, PY5EG, S50A, UA9BA, VE3EJ. The CQ WW call database would not be of such a high quality if it were not for Dick, N6AA. He again spent countless hours to make the CQ WW database the best in contesting. The CQ WW uses the constantly updated software developed by Tree, N6TR, in order to create the database. John, K2MM, created the entire WWW log entry information. His robot worked smoothly in acknowledging receipt of a log. Tack, JE1CKA, has created the appearance and non-log data on <cqww.com>. Translations of the rules into Spanish, Japanese, German, and French were done by EA3DU, JE1CKA, DL6RAI, and F6BEE. Larry, N6TW, was invaluable in retrieving and processing data from e-mail submissions. Thanks to the counsel of John, K1AR, and his hard work to make the CQ WW successful.

Congratulations to all the winners! This year try to get a friend on in the contest. He and you will find the CQ WW a real contesting experience. To participate and have fun is what contesting is all about!

73, Bob, K3EST

## DX QRM

ZM2K at 1412Z big shock; assume it was correct . . . **9HBA**. We did break the record score of OC Multi-Single which we made last year, if the reduced score is less than we expect . . . **AH2R**. I've beaten the guy I was competing against—myself (with last score)! . . . **CT1BQH**. Your super contests are the ideal lab for studying the frontiers of QRP operation. Lots of big ears are desperately looking for a multiplier, and a CW CT1 is not very common. I limited it to 100 mw. Maybe 143 QSOs or 20,145 claimed points is not very huge, but I think I could get one of the best scores of points per watt! . . . **CT1ETT**. I had a lot of fun with the 3-ele noodle beam (W9XR/W3GH design) at only 15m height! . . . **DF4SA**. It isn't easy to work single band with mostly just a dipole, but it was fun the whole time, especially if stations like VK9LX, 9M6AAC, and other rare DXers gave me a call. . . . **DK8FD**.

My second CQWW CW entry from HI land. This was the most wet contest I ever worked . . . **H18/DL1HCM**. Fifty percent more points than the old Low Power DL record, but with condx like these I may end up as #3 in DL only. . . . **DL2HXA**. Most of the stations I called often returned at once. Low power and a German callsign seem to be a handicap . . . . **DL2HQ**. Final tuning of the C31XR beam was made on the tower at

minus 15 degrees Celsius. Thanks to Force 12 and SWL Holgi. . . . **DL4NAC**. High sunspots and low noise—cool! Trx again to our friends in Ibiza . . . **EA6IB**. Apologies to all who tried a 160m QSO with us and got no reply. A broadcast AM station just 50 meters away on 1584 kHz kept 1.830-1.850 segment quite "clean," making reception almost impossible! . . . **EA9EA**.

My computer was broken after 1300 QSOs! I have now only last part of the log, which I made on paper . . . **ER5AA**. No team to use TM1C, so I took the antenna farm for a week for the CQ WW CW. I tried a single band 10m. My CW level is not very high, I trained with PED to improve my code speed. Thanks very much to many American stations who repeated their calls and made a little QRS for me! I was pleased to contact China and Mongolia. 3E1AA was going too fast. It took 10 minutes to understand his call. . . . **F5ITK**. QRP is the best; with a good antenna you don't need lots of power . . . **GBVQR**. Fifteen meters was in very good shape, but with hindsight I think it would have been even better on 10m. . . . **G3MXH**. Enjoyable as always, but I cannot get near GI0KOW's scores from plain old G-land. Great conditions on 10m, but the HF bands are still shutting early. It can get better than this! . . . **G4BUO**. This is my best score to date and the first one from GD where I spent a lot of the time CQing for a change and holding the frequency, on 100W! The rotator for the 3-ele Yagi was damaged in the recent storms, so the whole contest had the Yagi facing East. . . . **GD4UOL**.

Azamed to make over 2000 QSOs; disappointed to not get all 40 zones, as I know zones 2 and 34 were active . . . **GM4YX1**. On Sunday afternoon we had all six bands open. Practically impossible to find few hundreds of Hertz free for running . . . **IK0HBN**. Really great 15 and 10 meters! For me 1.127 QSOs and 791.700 points was a dream before now. Only wire antennas and 100W, but next year hope better antennas . . . **IK4EWX**. Strong signals from USA and many stations from Japan. Great pile-up on 40m for XX9X and XZ1N . . . **IQ8T (Op.IK6SNQ)**. Wind broke my antenna at half of the contest . . . **IR8T (Op.I79GSF)**. Finally, I've got zone 01! . . . **IT9TWC**.

As the condx during test was good, I enjoyed very much. But I lost many multi because of pile-up . . . **JQ3UDL**. It was suffering in freezing temperatures—minus 35 both C and F—assembling beams and struggling through 48 hours with three stations, but it was fun to experience that rare zone 23 and meet those who provides it regularly to us Deserving . . . **JT1A**. Have not heard for years such a fine contest. I was assisted by my son LZ1ABC . . . **LZ1AQ**. Thanks to LZ1DB, the President of "TELZET," for equipping the station with transceiver and amplifier. Great propagation to JA! . . . **LZ5W**. Sunspots are back! Had a clean sweep on 15 into NA. Highlight: Getting called by KC1XX and others on 80m . . . . **OE5OHO**.

Missed VK6; heard later a couple of others missed them, too. This time heard only a few mulls that could not hear me; the VE2 was one of them. I hope conditions would be better to Japan next year also on CW. Hear you all next year with a shorter callsign! . . . **OH0JJS (OH6LI)**. First time trying to put some signals in the air from Argentina. I wish I could get a local call next year . . . **LU/OHWBW**. The biggest thrill was to work V63X through W/JA pileup at 2200Z on Sunday just after JX7DFA double multi! . . . **OH1F (OH1NOA)**. What a great contest! Passing mulls to other bands went also very smoothly. The highlight was XU1A answering to our CQ on Sunday 2050Z . . . **OH2U**.

The very best of all operators I heard was HC2SL . . . **OZ8AE**. After many years of single-band operating, I wanted to try something new in the form of an all-band attempt. By the way, I really appreciate the UBN report. It gives very good advice for self-improvement . . . **PA3AAV**. Back to basics: no more DXcluster, no more big Yagi, no more 3-500Z, but had the best time in years! Contesting as it is supposed to be? . . . **PA3BUD**. 300 QSOs on first 3 hours! 22 hours of operation and more QSOs than WW SSB—breaking my own record using R7 vertical—no other antenna, no amplifier . . . **PY2NY**.

Was lucky to find nice conditions on 15m in RA3-land after many years of waiting. Have got joy . . . **R43XO**. We've just finished the construction of 3-el Yagi for 80m 3 hours before the contest began. Antenna worked fantastic! It was the first time for us we've made QSO in contest on 80m with 6D2X, zone 6 through big pileups USA, KL7Y, long path 3 zone W6RJ . . . **RU1A**. 80m is a real band . . . **S50A**. Better than last year on 10 meters! Couldn't work zones 6 and 29. No aurora. Funny

reports received as ENNN . . . **SP5DDJ**. I love CW. I am 17-year-old blind boy . . . **SQ9BZK**. OT of 82 years. Most QSOs ever in CQ WW SSB or CW. Tried manual and computer log at same time! Previously V2/G6QQ, but now been given local license . . . **V29QQ (G6QQ)**. Biggest thrill was breaking the pileup on the Azores on 15. Thanks to VE7CFD, for his hospitality and use of his station. Original goal was to break 500 Qs; maybe 1000 Qs will be possible for QRP from the west coast soon. . . . **VE7CFD (VE7COK)**.

What a weekend for a contest! Trx to VP5JM . . . **VP5GN (K5GN)**. This old goat only managed 38 hours operating, which included some equipment problems. Band conditions were great, but I lacked the antennas to take full advantage of the conditions. Next year I'll be better prepared and hope that conditions are as good . . . **VP5M (NATO)**. Many thanks to VE1JF (Jim and Hannalore) for hosting my DXpedition to Nova Scotia . . . **XJ1UF (VE7SY)**. All bands were UFB, and specially 15m and 10m. This is my best effort in this category . . . **Z31JA**. First time like "BIG GUN." Excellent results on 40m. Sorry for many stations from W6/7 and JA I couldn't copy because my receiver was very poor . . . . **Z39Z**. I operated from Quartz Hill Amateur Radio Station located on a farm near Wellington. The station is a former Radio New Zealand facility for reception of international broadcasts. ZL6OH is a special callsign for use by members of the Quartz Hill User Group . . . **ZL6QH (ZL1AZE)**. Thanks to PY5EG for a memorable experience and a new world record! . . . **ZWSB (KS2Z)**.

## USA QRM

Goal was 100 countries on single band. Close but no cigar . . . **AA8TY**. Thanks to Roger, K1DQV/3, for hospitality and opportunity to test drive his new installation. First contest from U.S. in 12 years. Won the national championship in the last one (ARRL DX CW) from W3GRF. Won't even make top ten this time. What a difference a decade makes! . . . **KBDQ**. This is my first CW entry, although I've operated in CQ WW for years now. Hope to make a better showing next year when I get the tower up. Using only verticals can be a real handicap in pileups, but it can still be fun, too! . . . **KBIL**. Thanks to the sunspot gods for excellent 10/15m condx. That's the most fun I've had on 10 for a long time. Sigs coming from everywhere at once. Had to use the Zepp so I wouldn't miss anything . . . **K1RC**.

Best conditions in years! And the YCCC really motivated us little pistols to operate! . . . **K1TH**. This was the best ever result in 20 years of contesting from Vermont. Better than 50% improvement over last year's score thanks to improved 10/15m antenna setup and propagation. Even more important, we managed to have FUN. Thanks to our hard-working crew . . . **K2LE/1**. Motor skills and brain neurons are sharpened up as a result of working single band 40m. Loved it! . . . **K4LDR**. The person who said, "There ain't no meters like 10 meters" was certainly right this weekend generated twice as many points as any other band for me . . . **K4LT4**. Wish I could have spent more time on the bands. Did get to enjoy some good 10m openings after local sunrise . . . **K4RO**.

We should be classed as multi-multi unassisted as we do not use packet, the Internet, or any other outside sources for our contacts as the east coast packet slaves do! All of our contacts came from inside the shack . . . **K4VXB**. Welcome back sunspots! This is what we've been waiting for since 1993 . . . **K5MDX**. Like so many others this is a personal best for me. Was great fun, even with modest antennas and low power . . . **K7HBN**. All I could get up before the contest was a 2-40 at 130 ft. Just thought I would work a few guys and have some fun. Turns out that I was competitive! . . . **K8DX**. This looks like a new CQ WW CW MM record! Conditions were outstanding on all bands! Ed, K1TR, graciously helped out on 20m and on the spotting radio setup. Thanks, Ed! As usual, Matt's XYL, Christine, provided moral support and food throughout the contest . . . **KC1IX**. First ever CQ WW on CW. Thanks to all who slowed down for my slow copy. Really got my code speed back up, though . . . **KETFO**.

After 20 years without a single CW QSO I made 175 in just under 13 hours! . . . **KETKD**. This was a great effort for the first time in this contest, with a great team of operators. We missed the first 38 minutes of the contest, as we were still outside raising antennas! . . . **KG6OK**. Set a goal to beat my last year's scores and totals. With a modest station I could not hold a run frequency, but maybe that was good, as S&P and the TR bandmap yielded a wealth of multipliers, especially on 10! . . . **K9JC**. What a contest! Can't imagine what the top of the cycle will bring in a few years. Activity this weekend puts claims of dying interest in CW to rest for good! . . . **NIDG**. This was my personal best all time from Stateside in CQ WW. . . . **N2BA**.

Great conditions all around. Highlights: three new countries worked (280), busting pileups. Lowlights: not even hearing XX9 . . . **N2CU**. For the most part I was "packet pouncing," but there was so many spots I was kept busy all weekend. Were I a better CW operator I would have been able to run. Conditions were really great and I was hoping to work over 100 countries on 10, 15, or 20 meters . . . . **N2FF**. Could not find much chance for sleep. Shut down after EU sunrise for an hour, got up to check EU secondary, only to hear JT1 booming through. Hard to believe WV condx can improve much over what they were this weekend, but sorry to see beloved low bands suffer . . . **N4AF**. Biggest thrill: finding VK9SLX all alone on 20m after midnight and working them first call! . . . **N5TW**.

This was my first contest from the home QTH using a beam. What a difference over wires! Working XZ1N just after sunrise on 20m (first call) and VK's, VK9LX long path on 15m just before our sunset . . . . **N6RFM/1**. JA runs went for many hours and running Europe on 10 meters made me feel like I had moved to the east coast! 1999 should be a really great DX and contest year! . . . **W0TM**. This is as good as it gets! My best score ever, and longest time awake . . . . **W1WEF**.

What a thrill to break the LP record! This contest was action-

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packed the whole time; there really were no totally dead periods. Warmest congratulations to Jeff, N5TJ, who looks to have run away with it. . . . **W3EF**. Most impressive score goes to N9RV operating at W9RE. . . . **W4AN**. More fun than should be allowable. My second run at this game again from the /M platform. My daughter Katy (also a ham) was with me during the trip. Many thanks to all who pulled me out of the mud to make this another memorable event! . . . **W4CAT (K1KY)**. Yo quiero 10 meters. . . . **W4PA**. Ninety years old and I still love DX contests! . . . **W6BA**. It was wonderful to have openings to Europe (on 10) after such poor conditions in the SSB contest last month. It wasn't quite good enough to hear zones 18, 21, 22, 23, 34, 37, 39. . . . **W6YA**. A contest to remember for all time. . . . **W9RE (N9RV)**.

