

# Results of the 2007 CQ WW DX CW Contest

BY BOB COX,\* K3EST

## Expanded CQ WW Contest Results on the Web

Several elements of our contest reporting are on the CQ website, including Station Operators of Multi-Op stations and expanded QRM. To view them go to <<http://www.cq-amateur-radio.com/cqwwhome.html>>, then click on "Expanded results, 2007 CQ WW CW" and select the category you want to see. You may also get there by going to our home page at <<http://www.cq-amateur-radio.com>>, clicking on "Contest Rules & Info," then clicking on "CQ World Wide DX Contest" and selecting "Expanded Results, 2007 CQ WW CW."

The 2007 CQ WW DX CW Contest is always an event looked forward to by many contesters around the world. You never know what propagation will provide, but you can be sure the CQ WW will provide activity from stations located in exotic locations. Lots of activity was heard as contesters filled the airwaves. Once again the propagation favored the low bands. One-sixty really showed what it could provide with several stations working over 100 countries. Look at the scores on the low bands and you will see many new records were set. Still, the high bands provided everyone with plenty of contacts. It was a real challenge to be on 10 or 15 meters at the right time to catch the 10-minute opening to somewhere. This "magic" is what makes radio and contesting so much fun. You just never know what the conditions will provide. The sun is taking its time to ramp up the next cycle. Even with a low solar flux index, a new CW logs received record was set. The number of CW entrants is growing right along with SSB.

The CQ WW has something for everyone: contesting, DX hunting, prefix hunting, IOTA activations, club participation and much more. All you have to do to take part in the biggest ham radio contesting event of the year is turn on your radio and listen. If you do that you soon will be drawn into the excitement of making QSOs. Once you jump into the contest, it is very hard to get out of the QSO pool. This year there was activity from over 240 DXCC countries.

As has been mentioned before, the CQ WW is a fantastic competition which brings out the best in amateur radio: team work, station construction, antenna erection, operating skill, and most of fun. The CQ WW is a celebration of ham radio skill and effort. New hams and old timers who participate in the CQ WW become hooked. What follows are the results of the 2007 CQ WW CW contest. Everyone who enters is a winner!

## High Power

The High Power Single Operator category is a real challenge. The competition is intense and causes entrants to bring all their skills to the event. Again this year propagation favored the low bands. Conditions on 160 meters were really outstanding. To take advantage of this unexpected windfall, the top operators had to catch the right band openings, especially on 10

meters. The three operators who finished on top of the world are all well-established contesters. After all the log checking was completed, Hrane, YT1AD, operating from 3V2A, had the world's highest score. Hrane put eastern zone 33 on the map. Second place went to John, W2GD, P40W. John put his considerable contesting talent to great use. John said, "I actually enjoy the bottom of the sunspot cycle with its enhanced propagation on 160/80/40. On the other hand, I miss the endless runs of EU and NA on 10 meters. Hopefully next year both will be true as the spots begin their return." Third place world went to V47NT operated by Andy, N2LT. He observed, "It's all in the location." This explains all the wonderful DXpeditions during the contest. Travel to a DX location and you too can run them all the time.

In the U.S., Randy, K5ZD/1, continued his dominance of in this category. He sure took advantage of the band openings to overpower his competitors. Second place in the U.S. went to Alexander, LZ4UU, putting K3CR in central Pennsylvania on the map. Third place U.S. was taken by Krassy, K1LZ. He noted, "I am glad that there are still a lot of SO2R operators and friends who gave me a lot of drive for future contests."

In Europe, top honors again were taken by the Azores' station CU2A located in far western Europe. Toni, OH2UA, keyed CU2A to outdistance all competitors. Second place in Europe went to Ben, DL6FBL, who operated from SV9CVY. Ben had a it right when he said, "I knew that with existing propagation most of my QSOs in the contest would be with Europe. The signal path to W/VE is directly over EU, and without sunspots W/VE is far away from here, so chances for good W/VE runs were marginal. Being closer to Asia surely helped regarding signal strength, but QSO numbers are no longer high from that part of the world." Third place in Europe went to Ranko, 4O3A. Special mention must be made of A45XR, who was 5th in the world from Asia. The fine jobs turned in by CN3A (IK2QE1), 9K2HN (KL2A), 6W1RW (F6BEE), and 4L0A (UU4JMG) are all to be commended.

The continental winners were: North America: V47NT (N2NT), Africa: 3V2A (YT1AD), Asia: A45XR, Europe: CU2A (OH2UA), Oceania: VK9AA(VK2IA), South America: P40W (W2GD), Japan: JH4UYB, and U.S.: K5ZD/1.

## Low Power

Low Power is the most popular CQ WW cate-



Dani, EA5FV, was #1 All Band, High Power for Spain.



Darko, J28OO (T95A), gave out a new one, Djibouti, to many.

gory. Anyone with a transceiver and an antenna can enter the low power group. To end up on top in LP takes skill, planning, and operating from the right location. The saltwater enhancement provided by an island location sure makes up for monster antennas. However, if you want to try to finish near the top of the Low Power category, you will have to put in a real effort.

Perennial low power winner Bud, AA3B, again keyed V26K to number one world. Second place world went to Dimitri, RA3CO, who traveled to Colombia to activate HK1AR. Great job, Dimitri. Third place in this tough category went to H7/K9NW. Mike says, "Spent very little time tuning for mults but ultimately a decent number found me and I ended up with a reasonable score to boot." You sure did!

Reprising his SSB win, Art, K1BX, took top U.S. honors. He put together the right strategy to win. Still he commented, "Gave up lots of 20-meter QSOs to get mults on 10 and 15." A lot of people probably did the same thing. Second place U.S. went to Paul, K1PT. Third place went to Marvin, N5AW. Marv had over 100 countries on 40 meters low power. That is not easy.

The top European scorer was CT6A operated by Filipe, CT1ILT. Filipe had this to report, "160 meters was great to USA. I just don't understand how USA could hear me quite well and Europeans couldn't! I was just sorry not

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## TROPHY WINNERS AND DONORS

<b>SINGLE OPERATOR</b>	<b>World - 3.5 MHz</b>	<b>Europe</b>
ALL BAND	CN2FB (Opr.: Dmitri Gorshkov, UA2FB)	9A7A (Oprs.: 9A2X, 9A3TR, 9A3OS, World
World	Donor: Fred Caposella, K6SSS	9A5X, 9A7V) Donor: Bob Cox, K3EST
3V2A (Opr.: Hrane Milosevic, YT1AD)	World - 1.8 MHz	
Donor: K4FW Memorial (Scott Robbins, W4PA)	CN2FF (Opr.: Vladimir Gumenikov, UA2FF)	Japan
World Low Power	Donor: Kenneth Byers, Jr., K4TEA	8N7TU (Oprs.: JE7HLZ, JG7PSJ, JO7JID, V26K (Opr.: Joseph Trench, AA3B)
Donor: Slovenia Contest Club	USA - 28 MHz	JO7DJT, JI5RPT, JJ5DWF, JH0NZN) Donor: Madison Jones, W5MJ
World QRPP	Courtney Judd, K4WI	
6V7D (Opr.: Paul Young, K1XM)	Donor: Wireless Institute of the Northeast	Oceania - Pacific Rim
Donor: Gene Walsh, N2AA	USA - 21 MHz	AH2R (Oprs.: JI3ERV, JR7OMD, JR8VSE, World Assisted
ER0WW (Opr.: Sergiy Rebrov, UT5UDX)	John S. Jarrett, K4FJ	JE8KKX, JK3GAD) Donor: Junichi Tanaka, JH4RHF
Donor: Robert McGwier, N4HY	Donor: Wayne Carroll, W4MPY	
USA	USA - 14 MHz	South America
Randy Thompson, K5ZD/1	Ralph W. Bradford, Jr., K5GA	PS2T (Oprs.: PS2T, PY2NDX, PY2YU, PY2EX)
Donor: Frankford Radio Club	Donor: Northern Illinois DX Association	Donor: Araucaria DX Group
USA Low Power	USA - 7 MHz	
Arthur Hambleton, K1BX	Paul H Newberry, Jr., N4PN	MULTI-OPERATOR, TWO TRANSMITTER
Donor: North Coast Contesters	Donor: W6AM Memorial (Jan Perkins, N6AW)	World
USA QRPP	USA - 3.5 MHz	HC8N (Oprs.: N5KO, K6AW, N5OT, W9RE)
K8CC (Opr.: Ulrich Ann, KK8I)	Robye Lahilum, W1MK	Donor: Array Solutions
Donor: Gene Zimmerman, W3ZZ	Donor: Bill Feidt, NG3K	
USA - Zone 3	USA - 1.8 MHz	USA
Glenn Rattmann, K6NA	Theodore J. Demopoulos, KT1V	N3RS (Oprs.: N2SR, N3RD, N3ED, N3NA, Donor: Central Arizona DX Association
Donor: The Society of Midwest Contesters	Donor: Jeff Briggs, K1ZM	N3RS, WA3LRO, W2UP, W8FJ) Donor: Eric Scace, K3NA
USA - Zone 4	Canada (14 MHz)	
Alex Tkatch, KU1CW/0	Christopher Llewellyn Allingham, VE3FU	Europe
Donor: The Society of Midwest Contesters	Donor: John Sluymer, VE3EJ	EA6IB (Oprs.: EA3AIR, EA3ALZ, EA3AVV, Carib./C.A.
Canada	Carib./C.A.(14 MHz)	EA5BM, EA5GX, EA6BF, EA6FB, EA6FO, OZ1AA) Jeffrey Briggs, VY2ZM
Donor: John Sluymer, VE3EJ & Jim Roberts, VE7ZO	HP1/DJ7AA (Opr.: Wilfried Gottschald, DJ7AA)	Donor: Aki Nagi, JA5DQH
V47NT (Opr.: Andrew Blank, N2NT)	Donor: Bill Hein, NT1Y	
Donor: Chuck Shinn, W7MAP	Europe - 28 MHz	MULTI-OPERATOR, MULTI-TRANSMITTER
Europe	Meho Omerbasic, T93O	World
CU2A (Opr.: Toni Linden, OH2UA)	Donor: Jay Pryor, K4OGG	3X5A (Oprs.: AA7A, G3SXW, G4BWP, Donor: W3AU Memorial (Pete Raymond, N4KW)
Europe - Low Power	Europe - 21 MHz	G4IRN, GM3YTS, K4UEE, KC7V) CT6A (Opr.: Filipe Monteiro Lopes)
Donor: Scott Jones, N3RA & Tim Duffy, K3LR	Kresimir Kovarik, E7/9A5K	Donor: K2GL Memorial (Doug Zwiebel, KR2Q)
Scandinavia	Donor: Robert Naumann, W5OV	
OF8X (Opr.: Marko Holmvuo, OH4JFN)	Europe - 14 MHz	USA
Donor: W3FYS Memorial (Chas Weir, Jr., W6UM)	CT8T (Opr.: Timo Klimoff, OH1NOA)	W3LPL (Oprs.: W3LPL, K1HTV, NI1N, N2YO, Russia
Russia	Donor: G3FXB Memorial (Maud Slater)	ND3A, WX3B, N3KS, A13M, K3MM, Vadim Ovsannikov, UA9CLB
Donor: Roman Thomas, RZ3AA	Europe - 7 MHz	N3OC, K3RA, K3RV, N3UA, WR3Z, W3ZZ, Carib./C.A.
Africa	OK5C (Opr.: Jiri Pesta, OK1RF)	KD4D, K4ZA, AC6WI) CN3A (Opr.: Stefano Brioschi, IK2QE)*
CN3A (Opr.: Stefano Brioschi, IK2QE)*	Donor: Ivo Pezer, 9A3A	Donor: N6RJ Memorial (Bob Ferrero, W6RJ)
Asia	Europe - 3.5 MHz	
Chris Dabrowski, A45XR	ZB2X (Opr.: Jorma Salaranta, OH2KI)	Europe
Donor: Chuck Shinn, W7MAP	Donor: K3VW Memorial (Frankford Radio Club)	LZ9W (Oprs.: LZ1PM, LZ1ZD, LZ1ANA, LZ1RGM, Japan
Japan	Europe - 1.8 MHz	LZ1UQ, LZ1FG, LZ1PJ, LZ1GC, LZ1ZF, LZ4UU, Masaki Masa Okano, JH4UYB
Donor: Tack Kumagai, JE1CKA	Jerzy Stanisz, SP3BQ	LZ2CJ, LZ2FV, LZ2PO, LZ2UU, LZ2UZ, LZ3FN, Japan - Low Power
Japan - Low Power	Donor: Pat Barkey, N9RV & Terry Zivney, N4TZ	LZ3FM, LZ3UM, LZ3SM, LZ4TX) Donor: Finnish Amateur Radio League
Nobuhiro Iwasa, JH8SLS	Japan - 21 MHz	
Donor: Western Washington DX Club	Yasuji John Okamoto, JR3EOI	Japan
Oceania	Donor: CQ magazine	JA5FDJ (Oprs.: JA1VQN, JM1UWB, JA5FDJ, VK9AA (Opr.: Bernd Langer, VK2IA)
VK9AA (Opr.: Bernd Langer, VK2IA)	Japan - 14 MHz	JA5JCC, JH5FIS, JH5FXP, JH5RXS, Donor: Chris Tran, ZL1CT
South America	Kenji Koishi, JH3AIU	JR5JAQ, JR5VHU, JJ6WYS) P40W (Opr.: John Crovelli, W2GD)
P40W (Opr.: John Crovelli, W2GD)	Donor: Chris Terkla, N1XS	Donor: Ryozo Goto, JH3JYS
Donor: Venezuela DX Club	Asia - 14 MHz	
SINGLE OPERATOR, SINGLE BAND	Steve Hodgson, ZC4LI	WORLD - MULTI-MULTI SSB/CW COMBINED
World - 28 MHz	Donor: Andei Stchislenok, NP3D	K3LR: 29,908,123 Points Juan Manuel Morandi, LU1HF
Juan Manuel Morandi, LU1HF	MULTI-OPERATOR, SINGLE TRANSMITTER	Donor: W0ID Alpha Award
Donor: Joel Chalmers, KG6DX	World	
World - 21 MHz	C4N (Oprs.: 5B8AD, RV6LNA, RW4WR, ZX5J (Opr.: Cark Cook, AI6V)	USA - MULTI-MULTI SSB/CW COMBINED
ZX5J (Opr.: Cark Cook, AI6V)	UA9CDV, RN3QY)	K3LR: 29,908,123 Points Donor: Chris Tran, ZL1CT
Donor: Lew Sayre, W7EW	Donor: Anthony Suseen, W3AOH	Donor: N8SM Memorial (Operators of K3LR)
World - 14 MHz	U.S.A.	
CN2AW (Opr.: Andrei Karpov, RV1AW)	W3BGN (Oprs.: W3BGN, K2TW, NO2R)	CONTEST EXPEDITIONS
Donor: W2JT Memorial (North Jersey DX Assn.)	Donor: Douglas Zwiebel, KR2Q	World Single Operator
World - 7 MHz	Canada	VK9AA (Opr.: Bernd Langer, VK2IA)
9Y4AA (Opr.: James Neiger, N6TJ)	VE3HG (Oprs.: VE3HG, VE3KZ, VE3JAQ, Donor: Alex M. Kasevich, VP2MM	Donor: Friends of Phil Goetz, N6ZZ
Donor: Steve Merchant, K6AW	VA3EC, VA3HJ, VA3GGF, VE3RZ)	
	Donor: Eastern Canadian DX Assn.	WORLD MULTI-OP
	Africa	3X5A (Oprs.: AA7A, G3SXW, G4BWP, Carib./C.A.
	6Y1V (Oprs.: KY1V, W4OI, OH3RB)	G4IRN, GM3YTS, K4UEE, KC7V) Donor: Lone Star DX Association
	Donor: Harry Booklan, RA3AUU	Donor: Carl Cook, AI6V
	Africa	
	S79UU (Oprs.: UA3AB, RA3AUU)	SPECIAL - SINGLE OPERATOR AWARD
	Donor: Harry Booklan, RA3AUU	World SSB/CW Combined
	Asia	8P5A (Opr.: Thomas Georgens, W2SC)
	RT9W (Oprs.: RU9WX, RX9WR, RW9WW, Donor: Steve Merchant, K6AW	20, 613,468 Points Donor: Hrane Milosevic, YT1AD

\* Second Place



Nodir, EY8MM, was #3 World on 1.8 MHz.



World #3, 28 MHz, was Rene, LU7HN.



Kevin, K4PG, did a fine job on 7 MHz.

having made a single QSO on 10 meters." Second place in Europe went to John, OM5XX. Third place went to OL6P, operated by Petr, OK2WTM. Special mention is made of the efforts of Willy, UA9BA, who was #5 in the world from zone 17! Turning in fine efforts were J88DR, C6AQQ, and EA8CN.

The continental winners were: North America: V26K (AA3B), Africa: EA8CN, Asia: UA9BA, Europe: CT6A (CT1ILT), Oceania: 9M6AAC (N1UR), South America: HK1AR (RA3CO), Japan: JH8SLS, and U.S.: K1BX.