## Station Operators Multi-Op Single Transmitter

**4U1VIC**: DJ0IP, DJ1AT, DL1MGB, DL3NCI, DL5RDO, DL5RMH, DL6RDR, DL9NEI, S57NW. **BQ7DV**: UA9CI, UA9CDC, UA9CDV, UA9CLB, UA9CCF, UA9CKP. **9A5D**: 9A3DU, 9A3NY, 9A4NC, 9A4SG, 9A6DX, 9A6KKB. **A2AF2 & K2OMF**, **A3AJU & FH2F**, **A2EF & WR2I**, **AH2R**: KH2JH0USD, KH2JR0BD, JR70MD/W13O. **C3EF**: CE3/SM3SGP, CE3FIP, C3TF/DL2HYH. **D4BC8 & DL20BF**, DK7Y. **DF0C1**: DL5ZL, DL8AKI. **DF6XG**: DL4FCX, DH8MCB, DJ3XG. **DJ6QT**: DL1EFD, DL1EFO. **DK0FF0**: DL1BZA, DL2BWM, DL7UGN. **DK0TZ**: DL1SFB, DL4AAE, DF5SEN. **DK0ZG2**: DJ5WG, DL6MPG, DL8CYG, DL8MUG. **DK1II & DL5EBE**, **DK5MV & DL7MAE**, **DL8AO**: DJ3TF, DJ5RE, DJ6RN, DK1RP, DL6RDE. **DLB0B/P**: DF2CH, DJ8BD, DL3DAZ, DL4DZ, DN1DF. **DL2NB1** & DL4RD, DL6RA1. **E45BY & EA3CB**: EA5ABE, EA5BX7, EA5EU, EA5FID, EA5GRV, EA5KW, EA5SM. **E46IB**: EA3AIR, EA3AJW, EA3ALV, EA3DU, EA3GGO, EA3KU, EA5BM, EA5ZF, EA6ACG, EA6FG, **ED7UR**: EA7BVJ, EA7ES, EG7AEN, EC7DZD, EC7AJL. **F5KPG**: F5SDT, F5TF, F6FY. **F5PEP & F5CW**, **F6ENO & F6EC**: F6DKV, F5AKL. **G3TMA & G6WAT**, **GM8C**: GM4WLN, GM0KMD, GM0RLZ, MM0B5M, GM0KWL, GM0AZC. **HA1KRR**: HA1ZZ, HA1ZN, HA1XU, HA1XO, HA1XK, HA1DRR. **HG1S**: HA1TJ, HA1DAE, HA1DAC, HA1AH, HA1AI, **HS0AC**: HS1BZY, HS1CKC, HS0SKC, HS0GBI, HS6NDK, E21EIC, E21ENI. **H59AC**: H51IV, HS0AOAG. **J3T**: JV3AT, JV3TRK, JV3YYK, JV3SHF, JV3OWC, JV3ZLC, I3BLF, IK2NCJ, IK2JUB. **IK1QBT & IK1LWL**, I1NVU, IK1CLP, I1WXY. **I02A**: IK2HKT, IK2CIO, I2IFT, IK2AHB, IK2PFL, I2CQZ. **I02L**: IK2NCF, IK2PIG, I2ZAJU. **IU2C**: Club. **IY2AR1**: I2AVAK, IK2UCK, IK2XWY, IK2BUF, IK2VNU, 12MQP.

**J41YOH**: J76BI, JR0EFE. **J42ZJW**: JM2NFO, JE2PCY, JH2CMI, JI2ICO. **J49YBA**: JR9QNJ, JF0EGG. **JE2YHS**: JA2OLJ, JE2WBW, JI1CUP, JN3PYO, J01BMY. **J12ZEY**: JA2BIV, JA2BIL, JM2CCL. **J3BFC & J3GKE**, **J12ZE**: JA1R1Z, JG1TCB, JI1RUC, JG1SQI, JP1QGO, JR1ZTT: JK1JHU, L71ETP, JM3CRK, 7N3PZ, JG2HKO, 7L3CQ, JR0UUU, JR0XHL, 7M4AZB, JM4HH, JH0KRR, K.Hirumi and Y.Megumi, JY9QJ & DL5MBY. **K02M & K0XU**, **K1AR & K1EA**, W2RQ. **K1Z & K1RO**, N1RL. **K2TE & K1HI**, K2XR & WB2BHC, WB2WK, K20WR, N2YFH, K3PH & W3MF, K3TUP & K3JL, N0BL, WA3SES, WA3HEA. **K5MDX & W05L**, W5UE, N5FG, K6ANP & N6AD. **K7ON & N7U1**, **K8AZ & K8BL**, K8MR, K8NZ, P8CR, W8GN, W8KIC, KG8TS, KQ8M, N8TR, W1MD, WB8K, WT8C. **K8LX & K8GM**, N8EA, WA8ZDT.

**K9KJ & W9YYG**, **K1A9G & K1VR**, **KB0WVT & KG0US**, **KG6OK & N6HC**, W1HJ, A6APW, K1XG, KQ6ES, K6JZB, KA6AS, KH7R & KH6ND, K1ER, K9PC, K9NW, WE9V, ND3A, K5TSQ, AH6LV, NH6XO, AH6OZ, AH7R, KH7L, **KL7Y & WL7E**, WA2GO, KL7U. **KQ4QM & K4KL**, **KV8Q & N0NR**, W7KM, AE0Q. **L1AK**: L1A7UJ, LB7JE, LB7VE, LB8W: LA4DCA, LA8SDA, LA9EEA, LA9HW. **LU8WX**: LU3XQ, LU6XQI, LU6XQG, LU6EFF & LW1EXU, LW9EYI, LX/LD4S3X & DL5SEJ, DL4SDW, DL8SCG, **LY3AV**: LY1CO, LY1CX, LY3BP, **LZ1AO** & LZ1ABC. **LZ5Z**: LZ1AX, LZ1UO, LZ1BMV, LZ1HST, LZ3FN, LZ3FR, LZ3SM, LZ4AX, OK2DF. **LZ6A**: LZ2EG, LZ4BC, LZ2HR, LZ2VO, LZ9A: LZ2DF, LZ2EV, LZ2HM, LZ2JE, LZ2PL, LZ2PP, LZ2WP, LZ3WT, LZ4U. **N0JJ & A0BY**, W7OM, AA0AW, AA0SI. **N0LM**: W0ETT, W0NT. **N0NN**: N0AV, N0AC, K0R9, K0D, W0V9, W0FLS. **N1AU & WC1D**.

**N2LBR & WA1KKM**, **N2NU & K2WI**, W2REH, WB2REM. **N2SS & N2MT**, **N3RS & N2SR**, N3ED, N3RD. **N3OC & WR3Z**, **N4RV**: N4RA, KT4W, N8RA & NJL2, **N3EF & K3ATO**, **NY3M** & Dave Long, OH5M: OH5CW, OH5MLH, OH5UX, OH5TQ. **OH6NIO & OH6KZP**, OH6X: OH6UV, OH6MW, OH6NJ, OH6KSR, OH6MSZ, OH7M: OH4LYX, OH4XX, OH6LN, OH7MS, OH7MHL, OH7KIR, OH7KD. **OK1KCF**: Club. **OK2DKS**: OK2VWB, OK2HJU, K02-22266. **OK2K0D**: OK2BNX, OK2BJ. **OK5W**: OK1AEZ, OK1CF, OK1WF, OK1TA, OK1FKD, OK1DD, TA2ZW, OK1JR, OL2A: OK2PDK, OK2HBY, OK2PML, OM3A: OK1AY, OK1CM, OK1DRQ, OK1DX, OK1FCJ, OK1FJD, OK1FWM, OK1MR. **OL50**: OK1HRA, OK1FLC, OK1AYE, OK1FU. **OM3A**: OM3CGN, OM2DX, OM6TY, OM7RU, OM8AM, OM8AW, OM9WR. **OM8A**: OM3RM, OM3GI, OM3LU, OM3JW, OM3EA, OM3XX, OM5RW. **OT8K**: ON4ON, ON5DI, ON5SY, ON6HH, ON4ADZ, ON7PQ, ON398, ON4-4531. **OT8P**: ON4G0, ON4LM, ON4LDJ, ON50NO, ON6AH, OM6NH, OM6VL, OM6QR, ON7PC, OM5V, Visitors ON5AV & ON4LZ.

**PA3HBB & DF5RF**, **P14CC**: PA3ALK, PA3BSQ, PA3EPD, PB0AIT, PB0AIU, PA4COM: PA3BGP, PA3BWD, PA3CAL, PA3EBT, PA3ERC, PA3EW, PA3FDO, PA3GBQ, JH9GGH. **RK8XFS**: RU0SN, RU0ST. **RK3AW**: RU3DGD, RK3FM, RA3FF, RK3FT. **RK3PX**: RW3PN, UA3PNO, UA3PBE, VR3PE, UA3PMT, UA3PMW. **RK3WWA**: UA3WU, RV3WU, UA3WGA, RA3WOK. **RK4CWA**: RA4CQ, RW4CG, RA4CTR, UA4CQW. **RK4WWA**: UA4WA, RW4WA. **RK4YYM**: Club. **RK6AYN**: UA6AH, RU6BP, RN6BP. **RK9AWN**: RA9AA, RA9AC, RA9AX, RN9AA, RZ9AW, UA9AR. **RK9CWW**: RZ9CO, RA9CO, RA9CMO, RA9CKQ, UA9FQY, UA9CDT, UA9CIR. **RK9CXM**: Vlad Kalichenko, Arkady Medyakov, Oleg Khabarov, Serge Bankin. **RK9KWI**: UA9KJ, UA9KDZ. **RN6A**: RN6BN, RA6CM, RA6CO, RA6AX, RX6BA, RW6YY. **RN3R**: UA3AR, UA3RA, UA3RJ. **RU1A**: RW1AC, RV1AW, RU1AA, RN1AM, UA1ARL, RX1AA, RA1ARZ, R-1400, Alex, Vadim. **RY9C**: RW9CF, UA9CGA, UA9CR, UA9DD.

**RZ1AW0**: UA1ASG, RA1AIM, KB2WKC, UA1ACC, KB2WWD, UA1AOF. **RZ4SWM**: UA4SCB, UA4SBL. **RZ9AZA**: RU9AN, RU9A, RZ9AR, RZ9AZ, UA9BA, UA9AJ, UN4L, UN9LG. **S50G**: S51F, S56M, S57AW, S57MW. **S52C**: S52E, S52F, S510, S52P, S58Q. **SK2AU**: SM2VHD, SM2MD. **SK6FM**: SM6BGA, SM6DYK, SM6FKF, SM6LJU, SM6MCN, SM7BUA. **SN0KRT**: SP9ADU, SP9EMI, SP9UXL, SP9-1753-KA. **SP1KYB**: S01QDN, S01EIU. **SQ6D**: SP3ANS, SP3HRSN, SP3RBI, SP3RBR, SP6HGE, SP8NR. **TA/DL5YN & DL5YL**, DL1CW. **TM2Y**: F6BEE, F6ARC, F6FGZ, F6FVY, F6MUS, F6NL. **U50XC**: RW9OX, UA9OSV, UA9OOA. **UD6M**: UA6LO, UA6LV, R1ELNA, UR5MVZ, UA6LFQ, RN6LG, RU6LG, UA4AJF/6, UT6IZ/R6. **UT7Z**: UR-ZMH, UT7Z, UT2Z, UT1Z, UT4Z, UX0Z. **U63X**: WA1WS, K01F, K1KM. **V66A0**: VERAMR, VE6CZ, VE6VKC, VE6SI, VE6ZE, VE6BR, VE6JZ, VE6RTL, VE6TC. **VE6SV**: VE6EX, VE6EK, VE6EZ, VE6AKY, VE6NTF, VE6NPA. **VK9LX**: K6KM, N4RU, N0TT, NM7N, VK2ICV. **VQ9IO**: VQ9JT/K5D(Y), VQ9QM(W4QMN), VQ9SF(N5SF), VQ9SS(N6SS), VQ9ZX(K7ZK), VQ9MG(BKBVHV). Baran, VU2ZAP & W1INN. **W1NR & W1BK**, **W1SRG**: N1YXR, KE4G1, W2CG & K2WJ, W2NO, W2RE & AA2DY, N2IK. **W2SEX**: K2YW, K2ZR, W4PRO & WB4DNL, W4HIR. **W6XH/2 & N2AU**, **W7L**: K77J, K7ZUM, AL7W, WA0DM. **W7VJ**: Others. **W8Z & WD3A**, K6QBL, N0BL, **W9J** & K9GY, K9JY, N9AW, W9VU, W9XT, WG9L. **WN90** & W9IU. **WR3L** & N3YHC. **WX0B/5**: AD5Q, NM5, NM5N, K50T, AD4PU, K5GA. **YT1Z**: YT1WV, YU1YR, YU1PD, Dragan Manojlovic, Ivan Petkovic, Sanjo Jocic, YU1HF: YU1M1, 4N1FTD, 4N1FMN, 4N1DX, 4N1YL, 4N1FYL, YT1SA, YT1PNR, YU7AL & Y7EM, 4N7RGH. **YZ7A**: Lacy, YU7CM. **YZ7W**: Club. ZM2K: ZL2AZ, ZL2AGY, ZL2BA, ZL2BSJ, ZL2ST, G4PIQ, ZL2DX.

**Station Operators**  
**Multi-Op Multi-Transmitter**

**5V7A**: G3SXW, G3VMW, G3ZEM, GM3YTS, G4FAM, G4BWP, G4ZVJ, K5V7, K7V7, K7Y4, K7Z2, K7W, N6BT, N6TV, N6FV, A7VY, K7CO, K4SO, K7CE, AG9A, W9QA. **A61AJ & K3EO**: PA4AD/794S, T93Y, T97M, W3UR. **BW0R**: BV2KI, BV2KS, JH3GCN, JP1RIW. **DF0HQ**: DK8BY, DL1AU, DL3AL, DL30I, DL3TD, DL4ALB, DL5ANT, DL5AXX, DL5LYM, DL5MX, DL7URH, DL7V0A, DL8WAA. **DL0CS**: FD1LX, DF1LJ, DL5LA, DL2K0Y, DK6WL, DK8LV, DL1QQ, DL8UD, DLBWPX, DL9LB, HA1AG. **DL0KF**: DL4LBK, DL3JUL, D4JTK, DL7TN, D7WSV, DL8PY, DL3HAX, DK3UA, DF4PA, DL3LBX, DL5XJ, DL2ZT, DF3LZ. **E4M4L**: EA1DAV, EA4AHD, EA4AKO, EA4AMO, EA4ET, EA4KA, EA4MC, EA4TX, EA4WV, EA4AKI, EA4EPJ, EC4AGN. **E49EA**: EA9AI, EA9AZ, EA9EU, EA9GK, EA9KB, EA9UG, EA7DPU, EA7GTF, EA7KW, EA7TL, EA5FV, EA5RS, EA4KR, EA2CLU, EA1AK. **E50Q**: EB5MC, ES5MG, ES5QX, ES5RN, ES5RY, ES7RE. **EW1WV**: EW1V, EW1MN, EU1CO.

**H66N**: HA2RX, HA5BWS, HA6ND, HA6NF, HA6NL, HA6NO, HA6NY, HA6OB, HA6OI, HA6ON, HA6OY, HA6PX, Y05BRZ. **J3A**: JN1V, W5UDA, JK3GAD, W1WFB, N9KUW, N9KU, N9R, N9S, S50R, K9MM5, K16T, N2G, N2A, K3EST, N3RA, K4JWY, W9KJ, K9V, K8CX, W8ILC, W8OK, W8QID, W9CG. **J41YPA**: JA1PEJ, JF1MIA, JH1HLC. **J41XP**: JE1KA, JF7TFK, JG4KEZ, JG7PSJ, JH0N7Z, JZDLF, JL2JF, JM1UWB, JP1OLG, JQ1BRW, N3QLN, H.Masuda. **J43YKC**: JP3PZD, JS3QGO, JG4LSR, JY4HWC, JL4CVB, JE5DTS, JE6EKC, JL6BQ, JP6BWN, Sakusha. **J44EKU**: JE3MAS, JG3KV, JI3OPA, JA4EKO, JF4ETK, JF4UF, JG4CL, JH4MNT, JH4JDP, JN4FEU, JR4ISF, **JASBJC** & JA5FDJ, JA5JCC, JA5THU, JH4RXS, JR5JQ, JR5VHU.

**JT1A**: JT1BH, JT1BV, JT1CD, OH1RX, OH2BH, OH8PF. **K1K1 & K1CC**, KM1P, W1RM, W2XX, W1NT, N2YKH. **K1R1 & K1EPJ**, KR1G, N1TO, A1A1S, KF1V, K1OZ & W2AX, W2LX, NB1N, NB2UN, N1B8, W1MA, W1VE, W1FJ, K3II & K3CT, K3TEJ, K3LR & W2YQ, K3UA, K3GL, N2C, N2A, K3EST, N3RA, K4JWY, W9KJ, K9V, K8CX, K4VX & K2VW, N5DX, K9QC, K5LG, KM5G, K9BGL, N9JF, KM0L, K9VU, NS0Z, K9C8C & AC8W, K8D, K8KJ, KM8M, K9TM, N8CQA, W8MJ, WD8S, KB1H & A1AC, NB1U, K1EBY, KB1DFB, N1XS, K1NG, KB1S0 & N1S1B, W1GQ. **K9NS**: AA9D, K9BG, K9DX, K9HB, K9KM, K9PPY, K9PW, K9QB, K9RS, K9S9, K9UW, W9V7, K1C1X & KM3T, K1QG, K1D, N1RR, N2IC, T93M, Christine. **KV1W & K1R, LY5A**: LY2PAJ, LY2FY, LY1BA, LY2CO, LY4CW, LY2KW, LY2PX, LY2IJ, LY7A: LYR-346, LYR-728, LY2BWMX, LY2OC, LY3DA, LY2FN, LY3KS, LY3HD, LY4AA, LY2KZ, LY2AO, LY2NK.

**N2LBR & WA1KKM**, **N2NU & K2WI**, W2REH, WB2REM. **N2SS & N2MT**, **N3RS & N2SR**, N3ED, N3RD. **N3OC & WR3Z**, **N4RV**: N4RA, KT4W, N8RA & NJL2, **N3EF & K3ATO**, **NY3M** & Dave Long, OH5M: OH5CW, OH5MLH, OH5UX, OH5TQ. **OH6NIO & OH6KZP**, OH6X: OH6UV, OH6MW, OH6NJ, OH6KSR, OH6MSZ, OH7M: OH4LYX, OH4XX, OH6LN, OH7MS, OH7MHL, OH7KIR, OH7KD. **OK1KCF**: Club. **OK2DKS**: OK2VWB, OK2HJU, K02-22266. **OK2K0D**: OK2BNX, OK2BJ. **OK5W**: OK1AEZ, OK1CF, OK1WF, OK1TA, OK1FKD, OK1DD, TA2ZW, OK1JR, OL2A: OK2PDK, OK2HBY, OK2PML, OM3A: OK1AY, OK1CM, OK1DRQ, OK1DX, OK1FCJ, OK1FJD, OK1FWM, OK1MR. **OL50**: OK1HRA, OK1FLC, OK1AYE, OK1FU. **OM3A**: OM3CGN, OM2DX, OM6TY, OM7RU, OM8AM, OM8AW, OM9WR. **OM8A**: OM3RM, OM3GI, OM3LU, OM3JW, OM3EA, OM3XX, OM5RW. **OT8K**: ON4ON, ON5DI, ON5SY, ON6HH, ON4ADZ, ON7PQ, ON398, ON4-4531. **OT8P**: ON4G0, ON4LM, ON4LDJ, ON50NO, ON6AH, OM6NH, OM6VL, OM6QR, ON7PC, OM5V, Visitors ON5AV & ON4LZ.

**N2LBR & WA1KKM**, **N2NU & K2WI**, W2REH, WB2REM. **N2SS & N2MT**, **N3RS & N2SR**, N3ED, N3RD. **N3OC & WR3Z**, **N4RV**: N4RA, KT4W, N8RA & NJL2, **N3EF & K3ATO**, **NY3M** & Dave Long, OH5M: OH5CW, OH5MLH, OH5UX, OH5TQ. **OH6NIO & OH6KZP**, OH6X: OH6UV, OH6MW, OH6NJ, OH6KSR, OH6MSZ, OH7M: OH4LYX, OH4XX, OH6LN, OH7MS, OH7MHL, OH7KIR, OH7KD. **OK1KCF**: Club. **OK2DKS**: OK2VWB, OK2HJU, K02-22266. **OK2K0D**: OK2BNX, OK2BJ. **OK5W**: OK1AEZ, OK1CF, OK1WF, OK1TA, OK1FKD, OK1DD, TA2ZW, OK1JR, OL2A: OK2PDK, OK2HBY, OK2PML, OM3A: OK1AY, OK1CM, OK1DRQ, OK1DX, OK1FCJ, OK1FJD, OK1FWM, OK1MR. **OL50**: OK1HRA, OK1FLC, OK1AYE, OK1FU. **OM3A**: OM3CGN, OM2DX, OM6TY, OM7RU, OM8AM, OM8AW, OM9WR. **OM8A**: OM3RM, OM3GI, OM3LU, OM3JW, OM3EA, OM3XX, OM5RW. **OT8K**: ON4ON, ON5DI, ON5SY, ON6HH, ON4ADZ, ON7PQ, ON398, ON4-4531. **OT8P**: ON4G0, ON4LM, ON4LDJ, ON50NO, ON6AH, OM6NH, OM6VL, OM6QR, ON7PC, OM5V, Visitors ON5AV & ON4LZ.

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Advanced Class (4A + Code) .... \$29.95

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REPEATER HEADQUARTERS

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• 45 Watt VHF Micor from ..... \$99

• 40 Watt UHF Master II from ..... \$199

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Info: 307-266-1700

Fax: 307-266-3010

## TOP SCORES

### **WORLD**

#### **Single Operator**

##### **All Band**

P40E ..... 14,372,964  
 EA8EA ..... 13,717,801  
 HC8N ..... 12,971,803  
 P40W ..... 12,108,798  
 CN8WW ..... 11,904,984  
 8P9Z ..... 9,991,863  
 C4A ..... 9,904,510  
 A45XR ..... 9,067,345  
 3V8BB ..... 8,589,180  
 6V6U ..... 8,127,504

##### **28 MHz**

ZW5B ..... 1,991,895  
 LT1F ..... 1,824,312  
 ZY2DX ..... 838,532  
 HC2SL ..... 837,774  
 LU4FPZ ..... 789,888  
 H20A ..... 768,405

##### **21 MHz**

5X1Z ..... 1,361,360  
 9Y4VU ..... 1,222,485  
 5B4AGC ..... 1,139,608  
 CX5X ..... 935,375  
 ZV5A ..... 893,671  
 K2SS/1 ..... 770,355

##### **14 MHz**

5NØ .....  
 /OK1AUT ..... 1,456,400  
 K2WK ..... 1,007,781  
 OHØZ ..... 901,230  
 OK1RF ..... 852,488  
 GM3POI ..... 820,080  
 DJ7AA ..... 768,768

##### **7 MHz**

V8A ..... 952,416  
 9A9A ..... 908,694  
 OT8T ..... 772,530  
 9A5Y ..... 734,570  
 LZ5W ..... 639,912  
 OH9DX ..... 608,548

##### **3.5 MHz**

IH9/OL5Y ..... 671,703  
 XJ1F ..... 497,280  
 S50A ..... 458,738  
 SN3A ..... 437,904  
 W1MK ..... 413,576  
 5B4/EU1AA ..... 412,482

##### **1.8 MHz**

VA1A ..... 246,238  
 IR4T ..... 159,654  
 9A5W ..... 158,652  
 4X4NJ ..... 144,045  
 S50U ..... 134,784  
 OM5ZW ..... 117,771

#### **Low Power All Band**

V26K ..... 7,185,562  
 N5TJ ..... 3,157,053  
 W2TZ ..... 2,678,662  
 S59AA ..... 2,595,303  
 XO7X ..... 2,584,983  
 LY3BA ..... 2,543,038  
 W3EF ..... 2,401,695  
 HA1CW ..... 2,331,648  
 T95A ..... 2,297,344  
 KM1X ..... 2,282,097

##### **28 MHz**

CX5AO ..... 887,556  
 WP2Z ..... 806,124  
 LU5WW ..... 689,568  
 9A7R ..... 536,580  
 NP3A ..... 477,664  
 KP3L ..... 468,814

### **21 MHz**

EA8NN ..... 545,100  
 9A6A ..... 494,025  
 IK4DCT ..... 490,196  
 CT1BQH ..... 443,120  
 LU5FF ..... 424,799  
 UA4LM ..... 389,025

### **14 MHz**

VK2APK ..... 442,566  
 S58AL ..... 388,680  
 CX9AU ..... 387,985  
 EA3BCM ..... 366,560  
 IT9XUC ..... 320,320  
 JR4PMX/1 ..... 300,960

### **7 MHz**

EA8CN ..... 519,932  
 HI3K ..... 372,372  
 LZ4ZP ..... 294,857  
 4L8A ..... 294,210  
 IQ7A ..... 292,420  
 UAØCM ..... 274,500

### **3.5 MHz**

UA9JJ ..... 166,200  
 TA3D ..... 163,846  
 UUØJM ..... 123,250  
 RA9AE ..... 119,935  
 HA8RH ..... 110,865  
 UT7CC ..... 107,507

### **1.8 MHz**

HA3MQ ..... 49,192  
 EU1AZ ..... 47,047  
 EI7IU ..... 31,507  
 YU1RA ..... 28,535  
 LY2OU ..... 26,605  
 UXØHA ..... 25,264

### **QRP All Band**

HA2SX ..... 1,002,822  
 N6MU ..... 857,395  
 K0OD ..... 161,432  
 SM3CCT ..... 666,050  
 K1RC ..... 659,880  
 W3ZZ ..... 628,304  
 N7IR ..... 569,192  
 W5UN ..... 542,025  
 K8DX ..... 532,105  
 W8UD ..... 168,750  
 AD7U ..... 149,643  
 W8TWA ..... 73,830

### **QRP All Band**

N9CIQ ..... 383,052  
 WA3NKO ..... 292,950  
 AA1CA ..... 203,058  
 K3WWP ..... 160,800  
 W6YJ ..... 104,448

### **Assisted All band**

K3WW ..... 7,963,764  
 K1G ..... 6,477,468  
 K2NG ..... 5,951,043  
 K2TW ..... 5,685,240  
 N2GC ..... 77,616  
 WØSF ..... 34,040

### **Assisted All band**

W8LRL ..... 36,864  
 W8UVZ ..... 19,532  
 W2VO ..... 17,400  
 K1VW ..... 9,028  
 W2UP ..... 4,695,670  
 K1TI ..... 4,649,790  
 RZ3BW ..... 4,642,688

### **Multi-Operator Single Transmitter**

K1AR ..... 12,063,114  
 TM2Y ..... 10,357,360  
 N3RS ..... 9,681,880  
 EA6IB ..... 9,522,048  
 N2NU ..... 9,313,019  
 K8AZ ..... 9,259,470

### **Multi-Operator Multi-Transmitter**

6Y2A ..... 39,279,140  
 5V7A ..... 34,658,186  
 TI1C ..... 32,783,400  
 EA9EA ..... 29,532,750  
 A61AJ ..... 28,014,492  
 J6DX ..... 25,596,764

### **USA**

All Band  
 W1KM ..... 7,379,711  
 W4AN ..... 7,141,453  
 K1ZM ..... 7,119,308  
 W9RE ..... 6,875,625  
 K1TO/4 ..... 6,293,104  
 KQ2M/1 ..... 6,112,282  
 N2NT ..... 6,086,220  
 K3ZO ..... 6,054,048  
 N2LT ..... 5,831,100  
 K1RU ..... 5,214,551