## QRP

The QRP category sure sharpens your search-and-pounce skills. Five watts can be lost in the QRM unless you happen to time your calls just right. Paul, K1XM, traveled to Senegal and activated 6V7D to take the top world QRP position. Paul commented, "Thanks to everyone who heard my weak signal, and especially to Francois, 6W7RV, for his help. Maybe this wasn't the best year to try QRP, but I operated low power last year and wanted to do something different." Congratulations, Paul! Second place world went to Didier, FY5FY. He said he had "poor 10 meters this year but some amazing QSOs on 160 with 5 watts." Rounding out the top world three was K8CC operated by Uli, KK8I. K8CC was also number one in the U.S. Uli made an interesting observation: "Propagation for a QRP station differs from propagation when running high power. While this seems to be obvious, a certain flutter (I called it 'glazing') sound on the signals indicates that you will not get through with QRP despite a strong signal of the station you are trying to reach. You have to find the good waves in the ocean and ride them as long as you can. Typically, a good propagation situation does not last long for a QRP station, and you have to frequently look for opportunities on other bands."

Second place in the U.S. went to Doug, KR2Q, from northern New Jersey. Third place went to Tom, N1TM. Apparently Tom's antenna could only rotate between 0 and 115 degrees! QRP and 115 degrees to work with, wow!

In Europe, Antonin, OK7CM, keyed his way to first place. Just to the west was second place, Stefan, OM7DX, while third place went to Milan, OL4W (OK1IF), who rightly states the converse of the common idiom: "Life isn't so long to spend it with QRO." A special mention is made of the fine efforts of JR4DAH, SU8BHI, RA9SC, W6JTI, and V73NS.

The continental winners were: North America: K8CC (KK8I), Africa: 6V7D (K1XM), Asia: JR4DAH, Europe: OK7CM, Oceania:

V73NS, South America: FY5FY, Japan: JR4DAH, and U.S.: K8CC (KK8I).

## Assisted

The traditional QSO-alerting system has undergone a technical leap since the 2007 contest. The availability of CW decoding devices over a wide spectrum has stirred up a lot of interest. It will be interesting to see how "Skimmer or Skimmer-like" technology will change how assisted stations operate. As the rules indicate (see the 2008 contest rules elsewhere in this issue), use of these devices places the entrant in the Assisted category. CQ embraces these exciting new technologies.

This year's world top score went to Sergey, UT5UDX. He keyed ER0WW to #1 world and #1 Europe. Sergey commented, "Enjoyed the contest a lot. Congratulations to all my friends who made a good score under difficult conditions." Second place world and second place in Europe went to Manfred, operating from beautiful southern Germany. Manfred said, "Quite astonishing what can be worked during the bottom of the sunspot cycle, but CQWW has its own rules with great activity. Long live CW!" We second that opinion! Third place in the world went to Ricardo, CT3KN. Third place in Europe went to HG3DX, operated by HA3MY. Here in the U.S., the Frankford Radio Club prevailed by taking all three top slots. Charles, K3WW, who constantly finishes in the top two U.S. Assisted, took top honors. Second place in the U.S. went to Rick, K3OO, and third place went to Noah, K2NG. Special mention is made of the trio of assisted stations who gave everyone nice multipliers: IH9U, IH9R, and IH9M. Also, XW1B and T88FY sure put in real FB efforts from nice DXCC multipliers.

The continental winners were: North America: K3WW, Africa: CT3KN, Asia: 4L8A, Europe: ER0WW (UT5UDX), Oceania: T88FY (JK2VOC), South America: CE4CT, Japan: JH3PRR, and U.S.: K3WW.

## Multi-Single

With special permission from the Cyprus PTT, the callsign C4N was put on the air and boy did they do a good job. This all-Russian team took the top world honors in this very competitive category. It took a lot of work and coordination to put their effort together. Congratulations! Second place world went to the PS2T team. They sure had the right idea when they said, "The operators maintained during all the contest a high level of sport spirit and motivation." World third place and #1 in Europe went to



Making the top ten USA, High Power was Lew, N2LT.

9A7A. Their very first activity from their new location was in 1989, and their special contest callsign (9A7A) was issued in 1992. They summed up a lot of feelings that we share when they said, "Everything we have achieved in the contests is the result of our friendship, as well as a love for our hobby." Second in Europe went to the team at OM8A, the Slovak Contest Group. What a great job they put together. Third place in Europe went to 9A1P. We think they summed up the thoughts of most contestants when they said, "Another great weekend with lots of fun. Conditions were bad on the upper bands, 10 meters almost completely closed, 15 meters had very short openings, and 20 meters was closed pretty early. On the other hand, 40 and 80 meters were quite good and 160 was excellent." In the U.S., last year's top two finishers reversed positions. Frankford Radio Club's W3BGN took top honors, while Tom's team at K8AZ took second. Moving into third place was the all-wires-in-trees team at KT3Y/4. All top three U.S. teams broke the 5-million point barrier.

The continental winners were: North America: 6Y1V, Africa: S79UU, Asia: C4N, Europe: 9A7A, Oceania: AH2R, South America: PS2T, Japan: 8N7TU, and U.S.: W3BGN.

## Multi-Two

The Multi-Two category is a way to have a lot of fun and make a lot of QSOs. The three top world stations all operated from island QTHs. The famous station HC8N operators once again demonstrated their operating and copying skills by taking first place. They commented, "Nice weekend working the world. Great competition in the M2 category. Thanks to all the ops who go to special places to make this such a fun event." Second place went to the

EF8M Russian team. We heard a lot from EF8M during the CQ WW CW and their newly upgraded station. Third place in this increasingly interesting category went to D4C, an Italian, Latvian and Lithuanian team. They commented, "First try from Monteverde and it was a great experience which we never had experienced in the past." In the U.S. Sig's team at N3RS took top honors from just west of Philadelphia. Second place went to K1AR operating from the K1EA QTH. Third went WE3C, who commented, "We were pleased with the results of our first CW Multi-Two effort." Over in Europe, top honors went to EA6IB. They put on another effort from the lovely island of Ibiza. EA6IB said, "Thanks to all of you and especially to the European M2 groups for a great and competitive weekend." Second place in Europe went to the long-time famous team from IR4X. They said, "Thanks to all for calling us and to all the contestants traveling around the world to activate such a great numbers of countries." Third place in Europe went to T93J, whose 160- and 80-meter antennas seemed to perform very nicely. They said, "The Beverage redesign helped us to hear many more multipliers on 80 and 160 meters."

The continental winners were: North America: HI3A, Africa: EF8M, Asia: P3F, Europe: EA6IB, Oceania: KH6LC, South America: HC8N, Japan: JA1YPA, and U.S.: N3RS.

### Multi-Multi

Top honors in this difficult category went to 3X5A. Their DXpedition included a long two-day drive from Bamako, Mali to Conakry, Guinea and four long work days in the heat and humidity to be ready in time for the contest. Great job, guys! Taking second place in the world was the Rhein-Ruhr DX Association DXpedition station, ED8A. The RRDXA always brings enthusiasm and expertise to anything it does. Finishing third in the world and first in Europe was LZ9W. They commented, "Building a competitive M/M station is a big task. Rebuilding it, is in some aspects, an even bigger one. It took one loong year to rebuild LZ9W." It paid off. In the U.S., first place in this very tough category really means something. In 2007 the winner was W3LPL with the Potomac Valley Radio Club crew. Quite a lot of local talent under one roof! Second place went to K3LR. Tim's doors are always open to available talent and his team did a superb job as usual. K3LR also received the World and U.S. Combined SSB/CW trophies, quite an honor. Third place in the U.S. went to Matt's team at KC1XX. His 20-meter operator was KC1F, who became a SK in 2008. Stu was a gentleman and dedicated competitor. He will be missed. Second place in Europe went to DF0HQ of the RRDXA. They expressed a wish we all hope for, "It was fun but we hope there will be some sunspots in 2008!" Third place in Europe went to DR1A of the BCC. They are hoping for more sunspots in 2008 as well.

A special mention must be made of the fine crew from China, B1Z. All of us hope to see them back this year. Finally, the competition in Japan for MM top honors for the last decade has been between two fine stations, one located in Shikoku (JA5FDJ) and the other in Nara (JA3YBK). Sadly, the leaders of both teams became SKs recently. It is a tribute to their memory that these teams continue their excellent tradition.

The continental winners were: North America: J3A, Africa: 3X5A, Asia: JA5FDJ,

Europe: LZ9W, Oceania: KH7X, South America: No Entrant, Japan: JA5FDJ, and U.S.: W3LPL.

### Club Scores

The social life-blood of ham radio is radio clubs. By belonging to a radio club you have a front-row seat to many sources of information on all radio subjects, including contesting. As you know, it is no trouble to linger around after a club meeting and talk about contesting for hours. "Did you work that opening to Asia on 21 MHz at midnight?" could be just one of hundreds of topics covered everyday by contestants.

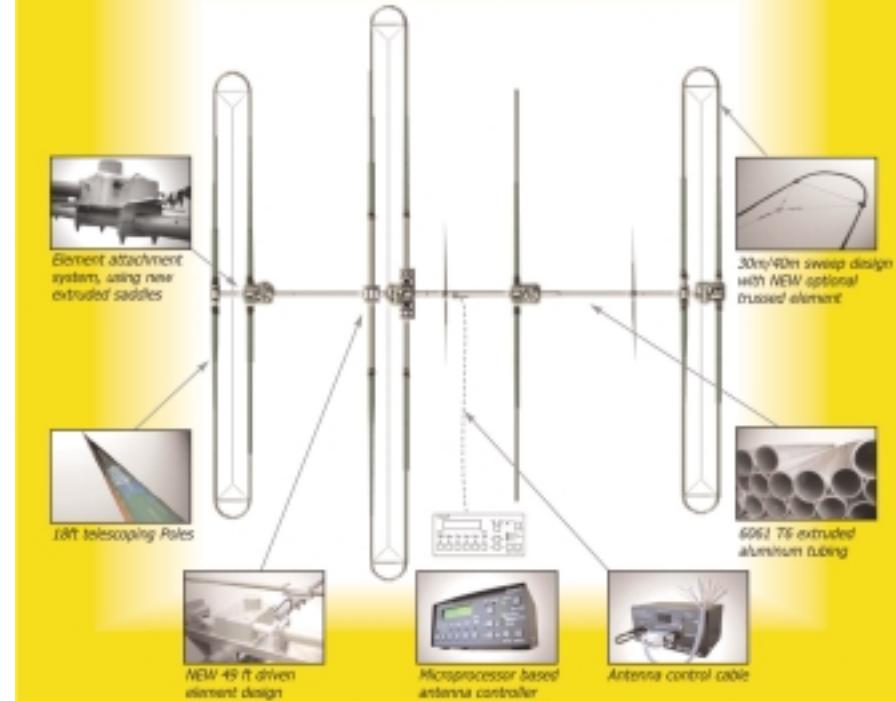
The combined scores of the top four world club scores topped a billion points! Many of the DXpeditions are initiated to help a club's

bottom line. The world's top club score was the Frankford Radio Club. With 145 entrants, the club sure had a big point total per entrant: 1.5-million points. What a great job. Second place in the world went to perennial powerhouse the Yankee Clipper Contest Club. Third place U.S. went to the Potomac Valley Radio Club. Each of these clubs has a long tradition of full commitment to the contest. Clubs encourage activity and that is good for amateur radio and contesting.

For many years now, there has been a friendly rivalry in Germany between the RRDXA and the BCC. This year the Bavarian Contest Club edged out the Rhein-Ruhr DX Association for first place non-U.S. and third place world. Third place non-U.S. went to Contest Club Finland.

## Stepper™ Antennas

### INTRODUCING THE DREAM BEAM 36



#### THE FIRST ANTENNA IN THE DREAM BEAM SERIES

##### The DB-36 YAGI

- NEW innovative, patent pending design, is 60% of full size on 40m and 30m, but virtually equals the performance of an identical full sized Yagi.
- 80m fully tunable dipole option is available. Automatically tunes the entire 3.5MHz to 7 MHz range with 1:1 SWR. Nearly equal in performance to a full sized dipole with no additional wind load.
- All DREAM BEAM antennas will have gain on 40m and 30m by using shortened elements that deliver performance that is only a few tenths of a dB below full size elements.
- The Dream Beam series will offer antennas for both space limited Hams as well as the "Big Guns" who have the space and want the very best.

Antenna Specs	Dream Beam 36
Weight	180 lb / 72.8 kg
Wind load	17.5 sq ft / 1.63 sq m
Longest element	46 ft / 15.1 m
Turning radius	26 ft / 8.0 m
Boom length	35' 10" ft / 11.1 m
Mount clamps (incl)	2.0 in / 5.08 cm
Power rating	3 kW
Wind rating	100 mph EIA-222-C
Frequency coverage	**3.4 MHz - 54 MHz
Cable requirements	16 conductor 22 gauge shielded
Tuning rate	1.33 ft/sec = .4 m/sec

Performance		
Band	dBi Gain	F/R dB
80m	1.35	N/A
40m	7.2	23
30m	8.2	18
20m	9.27	21.5
17m	9.88	26.5
15m	10.21	27.1
12m	10.43	21.1
10m	10.65	11.0
dm	4.0*(12.75)	1.7B(27.4)

\* Sketch shown with optional 6m passive kit

\*\* Gain and F/R measured in free space

\*\* with optional 6m passive element kit

\*\* with 80m - 40m optional dipole

## Introductory Price \$4295.00

2112 116TH AVE NE SUITE 5, BELLEVUE WA, 98004 WWW.STEPPER.COM TEL: (425)-453-1950 FAX: (425)-462-4415

Thanks to all the clubs that sent in scores. Clubs can help us a great deal by making sure that all their entrants use the same name for their club on their Cabrillo submission. One major club had 15 variations of its club name! To arrive at a correct score total for a club is a lot of extra work when we encounter variations of club names.

## Team Contesting

Get together five contestants from anywhere in the world to form a team. As you can see below, the Phil Goetz Memorial Team took away top honors. The team had some top finishers in the contest. Second place

went to the Pile-up Survivors made up of calls that are very recognizable. Third place went to the Code Sharks. You can send your team registration via e-mail to <teams@cqww.com>, or fax or mail to CQ magazine. You will receive an acknowledgement when sending via e-mail.

Here is the 2007 lineup:

**1. Phil Goetz Memorial Team:** CT3NT (CT1BOH), 9Y4AA (N6TJ), V47NT (N2NT), HQ2A (N6AA), 9K2HN (KL2A): 27,487,938

**2. Pile-up Survivors:** 8P5A (W2SC), ER0WW (UT5UDX), P49Y (AE6Y), VC3J (VE3EJ), VE2IM (VE3DZ): 25,655,284

**3. Code Sharks:** ZS1EL, ZS9X (ZS4TX), V26K (AA3B), VE1OP, PZ5X (K5UN): 19,123,352

## TOP SCORES

World	EA8FT	280,125	W3LPL	13,939,191	N4MO	181,090	4O3A	6,942,915	14 MHz	
Single Operator	XR3A	257,982	K3LR	13,247,624	N4UJ	172,205	9A1A	5,765,256	LZ9X	505,158
All Band	A35RK	234,960			K2MFY	162,347	S50A	4,851,392	9A3B	474,320
3V2A	13,112,736				N5DO	155,774	UU7J	4,815,774	EATTN	442,776
P40W	10,673,421						HA8JV	4,447,950	HA8IH	405,275
V47NT	9,695,355						M6T	4,122,914	LZ6W	291,336
8P5A	9,040,800						YQ9W	4,032,426	HA3LN	289,488
A45XR	8,684,269						TM6X	3,951,600		
CN3A	8,353,488									
9K2HN	8,287,614									
CU2A	7,400,808									
6W1RV	7,400,808									
4L0A	7,297,524									
28 MHz										
LU1HF	198,275									
YM2W	54,595									
T930	47,700									
YU2A	18,450									
OG0Z	17,325									
9A5MT	14,508									
21 MHz										
ZX5J	1,384,497									
LS1D	1,194,638									
LU7HN	1,060,663									
ZP0R	972,332									
E7/9A5K	491,400									
KH7Y	478,084									
14 MHz										
CN2AW	1,387,176									
ZC4L	1,294,033									
HP1/DJ7AA	1,244,796									
C4I	1,219,239									
CT8T	984,370									
S57AL	779,436									
7 MHz										
9Y4AA	1,674,456									
EA8/OH4NL	1,595,698									
P49Y	1,411,840									
E7/9A8A	1,103,256									
OK5C	1,100,486									
CW6V	984,872									
3.5 MHz										
CN2FB	1,590,288									
ZB2X	683,240									
TM6A	598,884									
UN4L	588,846									
C4M	575,100									
OH0R	537,695									
1.8 MHz										
CN2FF	618,849									
CN2R	559,860									
EY8MM	343,012									
SP3BQ	268,499									
LY2J	266,124									
SN7Q	260,064									
Low Power										
All Band										
Multi-Operator										
Single Transmitter										
C4N	17,015,112									
PS2T	14,239,493									
Multi-Operator										
Two Transmitter										
H8C8N	28,736,800									
EF8M	27,660,420									
D4C	23,954,832									
PJ2T	20,759,622									
PJ4A	20,715,138									
P3F	20,468,448									
28 MHz										
LW6DW	21,840									
PW2MTS	19,278									
OM3OM	9,322									
PY2SRB	8,112									
9A3VM	7,440									
IZ8DVD	6,292									
21 MHz										
9G5XA	492,282									
PY2NA	397,600									
CO8LY	346,203									
Low Power										
All Band										
Multi-Operator										
Multi-Transmitter										
3X5A	36,547,280									
ED8A	18,146,604									
28 MHz										
LW6DW	21,840									
PW2MTS	19,278									
OM3OM	9,322									
PY2SRB	8,112									
9A3VM	7,440									
IZ8DVD	6,292									
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D4C	23,954,832									
PJ2T	20,759,622									
PJ4A	20,715,138									
P3F	20,468,448									
28 MHz										
LW6DW	21,840									
PW2MTS	19,278									

## 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
3V2A	322/12/59	1231/24/86	1925/30/103	2148/30/94	1599/31/94	190/8/37
P40W	428/16/68	1009/24/92	1251/28/98	1637/28/104	1679/25/103	102/14/27
V47NT	239/14/45	555/21/80	2373/32/113	1972/31/109	1789/22/94	68/12/18
8P5A	367/14/51	841/24/83	1589/31/101	1782/31/104	1773/28/93	213/12/27
A45XR	157/14/52	553/22/76	1723/33/118	1397/33/111	1169/31/103	64/18/38
CN3A	221/12/49	896/24/75	1291/25/92	1224/28/91	1381/25/96	248/12/43
9K2HN	247/12/55	1065/25/86	1346/32/105	1137/34/105	1155/28/96	36/18/30
6W1RW	25/10/23	344/20/66	815/26/80	1318/30/103	1897/29/111	223/13/53
4L0A	263/11/53	1033/25/85	1532/27/92	864/24/75	853/29/87	315/9/41
V26K	186/11/28	565/19/72	1818/28/102	1422/29/98	1434/23/91	101/13/26

### USA TOP SINGLE OPERATOR ALL BAND

Station	160	80	40	20	15	10
K5ZD/1	220/17/68	639/25/101	773/30/115	1293/31/118	501/24/100	29/11/20
K3CR	110/18/61	667/26/97	566/30/111	1176/32/122	467/26/95	35/10/24
K1LZ	205/14/66	701/25/103	699/34/122	1088/30/113	313/21/97	21/8/12
K1DG	147/18/73	571/22/87	747/29/103	1276/27/102	277/24/94	21/9/16
K3WW	117/18/71	468/25/103	632/34/125	862/31/125	388/23/94	29/12/24
W1KM	152/15/62	676/25/92	607/28/105	1012/25/104	314/23/81	14/9/12
K300	107/16/59	407/25/98	463/32/119	958/30/123	301/27/103	35/12/26
K4ZW/3	81/17/47	439/25/75	579/31/104	1351/30/112	154/21/70	14/8/10
K2NG	111/18/76	260/27/113	462/39/142	534/36/145	442/27/119	53/11/29
K1A/3	143/20/62	447/21/85	471/28/101	1034/29/107	361/22/87	27/10/20

### WORLD MULTI-OPERATOR SINGLE TRANSMITTER

C4N	384/18/75	759/31/105	2431/38/138	2086/38/144	1379/32/136	429/16/70
PS2T	29/13/28	182/25/97	1440/38/137	1861/39/150	2175/36/151	501/26/77
6Y1V	149/16/68	538/27/100	2036/35/126	1854/37/135	1548/30/120	23/12/22
ZY7C	20/8/20	173/22/89	1357/35/124	1495/38/137	2220/30/122	53/18/44
AH2R	86/16/27	394/30/72	1385/35/115	1437/37/120	980/36/98	179/13/19
RT9W	283/12/61	837/29/110	1113/35/146	989/33/140	766/27/103	15/8/13

### USA MULTI-OPERATOR SINGLE TRANSMITTER

W3BGN	173/21/82	366/27/101	684/34/126	1152/34/134	340/26/109	41/11/34
K8AZ	87/17/63	524/27/105	569/37/130	1408/34/132	132/24/97	32/14/30
KT3V/4	72/15/52	433/25/97	925/31/120	1389/35/134	156/23/98	12/9/12
K1IR	92/15/55	436/28/104	636/35/130	1197/29/128	269/23/100	21/13/20
K2LE/1	54/14/41	281/21/93	524/29/122	1246/34/135	190/24/102	32/11/27
W3UA/1	102/14/59	249/21/95	819/32/129	1181/30/123	130/24/97	7/5/7

### WORLD MULTI-OPERATOR TWO TRANSMITTER

HC8N	431/19/72	1412/30/111	3107/35/134	2992/38/145	3198/35/145	775/24/62
EF8M	493/16/76	1842/30/118	3521/35/140	3001/37/145	2639/36/142	353/17/57
D4C	333/15/70	1150/26/102	2564/34/120	3353/33/133	2936/32/127	558/21/79
PJ2T	662/20/83	1359/26/107	2853/36/139	2586/36/130	2115/27/114	166/15/34
PJ4A	533/16/72	945/25/98	3371/34/131	2803/34/127	2344/27/118	169/16/29
P3F	450/17/72	1846/28/108	3246/36/151	2151/36/133	1416/35/117	268/11/48

### USA MULTI-OPERATOR TWO TRANSMITTER

N3RS	131/19/73	1025/29/110	1271/38/145	1845/36/149	804/27/125	63/15/40
K1AR	240/21/77	697/29/113	1095/38/139	1885/35/145	642/27/128	40/13/29
WE3C	108/18/77	1089/28/117	1016/31/127	1514/35/141	790/27/116	41/13/32
NY4A	139/16/65	756/26/107	1505/37/138	1404/32/133	689/27/119	5/5/4
K1RX	90/14/51	579/29/112	847/36/134	1327/33/132	407/26/112	44/12/25
K0TV/1	85/14/47	362/27/101	628/30/125	1233/31/129	361/23/98	30/9/14

### TOP SCORES IN VERY ACTIVE ZONES

Zone 3	K4ZW.....3,900,600	RG3K.....2,510,749
K6NA.....1,894,742	AA1K/3.....3,864,576	UA4FER.....2,066,076
N6TV.....1,872,780	N2LT.....3,538,836	RM3F.....2,043,500
KO7AA.....1,839,328		UA4CCG.....1,547,666
K6XX.....1,826,437		UR7EU.....1,250,232
WC6H.....1,738,317	CU2A.....7,400,808	RW1ZA.....1,181,601
K7GK.....1,437,056	*CT6A.....4,987,632	*RV6LFE.....1,226,434
W2VJN/7.....1,427,819	M6T.....4,122,914	
W6PH.....1,332,873	TM6X.....3,951,600	
K7RL.....866,550	DJ1YFK.....3,711,576	SV9CVY.....6,986,736
N7TT.....720,513	DL3YM.....3,550,858	YQ9W.....4,032,426
Zone 4	EA5FV.....2,950,400	4Z5TA.....1,576,155
VC3A.....4,968,440	GM7V.....2,539,832	*TC3A.....1,423,800
VC3J.....4,853,208	AO7AJR.....2,095,104	*LZ9R.....1,295,111
VE3EY.....3,611,762	PA3AAV.....2,011,530	ZC4LI.....1,294,033
VE3NE.....2,503,250		C4I.....1,219,239
KU1CW/0.....2,392,704	4O3A.....6,942,915	Y06BHN.....1,061,286
WX0B/5.....2,245,120	9A1A.....5,765,256	SV1ENG.....1,033,708
K8GL.....1,736,658	S50A.....4,851,392	*Y03FRI.....1,031,800
K0SR.....1,504,116	HA8JV.....4,447,950	
*N5AW.....1,506,560	ES5TV.....3,228,610	JH4UYB.....3,752,242
N4TZ/9.....1,450,400	OF8X.....2,727,276	HL2AEJ.....1,216,334
Zone 5	*OM5XX.....2,387,938	JF1PKJ.....1,146,915
VY2ZM.....6,885,168	*OL6P.....2,301,740	JK1OPL.....1,025,060
K5ZD/1.....6,399,360	YL6W.....2,258,815	JF2QNM.....968,803
VY2TT.....6,072,935	*LY6M.....1,833,720	*JH8SLS.....930,369
K3CR.....5,330,100		JA5DQH.....861,713
K1LZ.....5,093,565		*JI1RXQ.....804,678
K1DG.....5,001,120	UU7J.....4,815,774	JR3NZC.....790,359
W1KM.....4,433,030	UT5UGR.....2,764,480	JN2AMD.....686,350
	RS3A.....2,739,924	*Low Power
Zone 16		

### Records

You can QSY to <cqww.com> to check the records for every country that has entered the CQ WW since 1948. If you discover an error, please let us know at <questions @cqww.com>. Below are the outstanding efforts of super operators which resulted in setting new CW records during the 2007 contest. Congratulations!

**World:** 3.5 CN2FB (UA2FB), 1.8 CN2FF (UA2FF), L7 TC3A, L1.8 TA2RC, Q1.8 C6ARR (N6BT), A3.5 IH9M (IK7JWY); **North America:** L14 C6AKX(KE7X), Q1.8 C6ARR(N6BT), MS HI3A; **Africa:** CN2FB (UA2FB), 1.8 CN2FF (UA2FF), L7 6W1SJ (T98A), QA 6V7D (K1XM), Q21 SU8BHI (HA3JB), A7 IH9U (I1NVU), A3.5 IH9M (IK7JWY); **Asia:** 14 ZC4LI, 3.5 UN4L, 1.8 EY8MM, L7 TC3A, L1.8 TA2RC, Q7 RW9LL; **Europe:** A3.7

## EUROPE TOP SINGLE OPERATOR ALL BAND

Station	160	80	40	20	15	10
CU2A	288/15/61	1013/24/92	1783/31/109	1129/31/108	1673/27/107	59/13/30
SV9CVY	293/12/59	1094/23/81	2088/34/120	1688/33/107	1245/33/101	163/7/38
403A	353/12/59	1149/24/88	2005/34/115	1455/34/97	934/33/109	179/12/34
ERØWW	328/10/57	867/29/98	1439/38/137	1515/38/136	545/35/131	69/10/43
9A1A	179/12/59	1028/30/106	1461/38/146	1103/36/119	344/33/121	176/10/46
DJ5MW	238/16/66	812/29/106	994/36/144	932/37/132	457/35/130	104/13/59
CT6A	282/11/57	773/21/16	1266/29/117	955/29/102	782/29/101	147/9/33
S50A	254/14/59	878/24/85	1045/34/111	1192/35/101	580/34/100	46/9/31
UU7J	346/23/76	872/30/103	1215/34/127	943/36/99	632/33/108	167/11/49
HG3DX	224/15/61	611/23/82	979/34/135	982/36/127	452/35/128	67/17/67

## EUROPE MULTI-OPERATOR SINGLE TRANSMITTER

9A7A	255/20/81	1282/32/124	1664/38/156	2236/39/155	624/36/144	104/12/67
OM8A	342/24/101	1073/31/124	1655/37/144	2044/39/149	659/34/146	79/13/61
9A1P	380/21/90	1146/30/114	1557/37/146	1584/39/150	849/37/144	111/17/64
OM7M	416/25/93	1011/32/118	1507/38/151	1586/40/152	467/35/139	58/12/52
T93M	219/16/69	846/26/101	1458/36/143	1768/39/142	756/37/144	138/16/55
HG1S	203/13/70	1112/32/124	1681/36/158	1571/38/143	317/36/133	128/12/52

## EUROPE MULTI-OPERATOR TWO TRANSMITTER

EA6IB	708/18/79	1865/30/115	3000/38/154	2454/38/139	1243/36/138	362/13/59
IR4X	260/19/76	1839/34/125	2080/38/156	1973/39/153	1035/36/145	129/14/64
T93J	777/25/90	1545/31/118	1748/38/152	1490/37/137	1011/38/146	54/15/42
RU1A	769/26/91	1660/36/130	1670/37/143	1706/39/151	443/37/138	94/10/48
EE2W	331/11/61	1797/26/101	1871/35/125	1683/36/126	1242/36/118	189/14/44
Z37M	518/14/73	1899/33/119	2140/38/138	1681/36/125	634/36/135	59/10/29

## EUROPE MULTI-OPERATOR MULTI-TRANSMITTER

LZ9W	1137/21/87	2257/35/129	3052/38/155	2819/38/148	1294/37/148	257/17/70
DF0HQ	1093/22/91	2033/33/125	2673/37/158	1901/39/155	677/35/146	317/15/81
DR1A	997/22/86	1870/32/123	2134/38/153	1844/38/145	813/32/138	243/14/71
OE2S	624/10/67	1951/31/113	1596/36/141	1401/39/141	331/34/135	129/14/57
SK3W	837/15/72	1330/29/110	1698/34/133	1305/38/136	495/30/119	113/10/40
LY7A	1034/17/74	1457/24/89	1592/35/132	1287/36/136	376/30/112	97/9/45

SO2R (SP2FAX); **Oceania:** Q14 V73NS, A21 VK4AN, A7 ZM3A, A3.5 ZL2IFB; **South America:** 7 9Y4AA (N6TJ); **USA:** L1.8 N2WN/4, Q1.8 W2MF; **Japan:** L14 JA1BPA, Q14 JA6GCE, A14 JG2KKG

## Special Mention

As G3SXW commented in his book *Contesting in Africa*, "for Homebound Contesters and DXers alike, there is no thrill in amateur radio to match that of hearing your call come back from a new multiplier or a new country. But imagine the thrill of *being* the new multiplier or country for literally thousands of stations!" For the many of us, this means participating in a DXpedition. The following stations are some of the many who made the contest more interesting for everyone by going on DXpeditions:

VP2EDL, V26K, C6ADQ, C6AGY, C6AKX, C6ATA, 8P5A, 8P0P, 8P9MN, V31DF, OH1VR/V9P, YA/K9GY, HQ2A, HQ9R, FM5BH, H7/K9NW, HP1/DJ7AA, PJ7/DJ5HD, V47NT, J88DR, D2NX, 7X0RY, VQ9LA, J28OO, 9G5XA, 9G5ZZ, 5R8NL, 3B8GT, CN2AW, CN2FB, CN2FF, V5/DJ4SO, 6W1RW, 6W1SJ, 6W1SE, 3DA0ZO, 5H3EE, 3V2A, S21ZDX, C4I, C4M, C4Z, 4L0A, VR2/AA1ON, XU7MWA, 9K2HN, HS0ZAR, YM2W, 9M2CNC, OH0Z, OH0R, OH0M, CU2A, SV9CVY, ZB2X, J43J, 4U1ITU, EI/W5GN, MD/DL3KNF, MD/DL3KWR, GI6YM, CT8T, IS0/K7QB, IS0N, IS0/OL0A, MZ5A, MZ5B, VK3TDX, VK9AA, 9M8YY, 9M6AAC, FO5RY, WH2D, KH2/KI3DNN, C6ARR, KH6/N0CO, ZL3TE, T88RJ, T88WV, A35MJ, P40W, P49Y,

ZX5J, HK1AR, HK7/VK6DXI, ZP0R, ZP6/IK1PMR, PZ5X, 9Y4AA, 6V7D, JD1AHC, HR2/LT0E, IS0/OK1CZ, SU8BHI, EA8/OH2BEM, KL2R, IH9U, IH9R, IH9M, 3B8/SM6GOR, OH0E, 9H3HH, ERØWW, T88FY, DX1M, TI5N, 6Y1V, 5J0A, S79UU, C4N, AH2R, ZF1A, HI3A, VP2MSC, VP5W, EF8M, D4C, CT9L, P3F, GJ2A, LX7I, E51A, HC8N, PJ2T, PJ4A.

Why not do a little work and find out about an overseas location? You can jump on a plane for a few hours and experience never-ending pile-ups. You will find that it will be an experience to remember.

## Comments

The 2007 CQ WW CW resulted in the highest number of CW logs ever received. With code requirements around the world almost eliminated, it is very heartening to see that many newcomers are taking the time to learn CW and join in the fun. With 10 meters almost totally closed, the CQ WW CW still generated 4867 logs.

For the 2007 logs, the CQ WW log-checking process underwent a considerable amount of change. After many years of developing the log checking process Dick, N6AA, turned over the process to Ken, K1EA. This was a major change in procedure. We welcome Ken and his log-checking software to the CQ WW. In addition, the CQ WW acquired a new server dedicated to it. Both of these changes have brought new challenges to the CQ WW CC. We appreciate all the input we have received from the entrants in the contest. Your input is always welcomed. As before, with a new processes in place, we will continue to provide the best log checking available. Please remember, that the purpose of log checking is to certify the winners. A side product of this process is the UBN/NIL reports, which are supplied to all entrants. The UBN/NIL reports are an aid to improve your skills.

Since the 2007 contest season concluded, there have been ongoing discussions concerning remote operating and skimmer technology on various reflectors. Remote contesting is addressed in the existing rules. All TXs and RXs must be contacted by wires to antennas and located within a single 500-meter diameter circle or the owner's property which ever is larger. The operator can be anywhere, but the remote station he (she) uses must obey the CQ WW rules and the rules of the country in which he is remotely operating. All remote RXs must be in a 500-meter station circle—nowhere else. A single operator using skimmer or skimmer-like technology places the entrant in the Assisted Category. Use of any QSO alerting technology places the entrant in the Assisted Category.