### **28 MHz**

N4BP ..... 483,705  
 K4WX ..... 422,919  
 K9IG ..... 415,552  
 W6YA ..... 371,159  
 W6NL ..... 359,077  
 W9WI/4 ..... 339,456

### **21 MHz**

K2SS/1 ..... 770,355  
 WØUN ..... 713,565  
 NN4T ..... 584,824  
 W9LT/8 ..... 535,804  
 WØSD ..... 501,234  
 K4OAQ ..... 443,022

### **14 MHz**

K2WK ..... 1,007,781  
 W9OF ..... 382,356  
 K2BA ..... 310,542  
 W8UD ..... 168,750  
 AD7U ..... 149,643  
 W8TWA ..... 73,830

### **7 MHz**

W5UN ..... 542,025  
 K8DX ..... 532,105  
 W3GG ..... 334,632  
 K0OD ..... 161,432  
 W6KP ..... 156,457  
 W6YJ ..... 104,448

### **3.5 MHz**

K3WW ..... 7,963,764  
 K1G ..... 6,477,468  
 K2NG ..... 5,951,043  
 K2TW ..... 5,685,240  
 N3AD ..... 4,964,695  
 W2UP ..... 4,695,670  
 K1TI ..... 4,649,790  
 K5NA ..... 94,581

### **1.8 MHz**

N2GC ..... 77,616  
 WØSF ..... 34,040  
 W8LRL ..... 36,864  
 W8UVZ ..... 19,532  
 W2VO ..... 17,400  
 K1VW ..... 9,028  
 W2UP ..... 4,695,670  
 K1TI ..... 4,649,790  
 RZ3BW ..... 4,642,688

### **Low Power All Band**

N5TJ ..... 3,157,053  
 W2TZ ..... 2,678,662  
 LU5FF ..... 2,678,662  
 N8AA ..... 2,474,012  
 W3EF ..... 2,401,695  
 KM1X ..... 2,282,097  
 NA2U ..... 2,213,580  
 K1VUT ..... 2,139,800  
 WT1O ..... 1,741,560  
 K5KLA ..... 1,437,000  
 WD5K ..... 1,420,923

### **Multi-Operator Multi-Transmitter**

W3LP ..... 21,271,495  
 K3LR ..... 20,897,569  
 K1KI ..... 17,808,700  
 K2LE/1 ..... 13,276,122  
 K9NS ..... 11,526,040  
 WB4TDH ..... 208,372  
 W3EP/1 ..... 167,040

### **TOP SCORES**

### **K2MFY**

..... 159,453  
 N2OO ..... 156,500  
 K2ACW ..... 143,507  
 K9WA ..... 114,840

### **21 MHz**

N4CT ..... 294,602  
 KQ2M/1 ..... 282,218  
 N2NT ..... 213,705  
 K9RN/M ..... 213,705  
 AF9DX ..... 122,884  
 AAØTY ..... 122,815  
 K1RU ..... 113,870

### **28 MHz**

9HØA ..... 840,434  
 GW3YDX ..... 726,193  
 G3MXJ ..... 620,172  
 GW3WVG ..... 511,932  
 T99W ..... 492,582  
 OH5LF ..... 3,994,272  
 AE9F/6 ..... 113,870

### **21 MHz**

IR4T ..... 769,484  
 DL1IAO ..... 723,492  
 GM4YXI ..... 672,175  
 OH1F ..... 607,338  
 4O6A ..... 589,842  
 OM7M ..... 584,150

### **14 MHz**

K9MK ..... 2,640  
 QRP  
 All Band  
 N6MU ..... 857,395  
 N1TM ..... 701,679  
 K1RC ..... 659,880  
 W3ZZ ..... 628,304  
 N7IR ..... 569,192  
 KV8S ..... 503,750  
 N9CIQ ..... 383,052  
 WA3NKO ..... 292,950  
 AA1CA ..... 203,058  
 K3WW ..... 160,800

### **7 MHz**

9A9A ..... 908,694  
 OT8T ..... 772,530  
 9A5Y ..... 734,570  
 LZ5W ..... 639,912  
 OH9DX ..... 608,548  
 S57AL ..... 532,526

### **3.5 MHz**

S50A ..... 458,134  
 SN3A ..... 437,328  
 SP7GIQ ..... 343,476  
 GMØGAV ..... 249,000  
 OH1MA ..... 240,828  
 LA6YEA ..... 209,677

### **1.8 MHz**

IR4T ..... 159,654  
 9A5W ..... 158,200  
 S50U ..... 134,784  
 OM5ZW ..... 117,771  
 LY3BS ..... 96,720  
 LX4B ..... 95,030

### **Multi-Operator Single Transmitter**

K1AR ..... 12,063,114  
 N3RS ..... 9,681,880  
 N2NU ..... 9,313,019  
 K8AZ ..... 9,259,470  
 K1ZZ ..... 8,930,278  
 K8LX ..... 6,701,035

### **Multi-Operator Multi-Transmitter**

KC1XX ..... 22,473,282  
 W3LP ..... 21,271,495  
 K3LR ..... 20,897,569  
 K1KI ..... 17,808,700  
 K2LE/1 ..... 13,276,122  
 K9NS ..... 11,526,040  
 WB4TDH ..... 208,372  
 W3EP/1 ..... 167,040

### **28 MHz**

9A7R ..... 536,580  
 9A1AA ..... 330,544  
 SP3SUX ..... 201,117  
 E18GP ..... 191,394  
 ER1OO ..... 169,514  
 T99T ..... 165,891  
 9A6A ..... 494,025

### **EUROPE**

All Band  
 GIØKOW ..... 6,961,240  
 S58A ..... 6,628,059  
 G4BUO ..... 5,073,750  
 GU6UW ..... 5,047,170  
 4N9BW ..... 5,016,810

### **14 MHz**

S58AL ..... 388,680  
 EA3BCM ..... 366,560  
 IT9XUC ..... 320,320  
 ES2RJ ..... 282,757  
 RU3HD ..... 274,822  
 RW4WM ..... 194,100

### **28 MHz**

9HØA ..... 840,434  
 GW3YDX ..... 726,193  
 G3MXJ ..... 620,172  
 GW3WVG ..... 511,932  
 T99W ..... 492,582  
 IQ4A ..... 487,494  
 N9GBB ..... 8,800

### **21 MHz**

IR4T ..... 769,484  
 DL1IAO ..... 723,492  
 GM4YXI ..... 672,175  
 OH1F ..... 607,338  
 4O6A ..... 589,842  
 OM7M ..... 584,150

### **14 MHz**

OHØZ ..... 901,230  
 OK1RF ..... 852,488  
 GM3POI ..... 820,080  
 DJ7AA ..... 768,768  
 SN2B ..... 759,330  
 YT7A ..... 749,394

### **7 MHz**

9A9A ..... 908,694  
 OT8T ..... 772,530  
 9A5Y ..... 734,570  
 LZ5W ..... 639,912  
 OH9DX ..... 608,548  
 S57AL ..... 532,526

### **3.5 MHz**

S50A ..... 458,134  
 SN3A ..... 437,328  
 SP7GIQ ..... 343,476  
 GMØGAV ..... 249,000  
 OH1MA ..... 240,828  
 LA6YEA ..... 209,677

### **1.8 MHz**

HA2SX ..... 1,002,822  
 LY2FE ..... 795,874  
 SM3CCT ..... 666,050  
 DL3KVR ..... 525,358  
 OE2S ..... 507,000  
 YU1LM ..... 500,148  
 ØZUT ..... 452,403  
 GØOGN ..... 446,879  
 HA7YS ..... 340,901  
 F5NZY ..... 318,024  
 UR9MM ..... 304,370

### **Assisted All Band**

RZ3BW ..... 4,642,688  
 DF3CB ..... 3,640,994  
 M8Z ..... 3,295,396  
 UT5UGR ..... 3,235,392  
 YZ7AA ..... 2,798,640  
 OK2FD ..... 2,681,000  
 RZ3AZ ..... 2,504,584  
 SM3EVR ..... 2,450,682  
 DL7ON ..... 2,424,840  
 S56A ..... 1,977,570

### **Multi-Operator Single Transmitter**

TM2Y ..... 10,357,360  
 EA6IB ..... 9,522,048  
 RU1A ..... 9,044,874  
 SQ6Z ..... 8,775,480  
 DL2NBU ..... 7,925,400  
 OM8A ..... 7,360,440

### **28 MHz**

DFØHQ ..... 18,897,540  
 OH2U ..... 18,387,820  
 RW2F ..... 16,862,016  
 SL3ZV ..... 14,495,360  
 DLØCS ..... 13,194,288  
 EA4ML ..... 12,587,520

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

## CW RESULTS SINGLE OPERATOR NORTH AMERICA

### UNITED STATES

<b>W1KM</b>	<b>A</b>	<b>7,379,711</b>	<b>4027</b>	<b>155</b>	<b>488</b>	K2DM	256,542	343	92	194	WC4E	3,914,204	2632	145	457	W5JRP	14	13,338	81	19	38	N7UN	234,608	411	96	248		
<b>K1ZM</b>	"	<b>7,119,308</b>	<b>3837</b>	<b>169</b>	<b>517</b>	KU2X	244,133	361	68	173	W4RX	3,654,864	2326	149	463	<b>W5UN</b>	7	<b>542,025</b>	<b>1262</b>	<b>37</b>	<b>128</b>	N7JXS	164,710	333	59	123		
<b>K2QM/1</b>	"	<b>6,112,282</b>	<b>3424</b>	<b>148</b>	<b>500</b>	W2EZ	238,492	350	54	164	W4MR	3,558,746	2244	138	440	<b>K5NA</b>	3.5	<b>94,581</b>	<b>334</b>	<b>27</b>	<b>46</b>	K7CUP	130,290	308	72	130		
<b>K1RU</b>	"	<b>5,214,551</b>	<b>3489</b>	<b>136</b>	<b>411</b>	K2JL	234,240	340	60	184	W4PA	3,555,681	2308	144	425	"	"	21,208	125	21	67	W7ZI	43,681	131	42	79		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	N2UM	206,050	337	96	221	AA4S	2,867,580	1965	131	403	<b>K5KLA</b>	"	<b>1,357,053</b>	<b>1976</b>	<b>149</b>	<b>452</b>	K1L7S	858	27	15	18		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2VB	204,525	324	56	169	N6AR/4	2,709,564	1804	136	436	<b>W5D5K</b>	"	<b>1,420,923</b>	<b>1038</b>	<b>122</b>	<b>375</b>	K7PNN	28	246,737	785	29	108	
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	W2OMV	159,080	274	54	151	K4LTA	1,534,689	1402	131	376	<b>N5AW</b>	"	1,043,474	817	123	355	NX7K	188,101	588	34	103		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	KQ2O	141,321	327	49	114	AA4NN	1,274,400	1255	111	289	<b>K7Y5N</b>	"	571,272	666	81	231	W8EQA/7	101,878	309	31	102		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	W2BE	137,611	264	72	169	W3VT/4	1,246,230	907	124	363	<b>W5GAI</b>	"	356,655	433	85	210	W7AYY	48,024	183	28	64		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	WF2Y	110,448	191	61	141	W4YE	1,209,600	988	102	342	<b>NN5T</b>	"	230,463	365	77	84	AD7U	14	149,643	517	31	86	
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	W2UDT	109,174	305	62	159	N4XM	831,402	724	116	302	<b>A5ACK</b>	"	208,427	369	86	171	W8AEF/7	3.5	18,675	130	23	52	
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	KG2BI	60,799	176	50	113	W8PC/4	772,148	690	100	303	<b>KN5L</b>	"	100,926	234	59	130	<b>K7Z7A</b>	A	1,031,274	908	124	290	
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2YR	48,910	139	53	93	N4MM	758,334	628	114	308	<b>AF5Z</b>	"	98,280	214	63	23	<b>K7ED</b>	"	953,771	1035	107	222	
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	N2LKF	35,910	150	36	99	K4LQ	259,184	99	269	269	<b>W5K5</b>	"	83,328	195	60	108	(Op. WABRJY)	"	"	"	"	"	
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	W2OP	22,608	142	48	96	K4YR	455,175	513	89	226	<b>AJ4F/5</b>	"	38,316	134	43	81	K7HBN	809,640	817	114	246		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	N2MR	21,400	81	39	61	K9HUY/4	357,870	420	74	224	<b>N5XT</b>	"	31,152	110	41	77	N7AN	697,956	840	94	200		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2FR	11,009	85	33	68	N3JT/4	303,163	476	70	199	<b>K5UIA</b>	"	26,894	126	37	76	N7R0	654,775	887	87	188		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	312	8	5	8	W2YE/4	298,480	105	65	195	<b>K7ZZA/5</b>	"	20,235	97	43	52	NX7K	580,290	710	98	192		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	22,608	142	48	96	K4RW	152,672	266	56	152	<b>W5D5U</b>	7	<b>102,340</b>	<b>321</b>	<b>80</b>	<b>89</b>	W7ODM	160,506	278	78	144		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	128,385	342	29	106	K4NF	116,204	223	64	145	<b>W5CWQ</b>	"	34,191	166	24	63	W7XG	100,398	216	64	110		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	128,385	342	29	106	K4NA	"	"	"	"	<b>W6AX</b>	A	4,417,426	2733	165	433	AB7RW	254,130	485	65	132		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	14	1,007	781	1955	39	144	W4RW	"	"	"	"	<b>W6AX</b>	A	4,417,426	2733	165	433	(Op. N6IG)	"	"	"	"
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2BA	310,542	832	35	111	K4NA	"	"	"	"	<b>W6RU</b>	"	3,141,840	2354	142	342	(Op. KR6X)	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>W6RU</b>	"	41,580	143	42	63	WA2OCG/7	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>K6LA</b>	"	<b>2,851,800</b>	<b>2252</b>	<b>128</b>	<b>362</b>	N4ZR/8	A	3,206,500	2092	129	421	
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>K5ID/8</b>	"	<b>1,121,730</b>	<b>993</b>	<b>107</b>	<b>310</b>	W8F SJ	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>K8MR</b>	"	1,054,918	1016	108	283	W8F SJ	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>N8MZ</b>	"	973,410	787	117	340	W8F SJ	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>KF8TM</b>	"	889,748	749	111	318	W8F SJ	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>W6AX</b>	A	4,417,426	2733	165	433	W8F SJ	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>W6AX</b>	A	4,417,426	2733	165	433	(Op. N6IG)	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>W6AX</b>	A	4,417,426	2733	165	433	W8F SJ	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>W6AX</b>	A	4,417,426	2733	165	433	W8F SJ	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>W6AX</b>	A	4,417,426	2733	165	433	W8F SJ	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>W6AX</b>	A	4,417,426	2733	165	433	W8F SJ	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>W6AX</b>	A	4,417,426	2733	165	433	W8F SJ	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>W6AX</b>	A	4,417,426	2733	165	433	W8F SJ	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>W6AX</b>	A	4,417,426	2733	165	433	W8F SJ	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>W6AX</b>	A	4,417,426	2733	165	433	W8F SJ	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>W6AX</b>	A	4,417,426	2733	165	433	W8F SJ	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>W6AX</b>	A	4,417,426	2733	165	433	W8F SJ	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>W6AX</b>	A	4,417,426	2733	165	433	W8F SJ	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>W6AX</b>	A	4,417,426	2733	165	433	W8F SJ	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832	35	111	K4NA	"	"	"	"	<b>W6AX</b>	A	4,417,426	2733	165	433	W8F SJ	"	"	"	"		
<b>K2WB</b>	"	<b>5,212,500</b>	<b>3424</b>	<b>148</b>	<b>500</b>	K2WB	310,542	832																				