In accumulating the scores, considerable effort is put into collecting all the names used by a club's entrants. One famous club had over 15 variations of its club name, as mentioned earlier. Clubs can help out the CQ WW CC a great deal by making sure that all their entrants use the same club name on submitted documents. When you submit your log, please take the time to look at your Cabrillo header page. Check to see that the call you used during the contest is the one that appears as your

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entry call. In addition, look your log over to make sure you really logging the right band. On CW there were several entrants who forgot to change bands on their computer logging program. Please be careful to log all your QSOs on the correct band.

The Multi-Single category is very popular. Please remember to designate the run and multiplier station within your logging software. You can designate the run as station 0 and the multiplier station as 1. It is easy to do and all contesting programs can do it. By doing this, MS checking becomes much easier for the CQ WW CC.

The CQ WW CC uses the same .cty file to check all the logs. In this way all the logs are treated equally. The CQ WW CC has known for a very long time that a large number of CQ WW entrants have limited operating time. It is precisely these operators having fun who give the continuing runs available during the contest. No matter how your time might be limited because of other demands, get on in the CQ WW and have fun. The CQ WW CC wants to thank and recognize the causal operator as a major contributor to everyone's good time.

As has been mentioned many times before, your UBN/NIL report is just an aid to help you pinpoint how to improve your copying skills. Submitting an electronic log is easy. Send your SSB log and summary to <ssb@cqww.com>, CW to <cw@cqww.com>. Please send your log in Cabrillo format. If you have any problems, we can help you at <questions@cqww.com>. It bears repeating that if you make a mistake on your first submission, you can resubmit your log. It will replace the first submission.

## Thanks

The CQ WW Contest Committee wants to thank all the entrants who make the CQ WW the event of each year. We try to do our best

to assure that the results are true and accurate. The results require hundreds of hours of work by a lot of people. The members of the CQ WW CC who provided labor and insight in creating these results were: K1DG, K1AR, K3WW, K3ZO, K3LR, K5ZD, KR2Q, N2AA, N2NC, N2NT, N3ED, N6AA, N6TR, N9RV, W3ZZ, K1AR, KM3T, KT3Y, W5OV, N5KO, K6AW, and N8BJQ. The logs were received and processed by Larry, N6TW, and the scores developed by Ken, K1EA. K1EA has done a great job learning all the CQ WW log-checking procedures. The CQ WW records are maintained by N2NC and K3EST. The All-Time Records are maintained by K6SSS. Thanks to KM3T, K5TR, and N5KO, who do the hard work to keep the servers working. Thanks to John, K1AR, for his advice and hard work to make the CQ WW so successful. Very special thanks to Barry, W5GN, who helps on many levels, but especially with the book keeping and development of the CQ WW certificate program. Our CQ WW CC members who are DX advisors were very helpful in offering advice, providing information, and sorting out potential problems: CT1BOH, DL6RAI, EA3DU, F6BEE, G3SXW, I2UIY, JE1CKA, OH2KI, OH2MM, PY5EG, S50A, UA9BA, VA7RR, VE3EJ, and E21EIC.

If you plan to participate in the 2008 CQ WW contests, you are on the track to having a lot of fun. Congratulations to all the 2007 participants on all levels! CU this fall in the 2008 contests! 73, Bob, K3EST

## DX QRM

Only a part time effort, in between work and the weekend activities! Very happy with score ... 2E0CVN. Great Contest! See you all again! ... 4L0A. 10m poorer than 2006. Many thanks to Graham, 5X1GS, for use of his shack. Hard work on 40 and 80 with low power ... 5X1NH. Nice contest. Txn all 6H1IM operators XE1IM ... 6H1IM. Operated from a bush in Tongatapu island. Mosquitoes and Tongan wasps

were my only companions ... A35MT. What a terrific contest! We certainly enjoyed the pile-ups and all the terrific multipliers. Thanks to all who traveled to distant places for the weekend ... A71EM. Working with a special callsign was indeed difficult. Many said I was UA1 and had to go very slow CW telling them AU1, India. It was very nice so many responded with their numbers to us ... AU1JCB. Great contest as always but faced computer failure on first day and antenna down on second day, missed most of time during the contest. Very happy to know that B1Z, B3C, and B7P did good results! See you next year! ... B4TB. Cinnamon rolls from Florence's bakery, beach walks, power failure, great football. Treasure Cay beach is one of the top 5 in the world! You'll agree! Forget the Qs; please pass the SPF 60! ... C6AGY. Many thanks for all who took a lot of time to take me out of QRM. Every QSO was a fantastic experience. I'm sorry E51A didn't copy me. The day before contest I worked them. Signal was very stable all over 30 minutes. Tks to the JA's for the fantastic good ears to copy me. See all of you in next contest. 73 and good luck for everybody ... CT1AOZ. Don't forget, the fun is the power! ... DK3RED. CQWW shows how the conditions really are. The daily use makes you think that the conditions are bad when it in fact really is low activity. Great condx on Saturday, not so good on Sunday ... EI4CF. Lots of fun just being able to work a contest in the casual mode instead of trying to be in the top ten. Biggest thrill was working BZ1Z on 40 ... F5VHJ. With a station "optimized for Europe" and a brain "optimized for sleep," this was always going to be tough ... G0MTN. It's 40 years since G3TXF first took part in CQWW CW. Only three have been missed in the intervening years. Roll on the next sunspot cycle! ... G3TXF. Was a bit under the weather in the summer for few months. Knocked guts out of me, and what you need in this contest is GUTS! Conditions fair, especially on LF. What is certain is that CW is far from dead! ... GW3JXN. It was a really good propagation and outstanding activity. 15m opened unexpectedly for USA and resulted in good sigs on my wire. The contest was fun and running high. Thanks for Q's. See you next year! ... HA2MN. I didn't check antenna. It was lying on the floor of the terrace. Therefore some hams must have special ears to hear me. I hope to survive and see sunspots again. FT-920 100 with horizontal loop ... IK2AIT. QTH north Sardinia, about 100m from the sea. Rig Elecraft K2/100, ant 2-ele mini beam, 8m high. Good fun even if condx were rather poor ... IS0/OL0A. Many thanks to all who worked us. Great contest, great fun ... J42WT. I heard HC8, South American station on 1831.2 kHz but no JA freq. It was the first time to hear SA station on 160m in my 30 years of amateur radio life. Look for him in next contest! ... JO7KMB. A big "mahalo" to all who worked us or tried. Everyone here worked hard before and during the contest. Still a new station, improvements coming, especially on the low bands. 73 & Aloha ... KH6LC. High solar wind and very poor conditions through Sunday afternoon made this contest rough. Even with poor band conditions this contest is by far my favorite. Lots of great DX to be found, not to mention I finished up my WAS award, too. Thanks for a great contest! ... KL8DX. Good condx on 40m. Worked many new Central American and Caribbean countries. Best 73's to contest committee ... LY3X. Very poor conditions up here in Shetland at 60 degrees north ... MZ5A. Pain with 100W and Beverage and untuned loaded vertical! ... OH8VJ. Nice condition on 80mtr ... OK1TC. As usual, PRIMA ... OL4M. Rig Elecraft K2 and dipole for 20 meters and up, and a short vertical for 40 meters and down. With 560 QSOs and a claimed score of 194,000 I made a new personal QRP record ... OZ7BQ. M2 is a great category for those of us who enjoy multi-op contesting but don't have the facility for a full MM setup. LF conditions were good but not quite so good as in 2006. At least it seemed that way. 10m barely opened at all but with zero sunspots we can't complain ... P3F. Thank for the great show again. Worked several new bandpoints on the 80m band. Here with my dipole always difficult and need the CQ contest! ... PG2AA. Thank you for FB contest! It's been a big fun though condx on 10 meters was poor ... RA3BQ. CIDR Cyclone struck Friday before the contest, and that was it for me after all the preparations done for a serious contest effort. Anyway, managed to operate a few hours with a single 40m dipole to give out a multiplier. Worked a few QSOs on 15m and 20m as well ... S21ZDX. Great fun as always. The low band conditions were no good and the old trustworthy 20m did

## SUCH A HAM

SH 004



I bought you a beautiful pair of earrings, Mavis.  
Put them on, I'd like to try something.

## CLUB SCORES

### USA

Frankford Radio Club .....	266,909,574
Yankee Clipper Contest Club .....	260,552,723
Potomac Valley Radio Club .....	139,642,195
Northern California Contest Club .....	75,488,405
Florida Contest Group .....	60,754,161
North Coast Contest Club .....	38,498,561
Society of Midwest Contesters .....	34,860,384
Carolina DX Association .....	34,784,070
Minnesota Wireless Association .....	30,796,748
Southern California Contest Club .....	24,248,185
South East Contest Club .....	24,170,938
Mad River Radio Club .....	20,182,018
Western Washington DX Club .....	20,050,938
Rochester DX Association .....	14,431,175
Central Texas DX and Contest Club .....	14,086,887
Central Arizona DX Association .....	14,011,476
CT RI Contest Group .....	12,709,622
Hudson Valley Contesters and DXers .....	9,733,694
Alabama Contest Group .....	9,626,274
Mother Load DX & Contest Club(W6) .....	7,158,524
North Florida DX Association .....	7,108,265
North Texas Contest Club .....	7,094,998
Willamette Valley DX Club .....	6,195,615
Oklahoma DX Association .....	4,155,279
Kansas City DX Club .....	3,842,499
Low Country Contest Club .....	3,234,334
Delaware Amateur Radio Assn .....	2,606,347
Spokane DX Association .....	2,087,073
Texas DX Society .....	1,709,275
Utah DX Assn .....	1,631,803
South Florida DX Assn .....	1,519,213
Southwest Ohio DX Assn .....	1,319,984
Southern California DX Club .....	969,673
Sterling ARC .....	965,792
NorthEast Wisconsin DX Assoc .....	887,004
Western New York DX Assn .....	803,725
Metro DX Club .....	725,328
West Park Radiops .....	715,857
Salt City Dx Assn .....	551,454
Northern Arizona DX Assn .....	447,157
Northern Illinois DX Assn .....	349,975
Kentucky Contest Club .....	302,073
Alamance Amateur Radio Club .....	248,137
Eastern Iowa DX Assn .....	244,595
Magnolia DX Association .....	240,782
Bergen Amateur Radio Association .....	211,340
Mississippi Valley DX & Contest Club .....	198,912
Great South Bay ARC .....	194,579
Southeastern DX Club .....	194,293
Redmond Top Key Contest Club .....	175,856
ARROW Communications Assoc. Inc. ....	167,111
Tri-Town Radio Amateur Club .....	45,892

### DX

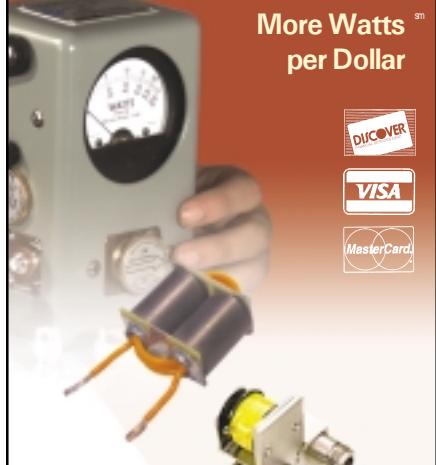
Bavarian Contest Club .....	258,978,970
Rhein Ruhr DX Association .....	228,914,196
Contest Club Finland .....	87,361,420
Contest Club Ontario .....	70,890,904
Yu Contest Club .....	52,025,083
Araucaria DX (PY) .....	51,829,933
LU Contest Group .....	50,292,163
Ural Contest Group (UA9) .....	49,726,580
Slovenia Contest Club .....	47,897,732
Croatian Contest Club .....	38,827,929
*World Wide Young Contesters .....	38,696,386
Black Sea Contest Club .....	37,872,164
Bosnia and Herzegovina Contest Club .....	37,851,018
HA DX Club(HA) .....	35,088,138
Caribbean Contesting Consortium(PJ) .....	33,812,996
Ukrainian Contest Club .....	28,506,942
Chiltern DX Club(G) .....	24,320,277
SP DX Club .....	22,813,202
VK Contest Club .....	21,425,649
Kaunas Univ. of Tech. Radio Club(LY) .....	19,129,766
LZ Contest Team .....	18,383,754
UA2 Contest Club .....	15,802,077
Kiev Contest Club .....	15,036,119
Central Arizona DX Association .....	14,011,476
British Columbia DX Club .....	13,040,452
South Ural Contest Club(UA9) .....	12,755,800
Latvian Contest Club .....	11,934,843
Lithuanian Contest Group .....	8,976,258
LA Contest Club .....	8,779,565
Central Siberia DX Club(UA0) .....	8,228,521
Bashkortostan Dx Club(UA9W) .....	7,870,773

\*Not a qualifying club

(Continued on page 100)



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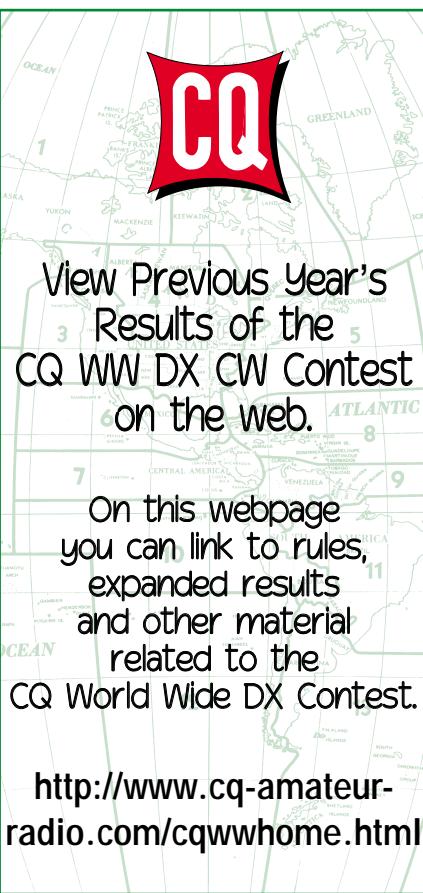
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**CQ**

View Previous Year's Results of the CQ WW DX CW Contest on the web.

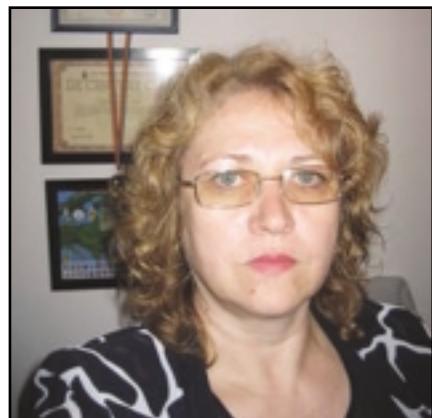
On this webpage you can link to rules, expanded results and other material related to the CQ World Wide DX Contest.

<http://www.cq-amateur-radio.com/cqwwhome.html>

## Results of the 2007 CQ WW DX CW Contest (from page 23)



John, OM5XX, was #2 All Band, Low Power in Europe.



Tina, YO3FRI, was the top Romanian All Band, Low Power.

the job once more. Half of all QSOs were from USA and half from EU. The farthest away was probably Lloyd, KH6LC, in Hawaii, but the closest one was my old friend Bjarni, TF3GB. Thanks for organizing this great event ... **TF3AM**. Slowly the reliability of the station grows up. Now we must find some more operators. Some more technical things to achieve before 2008 edition! Which station in the world can claim to eat rabbit civet, deer, wild pig, cow tongue, and drink 18 and 21 year-old Knockando? See you next year with less food and more multipliers! ... **TM4Q**. Had not planned on QRP but the main rig failed in early October and then 21 November the 706MKII became a door stop. All I have left is the IC-703 and a G5RV flat top at 60 feet and a lot of saltwater! Rather than "hunt & peck" I picked a freq. and would call until someone noticed me, then the fun begins! Difficult to manage QRM as the 703 only has one filter so it was a challenge. I often had to QSY when high power stations squeezed me out. Still I am thrilled with the QRP results! Yes, it does help to have a rare callsign too! I might run QRP next year too, except with the 746Pro's receiver! ... **V73NS**. Low power and a simple wire antenna. Is the glass half empty or half full? Is it "you pretty much work all you hear" or "you can't get no satisfaction"? Still undecided ... **VE3FDT**. Had to work on the roof and then lay new hardwood flooring the next day. Low score, nice floor! ... **VE3RCN**. I got a little more serious about this contest to improve on the last two years efforts. Friday evening and Saturday I used my FT-757GX I inherited earlier this fall. Sunday I used my IC-751A with the FL-53A narrow filter to get more serious. I still had a lot of fun. You don't have to have the latest rigs to have fun contesting. The QSK on that FT-757 blew me away in the contest. It's that nice. ... **VE7BGP**. A very fine contest where even the slow operator has a chance. Many DX ops gave me a QSO in slow speed. That was very fine of them ... **VU2LYX**. I am not a CW op. That is, I am not a CW competitor. Just ask the 30 stations who worked me. However, this may have been a baby step, thanks to Robby, VY2SS. Outside of a feeble effort in a RAC Winter contest, I have never entered a CW contest. We'll see where this goes ... **VY2LI**. Txn for contest QSOs! ... **YL1S**. Had a lot of fun in my first WW CW contest expedition! ... **YS/K9GY**. We had a lot of fun and in this Macedonian-German Contest Team. We Germans enjoyed it very much to be guests in Macedonia. The hospitality was overwhelming ...