AFRICA													
AFRICAN ITALY													ISRAEL
IH9/OL5Y 3.5 671,703 1899 28 99													
CANARY ISLANDS													
EA8EA A 13,717,801 6563 176 543 (Opr. OH2MM)													
JAPAN													
EA8 A 100,144 467 22 66 *4X													JH10GC A 1,979,356 1615 142 277
RA9JC * 14,040 168 16 44 *TF1MM 28 121,440 673 17 49													JH1QOW " 687,724 685 122 216
RA9JP 21 243,593 986 30 89 *4ZFW 21 225,504 974 18 63													JH1WP " 411,247 556 98 191
RA9JEP 7,316 254 18 44 *4ZATA 14 88,320 376 21 59													JH1VEZ " 289,541 406 115 196
RA9XK 14 583,072 1436 36 116 *4X1VF 3.5 23,171 170 7 40													JH1CTV " 211,974 379 88 118
RA9DZ 297,346 940 33 101 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9FF 7 40,768 175 23 68 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9AT 1.8 44,793 304 11 52 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9VXF 1 A 1,300,444 1381 77 255 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9JR 788,389 1005 73 214 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9XA 732,354 799 106 265 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9CZ 440,220 499 98 250 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9WZ 370,800 565 156 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9JMS 273,000 510 157 53 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9JKT 206,388 484 53 129 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9OU 213,060 979 23 83 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9SR 127,872 600 27 84 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9SBC 20,865 135 18 47 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9MC 19,665 109 19 50 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9WQK 16,280 131 17 41 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RX9FB 214,743 582 31 110 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9AB 98,900 350 23 77 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9AUH 85,428 304 25 83 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
UA9BS 14 281,484 805 32 94 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9AN 115,440 425 29 75 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9AJL 166,200 773 22 78 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9AE 119,935 607 15 70 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9AQ 27,790 191 14 39 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
UA9QJX 2,220,574 3023 161 381 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA9ULL 1,355,250 1904 125 250 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
UA0ANW 556,885 1036 68 177 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
UA0JS 515,171 913 83 188 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
UA0YY 513,890 718 80 215 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA0JX 283,140 900 80 118 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
UA0UAG 191,897 599 47 80 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA0ZAT 102,222 361 48 114 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA0ZD 101,660 189 90 131 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
UA0ZC 58,975 173 70 105 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
UA0ZY 19,006 92 35 51 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
UA0LH 103,900 382 30 70 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
UA0SD 164,917 610 30 79 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA0UQ 88,020 396 30 78 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
UA0YM 26,334 183 23 40 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
UA0CM 7 274,500 1032 32 93 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA0BB 70,560 320 26 70 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
UA0BGZ 60,171 297 27 66 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
UA0CAY 3.5 1,479 77 9 8 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA0LH 2,220,574 3023 161 381 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA0ULL 1,355,250 1904 125 250 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
UA0ANW 556,885 1036 68 177 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
UA0JS 515,171 913 83 188 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
UA0YY 513,890 718 80 215 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA0JX 283,140 900 80 118 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
UA0UAG 191,897 599 47 80 *4ZB 22 157,710 281 82 128													JH1JCTV " 157,710 281 82 128
RA0ZAT 102,222 361 48 114 *4ZB 22 157,710 281 82													

*7L2VOB	24	4	2	2	*JF5FGY	10,146	72	23	34	*JA8AOQ	3.5	9,145	141	23	36	*EAGYW	A	22,654	101	30	64	9A4D	19,260	305	11	49									
*JR4PMX/1	14	300,960	699	35	125	*JA5JGV	4,864	45	17	21	*JA0ADY	1.8	2	1	1	*EA6	/DL8NBY	21	48,840	249	23	65	*9A2EU	A	1,997,082	1912	134	428							
*JL1MUT	177,580	551	34	96	*JA5APU	152,448	729	29	67	UN7TX	28	204,078	888	27	86	UN9GD	A	2,665,131	2993	128	409	*9A9R		864,604	1422	85	253								
*JA1XPU	1,296	24	9	18	*JA5PDS	3.5	740	26	10	10	UN5J	21	237,276	784	34	122	EU200A		797,742	979	115	359	*9A2NO		553,781	766	102	299							
*7L2ICS	279	13	3	6	*JA6ZLI	A	1,155,682	1137	130	271	UP4L	14	427,032	1163	35	127	(Op. UN7L2)						*9A2TN		471,344	925	91	265							
*JH1AZO	7	49,680	230	28	52	JQ6NAW	"	1,030,324	1046	120	238	UP0F		8,256	101	7	25	UN7JX	1.8	34,122	207	15	51	*9A3SM		361,872	617	84	252						
*JS1UMQ	3.5	6,164	64	19	27	JG6SRB	"	686,475	836	111	228	UP0L	7	420,912	1483	35	113	EU1DX		301,344	1179	34	112	*9A2UA		132,398	373	55	138						
*JF1LPZ	5,838	83	18	24	JAGCOW	"	605,228	571	130	282	UP0F						EW2AA		511,868	816	98	264	*9A3CY		69,160	360	32	108							
*JM1NKT	1,760	38	9	11	JG6GIV	"	114,432	227	73	119	UP0L						EU5A	7	352,314	1618	30	108	*9A7R	28	536,580	1498	36	129							
*JE1SPY	1.8	476	14	8	JABWW	"	76,130	265	95	135	UP0F						EU1DX		301,344	1179	34	112	*9A1AA	"	330,544	1001	34	112							
JH2BCN	A	1,125,940	1212	126	254	JAGWIF	28	226,380	587	35	105	UP0L						EW2AA		511,868	816	98	264	*9A7P		154,638	551	29	92						
JQ2VQF	"	609,588	780	100	187	JATQ	"	60,662	233	30	68	UN7JX	1.8	34,122	207	15	51	JF2HU	57,086	164	58	88	*9A2FK		104,748	537	26	60							
JQ2AXB	"	608,855	693	114	209	JABZI	7	100,710	309	37	98	EX8W	A	1,227,045	1620	125	332	*JG6BZI		100,710	309	37	98	*9A3RE		91,809	403	29	72						
J76AAK/2	"	154,440	260	86	120	JAGZP	3.5	46,725	251	24	51	EX8W	A	4,373,712	3608	124	380	(Op. JR6HSQ)					*9A6A	21	494,025	1572	39	136							
(Op. V2KEKY)					*JA6UBK	A	1,020,832	895	141	296	EX8W	A	1,227,045	1620	125	332	*JA6UBK	A	1,020,832	895	141	296	*9A5Y	14	67,680	450	23	67							
JQ2QV	"	106,872	242	78	105	*JH6OPP	"	447,470	625	103	187	EX8W	A	4,373,712	3608	124	380	JH6OPP	"	447,470	625	103	187	CZECH REPUBLIC											
JF2HU	"	57,086	164	58	88	*JH6TYD	"	313,491	459	90	159	EX2A	7	49,973	246	17	60	JH6TYD	"	313,491	459	90	159	0K1AVY	A	1,716,286	1863	103	339						
JE2LUN	28	52,690	184	33	77	JG6AKV	"	78,472	214	53	83	*EX8MZ	A	165,034	633	24	77	JG6AKV	"	78,472	214	53	83	0K1EP	"	1,554,506	1749	121	370						
JQ2MOG	14	78,200	288	28	72	JG6QDU	"	76,840	205	58	78	JG6QDU	"	76,840	205	58	78	JG6QDU	"	76,840	205	58	78	0K2PD	"	1,269,216	1512	97	319						
JQ2XOP	"	45,500	185	28	63	JG6WFM	21	154,330	574	31	84	JG6WFM	21	154,330	574	31	84	JG6WFM	21	154,330	574	31	84	0K1FZM		1,139,476	1393	101	341						
JQ2BY	A	799,693	823	123	244	JG6QIL	"	52,626	212	31	67	JG6QIL	"	52,626	212	31	67	JG6QIL	"	52,626	212	31	67	0K1OL		876,544	1187	99	329						
JH2NWP	"	556,100	643	114	218	JG6QIL	"	126	6	4	3	JG6QIL	"	126	6	4	3	JG6QIL	"	126	6	4	3	0K1DOL		783,840	1341	81	264						
JQ2UOT	"	468,006	715	90	141	JG6QIL	"	126	6	4	3	JG6QIL	"	126	6	4	3	JG6QIL	"	126	6	4	3	0K1JOC		696,340	986	89	281						
JQ2CUS	"	372,145	545	95	188	JG6QIL	"	126	6	4	3	JG6QIL	"	126	6	4	3	JG6QIL	"	126	6	4	3	0K2PAD		413,463	800	74	209						
JQ2KKA	"	273,702	419	87	155	JG6QIL	"	126	6	4	3	JG6QIL	"	126	6	4	3	JG6QIL	"	126	6	4	3	0K1XB		356,644	587	87	239						
JQ2OJ	"	171,495	341	72	113	JG6QIL	"	126	6	4	3	JG6QIL	"	126	6	4	3	JG6QIL	"	126	6	4	3	0K2EQ		327,120	763	66	224						
JH2AMH	"	169,391	358	91	142	JG6QIL	"	126	6	4	3	JG6QIL	"	126	6	4	3	JG6QIL	"	126	6	4	3	0K1FRO		202,658	569	61	153						
JQ2TKX	"	63,756	190	56	76	JG6QIL	"	126	6	4	3	JG6QIL	"	126	6	4	3	JG6QIL	"	126	6	4	3	0K2KJ		73,439	310	23	80						
JQ2HO	"	26,334	85	56	70	JG6QIL	"	126	6	4	3	JG6QIL	"	126	6	4	3	JG6QIL	"	126	6	4	3	0K1AE	28	132,264	386	32	100						
JQ2IU	"	22,509	125	28	33	JG6QIL	"	126	6	4	3	JG6QIL	"	126	6	4	3	JG6QIL	"	126	6	4	3	0K1AC		83,032	390	29	78						
JQ2KKX/2	"	7,975	54	25	30	JH7AFR	A	3,788,148	2537	168	378	JH7AFR	28	331,712	932	40	106	JH7AFR	"	3,788,148	2537	168	378	0K2JST		53,680	239	25	63						
JQ2MLI	28	139,536	519	32	76	JH7WKQ	"	3,494,880	2711	124	388	JH7WKQ	"	2,057,950	1988	128	267	JH7WKQ	"	2,057,950	1988	128	267	0K1FZM	21	309,876	944	35	112						
JQ2KVB	"	111,244	359	34	82	JH7XGN	"	2,057,950	1988	128	267	JH7XGN	28	3,795,670	3249	163	402	JH7XGN	"	3,795,670	3249	163	402	0K1FZM	21	309,876	944	35	112						
JQ2MEI	"	7,056	65	18	24	JH7JHT	"	254,826	442	93	141	JH7JHT	28	170,640	308	133	133	JH7JHT	"	254,826	442	93	141	0K1FZM	21	309,876	944	35	112						
JQ2FFS/221	"	78,200	313	30	62	JH7JSRA	"	14,317	141	44	59	JH7JSRA	28	45,096	231	33	70	JH7JSRA	"	45,096	231	33	70	0K1FZM	21	309,876	944	35	112						
JQ2BOX	"	14,454	130	23	50	JH7JZQ	28	1,178	24	10	9	JH7JZQ	28	1,178	24	10	9	JH7JZQ	28	1,178	24	10	9	0K1FZM	21	309,876	944	35	112						
JQ2GNYM	"	10,074	77	20	26	JH7JZQ	28	1,178	24	10	9	JH7JZQ	28	1,178	24	10	9	JH7JZQ	28	1,178	24	10	9	0K1FZM	21	309,876	944	35	112						
JQ2JCE	"	5,530	60	16	19	JH7JZQ	28	1,178	24	10	9	JH7JZQ	28	1,178	24	10	9	JH7JZQ	28	1,178	24	10	9	0K1FZM	21	309,876	944	35	112						
JQ2LCE	14	50,460	217	25	62	JH7JZQ	28	1,178	24	10	9	JH7JZQ	28	1,178	24	10	9	JH7JZQ	28	1,178	24	10	9	0K1FZM	21	309,876	944	35	112						
JQ2WIC	"	20,221	111	19	54	JH7JZQ	28	1,178	24	10	9	JH7JZQ	28	1,178	24	10	9	JH7JZQ	28	1,178	24	10	9	0K1FZM	21	309,876	944	35	112						
JQ2EOI	3.5	31,185	174	24	53	JH7JZQ	28	1,178	24	10	9	JH7JZQ	28	1,178	24	10	9	JH7JZQ	28	1,178	24	10	9	0K1FZM	21	309,876	944	35	112						
JG3LGQ	"	207	11	5	4	JQ2QOS	"	100	39	26	26	JQ2QOS	21	7,800	65	20	30	JQ2QOS	21	7,800	65	20	30	JQ2QOS	21	7,800	65	20	30	0K1FZM	21	309,876	944	35	112
JQ3GN	28	85,012	300	32	74	JQ2QOS	21	74	19	8	6	JQ2QOS	21	74	19	8	6	JQ2QOS	21	74	19	8	JQ2QOS	21	74	19	8	6	0K1FZM	21	309,876	944	35	112	
JH4UYB	A	4,470,430	2961	169	421	JQ2QOS	21	74	19	8	6	JQ2QOS	21	74	19	8	6	JQ2QOS	21	74	19	8	JQ2QOS	21	74	19	8	6	0K1FZM	21	309,876	944	35	112	
JH4ADK	"	812,058	976	135	242	JQ2QOS	21	74	19	8	6	JQ2QOS	21	74	19	8	6	JQ2QOS	21	74	19	8	JQ2QOS	21	74	19	8	6	0K1FZM	21	309,876	944	35	112	
JQ4ESR	"	192,303	346	78	129	JQ2QOS	21	74	19	8	6	JQ2QOS	21	74	19	8	6	JQ2QOS	21	74	19	8	JQ2QOS	21	74	19	8	6	0K1FZM	21	309,876	944	35	112	
JQ4HIX	"	27,738	117	63	71	JQ2QOS</																													