**Z37M**. Grateful thanks to Les for the use of his QTH for the weekend. Very poor condx for the first 12 hours or so, then much improved, but deteriorated again towards the end. Never a dull moment!! As part of the ZL6QH gang we had to be there come hell or high water! ... **ZL2AGY**.

## USA QRM

Highlight was having XW1A call me at 1405Z on 15 meters the second day. Wasn't expecting that kind of opening the way conditions have been ... **AA1K**. Great band opening on 40 meters in early morning. Worked only a few hours but had a ball working DX all over the world ... **AF4Z**. No problems from Murphy here, just a problem with the alarm clock (the Murphy Bed)? Overslept two hours Sunday morning, missing a good part of the EU opening, an inexcusable lapse for an East Coast station. Fell short of last year's totals, and I could blame the difference in 15m propagation, but I probably would have matched last year but for the alarm clock ... **K2PS**. I entered mainly to complete the NAQCC November challenge, but after I finished, I was having so much fun I kept going. The sunspot minimum certainly made it rough compared to when I was making 500+ QSOs at the maximum. But I'm happy with my results with my QRP 5 watts and simple wire antennas. I enjoyed working CN2FB on 80m for a new band country and SV9CVY on 20m for another one. Also a thrill to work New Zealand on 40m thanks to ZM3A's good ears ... **K3WWP**. Conditions really difficult. Thunderstorms in area kept me off 160 and very few contacts on 80. 10 was almost dead and 15 not very good. Everybody was on 40 and 20 so they were pretty busy. We had rain all day Saturday and Sunday. If it was not for the contest I would have had everything unplugged and watched TV (ugh)... **K5EWJ**. Bands were better than expected, plenty of stations to work (other than on 10). 80 was great to Europe Friday night. Operated the whole contest remotely using my station located 80 miles away. Fortunately the network and control equipment cooperated this time. Worked HC8N, KH7X, and KH6LC on 6 bands ... **K6NR**. New antenna that didn't get fully installed, new software that I never used before, limited time to contest, reworked the shack the day before, and mixed band conditions made for an interesting contest. Missed the guy in Hanoi but worked my first Laos station with a few minutes left in the contest ... **K7DD**. Two men and a truckload of dipoles. Great fun! ... **K8DO**. Wish I had more time to operate. Nice 10 meter opening Sunday morning. Happy to get 100+ countries on 20. Zone 33 stations need to sign their calls more. Great expeditions: 3X5A, D2NX, CT9L, 5J0A, 5X1NH, D4C. Some of these folks can REALLY send code. What an art form! ... **K8GL**. Big thrill was working 102 countries on 80 from far NW Wisconsin ... **N0IJ**. This turned out to be a much better event than I had expected. In spite of zip sunspots and somewhat noisy bands, the DX just kept coming. It was great. My (in)famous WimpyWire antenna system was on its best behavior this weekend, allowing me to get around the bands quickly, looking for new stations. I even worked three Chinese stations. Wow, the first and only time I've worked China before was back in 1998. N6WG, The Little Station with Attitude ... **N6WG**. I only made a few QSOs during the contest but it was a great way to shake out the two Elecraft K1s I assembled this month! ... **NE1RD**. Money band was 20m with openings to all parts. 40m was mostly SA, AF, and Asia, little EU here. Fun to work EU, Caribbean, KH6, ZL, VK on 80m. Even got 3 JAs, CN2R, CN2FF, and Caribbean on 160m. Thanks to those who have great ears to hear my 100W and 65 ft vertical w/45 radials on the ground. Thanks to DXpeditions who put many countries on in AF, SA, and Asia! ... **W0ETT**. This was the first CW contest I didn't touch the key in. Very strange feeling for a CW op ... **W6XI**. No Spots, No Problem, No 10 Meters, No Kidding. It'll all be better next year! ... **W7AT**. Search and Pounce from Arizona Ranch using 100W always presents a challenge to both new and old members of the contest. Conditions this year were as good as they can get. ... **W7RH**. All-time record for us. Had a very good time ... **W9NGA**. With fair conditions few Europeans were heard except for 20 meters, but there were big local problems: (1) Very strong power line noise to the NE, (2) Remote relay box failed, so we ran 250 ft. of coax at night for the 40 meter antenna, (3) Bad QRM from close-by 50 KW BC station really hurt 160 meters, (4) Ten minutes in the local RF packet node transmitter failed ... **WA7LT**.

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

## 2007 CW RESULTS

### SINGLE OPERATOR

#### NORTH AMERICA

##### UNITED STATES

K5ZD/1 A 6,399,360 3455 138 522

K1LZ \* 5,093,565 3027 132 513

K1DG \* 5,001,120 3039 129 475

W1KM \* 4,433,030 2775 125 456

K1Z2 \* 3,112,416 1,837 97 479

WC1M \* 3,077,464 2245 111 397

W1WEF \* 2,828,700 2016 112 413

W1FJ \* 1,627,444 1307 102 374

W1GO \* 1,075,355 956 100 379

K1JB \* 891,808 720 96 358

W1EBI \* 822,908 776 96 313

K1RM \* 605,664 958 87 237

K2K0/1 \* 735,013 627 95 354

K2CM/1 \* 694,683 660 72 225

K1BW \* 496,341 714 70 209

K1VW \* 404,544 509 67 227

W1HIS \* 396,644 524 85 238

W1UK \* 294,930 344 77 262

W1BYH \* 252,120 311 86 244

NS1L \* 176,200 296 75 84

W5WMMU/1 \* 111,910 299 36 19

K1KU \* 102,789 209 60 177

W3IZ/1 \* 61,202 164 40 102

N1JW \* 45,500 146 37 93

K1SND \* 37,647 144 39 102

W1VRC \* 32,258 105 42 85

K1B1OD0 \* 31,320 131 39 69

K1M \* 26,409 753 29 104

W1XX \* 149,688 475 30 102

W1MK 3,5 426,313 1156 30 109

K3FPI/1 \* 78,369 483 21 76

K1KV \* 1.8 117,165 501 21 86

\*K1BX A 2,056,800 1547 109 371

\*KS1J \* 1,175,853 1091 88 311

\*W1UQ \* 949,062 846 97 334

\*W2JU/1 \* 670,712 616 99 314

\*K1B \* 607,695 729 75 244

\*K1HT \* 491,980 545 87 253

\*KB1T \* 402,458 493 84 239

\*AB1FY \* 365,574 457 76 243

\*W1DC \* 342,550 450 75 235

\*K1ZE \* 315,892 383 73 229

\*AK1O \* 296,390 413 65 212

\*W1ECH \* 242,946 369 76 221

\*W1VB \* 213,153 353 53 174

\*K1JE/1 \* 206,448 322 72 187

\*K1RO \* 191,505 296 68 187

\*AE1T \* 175,824 310 50 166

\*AB1J \* 158,207 266 58 175

\*K1VSJ \* 121,397 234 54 139

\*W2QO/1 \* 50,786 152 38 96

\*W1HI \* 48,510 195 19 80

\*K1GP/L \* 19,097 207 42 71

\*K1OO \* 17,876 95 38 71

\*W1HBR \* 15,224 242 42 131

\*WB1FLA \* 11,610 88 32 54

\*W10HM \* 10,792 75 22 49

\*K1KNU \* 9,440 64 16 43

\*K1HTJ \* 9,348 54 25 51

\*K1EP \* 8,540 56 29 41

\*AA1M \* 3,600 36 12 27

\*KM1Z \* 2,989 76 26 35

\*K1V1MG \* 588 14 9 12

\*K1KAV \* 416 10 6 10

\*N1JO \* 84 10 4 3

\*N1NK 21 63,547 220 22 87

\*W1MU 14 446,090 1026 32 123

\*K1EH \* 57,327 219 18 79

\*W1NK 3,5 11,610 85 14 40

N2LT A 3,538,836 2112 134 470

W2RU \* 2,262,904 1805 111 365

K2NV \* 1,547,658 1114 117 402

W2LC \* 1,057,137 1010 96 323

K2FU \* 873,016 782 98 326

N2GC \* 723,788 668 95 308

W2XL \* 357,840 485 71 213

WA2YVA \* 272,734 397 61 192

KW2J \* 240,300 342 73 194

W2TB \* 203,346 330 50 187

AB2E \* 188,955 298 69 186

KM2L \* 157,178 299 54 152

WA2YSJ \* 142,480 271 60 148

W2FUI \* 98,032 202 52 124

WV2DX \* 85,617 201 59 130

KC2NB \* 85,084 222 50 128

W2YJ \* 69,388 179 50 116

N2EEB \* 62,235 235 52 125

N2CG \* 61,560 147 52 119

NG2P \* 49,491 142 37 104

K3MSB \* 380,160 127 30 76

N2VM \* 581,132 711 80 247

K2RET \* 546,060 713 66 219

N2RJ \* 423,964 519 82 250

K3IE \* 386,880 487 72 238

W2AEMF \* 308,160 383 84 237

WB2JEP \* 1,798 34 11 20

N2KZJ \* 440 24 10 12

N3RJ \* 21,440 105 30 70

N2UM \* 19,100 105 30 70

N2RJ \* 10,530 54 29 49

N2ZBP \* 9,375 70 26 49

WA2EMF \* 9,216 62 20 44

K3PU \* 169,604 348 54 164

W200/4 \* 393,928 498 78 250

W2KZK \* 82,212 209 56 130

N2KZT \* 66,255 207 45 119

W2R 28 4,144 50 11 26

W3FVT \* 64,064 173 44 99

NY3A \* 2,363,816 1971 100 342

N3JT/4 \* 863,702 841 93 289

N4AJF \* 830,552 882 93 301

W4R0 \* 216,056 354 58 181

N4ARL \* 210,058 361 68 186

N4ARO \* 209,560 344 64 196

W4NBS \* 339,160 405 80 225

N4MM \* 156,275 369 52 123

K4ARM \* 501,208 522 82 262

W4W0 \* 155,742 332 56 146

W4W0 \* 178,000 373 66 152

N4AR \* 147,288 273 67 161

K7CS4 \* 143,068 296 48 140

K4DJ \* 495,625 593 80 245

W4NO \* 150,308 302 60 152

<div data-bbox="214 1603

*WW6D		41,745	140	49	72	*N8AA	A	985,886	842	103	348	*N1WQJ/O	*	23,391	153	40	73	V5CPU	A	14,820	102	28	48	*9G5XA	21	Ghana				
"	"	18,144	92	38	46	*WB8JUI	A	712,218	695	95	302	*NOBUJI	*	22,892	101	30	67	*V5SF	A	62,580	389	30	54	*9G5XA	21	492,282	1369	27	99	
K6CSL	"	16,109	113	37	52	*KV8O	"	500,094	569	82	261	*NOGOS	*	20,174	114	27	50	VE6EX	A	723,620	1880	73	121	*9G5ZZ	14	(OP: G3CXAO)				
K8NW6	"	15,604	103	37	46	*WB8COC	"	266,464	396	55	207	*WBZQ	*	19,040	84	44	68	VA6IK	*	137,104	340	55	121	*9G5ZZ	14	527,730	1369	31	116	
*W6UR	"	14,700	83	34	50	*WB8TUI	"	213,213	318	75	198	*NOBK	*	17,425	85	35	50	VE6EPK	*	14,833	116	26	43	*9G5ZS	7	(OP: DL1CW)				
K6CSL	"	13,175	115	37	48	*WB8IDM	"	121,574	254	52	130	*NB0Z	*	11,360	55	31	49	VE6JY	14	457,064	1395	35	117	VE6ZQH	7	11,316	129	20	49	
"	"	5,757	86	28	29	*K3XQ/8	"	102,024	257	35	121	*NA0BR	*	8,103	76	34	39	VE6FEB	A	70,358	255	58	69	VE6CNU	14	112,746	647	27	54	
N4AG	"	4,116	55	23	26	*NOAUG/8	"	101,990	262	69	166	*K1QJ	*	6,318	95	35	43	VE6WQ	7	125,337	486	31	92	Madagascar	5R8NL	A	522,111	831	66	171
K4AGDT	"	4,116	39,36	121	288	*WB8KX	"	97,214	176	60	164	*K0RY	*	5,040	70	37	48	VA7RN	*	124,244	307	66	112	Djibouti Islands	CT3NT	A	3,755,805	2927	110	355
K7RM	"	3,936	41	15	17	*K9VUS	"	85,500	100	59	121	*WA0IAF	*	2,436	21	17	25	VE6EPA	*	179,495	786	76	261	(OP: CTIBOH)	CT3AS	*	719,495	786	76	261
*N6DZS	"	3,648	41	15	17	*WB8EE	"	23,280	100	37	83	*K2HFI/0	*	1,188	109	51	10	*VE6CNU	14	32,336	139	19	75	Madeira Islands	CT3BD	7	21,024	123	15	58
*N6ERD	"	2,00	55	15	55	*WB8KU	"	23,723	39	108	108	*K0XTR	*	1,188	109	51	10	*VE6CNU	14	112,746	647	27	54	Mauritius	CT3KU	14	32,336	139	19	75
K6CU	14	19,241	114	24	47	*WB0KJWJ/8	"	78,480	222	53	127	*WB0BNX	*	792	17	10	14	*VE6BGT	A	141,108	471	39	93	Morocco	CN3A	A	8,353,488	5261	126	446
K7AA	A	1,839,328	1547	242	334	*K9AB	"	919M	50,736	137	54	*WY1OV	*	462	47	26	40	*VE6BGT	A	1,387,176	2904	38	130	(OP: IK2OEI)	CN2AW	14	1,387,176	2904	38	130
K7GK	"	1,437,057	1298	126	310	*WB8KRV	"	42,395	165	51	88	*WBOPC	21	1,275	20	9	16	*VE6BGT	A	1,590,288	3244	35	133	(OP: RV1AW)	CN2FB	3.5	1,590,288	3244	35	133
W2BVJN/7	"	1,427,819	1308	121	288	*WB8KTO	"	33,180	215	45	113	*K0PJ	3.5	20,746	133	20	62	*VE6BGT	A	320,292	676	80	137	(OP: VA7RR)	CN2FF	1.8	618,849	1599	26	107
K7RA	"	866,550	1012	107	220	*WB8KR	"	28,583	110	33	68	*WB8KU	*	90,630	245	62	109	*VE6BGT	A	311,805	742	61	144	(OP: AA3B)	CN2R	"	559,660	1568	26	98
K7ZA	"	390,544	507	98	210	*WB8EH	"	11,200	63	20	10	*WB8AS	*	14,088	465	61	112	*VE6BGT	A	8,353,488	5261	126	446	(OP: W5KDJ)	CN3A	A	8,353,488	5261	126	446
K7GH	"	389,354	540	94	209	*WB8AS	*	2,091	29	18	23	*WB8WV	*	14,088	465	61	112	*VE6BGT	A	1,387,176	2904	38	130	(OP: VE3EBN)	CN2AW	14	1,387,176	2904	38	130
N6TW7	"	309,636	466	98	184	*WB8NK	"	1,504	23	14	18	*WB8WV	*	124,244	307	66	112	*VE6BGT	A	1,590,288	3244	35	133	(OP: UA2FB)	CN2FB	3.5	1,590,288	3244	35	133
K7MM	"	308,700	521	79	166	*WB8NC	"	1089	85	11	8	*WB8WV	*	10,773	121	17	40	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2FF	1.8	618,849	1599	26	107
W7YS	"	292,400	426	85	187	*WB8CR	"	17,072	111	41	74	*WB8KIR	14	27,258	304	19	23	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2R	"	559,660	1568	26	98
K7GQ	"	233,761	332	82	187	*WB8KIR	14	54,648	210	23	76	*WB8KIR	14	30,690	1191	49	81	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN3A	A	8,353,488	5261	126	446
N6TR	"	220,332	429	80	164	*WB8AF	"	17,301	100	19	54	*WB8AF	*	17,848	112	43	49	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2AW	14	1,387,176	2904	38	130
K7EG	"	175,840	315	65	159	*WB8G	3.5	22,590	117	21	69	*WB8KBL	1.8	4,715	59	12	29	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2FB	3.5	1,590,288	3244	35	133
K7HC	"	161,766	314	81	177	*WB8KBL	1.8	4,715	59	12	29	*WB8KBL	*	6,080	167	11	9	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2FF	1.8	618,849	1599	26	107
N8GZ/7	"	161,508	350	99	159	*WB8KBL	*	11,200	63	20	10	*WB8KBL	*	10,773	121	17	40	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2R	"	559,660	1568	26	98
K7BN	"	150,520	295	73	139	*WB8WV	A	746,823	791	88	283	*WB8WV	*	1,298,935	3354	110	231	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN3A	A	8,353,488	5261	126	446
W6AEA/7	"	112,424	259	59	125	*WB8K9V	A	669,086	715	90	284	*WB8K9V	*	1,298,935	3354	110	231	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2AW	14	1,387,176	2904	38	130
K7NT	"	108,500	265	66	109	*WB8WV	*	545,650	651	92	258	*WB8WV	*	1,298,935	3354	110	231	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2FB	3.5	1,590,288	3244	35	133
N6MA/7	"	99,588	235	67	105	*WB8WV	*	281,391	371	98	213	*WB8WV	*	1,298,935	3354	110	231	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2FF	1.8	618,849	1599	26	107
W7SY	"	98,334	242	60	112	*WB8K9R	*	181,492	251	82	232	*WB8K9R	*	1,298,935	3354	110	231	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2R	"	559,660	1568	26	98
N6KW/7	"	98,280	229	59	109	*WB8WV	*	176,412	311	73	171	*WB8WV	*	1,298,935	3354	110	231	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN3A	A	8,353,488	5261	126	446
WA1PMA/7	"	90,804	201	61	127	*WB8WV	*	171,288	298	63	171	*WB8WV	*	1,298,935	3354	110	231	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2AW	14	1,387,176	2904	38	130
K57T	"	84,645	216	58	107	*WB8WV	*	145,728	233	79	174	*WB8WV	*	1,298,935	3354	110	231	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2FB	3.5	1,590,288	3244	35	133
K7PG	"	84,409	220	59	122	*WB8WV	*	122,728	248	50	134	*WB8WV	*	1,298,935	3354	110	231	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2FF	1.8	618,849	1599	26	107
W7II/T	"	76,916	212	46	88	*WB8WV	*	66,216	228	62	124	*WB8WV	*	1,298,935	3354	110	231	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2R	"	559,660	1568	26	98
W7/DL1UF	"	37,908	111	65	91	*WB8K9U	*	62,155	155	56	99	*WB8K9U	*	1,298,935	3354	110	231	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN3A	A	8,353,488	5261	126	446
W7/XA	"	26,069	106	44	85	*WB8K9U	*	17,792	242	47	71	*WB8K9U	*	1,298,935	3354	110	231	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2AW	14	1,387,176	2904	38	130
W7/TMT	"	68,292	220	48	78	*WB8K9U	*	17,458	238	81	138	*WB8K9U	*	1,298,935	3354	110	231	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2FB	3.5	1,590,288	3244	35	133
NW7E	"	58,984	195	52	94	*WB8K9U	*	13,112	67	35	53	*WB8K9U	*	1,298,935	3354	110	231	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2FF	1.8	618,849	1599	26	107
W7ON	"	55,083	188	53	76	*WB8K9U	*	12,556	65	32	54	*WB8K9U	*	1,298,935	3354	110	231	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2R	"	559,660	1568	26	98
W7ODM	"	51,408	165	43	93	*WB8K9U	*	12,525	64	33	55	*WB8K9U	*	1,298,935	3354	110	231	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN3A	A	8,353,488	5261	126	446
K7GS	"	46,990	181	41	85	*WB8K9U	*	10,204	34	12	85	*WB8K9U	*	1,298,935	3354	110	231	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2AW	14	1,387,176	2904	38	130
K6UM7/	"	38,808	149	36	62	*WB8K9U	*	6,324	53	28	40	*WB8K9U	*	1,298,935	3354	110	231	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2FB	3.5	1,590,288	3244	35	133
N7WS	"	35,340	115	43	71	*WB8K9U	*	6,164	56	35	131	*WB8K9U	*	1,298,935	3354	110	231	*VE6BGT	A	1,387,176	2904	38	130	(OP: AA3B)	CN2FF	1.8	618,849	1599	26	107
*WA0WW7/	"	30,015	150	43	72	*WB8K9U	*	6,104	48	18	38	*WB8K9U	*	1,298,935	3354	110	231	*VE6BGT	A	1,387,176										

*UA9QOL	*	90,270	255	44	126	4L6X	*	984,786	1449	62	196	JN2AMD	"	686,350	1262	99	160	*JR0EQQ	21	27,468	156	28	56	OESLH	*	60,588	294	41	121							
*UA9TZ	*	69,760	199	42	118	*4L2M	3.5	169,400	769	17	71	J2A2H0	"	95,274	229	71	87	*JF0VMJ	*	6	1	1	1	O3GSA	7	265,350	1171	32	118							
*RV9CO	*	55,085	193	28	87							J02SLZ	"	4,343	45	20	23	*JH0EPI	14	124,320	434	32	79	*O5CWL	A	658,740	1669	73	224							
*RK9XX	*	53,613	258	28	83							JF2FIU	7	288	9	8	8	*JA0IOI	*	12,540	103	21	34	*OE1TKW	*	56,400	216	37	113							
*UR9AZ	*	45,344	164	31	78	*VR2/AA1ON	A	466,336	1241	85	151	*JA2XB	A	541,994	718	113	210	*JH0XUP	*	5,040	65	15	21	*O8CCQ	*	19,412	151	22	70							
*UA9FEG	*	31,862	165	25	64	*VR2ZUY	*	2,142	33	15	19	*JA2HNP	"	530,178	716	107	212	*JH0VNX	7	14,210	102	20	38	*OE6MD	7	109,652	358	33	125							
*RA9SN	*	29,900	188	27	88							*JA2KVB	"	406,252	563	98	210	*JA0GEY	*	4,255	51	17	20	*OE2UKL	*	55,224	337	23	81							
*RV9UB	*	26,335	143	47	68							*JA2VZL	"	128,432	302	77	107	*JA0NFP	*	2,356	41	14	17	*OE3BCA	1.8	64,200	865	12	63							
*UA9KB	*	25,024	109	33	59	*VU2PTT	A	486,673	671	75	218	*JA2KKA	"	68,572	221	49	75	*JA0DOW	*	2,130	32	13	17													
*UA9OV	*	22,265	122	24	49	*VU2JOS	*	4,232	92	20	26	*JA2OPV	"	48,190	179	50	72	*JH0BNB	3.5	3,564	67	21	33													
*RU9BS	*	14,520	159	33	77	*VU3DJQ	21	8,619	99	14	37	*JA2KPW	"	41,360	158	45	65																			
*RA9SAS	*	3,293	51	15	22	*VU2NIS	14	418	18	9	13	*JO2EH	"	20,740	101	36	49																			
*UA9UX	*	16	2	2	2							*JH2XTV	"	5,724	48	24	30																			
*RV9RA	21	46,240	234	19	66							*JA2KY	"	5,376	49	21	27																			
*RV9YK	*	26,670	156	18	52	4Z5TA	A	1,576,155	1701	87	270	*JH2MYN	28	770	19	9	13																			
*UA9QO	*	20,650	145	12	47	*4Z5QO	7	35,630	216	14	56	*JH2PLX	14	63,388	276	26	66	UP0L	A	5,614,400	3995	126	424													
*UA9OMT	*	3,663	52	10	23							*JL2TPX	14	6,688	77	16	22																			
*RV9DX	14	269,568	843	32	112	JF1PK	A	1,146,915	1460	111	220	*J2DUC	"	3,901	43	20	27																			
*RV9JR	*	107,217	458	23	76	JK10PL	A	1,025,060	961	129	299	*JA2PFO	7	11,700	100	21	31																			
*RA9JG	*	73,744	355	19	69	JH1FSF	*	237,468	390	89	168																									
*RV9UY	*	61,659	321	21	72	JA1AYO	*	186,780	403	86	134	*JF2WXS	3.5	9,798	98	22	47																			
*RV9WS	*	23,166	144	14	52	J1EV	*	170,820	354	71	124																									
*RA9AFZ	*	22,857	162	12	45	JA1QOW	*	167,409	378	67	104																									
*RZ9HK	*	22,572	197	18	48	JA1HP	*	152,588	372	57	116																									
*RA9YQA	*	8,788	90	15	37	JR1LEV	*	125,650	319	65	110																									
*RA9SKL	*	5,653	88	8	27	JN1WFF	*	68,976	194	60	84																									
*RK9AX	7	158,873	520	28	93	J71ABD	*	38,170	153	50	60																									
*RK9AJZ	*	146,048	528	28	84	JN1ROV	*	21,917	85	42	59																									
*RV9QA	3.5	40,238	257	12	47	JF1NZW	*	13,237	83	26	35																									
*RV9YZ	1.8	14,688	171	11	37	7N4KDU	*	12,716	72	26	42																									
*UA9OS	*	352	23	7	9	JH1NUX	*	7,590	54	29	37																									
RW0LT	A	1,018,920	1210	131	289	JF1FWY	*	6,533	89	24	13																									
RV0AL	*	768,339	1003	84	267	JF1SO	14	509,878	1308	35	114																									
UA0YY	*	601,082	799	97	261	J1S10Y	*	205,436	724	32	84																									
UA0FAI	*	523,120	119	99	161	JK1ILY	*	4,430	50	10	25																									
UA0AZ	*	48,074	750	85	238	JH1RFM	7	73,476	312	33	84																									
RK0UT	*	249,912	569	80	154	JH10GC	3.5	231,733	875	31	92																									
UA0ACG	*	223,608	578	78	153	JK1LEE	*	12,264	104	19	37																									
UA0FDX	*	191,678	443	81	158	JAK1KV	1.8	3,200	58	13	19																									
UA0ZAM	*	171,661	756	60	77	J1N1QX	A	804,678	1018	108	214																									
UA0SC	*	141,542	433	60	121	JH1RN1	*	42,960	639	94	180																									
UA0YM	*	89,676	321	50	109	JF1NH	*	419,265	802	84	147																									
RA0QC	*	65,280	507	31	65	JP1JFG	*	397,540	574	93	193																									
UA0WL	*	11,390	103	26	41	JP1QDH	*	328,985	594	80	163																									
UA0CW	*	3,354	32	16	27	JG1TVK	*	193,351	332	84	155																									
RA0AA	21	84,780	393	23	67	JA1JOY	*	151,424	354	35	116																									
*RA0AQL	A	346,500	561	69	183	J1APJS	*	70,756	233	54	79																									
*UA0SDX	*	252,948	549	67	167	J1AFRQ	*	64,400	200	73	120																									
*UA0AKY	*	198,848	484	66	142	JH1HTXG	*	59,682	202	61	86																									
*UA0CNX	*	198,300	897	37	94	JH1MTR	*	31,779	132	46	61																									
*UA0SJ	*	1,008	29	8	13	JM1KNI	*	30,960	152	41	49																									
*RN0SS	*	25,155	104	36	81	J1HNGU	*	11,363	112	39	44																									
*RZ0CQ	*	18,662	99	37	94	JH1MTR	*	12,426	85	26	31																									
*UA0JS	*	1,008	29	8	13	J1ATA1	*	10,150	84	26	32																									
*RN0IM	21	8,478	73	18	36	JH1MVK	*	8,990	62	29	33																									
*UA0JM	14	4,747	21	15	31	JH1WQX																														

9A1A	A	5,765,256	4291	159	597	OZ8SW	*	229,472	453	63	221	U6H0	*	14,480	111	20	60	*RUSPU	*	33,522	134	46	105	OH5JTI	*	70,525	412	38	117
9A5MT	"	28	14,508	161	18	OZ6EI	*	36,176	298	25	94	RW3MA	*	13,416	116	46	83	*UA6FW	*	32,144	199	29	83	OH2BBT	*	56,457	291	37	116
9A4D	21	351,354	954	37	149	(OP: 9A7DX)	*	30,160	139	35	81	RX4HX	*	12,816	107	19	70	*RUSBU	*	31,414	237	39	104	OH8VQ	*	49,920	252	36	124
9A5D	"	305,322	1199	34	117	OZ4O	1.8	10,878	133	15	54	RW4PK	*	12,075	90	28	77	*UA3UBT	*	30,012	209	30	93	OF4NSG	*	44,958	190	41	136
9A2VR	3.5	174,624	1257	20	70	OZ4DU	*	11,872	177	7	49	RK6HG	*	9,120	76	20	40	*UA4PAY	*	27,081	139	49	105	(OP: OH3WS)	*	36,559	253	28	89
9A4W	1.8	95,914	906	17	74	OZ5A	*	127,926	468	47	160	RN1CC	*	4,136	38	17	30	*RVSOG	*	25,676	102	45	86	OH6FMA	*	38,086	280	35	104
*9A3SM	A	224,664	508	71	225	OZ5A	*	31,365	161	32	91	RA3TT	*	1,316	34	20	27	*RA6XW	*	21,336	101	40	87	OH3HS	*	33,462	158	37	132
*9A2EY	"	176,176	485	58	184	OZ4RT	*	16,008	84	34	58	RC4Q	21	199,375	855	30	115	(OP: UA4RC)	*	20,564	129	34	72	OH2L0	*	26,718	117	38	108
*9A2TN	"	174,432	389	63	174	OZ4FF	*	15,120	120	21	59	UA6AY	*	71,775	296	31	114	*RD3QG	*	18,142	131	27	67	OH7YN	*	23,507	125	22	62
*9A5NB	"	142,044	334	57	171	OZ1DGQ	*	2,294	34	13	24	RAGAFB	*	13,050	97	19	56	*RK3FM	*	16,463	109	39	62	OH6KW	*	44,616	127	22	65
*9A6C	"	106,774	469	50	147	OZ1JFK	*	840	16	9	12	UA4LCH	14	389,662	1203	36	146	RN3RDY	*	13,832	73	34	42	OH2W	14	112,336	655	27	85
*9A2BW	"	83,936	346	42	130	OZ4PRT	*	1,116	30	8	23	UA6LFO	*	17,085	829	31	96	*UA6JFG	*	12,879	115	19	62	(OP: OH5YU)	*	37,488	241	32	110
*9A2OU	"	10,309	21	20	40	OZ7RQ	7	112,200	673	28	108	RA3EDQ	*	264,106	911	35	131	*RA6FUZ	*	13,248	158	15	54	OH2FS	*	11,954	74	20	66
*9A5YY	"	1,092	30	6	7	OZ4A	*	1,116	30	8	23	RW6CF	*	199,512	875	35	128	*RA1WU	*	12,212	59	31	55	OH2BPA	3.5	14,573	200	9	50
*9A3VM	28	7,440	181	10	30	OZ7TTT	3.5	25,970	339	13	57	RZ3GU	*	15,180	166	15	51	*RX3VF	*	9,960	106	18	65	OH5UFO	1.8	18,270	205	12	58
*9A2DI	"	1,035	22	8	15	OZ43B	14	474,320	1407	39	137	(OP: 9A1AA)	*	1,316	34	20	27	*UA3YAA	*	8,343	54	32	49	OH5ZB	*	5,250	129	6	36
*9A6M	3.5	181,170	1075	24	98	M6T	A	4,122,914	4273	136	421	England	*	132,348	725	26	97	*RA3YAO	*	9,240	147	12	48	OH8VJ	*	5,050	100	11	42
*9A4C	"	180,264	1472	25	86	G4BJM	*	944,234	1650	80	266	UA3MF	*	123,808	892	24	82	*UA3AMZ	*	5,162	77	14	44	TM6X	A	3,951,600	3370	132	468
*9A3TU	"	11,102	115	11	50	G3RXP	*	826,551	1490	75	288	(OP: 9A3FT)	*	89,082	643	24	77	*UL6PY	*	4,888	42	19	28	F8BPN	*	1,198,560	1677	100	354
*9A5BB	1.8	1,792	61	5	27	G4FAL	*	568,848	1243	67	269	UA6FA	*	80,454	714	23	83	*RA6MO	*	4,725	40	26	37	F5BBB	*	614,131	962	94	319
Czech Republic						G3ZGC	*	270,600	692	57	207	RW4PL	3.5	290,700	1281	30	120	*RA3XME	*	4,466	58	19	42	TM6X	A	3,951,600	3370	132	468
OL1M	A	1,096,146	2650	79	239	G4SGI	*	254,184	788	58	209	R3AWA	1.8	87,414	631	21	81	*RA3XEM	*	3,894	49	18	41	F8BPN	*	1,198,560	1677	100	354
OK1AOV	"	63,174	771	104	355	G4FWF	*	251,199	520	60	187	RA4PU	*	84,096	567	21	75	*RA6ALU	*	3,024	33	25	29	F5BBB	*	440,565	974	97	266
OK1AYY	"	595,289	1279	70	253	G4FVJ	*	224,112	529	60	172	UA4RZ	*	41,496	362	16	68	*UA3OG	*	2,448	26	13	21	TM6X	A	3,951,600	3370	132	468
OL4M	"	589,600	1194	75	260	G4HZV	*	198,654	442	55	171	RV3BO	*	14,052	324	9	54	*RA3XGM	*	2,135	24	14	21	F8BPN	*	1,198,560	1677	100	354
OK2ABU	"	543,504	1003	79	259	G4AMT	*	185,840	496	51	151	RA4YW	*	4,896	130	8	28	*RA4KPC	*	1,677	29	14	25	F5BBB	*	326,472	900	51	132
OL6W	"	470,020	851	74	257	(OP: OK2FB)	*	63,638	621	52	170	RK3KAH	*	15,946	214	11	56	*RA3DSW	*	1,551	32	9	24	TM6X	A	3,951,600	3370	132	468
OK2BZ	"	460,944	625	94	294	G4BNR	*	139,384	342	64	198	RV3OX	*	149,740	1251	99	323	*RA6UX	*	1,548	29	16	27	F8DWD	*	100,38	86	86	86
OK5XX	"	288,260	776	59	231	MOAJT	*	126,492	497	37	129	RN6FA	*	66,910	1154	87	305	*RA4ALU	*	1,547	29	16	27	F8CIL	14	191,084	852	27	97
OK1EP	"	286,885	544	54	167	G4MKP	*	100,464	524	35	133	RZ6BU	*	64,330	982	86	304	*RA3SKV	*	1,147	34	9	22	E5IQY	7	20,995	151	18	67
OK1FRO	"	218,900	835	38	161	G4IUF	21	34,560	218	22	74	RZ3OZ	*	531,200	1113	92	323	*RA1OKI	*	616	14	8	14	TM6X	3.5	598,884	236	32	111
OK1AXB	"	170,225	576	67	208	G4TFK	14	624,024	1937	36	126	RV3LO	*	517,244	926	79	298	*UA3OB	*	598	19	9	17	F6CWA	1.8	53,289	424	16	77
OK1KMT	"	72,488	202	42	122	G4GRU	*	303,017	1106	33	110	UA4FRL	*	445,440	785	89	295	*RA3RJ	*	418	12	7	12	F6HKA	A	1,717,242	1846	111	392
OK2FKF	"	38,664	258	30	78	G4ERW	*	109,964	703	18	56	RU3UN	*	428,644	563	85	319	*RA4WNO	*	54	5	4	5	F6FTB	*	913,856	1217	88	348
OK5CM	"	1,100,486	2829	38	155	(OP: OK1RKF)	*	91,233	657	21	72	RX3ZK	*	395,270	843	73	217	*UA3RN	28	42	3	3	F6DDR	*	493,479	753	98	343	
OK5MM	"	76,250	471	25	100	G4KPK	*	356,680	737	65	231	UA1CEC	*	359,119	1126	55	232	*RA6YVJ	21	104,412	406	32	122	(OP: F8CVR)	*	384,272	906	60	232
OK1DIB	"	70,912	356	25	103	G4VWGE	*	262,890	739	50	204	UA4ALU	*	264,404	701	64	220	*RA4RJ	*	87,468	334	33	115	F6DXY	*	284,560	227	35	84
OK2BWW	3.5	466,439	1889	34	117	G4EAK	*	252,992	745	47	189	RK3DM	*	357,390	645	83	247	*RA3AUN	*	68,901	334	27	92	F6DYZ	*	264,496	735	94	190
OK1XC	"	112,424	879	22	84	G4EAK	*	230,048	788	46	178	RK3DM	*	310,464	714	83	247	*RA3AUN	*	17,344	226	38	85	F6FBB	*	216,664	796	46	166
OK1XZP	"	65,721	867	68	235	G4JLR	*	34,463	229	32	111	RK3DM	*	203,072	505	92	232	*RA4HCA	*	30,286	376	26	87	F6FNA	*	18,755	135	37	84
OK1KNE	1.8	18,483	285	8	53	G4DXD	*	92,612	332	41	128	RK3DM	*	243,726	601	70	224	*RA4PB	*	63,280	302	26	86	F6RQO	*	5,880	110	36	62
OK1DML	"	1,448	348	41	147	G4K3M	3.5	40,743	338	12	69	RW6CM	*	209,911	644	46	195	RZ3OZ	*	4,851	139	10	39	F5VQJ	28	330	18	5	10
OK1DQJ	"	93,436	377	41	147	G3WPH	*	37,961	417	14	63	RK3DM	*	170,255	661	66	160	RN3ZD	*	15,900	223	16	53	F5GGL	*	5,720	71	17	48
OK2BV	"	87,990	453	36	134	G3VYI	*	6,360	120	8	45	RW6HP	*	159,536	482	59	177	*RA3RJ	*	28,875	142	16	47	F6DR	*	4,050	59	28	47
OK2BND	"	78,183	355	38	115	G3VYI	*	154,677	1994	110	392	RW6HP	*	154,612	227	30	115	*RA3RJ	*	25,515	221	20	61	F6DRE	*	29,155	180	29	90
OK2SAR	"	76,720	205	44	93	G3VYI	*	154,677	1994	110	392	RW6HP	*	190,080	486	57	207	*RA3RJ	*	28,560	227	30	115	F6DYZ	*	28,560	227	30</	