*OK2HI	74,646	588	19	68	UA1OZ	606,424	971	97	267	OH1BV	153,360	412	55	158	DL1JF	706,482	1020	89	289	*DL4AAE	17,272	91	25	43					
*OK1FOG	59,670	469	16	74	RK3DK	555,076	1119	78	224	OH1BOI	53,949	178	48	99	DL2MDU	678,972	890	108	305	*DL2MH	12,584	55	30	48					
*OK2DU	36,719	467	11	62	RA3UF	315,000	664	92	268	OH2AQ	28	190,720	748	33	116	DF1DV	601,762	937	95	276	*DH3MG	12,103	150	28	63				
*OK2BTK	5,412	142	6	27	UA1AUA	307,179	627	70	209	(Op. OH2NRV)				DF3OL	514,745	741	97	288	*DL3JRA	10,864	76	24	32						
*OK2PSA	693	29	15	56	RV1CC	235,755	481	67	212	OH7JL	39,990	210	23	70	DL2IA	507,400	650	100	244	*DL1IA	9,639	73	22	59					
*OK2PWJ 1.8	11,725	147	12	55	UA1AJW	212,444	356	79	228	OH1F	21	607,338	1744	37	126	DL8UI	495,720	858	96	228	*DF5ZV	7,370	63	20	35				
*OK1FC	11,373	281	6	45	RZ6FZ	184,440	487	75	190	(Op. OH1NDA)				DL3BQD	476,088	866	76	258	*DL5ANS	3,924	43	16	20						
*OK2OU	693	37	3	21	UA4LY	76,760	204	71	131	OH2BR	383,308	1183	37	121	DL8YR	457,600	774	78	247	*DL4ABR	3,818	47	8	19					
<b>DENMARK</b>																													
0Z1LO	A	3,779,440	3162	152	443	UA3XGM	52,326	212	40	113	OH1F	14	710,710	2127	36	118	DM3XRF	218,890	522	72	193	*DL5CX	480	10	7	9			
0Z5MJ	"	456,435	725	78	267	RX3AX	51,404	270	55	126	(Op. OH1MDR)				DU8WP/P	216,619	556	58	189	*DL7AU	28	126,144	364	29	177				
0Z8SW	"	196,770	487	54	156	RK3FY	41,503	150	48	73	OH8LQ	"	417,152	1958	37	91	DU2YE	178,000	535	49	151	*DL7VMM	119,320	357	38	114			
0Z5RM	"	12,403	122	22	57	RK3FV	"	14,184	111	30	42	OH1ZAA	"	154,679	591	34	99	DL3ORN	129,115	280	57	160	*DL4UL	77,226	296	33	89		
0Z8RO	7	92,493	352	33	96	UA3UCD	13,608	76	26	58	OH2BCD	"	25,296	228	16	51	DL4KBS	122,816	402	56	146	*DJ2QV	66,726	255	24	54			
*Z8BAE	A	645,816	806	97	282	RA3XR	9,200	51	33	47	OH9DX	7	608,548	2051	36	131	DK8RE	118,726	330	48	130	*DL4WA	15,912	114	19	33			
*Z8BNJ	"	497,004	1051	78	254	UA4RZ	28	133,736	511	30	116	OH6ZCH	"	51,040	187	30	86	DL6DVL	115,045	341	54	119	*DM3PKK	1,770	27	13	17		
*Z8ABD	"	241,366	687	60	169	RU4CO	11,800	430	29	101	OH1MA	3.5	184,920	1094	29	109	DL3DBy	99,224	333	43	114	*DJ8FR	1,419	29	13	20			
*Z5UR	"	147,114	378	62	136	RU4PL	21	347,424	1134	40	128	OH9UFO	"	101,480	685	24	94	DL5ZB	77,973	180	87	150	*DJ5GG	100,572	390	27	89		
*Z6TL	"	109,011	306	49	133	RA3XO	"	309,424	901	37	129	OH9BVM	"	92,862	631	27	99	DL4Q0	36,934	174	39	79	*DF6LQ	41,537	239	22	51		
*Z5SDK	"	98,343	510	55	168	RX6LG	24,348	938	29	103	OH1SH	"	62,980	475	18	78	DL2DSA	26,596	100	50	82	*DL2YAK	35,568	242	22	54			
*Z4AFF	"	24,500	128	34	64	RV6YB	112,243	514	30	77	OH1PY	"	378	9	6	8	DL2NEQ	24,592	140	32	74	*Z8TFTU	10,485	114	14	31			
*Z1APA	28	2,400	35	12	18	RU3ACE	14	99,186	524	28	94	OH4MFA	1.8	56,764	558	19	73	DL3DCY	123,492	1815	38	136	*D5JMN	46,893	300	18	69		
*Z1AV	21	31,878	222	19	47	UA4FEN	26,520	191	23	55	OH5VT	"	54,223	406	20	77	DK5EZ	11,308	93	22	27	*Z8KDM	14	253,151	873	35	114		
*Z6NF	"	1,230	29	11	19	RA4CD	18,564	93	24	67	OH4ML	"	33,264	353	15	62	DL1YH	10,920	62	31	47	*DF7TU	39,898	1266	37	121			
*Z1BMA 14	A	56,463	327	23	64	UA4LL	7	296,670	988	37	128	OH7UE	"	5,070	453	16	62	DL7MAE	54	3	3	3	*DL3HSC	34,410	199	23	70		
*Z2SMGZC	"	37,754	213	19	67	RW1ZZ	"	256,908	843	34	124	OH8BOT	A	1,012,095	1145	109	350	DK5QN	28	262,105	813	36	119	*DJ5TU	15,680	56	10	28	
<b>DODECANESE</b>																													
J45KLN	A	569,772	1612	61	191	(Op. SMØCMH)	"	39,074	326	26	83	OH2NN	"	537,672	802	86	55	DF1CY	215,888	810	30	101	*DJ2XC	66,872	310	23	73		
<b>ENGLAND</b>																													
G4BUO	A	5,073,750	3566	148	467	RA6BAD	112,042	501	23	83	OH2FV	"	489,846	733	83	244	DU6C	200,645	338	80	234	*OH6RC	81,641	342	26	81			
G8IVZ	"	4,722,406	3735	135	463	UA6LT	66,458	628	19	75	OH7HMC	"	204,407	435	49	140	DL5JW	120,902	563	28	94	*DU4KWW	79,209	302	28	89			
G4BJM	"	3,826,284	3780	125	367	UA4NW	1.8	47,386	375	22	64	OH1JMH	"	87,468	162	43	154	DL1JAD	21	723,492	1815	38	136	*D5JMN	1,380	25	24	24	
G3UFY	"	1,201,200	1415	93	307	RA4CJJ	19,468	281	10	52	OH2BMW	"	66,552	311	36	105	DK5SR	399,898	1266	37	121	(Op. DJ5PA)	DF5WN	6,407	132	7	36		
G3TJK	"	944,125	1288	89	326	*RA1ACJ	A	1,055,556	1390	97	339	OH2LYP	"	56,496	446	41	135	DF4SA	7	542,720	1633	35	125	GIBRALTAR	21	118,708	445	31	87
G3TJN	"	755,430	1319	84	254	*RA3ABJ	"	936,124	1259	115	354	OH4LJL	"	22,493	118	23	60	DL8UAT	78,366	334	27	84	*ZB2EO	28	65,475	348	24	73	
G3WUX	"	226,003	562	160	33	M8W	"	220,088	426	70	174	OH4FER	"	820,105	1147	114	367	DL0LR	68,425	493	31	84	GREECE	961,630	2058	84	286		
G3NAS	"	31,243	190	51	106	RA3AGS	307,008	554	82	206	OH3MC	"	917,285	1268	113	366	DU7JH	294,624	1093	31	113	*SV1DKR	A	961,630	2058	84	286		
G3MXJ	28	620,172	1577	36	125	RA1QJA	282,653	573	61	210	OH3KOH	"	21,250	104	22	63	DL5JAD	120,902	563	28	94	*SV2BL	"	195,206	410	75	134		
G3TBK	"	293,846	787	33	139	RW1AI	653,672	1043	91	313	OH8NLC	"	142,407	476	32	102	DL1EMH	"	105,359	535	28	93	*J41Y	"	117,260	706	58	162	
G3ORH	"	221,112	1119	31	80	RW1FV	130,537	597	83	254	OH3KRN	"	130,350	354	40	118	DL7ALM	3.5	100,152	683	21	83	*SV2BBJ	"	82,290	247	59	136	
G4ODV	"	168,338	566	35	111	RW1ON	497,710	811	88	267	OH9JW	"	57,816	258	26	73	DL7RJ	"	47,616	393	19	74	*SV1DPJ	21	175,734	1015	28	89	
G8G	21	412,794	1380	80	270	*RA1OMX	217,515	701	100	265	OH6MBQ	"	50,718	305	23	63	DK5IM	1.8	2,240,217	2062	52	134	GUERNSEY	GU6GUW	A	5,047,170	4194	127	428
G3PJT	"	375,744	1217	34	118	*RA1QKJ	131,100	257	79	149	OH2LYP	"	42,700	303	27	83	DL1VDL	1,065,494	1367	104	342	(Op. HA1YA)	"	5,960	74	14	26		
G4HTD	7	359,226	1582	31	95	RA1QJ	120,344	226	51	101	OH2FV	"	472,815	1030	110	285	DU8UH	5,960	74	14	26	*HA8FM	A	3,734,322	3955	142	385		
G3WGN	3.5	187,566	951	91	102	RA1QJA	307,008	554	82	206	OH3KOH	"	56,385	251	27	78	HA8JV	"	2,865,016	2649	153	463							
G3KPK	"	745,500	1120	80	270	*RA1QY	246,400	572	73	235	OH4LJY	"	52,788	269	26	80	DL2HQ	"	875,350	1098	104	323							
G5LP	"	727,909	1226	98	323	*RA3UAG	246,400	572	73	235	OH5RDX	"	106,578	342	50	141	DL7ANR	"	195,648	955	94	274							
G3NKS	"	713,754	1000	84	258	RV4LM	197,650	391	76	219	OH5NOL	"	265,356	710	64	174	DU3OG	"	65,285	794	110	305							
G3LZL	"	106,743	328	51	170	RW1OX	108,953	397	59	162	OH5NOL	"	258,120	746	64	206	DL3BRA	"	607,750	925	94	280							
G3ECS	"	82,992	289	44	89																								