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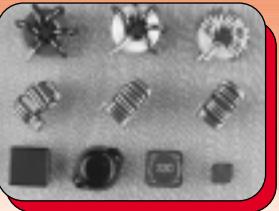
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DK9IP	7	552,231	1862	37	144	+DL1KUR	95,472	279	54	154	+DL1TPY	22,000	280	17	83	+DL9LM	106,821	500	27	90	+H8BTP	152,856	621	30	102							
DL7JK	•	248,788	1009	17	6	+DL9ABM	94,760	228	54	130	+DL7BD	17,135	227	37	78	+DL2DXA	91,770	370	29	86	+HG8C	129,903	403	34	125							
DL7LA	•	170,166	745	33	125	+DL8NBJ	94,668	390	36	160	+DC8HF	21,588	169	20	64	+DL4YR	58,962	324	22	71	+H8EAK	(OP: H8EAK)										
DL0MFS	•	14,952	91	23	66	+DL8DX	91,739	225	56	143	+DL3DY	20,972	169	29	78	+DF7EM	43,055	374	18	61	+H7MW	72,471	322	29	90							
DL2AMD	3.5	100	6	6	(OP: DJ6TK)	+DJ3XA	90,922	418	31	138	+DL5HP	19,560	186	24	96	+DL2MH	2,030	41	10	25	+H8TMW	65,400	327	25	84							
DL9MDR	1.8	169,740	1142	6	6	+DL2AM	90,753	350	43	136	+DL2JR	19,332	163	25	83	+DL2HO	7	11,600	546	23	+H3MU	119,328	660	26	106							
DL2FC	•	50,572	403	19	75	+DL0WD	88,871	428	33	148	+DL6RK	19,102	135	72	72	+DL2XZ	61,000	391	23	102	+H8KW	135,707	1206	26	101							
DL6OZ	•	27,193	314	10	67	+DL0IH	88,164	440	33	153	+DUNT	18,656	234	24	64	+DF9CY	14,238	179	12	51	+HG8Y	1.8	418	22	4							
DM3ML	•	11,584	185	10	64	+DL4SL	85,262	326	43	135	+DF6FC	18,480	189	18	66	+DDGCG	7,424	173	13	45	(OP: HA1CW)											
*DC4A	A	1,563,588	1712	112	402	+DL4KUG	86,317	341	51	158	+DF6FC	18,288	108	28	44	+DF7GG	3.5	67,990	603	15	+H4T	119,328	660	26	106							
*DD5M	•	1,146,680	1645	96	340	+DF5AN	83,130	355	33	130	+DL1HF	18,126	95	39	67	+DL9UDS	44,455	436	16	69	ITU HQ Geneva											
*DL1NKS	•	793,950	1359	78	317	+DF6NAO	79,860	363	38	127	+DL1THB	17,407	101	32	71	+DL6WN	43,725	505	12	63	4U1ITU	A	702,506	1716	70	208						
*DL9GFB	•	777,308	1064	101	375	+DR0R	78,126	300	43	131	+DL2FK	17,143	134	24	55	+DK3UA	1.8	26,496	309	11	+H3MU	119,328	660	26	106							
*DK5DQ	•	776,566	1233	85	288	(OP: DJ5BW)	76,800	337	49	143	+DL8UFO	16,415	97	25	42	+DL2RUG	7,171	563	113	7	+H8KW	135,707	1206	26	101							
*DL5RMH	•	755,438	1241	84	305	+DF1SZ	76,500	325	41	139	+DL6DU	16,366	150	19	79	+DK3AX	2,952	73	7	34	Iceland											
*DL5KUD	•	616,911	985	86	323	+DF6WE	71,424	391	39	147	+DL3MM	16,275	74	41	64	+TF3AM	A	9,964	108	15	32											
*DL6LJ	•	474,175	983	69	256	+DR3HB	69,960	331	36	129	+DL1RLB	16,019	193	15	68	+TF3CW	A	1,728	46	10	26											
*DL7UMK	•	468,350	1043	66	257	+DK3WJ	68,572	210	45	113	+DK2ZO	16,297	103	20	57	+Gibraltar	ZB2X	3.5	683,240	2680	34	121	(OP: OH2KK)									
*DL4FN	•	464,877	957	66	263	+DL1TS	67,470	238	43	152	+DL1AWM	16,228	90	34	58	+Greece	SV1ENG	A	1,033,708	1914	87	299										
*DL1SAN	•	381,780	834	71	244	+DM2RN	62,790	323	39	122	+DL8UAT	16,282	56	33	56	+EI2JD	A	673,752	1262	86	333											
*DL4TJ	•	367,352	662	88	288	+DL5KM	61,608	249	37	114	+DK5EZ	16,019	193	15	68	+EI4CF	21	53,820	310	26	89											
*DL3AX	•	352,275	856	57	218	+DH8MS	60,882	275	29	110	+DL4YGW	15,228	112	30	64	+EI2CN	1.8	41,925	502	11	54											
*DL8CKL	•	349,700	695	75	250	+DL7FA	60,830	304	38	120	+DL7VRG	15,093	90	23	42	+EI1WGN	A	782,236	1547	60	247											
*DL7DZ	•	348,986	693	72	247	+DL5ZB	60,802	157	61	141	+DL2AL	15,206	115	31	50	+EI7CC		302,498	641	61	226											
*DL5ARM	•	342,790	828	66	227	+DL9CW	59,262	220	46	120	+DL3JRA	15,960	83	17	35	+EI4HO		80,910	459	32	142											
*DL3FKV	•	334,480	648	87	283	+DL7UXG	57,933	248	40	117	+DA3T	15,928	90	24	62	+EI5DI		32,072	189	24	52											
*DL1TEF	•	315,153	697	69	229	+DL6YRM	55,257	194	50	113	+DH5NT	15,920	117	18	64	+SV3RF	A	126,300	905	21	79	Isle of Man										
*DL8UV	•	312,244	767	63	248	+DL1SBF	54,300	242	35	115	+DG0ETE	15,876	105	17	56	+SV1GRD	A	9,480	158	10	50	MD0CCE	A	1,792,912	2362	95	393					
*DH9JL	•	303,072	633	68	211	+DP2PH	53,676	271	30	112	+DL9GMC	15,728	104	19	53	+SV3KY		23,229	186	23	64	+MDL3KWF	A	36,934	236	27	91					
*DL1NUX	•	294,656	695	56	200	+DT7EC	52,403	229	35	104	+DOK9T	15,693	106	17	60	+SV1BWJ	14	217,494	1122	30	99	+MDL3KWR	A	25,704	225	28	108					
*DF1HE	•	289,608	809	49	215	+DL2DW	49,335	195	40	103	+D6XV	15,685	75	29	60	+SV2BLF	7	40,500	439	16	65	+SV1MF										
*DL3BRA	•	277,560	694	55	215	+DL5MO	48,216	188	30	138	+DL5KMS	15,600	65	22	48	+SV1MF		11,900	122	14	54	+SV2BH0	1.8	20,196	304	8	58	Italy				
*DL2NBY	•	261,280	736	58	180	+DL7HWI	47,838	226	31	103	+DL1C1	15,556	94	19	49	+SV1MF		1,020,996	2527	62	175	+SV1MF										
*DL5JRA	•	253,232	621	61	205	+DL2HWI	45,560	162	42	92	+DL1DXL	15,494	43	20	29	+GU4YOK	3.5	135,729	950	20	79	+GU0FAL	A	436,455	1044	52	213	Guernsey				
*DF3OL	•	224,624	401	72	206	+DN6JNH	44,880	150	47	123	+DF5BM	15,471	65	15	38	+H4TULH	"	267,650	886	55	147	+H8BTP										
*DL1VJL	•	222,991	425	65	168	+DL5KUR	43,778	164	38	80	+DL2EF	15,418	94	13	41	+H8BTP		1,792,912	2362	95	393	+H8BTP										
*DF1MM	•	217,118	518	67	211	+DL3KVR	43,011	144	55	122	+DL5LWM	15,390	68	16	41	+H8BTP		1,792,912	2362	95	393	+H8BTP										
*DL4HWI	•	207,788	445	62	225	+DL1KSE	41,480	427	28	108	+DH1OK	15,340	53	16	36	+H8BTP		1,792,912	2362	95	393	+H8BTP										
*DL3ZAI	•	205,155	557	48	187	+DL1DOW	40,500	186	47	115	+DK0SU	15,312	65	11	41	+H8BTP		1,792,912	2362	95	393	+H8BTP										
*DL2HWB	•	190,518	523	48	178	+DL6NDK	39,345	144	36	93	(OP: DF7SA)	HABJV	A	4,447,950	3928	152	498	+H8BTP		1,792,912	2362	95	393	+H8BTP								
*DL5ASE	•	190,112	580	51	157	+DL9GMN	38,880	113	52	92	+DL6UAM	3,050	83	6	44	+HABJV	A	785,295	1196	91	314	+H8BTP										
*DL8BUKE	•	183,727	412	72	197	+DL6RBH	37,506	207	39	102	+DL6NWA	3,024	81	16	47	+HABJV	A	343,976	794	56	192	+H8BTP										
*DK8BX	•	179,324	423	69	160	+DL8ULF	37,177	258	25	88	+DL4SN	2,760	33	19	27	+HABJV	A	4,760	33	23	33	+H8BTP										
*DL8ZAJ	•	170,640	410	56	184	+DQJ0YI	36,992	254	29	99	+DL5SVB	2,440	66	9	31	+HABJV	28	4,095	64	10	35	+H8BTP										
*DL7ARJ	•	160,284	473	52	176	+DK3WN	36,387	219	31	86	+DL9BDZ	2,360	71	21	38	+HABJV	7	330,704	1206	36	140	+H8BTP										
*DL5XAT	•	159,004	394	52	198	+DK3PM	36,195	232	24	103	+DL2DYL	2,173	38	19	34	+HABJV	A	117,000	919	27	93	+H8BTP										
*DL5JS	•	151,140	437	50	179	+DL1RTL	35,880	157	37	83	+DK7CH	2,135	88	14	47	+HABJV	1.8	122,109	1075	19	82	+H8BTP										
*DL1RTS	•	149,648	495	49	151	+DL6OL	35,075	204	32	83	+DL2AXM	2,064	49	13	35	+HABJV	A	718,740	1257	91	27	+H8BTP										
*DL5CD	•	146,664	518	51	165	+DK8RE	34,102	200	30	88	+DK5JK	2,014	62	17	36	+HABJV	A	664,200	1030	97	308	+H8BTP										
*DL8BUL0	•	141,264	480	48	168	+DQ3QG	32,818	110	40	82	+DK5GK	1,975	48	10	15	+HABJV	A	437,250	795	76	242	+H8BTP										
*DF2CH	•	129,913	397	63	214	+DL2YED	32,452	187	32	90	+DL5SWB	1,200	21	11	13	+HABJV	A	261,888	699	60	188	+H8BTP										
*DK7KR	•	123,977	388	53	144	+DK5PF	31,248	196	28	96	+DO1SAJ	972	32	7	20	+HABJV	A	188,748	516	54	198	+H8BTP										
*DL8YR	•	123,319	398	46	177	+D7JCJ	30,646	196	35	119	+DL2VB	644	13	11	12	+HABJV	A	165,336	508	55	194	+H8BTP										
*DL8UGF	•	113,229	321	50	157	+DL1DBR	30,378	174	33	89	+DL7MA	28	110	7	4	+HABJV	A	130,732	432	48	148	+H8BTP										
*DL2MBWB	•	106,547	297	40	177	+D9ST	29,400	236	26	79	+DL4UL	21	40,365	179	27	+HABJV	A	23,443	198	29	78	+H8BTP										
*DL0KB	•	105,276	320	44	142	+DL8DVW	29,393	171	33	86	+DK5ZX	24,336	164	18	60	+HABJV	A															