IR7A	271,260	643	72	202	*LY3BA	A	2,543,038	2246	127	439	SP8FHK	1,474,739	1858	113	348	*Y03APJ	A	1,954,437	1891	133	458	*S53AU	177,240	411	59	151			
IK2EGL	106,683	501	45	84	*LY2TA	"	1,835,808	2325	140	484	SN7N	1,025,766	1388	104	337	*Y03FRI	"	948,789	1311	104	319	*S53BM	165,568	459	51	148			
16FDJ	91,800	381	43	110	*LY1BW	"	681,296	1187	69	247	SP5UAF	454,080	700	92	252	*Y03FWC	"	931,845	1657	92	273	*S51NM	79,200	410	32	100			
I24BBA	41,922	193	43	94	*LY2GV	"	640,288	1069	86	266	SP3FZN	323,420	524	88	228	*Y08FRF	"	798,867	1003	76	257	*S57CQ	28	100	163	51			
IK12OH	21,836	101	44	62	*LY3CV	"	489,880	524	78	253	SP4KGB	283,575	705	82	203	*Y02DFA	"	780,278	1269	104	318	*S51TA	21	230,945	826	34	109		
IQ4A	28	487,494	1342	36	123	*LY2FN	"	450,522	901	73	236	SP3HUU	131,328	263	83	145	*Y06BNH	"	453,586	810	91	267	*S59DBC	195,582	841	31	80		
IQ5Z	195,507	770	35	82	*LY1DM	"	321,280	714	64	192	SP2IIU	124,400	244	69	131	*Y08PK	"	444,027	801	77	206	*S51MF	102,360	352	31	89			
IQ5Z	195,507	770	35	82	(Opn. IZ5AXA)	"	128,872	525	39	139	SP2KJH	112,117	364	50	141	*Y04XF	"	145,008	374	60	161	*S58AL	14	388,680	1357	35	129		
IR4T	21	769,484	1896	38	150	*LY2GF	"	125,568	551	36	108	SP6AZT	76,570	255	48	142	*Y04GDP	21	84,788	491	25	69	*S54A	7	217,800	835	32	118	
IR2W	14	729,444	2094	38	140	*LY2CX	"	60,280	250	42	95	SP1PLA	41,280	113	57	103	*Y04GJS	"	100	17	9	9	*S53F	7	175,934	780	25	96	
IR2W	14	729,444	2094	38	140	*LY1XA	"	17,181	83	32	51	SP2DKI	36,566	186	32	62	*Y03CTK	14	115,346	677	24	83	*S54W	86,652	478	28	88		
IK2RJK	12,506	124	22	52	*LY2AT	28	38,412	180	25	74	SP1MHV	30,600	89	58	78	*YR8A	"	54,963	346	26	67	*S52GO	3,5	78,624	652	20	76		
I11H	3.5	146,475	1062	23	82	*LY2BN	7	158,136	796	30	102	SP4EAK	8,440	79	9	31	(Opn. Y08AXP)	"	281	14	47	47	*S51RJ	63,684	597	16	71		
I23ALF/3	36,032	441	13	51	*LY1DD	"	134,504	713	32	104	SP4TKO	2,992	71	8	36	*Y08RXP	7	23,058	281	14	47	*S54AC	39,785	437	15	58			
IR4T	1.8	159,654	1051	26	92	*LY2BLQ	"	95,352	525	28	88	SP2FOP	28	240,318	689	35	123	*Y09FJW	"	6,625	109	10	35	(Opn. Y08AXP)	"	2,079	80	4	23
*I3JSS	A	1,712,050	1888	119	366	LUXEMBOURG					SP3FKH	194,129	582	33	104	*Y02CJX	1.8					SPAIN							
*IK1RQQ	"	1,430,805	1595	107	358	LX4B	1.8	95,374	1022	16	70	SP5DDJ	144,300	478	34	96	EA3NY	A	3,215,612	3226	132	389	EA1FBU	"	491,470	1314	65	180	
*IK4WMH	"	841,068	1141	92	291	*LY1JH	A	42,880	192	38	90	SP7ELQ	96,228	295	32	100	EA2BDS	"	358,924	732	66	178	EA5DCL	"	164,161	536	50	117	
*IV3TQE	"	723,320	900	101	327	MACEDONIA					SP6LVL	44,469	233	23	58	EA1BHR	"	127,050	382	50	104	EA1BAAE	"	103,936	452	55	148		
*IK4EWX	"	710,616	1102	84	264	Z31GB	21	377,760	1267	37	123	SP5GCR	21	584,972	1546	40	139	EA1OJ	"	75,600	203	52	116	EA1OIG	"	75,524	230	50	82
*IV3NVN	"	420,810	537	114	301	Z37FC	14	722	18	8	11	SP3SLA	355,907	1059	33	119	EA1CTA	"	198,006	662	45	138	EA1EVX	"	54,846	192	58	140	
*IZDAIS	"	310,310	491	78	232	Z39Z	7	511,344	2188	33	111	SP9PW	260,420	1172	34	111	EA1XHAB	"	28,212	193	34	48	EA1BXW	"	29,876	114	42	55	
*MFFG	"	235,470	523	62	173	Z32KV	3.5	378	18	5	13	SP5BB	1,275	32	7	10	EA1CMP	"	6,240	51	28	32	EA1CMD	"					
*IK0XF0	"	221,779	487	64	163	Z31DZ	14	5,060	61	14	30	SN8V	14	430,050	1550	35	115	EA5WDX	28	28,832	244	19	33	EA5WU	28	303,455	1014	32	105
*IK3HUG	"	196,600	614	46	154	MALTA					SP2PQH	7	759,330	2319	39	138	EA5TD	"	26,059	118	32	71	EA6TD	"					
*IK2CNA	"	161,230	354	62	168	9H0A	28	840,434	2545	36	137	SP2PQX	7	989,440	1309	100	352	EA1JO	21	133,301	456	33	104	EA1JO	"				
*IK0KH	"	138,096	377	47	151	*9H3YQ	7	107,779	963	20	69	(Opn. DJ7PR)	"	64,155	318	25	80	EA1FEL	"	79,705	568	23	72	EA1FEL	"				
*IK8WEI	"	91,935	337	41	94	MONACO					SP3EQE	64,155	318	25	80	EA1FTG	A	1,122,917	1105	111	376	EA2BNU	"	868,335	1435	73	232		
*IK2TQG	"	86,765	280	54	131	3A/N9NC	A	2,927,808	3211	127	417	SP9ABU	57,456	265	25	83	EA4DRV	"	481,683	932	73	234	EA4DRV	"					
*IK2A	"	79,376	281	47	117	NETHERLANDS					SN3A	3.5	437,904	1870	34	110	EA3BOW	"	352,185	775	68	197	EA3BOW	"					
*IK2EGL	"	102,584	264	67	182	PA3HBI	A	325,710	617	78	204	SP2PQH	A	1,532,440	1867	113	342	EA3CF	"	259,056	797	41	127	EA3CF	"				
*IK2AIT	"	42,880	209	30	50	ER5AA	A	1,206,584	1851	92	284	SP2PQW	"	998,440	1309	100	352	EA5DNO	"	235,296	526	52	140	EA5DWS	"				
*I7PVX	"	41,340	145	35	71	ER7N	28	240,298	778	33	104	SP6CYX	"	890,240	1360	100	316	EA5DWS	"	215,600	590	61	135	EA5DWS	"				
*IK0ADY	"	32,970	169	34	71	ER10A	21	114,950	489	33	88	SP1NY/MM	675,011	241	124	71	EA5DWS	"	200,028	453	61	150	EA5DWS	"					
*IK7QHS	"	27,615	172	36	69	ER5					SP1AEAN	621,810	850	90	288	EA7MT	"	197,010	439	58	141	EA7MT	"						
*IK4NPC	"	23,625	183	25	50	UX3FW	14	296,209	1574	34	105	SP6CDP	504,252	749	81	241	EA7TGX	"	197,010	439	58	141	EA7TGX	"					
*IK6HWX	"	12,240	86	27	41	ER2GR	1.8	8,722	149	8	41	SP9BZK	460,096	1027	84	232	EA7VQ	"	155,344	481	76	190	EA7VQ	"					
*IK2KWI	"	10,906	62	34	48	*ER100	28	169,514	665	34	97	SP3VT	381,744	868	60	181	EA7VQ	"	155,344	481	76	190	EA7VQ	"					
*IK1NLZ	"	9,504	93	16	38	PA3LOU	"	522,792	663	110	301	SP9GKGM	250,701	604	65	148	EA7VQ	"	155,344	481	76	190	EA7VQ	"					
*IK5RLS	"	100	11	8	10	PA3GUJ	"	89,240	352	34	81	SP5CCN	126,474	386	61	136	EA7VQ	"	155,344	481	76	190	EA7VQ	"					
*IK1XPQ	28	158,267	629	28	87	PA3ADU	"	18,120	210	12	28	SP1PDA	104,720	273	58	118	EA7VQ	"	155,344	481	76	190	EA7VQ	"					
*13MLU	"	56,700	284	24	66	PA3ADJ	21	18,120	210	12	28	SP6CXH	97,580	314	49	121	EA7VQ	"	155,344	481	76	190	EA7VQ	"					
*IK4DCT	21	490,196	1350	36	128	PA0CLN	1.8	64,032	583	18	78	SP6CRU	18,540	346	45	125	EA7VQ	"	155,344	481	76	190	EA7VQ	"					
*IK2YSE	14	43,962	241	25	77	*PA0RCT	A	861,273	1549	78	265	SP6ENB	72,520	142	69	116	EA7VQ	"	155,344	481	76	190	EA7VQ	"					
*I23BQT	7	37,464	247	21	63	*PA3AV	"	663,309	755	103	328	SP6YGB/9	"	67,986	306	40	124	EA7VQ	"	155,344	481	76	190	EA7VQ	"				
*I07A	7	292,420	1328	31	105	*PA0REJ	"	7,626	77	20	62	SP3SUX	201,117	531	37	120	EA7VQ	"	155,344	481	76	190	EA7VQ	"					
*I50QV	"	4,788	94	9	27	*PA0PLN	21	31,076	201	21	47	SP3LWP	"	102,250	351	31	94	EA7VQ	"	155,344	481	76	190	EA7VQ	"				
*I12P	1.8	15,216	289	7	41	*PA0RCL	"	304,234	679	62	155	SP5NWL	38,556	150	23	61	EA7VQ	"	155,344	481	76	190	EA7VQ	"					
*PA0MIR	3.5	22,632	273	13	56	*PA0ASC	"	10,541	73	25	58	SP5NWL	38,556	150	23														

*SM7BOX	45,387	248	38	85	*UT7CC	107,507	814	21	79	INDONESIA	PP7CW	44,330	148	41	69	9A2EY	"	124,758	505	38	136		
*SM5COP	19,500	93	40	60	*UT3QW	78,204	613	20	78	YCOLOW	1.8	144	8	5	7	PY2OJD	"	11,718	97	40	53		
*SM0DZH 28	45,592	250	21	61	*UT1FA	76,500	576	18	72	*YE3C	A	858,261	1467	76	143	Y04AAC	"	118,980	392	41	139		
*SM6JY 14	25,460	236	17	50	*US2WU	47,712	216	23	89	*YB5QZ	"	482,118	918	93	180	KR01	"	117,392	246	59	117		
*SK2IV	17,766	280	12	35	*UY2ZZ	4,182	94	7	34	*YB4JIM	"	95,200	273	52	108	UT5UJY	"	115,813	469	44	135		
(Opn. SM2CDF)					*UX0HA 1.8	25,264	367	12	53	*YB1KOR	"	36,414	163	54	99	DJ3GE	"	109,218	340	46	121		
*SM3ARR	506	16	6	5	*UU4JMG	7,030	581	18	77	*YB9BON	28	52,756	210	30	79	02243	"	102,243	322	46	127		
*SM3DXC 7	19,458	147	17	52					*YB2UU	21	186,258	806	30	81	0N7CC	"	98,638	358	39	110			
*SM5AJV 3.5	8,580	147	9	43					*PR2W	"	11,072	224	15	17	DL4XU	"	82,360	321	42	100			
SWITZERLAND					GW3JXN	A	974,850	1335	110	292	N5TW	"	82,264	316	75	151			82,264	316	75	151	
HB9KC	21	35,883	171	20	61	GW3KDB	973,488	1294	99	309			80,017	268	42	119							
HB9FMD 3.5	67,795	718	18	73	GW8K	885,236	1670	78	263	TX8UFT	A	920,535	1532	86	145	RW3VM	"	77,910	300	39	108		
*HB9ARF A	910,459	1143	101	306	GW3YDX	28	726,193	1966	35	134	*TX8FU	14	131,313	424	30	81	DL1LAW	"	74,698	350	54	115	
*HB9CBR	290,924	560	68	189	GW3WVG	"	511,932	1600	35	113	(Opn. FK8FU)					DKGAI	"	62,650	295	42	133		
*HB9OA	37,675	131	49	88	GW3LWJ	A	370,645	663	74	219	*R7FB	14	116,676	323	34	92	JA5CDL	"	60,900	194	60	80	
*HB9NL	32,224	149	39	67	GW3SYL	"	176,730	398	62	153	S7ZZ	"	17,784	103	24	52							
*HB9HAW 7	65,720	330	20	86	GW3WVN	"	63,675	389	23	52	*V3JRG	"	16,821	199	23	66	USBUA	"	57,280	214	39	121	
*HB9CP5	1,734	61	9	25	GW4MVA	14	53,238	226	29	85	*V1BLL	"	9,063	60	18	29	OK1AJ	"	57,112	319	28	90	
UKRAINE					YUGOSLAVIA					*V2EYE	"	1,917	25	12	15	KH6	"						
EN11	A	2,343,785	2279	150	485	4N9BW	A	5,016,810	4099	155	490	*PU2WMW7	28	28,046	133	21	53	H9BX	"	50,514	271	30	91
(Opn. US1TU)					YT1AD		876,256	1504	106	288	(Opn. YU7BW)					SP5FKW	"	50,076	216	37	79		
UX7IA	"	2,195,578	2302	128	410	YT1DX					*WHRV	28	349,561	1303	32	69	K4GEL	"	42,291	138	33	78	
UX5UO	"	2,089,798	2321	123	403	YU7AM		360,000	781	65	185	R3Z	A	347,956	776	65	107	LUSDYV	"	42,192	240	32	40
UX1UA	"	1,535,990	1668	126	412	YU1OL	28	352,132	1013	34	117	(Opn. CE3/NE4F)					NO7X	"	39,000	162	50	40	
UT0U	"	1,366,284	1803	121	371	YT1MP		113,148	395	28	95	CE3AA	A	735,715	1090	89	180	NM1K	"	35,754	114	38	80
UT5UB	"	1,125,894	1828	113	349	406A	21	589,842	2321	37	125	CE6TBN		784	107	27	29	US9PA	"	33,062	184	33	89
UR5UW	"	1,121,444	1343	112	379	YU1KX		529,872	1630	37	129	DU3NXE	A	541,371	1145	76	105	VE2ABO	"	29,988	135	35	63
UX3ZW	"	799,176	906	101	325	YU7TA	14	749,394	2245	38	148	*DU1UOX	"	621,225	1093	81	144	KL7TS	"	25,599	144	28	41
UT3UZ	"	722,533	1228	113	330	YU9ZA		646,209	2064	37	134	*DU3RCM	14	221,936	866	29	68	COLOMBIA					
UT4EK	"	701,499	1047	98	299	YU1NU					*DU1V	"	889,680	1261	94	170	H9KKK	A	396,952	917	66	170	
UR5QN	"	694,260	996	108	327	YU1ZZ		606,884	1988	38	135	*DU1V	"	620,225	1093	81	144	GØKZD	"	24,516	137	34	74
UR7QM	"	625,800	1185	83	267	YU7NU	7	551,925	1774	35	130	*DU1V	"	621,225	1093	81	144	UT5IZ	"	23,349	216	36	93
UR5E	"	486,048	855	78	245	YU1BB		374,884	1707	35	114	*DU1V	"	221,936	866	29	68	AF9J	"	22,944	107	37	59
(Opn. UR5EDX)					YU1FB					*DU1V	"	889,680	1261	94	170	HJ1RRL	A	536,544	1535	50	88		
UR6QS	"	1,235	97	37	9	YU7SF		53,486	234	24	70	*DU1V	"	689,566	1908	28	104	HJ3PXA		5,025	47	31	44
UR7VA	28	343,441	992	33	130	YU7YD		63,155	233	23	62	*DU1V	"	788,888	2593	32	104	AA3GM	"				
US6L	"	203,904	845	29	99	YZ7ED	7	126,265	746	29	86	*DU1V	"	614,262	988	73	154	K5OI	"	19,998	128	43	56
UU2JA	"	104,880	256	61	167	YZ1V		91,887	684	23	86	*DU1V	"	389,008	1103	51	113	SP4CQU	"	18,357	100	33	54
UX1KR	"	79,733	314	41	78	YU1QW		46,330	218	27	55	*DU1V	"	389,008	1103	51	113	OK1DMP	"	17,538	95	29	50
US7VL	"	69,915	177	56	121	YU1QX					*DU1V	"	43,368	199	48	156	KL7TS	"	17,599	144	28	41	
UU2JZ	"	67,344	163	68	115	YU1QY		105,704	266	72	109	*DU1V	"	33,784	127	42	61	COLOMBIA					
UU2JQ	"	64,436	174	72	109	YU7LS		90,396	282	54	108	*DU1V	"	12,108,798	6279	159	543	H9KKK	A	396,952	917	66	170
UT4ZQ	"	37,490	108	60	103	YU1HA	28	129,536	435	28	100	*DU1V	"	42,192,044	141	377	107	GØKZD	"	24,516	137	32	62
UT8AO	"	7,344	73	10	41	YU7SF		208,936	234	24	70	*DU1V	"	47,077	788	77	132	EC6VEM	"	13,680	144	25	70
UT4UWC	"	5,755	52	15	29	YU1YD		51,216	427	19	78	*DU1V	"	47,077	788	77	132	K6MI	"	8,330	59	33	37
UR6QS	"	1,235	37	9	41	*4N1FG	21	76,612	360	30	77	*DU1V	"	47,077	788	77	132	RW3VM	"				
UR7VA	28	343,441	992	33	130	*4N1FG		63,155	233	23	62	*DU1V	"	12,108,798	6279	159	543	DL1HTX	"				
US6L	"	203,904	845	29	99	*4N1FG		91,887	684	23	86	*DU1V	"	42,192,044	141	377	107	JA2X1	"				
UT1JA	"	198,144	734	34	110	*4N1FG		74,205	446	21	76	*DU1V	"	12,108,798	6279	159	543	HA0GK	"				
UR3QT	21	267,057	1255	37	120	*4N7CA		51,216	427	19	78	*DU1V	"	42,192,044	141	377	107	W9JUV	"				
UT8IM	"	236,979	1000	36	95	*4N7CA		51,216	427	19	78	*DU1V	"	42,192,044	141	377	107	JA2X1	"				
US1E	"	45,990	1196	35	111	*YU1CC	3.5	86,102	678	19	79	*DU1V	"	42,192,044	141	377	107	OM3CUG	"				
(Opn. UT7EZ)					*YU1RA	1.8	28,535	470	8	57	*DU1V	"	42,192,044	141	377	107	DL2TMT	"					
UX3HA	"	39,970	282	19	51	YU1RA					*DU1V	"	42,192,044	141	377	107	W07T	"					
US5WE	14	498,132	1541	37	140	YU1RA					*DU1V	"	42,192,044	141	377	107	EC5ALP	"					
US9Q	"	307,965	1351	35	112	YU1RA					*DU1V	"	42,192,044	141	377	107	F5IYJ	"					
(Opn. US9QA)					YU1RA					*DU1V	"	42,192,044	141	377	107	K7MM	"						
UY5DX	"	269,988	1001	32	117	YU1RA					*DU1V	"	42,192,044	141	377	107	W73W	"					
UY5ZZ	7	464,023	1703	33	118	YU1RA					*DU1V	"	42,192,044	141	377	107	W6ZJH	"					
US2IR	"	313,852	1149	35	119	YU1RA					*DU1V	"	42,192,044	141	377	107	UN6G	"					
US2Y	"	275,064	1509	33	113	YU1RA					*DU1V	"	42,192,044	141	377	107	JL3SBE	"					
UR3IOB	"	73,700	420	21	79	YU1RA					*DU1V	"	42,192,044	141	377	107	HA8DL	"					
UT5UQ	"	156	8	6	7	YU1RA					*DU1V	"	42,192,044	141	377	107							

RV6AF	"	17,490	153	15	51	N2VW	"	277,200	342	103	247	AA8U	21	414,951	1009	34	123	F6FII	A	FRANCE	PS2E	220,206	575	48	99
G3VPW	"	15,300	167	10	41	NA2M	"	217,160	308	85	220	WA8WV	3.5	11,505	75	14	45		A	660,672	1075	78	255	(Opn. PY2GX)	
UR4UU	"	10,431	128	13	44	K2BX	"	191,250	361	61	164							PT2HO			29,256	109	46	60	
SP9XCJ	"	8,614	120	11	32	W2LK	"	139,564	361	39	109	N9UA	A	1,525,898	1210	124	349								
ND8MS	"	2,530	50	13	33	A2AWN	"	116,580	276	88	206	N09Z	"	1,005,204	964	109	313	DF3CB	A	3,640,994	2123	172	570	GERMANY	
(Opn. NH7C)						WB2WPM	"	112,404	200	58	146	W09S	"	645,123	645	102	257	DL7ON	"	2,424,840	1981	182	498		
HABLUH	3.5	68,076	589	17	76	KA2AEV	"	59,410	174	33	97	N9FH	"	593,325	602	100	305	DL22AE		1,070,415	1645	93	312	CHILE	
UX3M	"	37,206	356	13	65	N2KJM	"	15,168	74	26	53	N9XK	"	482,667	505	101	248	DL6NCY		1,008,450	1062	117	369	XR1X	
(Opn. UR3MP)												DJ9IE		866,484	1064	104	348							MULTI-OPERATOR	
SP4GFG	"	32,760	396	13	57	K3WW	A	7,963,764	3764	168	601	W9RN	"	381,282	412	105	222	DJ5BV		857,282	948	125	374	SINGLE TRANSMITTER	
RU3WW	"	27,648	316	14	58	N3AD	"	4,964,695	2549	156	563	W9ILY	"	356,820	414	90	223	DJ9MH		835,758	1006	115	354	NORTH AMERICA	
UA3XAC	"	16,929	308	8	49	K3NZ	"	3,586,593	1775	166	595	K9NI	"	283,751	406	76	223	DL6KVA		294,100	319	120	220	UNITED STATES	
OM3TKR	"	13,320	286	5	40	N3RR	"	2,373,065	1365	158	497	K9FOX	"	163,098	275	87	159	DL1QW		189,996	434	72	212		
OK2KRT	"	8,160	193	5	35	NN3O	"	2,369,928	1524	132	441	K9OSH	"	139,682	241	63	148	DF6VQ		161,728	384	61	163		
UT5UOV	"	3,995	93	8	39	K3KO	"	2,022,806	1373	134	413	N9AU	7	229,798	566	35	121	DK9IP		151,536	267	76	170		
JA1AA	"	1,104	31	11	13	K3MD	"	1,941,710	1446	137	425	DL4MFP		126,246	372	51	108	K1AR		12,063	114	5074	181	701	
HA9RA	"	266	21	3	13	K3SV	"	1,914,075	1277	113	430	W0BTM	A	1,714,895	1365	137	318	K1Z2		8,930,278	3724	180	674		
OM2FY	1.8	21,600	376	9	51	W3OV	"	1,774,125	1382	116	359	WBWP	"	1,369,197	1011	128	343	W8FMW		53,040	238	52	118		
DJ3RA	"	15,904	262	8	48	K3ND	"	1,743,328	1024	153	475	N0AT	"	637,886	626	110	284	DL7BY	28	142,245	447	33	112		
RA3FD	"	13,110	201	9	48	N3DL	"	1,452,318	862	148	539	NS0B	"	290,136	372	102	212	DL1LH	21	273,300	841	35	115		
OM8TT	"	6,837	161	8	35	K3KY	"	1,451,790	1031	126	387	K0L	"	90,896	184	70	138	DK6LV	3.5	69,120	507	16	74		
K3PP						K3SA	"	1,364,769	897	128	453	KZ0C	"	32,656	112	59	98	N2NU		9,313,019	4053	182	675		
ASSISTED						K3JGJ	"	1,203,840	916	112	368						AA2FB		5,079,408	2680	154	558			
NORTH AMERICA						W3HQV	"	1,191,696	900	129	382						K2XR		3,541,626	2264	157	525			
UNITED STATES						VE1RX	21	1,167,424	1045	120	344	VA3DX	7	201,856	561	34	118	W2RE		3,180,970	2146	144	491		
K1HG	A	6,477,468	3185	162	570	N3ZA	"	940,056	697	138	414	VE6LB	1.8	5,592	124	10	14	W6XR/2		2,900,550	2073	156	454		
K1T1	"	4,649,798	2455	157	553	W3AP	"	750,321	853	124	305						K2TE		2,858,834	1628	146	507			
K5MA/1	"	3,961,105	2488	136	441	K3DI	"	715,002	612	111	332	WP3R	A	5,495,235	4362	139	406	IK5TSS	A	1,133,902	1257	99	308		
K1YR	"	3,013,114	1967	139	439	WT3P	"	647,622	595	90	312					IK0HBN	"	938,598	922	125	378				
W1NG	"	3,000,448	1576	160	544	K3AR	"	593,145	518	103	338					IK3SCB	"	140,418	392	54	120				
W1GD	"	2,974,140	1696	140	480	W3KV	"	583,275	551	104	281					IK3QAR	28	250,952	757	35	117				
K1ZM	"	2,145,798	1713	110	364	W3SB	"	509,220	520	86	283					IK4IKW	7	722,736	2017	36	132				
KA1CLX	"	1,637,185	1192	121	394	N3MLV	"	499,626	491	109	260					N2SEX		58,212	137	47	107				
KS1L	"	1,569,893	986	140	473	KB3X	"	495,430	495	107	263														
N6RFP/1	"	1,416,584	1025	118	396	KE3VN	"	243,991	578	108	343														
N1TDG	"	1,330,369	929	133	430	WF3T	"	237,533	487	147	132														
W1BH	"	1,317,593	894	140	449	KU3X	"	213,044	339	64	177														
K1VW	"	1,307,922	1142	97	302	K3NL	"	95,216	196	47	129														
W1CSM	"	1,289,834	1003	118	376	KQ3F	"	72,320	168	44	116														
K1AJ	"	1,186,788	1069	96	331	N3QO	"	58,437	160	47	104														
W1HR	"	1,136,678	959	100	367	W3TMZ	7	47,120	145	29	95	K3JGJ	1.8	3,626	56	11	26								
W1AX	"	1,119,560	800	125	395																				
W1RZF	"	1,100,268	1660	113	355																				
AA1AV	"	1,094,608	743	138	454	N4XR	A	2,794,342	1776	135	431														
W1RH	"	968,275	962	93	292	N4VZ	"	1,957,248	2128	145	431														
W1JR	"	918,592	707	133	363	N4ZJ	"	1,727,354	1194	123	419														
W1CU	"	901,310	700	115	352	W8ZF/4	"	1,406,444	973	143	416														
K1DC	"	762,439	683	108	323	N4DW	"	1,134,980	887	144	370														
K1NU	"	742,144	684	148	345	K4PB	"	921,456	713	124	350														
K1RV	"	664,306	693	95	291	NT4D	"	703,545	627	126	319														
K1MY	"	561,450	559	118	357	AA4R	"	684,740	546	130	381														
W1OK	"	478,160	537	95	249	K4MA	"	534,660	563	107	273														
NQ1K	"	472,056	453	106	302	N1CC/4	"	319,335	396	83	222														
N1KWF	"	463,570	584	81	221	W4NZN	"	240,198	323	77	189														
K1AE	"	455,126	468	112	301	W4NRC	"	144,926	244	70	163														
K1TH	"	440,412	588	78	243	W4WNT	"	34,071	103	45	78														
K1AKN	"	431,340	474	91	225	W4SI	"	24,900	104	28	72														
K1TM	"	408,807	548	78	231	W4UBC/4	21	344,129	1036	37	114														
K1JUN	"	401,330	485	89	246	K5AM	"	190,152	302	100	178														
N1MD	"	330,435	382	76	239	K5BU	"	100,745	108	38	54														
N2IQ	"	305,316	439	96	300	N5KB	"	21,012	77	42	60														
K1KD	"	246,561	513	99	314	N5JR	A	1,928,838	1258	138	425														
K1ZD	"	223,020	306	76	194	KR5V	"	1,238,076	790	151	427														
N1SP	"	218,155	306	63	208	W0SW	"	142,923	286	58	155														
W1TO	"	197,446	286	76	193	K5HDU	"	127,050	284	64	146														
K1EP	"	195,104																							