*IK2UCK	"	672,000	1022	80	320	Z35M	A	Macedonia	SP3FYX	*	69,832	493	26	90	Y09W	A	Romania	MZ8A	14	71,148	612	21	63		
*IK4EWX	"	609,535	1066	82	273	9H1XT	A	539,082	1282	63	235	SP9JZT	*	28,160	161	26	84	Y06BHN	"	4,032,426	4046	141	481	(OP: Y09GZU)	
*IK4UNH	"	308,226	643	61	221		A	500,551	1282	63	235	SN0ADV	*	9,480	105	11	49	Y07BGA	"	1,061,286	1496	109	365	MM0XAU	
*IZ2EJU	"	295,936	638	69	220	Malta	A	95,452	533	43	153	SN3C	3.5	210,868	1296	26	93	Y07ARY	"	296,577	718	63	216	MZ5B	
*IZ3DBA	"	235,365	811	52	169		A	95,452	533	43	153	SP9BGL	*	68,997	533	19	90	Y07PBO	"	168,370	653	54	172	MM5PSL	
*1FDJD	"	222,130	704	50	179	Moldova	A	21	73,710	274	31	104	1.8	268,499	1454	27	94	Y07LGI	7	62,944	360	22	90	(OP: SP3ASN)	
*1FGCG	"	210,168	573	61	191		A	294,886	705	56	227	SP9DW	*	16,112	145	15	61	Y07LGN	1.8	33,552	451	11	61	(OP: SP3ASB)	
*1AZ2	"	182,546	480	57	181	ER5WU	A	28	850	16	9	16	*S9E	A	72,552	1398	75	287	Y03FRI	A	1,031,800	1238	118	418	Sicily
*1Z0EHL	"	178,198	384	67	211		A	28	216	170	27	67		A	685,166	1162	81	313	Y04CAH	"	510,840	1038	79	251	(OP: SP5ATO)
*1Z2GMT	"	118,650	481	37	138	*ER100	A	14	59,800	382	19	73	*SP3LWP	A	518,384	1303	88	273	Y04CAN	"	342,512	707	64	220	(OP: SP5ATO)
*1V3ARJ	"	93,472	420	41	143		A	14	3,848	48	14	38		A	455,682	869	74	272	Y04CNP	"	259,632	705	69	204	(OP: SP5ATO)
*1V3DYS	"	92,560	320	42	136	*ER1WK	A	7	413	5	1	1	*HF60KAB	A	233,640	707	49	187	Y08KVS	"	230,840	707	49	187	(OP: SP5ATO)
*1N3FHE	"	83,125	269	45	130		A	3.5	48,370	575	10	60		A	204,820	670	60	206	Y05DAS	"	233,640	707	49	187	(OP: SP5ATO)
*1Z1DXS	"	81,838	349	37	129	*ER1RR	A	6,942,915	6075	149	502	**SN5G	*	414,225	1013	79	236	Y08RFS	"	175,492	384	75	217	Slovakia	
*1K2NUX	"	73,414	226	46	96		A	6,942,915	6075	149	502		*	343,018	604	88	254	Y08REFS	"	174,580	384	75	217	(OP: SP5ATO)	
*1Z3GHP	"	64,222	222	52	111	Montenegro	A	531,317	231	37	94	**SN9U	*	331,100	827	63	238	Y07NW	A	298,792	421	86	252	(OP: SP5ATO)	
*1K5KF	"	59,166	292	32	104		A	531,317	231	37	94		*	260,485	593	67	228	Y07OM	"	134,387	408	53	156	(OP: SP5ATO)	
*1K2AIT	"	55,413	281	35	106	403A	A	6,942,915	6075	149	502	**SN9U	*	117,997	535	37	150	Y07VNM	"	117,997	535	37	150	(OP: SP5ATO)	
*1K2CFD	"	53,317	231	37	94		A	6,942,915	6075	149	502		*	214,008	535	63	233	Y07CVG	"	259,632	705	69	204	(OP: SP5ATO)	
*1Z2EWR	"	46,632	294	30	104	PA3AAV	A	2,011,530	2076	115	455	**SP6LV	*	105,866	827	63	238	Y07OAC	"	134,387	408	53	156	(OP: SP5ATO)	
*1Z1GLX	"	44,403	215	40	83		A	1,858,595	2793	99	351		*	203,620	600	61	194	Y07OMT	"	65,872	246	52	127	(OP: SP5ATO)	
*1Z3DVL	"	42,705	173	39	98	PA4AA	A	698,895	855	104	397	**SP3D0F	*	179,280	467	58	182	Y07YDM	"	60,552	207	30	131	(OP: SP5ATO)	
*1K1WEW	"	35,632	226	39	92		A	324,531	625	66	255		*	194,372	417	49	163	Y07MAX	"	58,078	197	42	100	(OP: SP5ATO)	
*1K2NCF	"	32,912	163	35	86	PA4PA	A	220,002	769	54	168	**SP2IKP	*	141,934	449	52	154	Y07YDZ	"	49,572	281	43	119	(OP: SP5ATO)	
*1K2ZCO	"	30,030	141	39	71		A	204,402	625	51	158		*	141,570	427	53	181	Y07PST	"	44,814	220	46	108	(OP: SP5ATO)	
*1Z1DUG	"	28,908	187	29	103	PA4PN	A	120,184	399	45	136	**SP3HIC	*	140,685	423	68	185	Y07CEB	"	30,552	157	36	78	(OP: SP5ATO)	
*1K3MLF	"	28,560	177	32	88		A	66,332	319	32	136		*	129,376	321	59	149	Y07OAS	"	23,400	128	38	79	(OP: SP5ATO)	
*1Z5GRS	"	28,416	159	32	79	PA4PK	A	23,230	190	24	91	**SP9ET	*	128,772	345	58	194	Y07LTM	"	5,280	45	15	32	(OP: SP5ATO)	
*1K2XPB	"	24,395	176	38	81		A	17,056	145	24	80		*	117,888	327	57	153	Y07LYM	"	4,658	45	15	32	(OP: SP5ATO)	
*1Z4DYM	"	24,045	204	24	81	PA4PA	A	25,460	162	24	71	**SP1DPA	*	127,224	307	54	162	Y07OYR	"	972	11	9	11	(OP: SP5ATO)	
*14HRH	"	23,904	165	28	68		A	21	120,048	723	28	94	*	116,522	405	52	151	Y07OAL	28	1,050	21	9	16	(OP: SP5ATO)	
*1Z5EBL	"	16,740	95	36	72	PA4PA	A	16	122,244	160	16	62	**SP7FBQ	*	116,522	405	52	151	Y07SALI	28	1,050	21	9	16	(OP: SP5ATO)
*1K2DKX	"	9,636	109	21	45		A	16	204,402	625	51	158		*	116,522	405	52	151	Y07SALI	28	1,050	21	9	16	(OP: SP5ATO)
*1Z6BTN	"	6,710	77	19	36	PA4PA	A	1,21,320	242	17	15	**SP3HIC	*	106,296	458	52	156	Y07SALI	28	216	8	6	6	(OP: SP5ATO)	
*1Z8DWL	"	5,022	61	19	35		A	739,630	1286	74	296		*	105,542	367	53	173	Y07AOZ	*	147	19	7	14	(OP: SP5ATO)	
*1K2WXV	"	4,340	88	12	23	PA4PA	A	612,666	193	63	274	**SP9GMK	*	94,317	498	31	118	Y07OAGI	21	25,915	180	20	51	(OP: SP5ATO)	
*1K5JK	"	1,500	26	14	16		A	470,507	1340	55	208		*	90,216	349	31	143	Y07SOED	*	13,266	98	22	45	(OP: SP5ATO)	
*1Z3KMW	"	783	22	9	18	PA4PA	A	211,255	651	51	202	**SP9CTW	*	89,232	216	55	153	Y07VBN	*	12,772	345	12	22	(OP: SP5ATO)	
*1Z6FCK	"	130	5	5	1		A	154,160	536	45	159		*	87,450	324	43	122	Y07OAK	*	42,660	313	18	61	(OP: SP5ATO)	
*1Z5HOB	"	42	17	4	10	PA4PA	A	131,118	54	32	107	**SP9CTW	*	87,450	324	43	122	Y07TAT	*	47,380	318	24	91	(OP: SP5ATO)	
*1Z8DWL	28	6,292	69	14	30		A	344,565	900	59	220		*	87,450	324	43	122	Y07TAT	*	23,268	189	18	66	(OP: SP5ATO)	
*1R8M	21	31,620	246	66	77	PA4PA	A	9,867	92	20	49	**SP9DEM	*	8,195	102	16	39	Y07KDN	*	4,650	270	88	29	(OP: SP5ATO)	
*1K3SSO	1.8	20,894	318	9	53		A	3.5	63,550	686	14	68	*	7,991	273	20	49	Y07ORDY	7	44,847	260	18	81	(OP: SP5ATO)	
*1K0MRH	"	17,816	131,118	13	57	PA4PA	A	14	28,635	174	30	107	**SP7EXJ	*	7,278	224	22	66	Y07ORDY	7	6,076	135	28	74	(OP: SP5ATO)
*1Z1BIR	"	7,995	84	9	56		A	9,867	92	20	49	*	7,278	224	23	18	Y07ORDY	7	6,076	135	28	74	(OP: SP5ATO)		
*1Z3FJU	"	28	5	2	5	PA4PA	A	1,363	37	35	32	**SP9DEM	*	7,191	25	15	32	Y07ORDY	*	7,191	25	15	32	(OP: SP5ATO)	
*1K0RRS	14	16,956	1221	21	81		A	14	17,874	209	29	102	*	7,191	25	15	32	Y07ORDY	*	7,191	25	15	32	(OP: SP5ATO)	
*1Y2LZT	A	751,680	1511	71	289	PA4PA	A	14	24,374	174	30	107	**SP4DC	*	7,191	25	15	32	Y07ORDY	*	7,191	25	15	32	(OP: SP5ATO)
*1Y2LCV	A	324,576	601	78	244		A	14	18,774	409	10	53		*	7,191	25	15	32	Y07ORDY	*	7,191	25	15	32	(OP: SP5ATO)
*1Y2CR	A	156,804	625	46	173	PA4PA	A	14	23,800	128	29	122	**SP3AZO	*	18,970	152	17	53	Y07ORDY	*	7,191	25	15	32	(OP: SP5ATO)
*1Y2LP	A	149,104	326	49	159		A	14	23,520	125	33	107		*	15,080	144	13	39	Y07ORDY	*	7,191	25	15	32	(OP: SP5ATO)
*1Y2IP	A	61,320	385	29	117	PA4PA	A	14	29,705	675	54	211	**SP2AYC	*	12,495	165	11	40	Y07ORDY	*	6,048	345	18	69	(OP: SP5ATO)
*1Y2LHK	A	50,071	293	36	125		A	14	29,705	675	54	211		*	9,750	173	18	60	Y07ORDY	*	33,284	329	15	38	(OP: SP5ATO)
*1Y2LJU	A	11,270	173	13	57	PA4PA	A	14	97,695	386	41	154	**SP4AAZ	*	1,590	36	8	22	Y07ORDY	*	7,191	25	15	32	(OP: SP5ATO)
*1Y3LGDY	A	9,867	112	19	50		A	14	61,685	328	35	134		*	28,008	194	19	53	Y07ORDY	*	7,191	25	15	32	(OP: SP5ATO)
*1Y2LS	A	164,592	875	30	114	PA4PA	A	14	48,																

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•	34,800	166	32	88	SM2JEB	•	36,186	249	20	54	UR2VA	•	312,998	577	70	213	*UY5ZI	•	122,664	318	57	171	*UY7LM	•	14,162	257	14	
•	33,945	110	47	108	SM5CIL	7	44,946	304	21	78	UY2UQ	•	261,478	747	57	209	*UR5LO	•	106,722	291	70	172	*UT2OO	•	7,440	102	15	
•	33,372	177	28	75							UX2MF	•	223,104	382	94	242	*UX3IO	•	99,093	192	72	129	*USSKD	3.5	79,700	715	20	
•	32,116	186	38	110	SM6W	1.8	54,999	565	17	64	UT0RM	•	133,056	445	58	134	*UR5AW	•	81,940	344	35	135	*UT5KO	•	42,112	586	11	
•	30,184	156	33	65	*SM6NET	A	128,115	417	46	173	UR4EI	•	68,796	333	33	123	*UT5IZ	•	72,141	360	39	134	*US2WU	•	41,904	493	17	
•	28,440	170	34	86	*SM7BJW	"	119,133	371	45	138	UR7VA	•	64,010	156	60	113	*UT2LU	•	71,760	370	38	146	*U5RHO	•	23,994	331	10	
•	18,190	159	27	80	*SF3E	"	108,049	494	37	130	UY5OO	•	59,595	163	48	97	*U8MX8	•	70,380	282	44	136	*UT5DJ	•	20,679	325	9	
•	18,090	117	32	58							UY5HAC	•	55,200	170	56	104	*UT5UQ	•	66,960	303	47	139	*UT5KTT	•	17,922	267	9	
•	14,805	82	33	72	*SM7EH	"	101,600	417	42	158	UY2TM	•	52,059	146	75	126	*UX8W1	•	65,764	327	32	132	*UR5IKN	•	14,824	152	15	
•	13,272	99	27	57	*SM2KAL	"	98,235	363	39	146	UY4UJ	•	10,611	105	19	62	*UT8EL	•	64,620	315	41	139	*UR8IDX	•	13,629	128	13	
•	10,507	57	27	52	*SM3RL	"	63,756	281	39	122	UT7VL	•	5,880	38	24	36	*US0KXW	•	59,189	174	47	110	*UT8BIT	1.8	33,225	354	12	
•	6,728	60	21	37	*SM0BDS	"	43,885	253	30	101	UT4PZ	•	4,420	31	24	28	*U5R5ET	•	54,560	196	47	129						
•	4,620	58	16	39	*SE6C	"	38,041	244	28	81	UY1WM	14	262,405	984	36	107	*UT3UV	•	54,054	314	32	122	GW3JXN	A	262,704	768	54	
•	4,514	43	22	39							UY5MW	"	52,728	274	37	132	GW3NJW	A	183,600	610	164		GW8WTG	14	588,756	185	37	
•	3,888	56	13	35	*SM7YIN	"	35,483	194	37	100	UY7ID	•	70,224	323	30	84	(OP: US6IMA)					GW8WGT	3.5	276,120	1681	23		
•	3,774	57	17	34	*SIT7	"	24,075	196	21	86	UY8OR	•	37,920	288	18	62	*UT4EU	•	50,213	283	31	118	(OP: SM7LZO)					
•	3,403	48	17	24							UY4LA	•	8,100	133	7	43	*UT1IF	•	48,821	126	54	104	(OP: GW3WYD)					
•	2,992	45	16	28	*SM7CWI	"	23,999	124	32	71	UY7OF	7	740,684	223	38	158	*UT7HM	•	47,885	191	46	111	(OP: GW3SOW)					
•	2,907	49	17	40	*SM7BVO	"	16,352	110	22	51	UY3MZ	•	584,188	207	39	150	*UX1RX	•	47,120	251	38	114	GW8IZR	1.8	21,546	257	12	
•	1,984	91	16	48	*SM3JUR	"	10,384	144	20	68	UY5WW	•	583,038	216	31	147	*UT3IB	•	45,760	150	45	131	*GW3KDB	A	526,932	934	76	
•	1,064	24	14	24	*SM5BTJ	"	585	57	15	30	UY5VMM	•	189,656	787	31	120	*UR5TK	•	44,400	198	31	99	*MW0YDX	•	56,980	269	35	
•	702	19	9	17	*SM0CVI	"	0	16	9	13	UY4ZG	•	130,200	494	33	122	*USV5D	•	42,778	188	36	110	*GB6GW	•	39,520	195	34	
•	21	42,484	309	22	64	*SM00	14	54,096	459	16	68	UY5ECZ	•	37,620	245	21	74	*UR2MO	•	40,424	142	43	120	(OP: SM0OGO)				
•	18,745	186	153	24	58						UYTSSA	•	30,400	269	20	80	*UX3IA	•	39,712	122	51	95	(OP: SM06DTF)					
•	14,776	1605	32	120	*SM3AF	"	2,183	66	11	26	UY5OMM	•	25,428	294	19	59	*UX0UW	•	38,646	220	34	80	(OP: SM036T)					
•	14,556	256,278	1395	30	91	*SC300VL	"	24	8	4	8	UY2ZZ	•	11,492	125	15	53	*UR0IO	•	36,750	170	49	98	*MW0CJW	•	35,750	179	30
•	14,821	148,924	620	28	96						UY2II	3.5	241,529	1557	30	119	*UT7LM	•	36,000	233	24	66	*GW3INW	•	14,276	185	19	
•	14,075	112,035	750	23	82	*BS6A	3.5	17,034	303	8	43	UY2UO	•	139,568	94	26	96	*UX0ZL	•	35,478	193	34	112	(OP: SM0DFF)				
•	13,940	1036	204	16	48	*SM7ATL	"	9,246	208	7	39	UY5UO	•	31,785	506	9	56	*UX5NO	•	31,785	195	34	96	(OP: SM0DZH)				
•	13,520	15,720	186	11	29	*SM0J	"	6,486	136	7	40	UY7UO	•	184,785	1144	27	100	*UT7QO	•	30,627	111	34	99	(OP: UX2UA)				
•	13,305	110,034	206	14	48						UY1IR	•	137,529	981	24	87	*UX1IV	•	28,700	211	35	105	(OP: UT3UQ)					
•	13,084	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY8IM	•	137,529	981	24	87	*UX5UKY	•	27,594	156	36	90	(OP: UT3DX)				
•	12,964	110,034	206	14	48	*SM7ATL	"	9,246	208	7	39	UY7QC	•	97,300	789	22	78	*UX5WX	•	24,038	121	32	87	(OP: UT3UQ)				
•	12,844	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY8OM	•	10,608	189	10	41	*UX3AW	•	20,203	172	21	68	(OP: UX2UA)				
•	12,724	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY5VU	1.8	76,446	694	17	76	*UX7UN	•	9,912	54	36	48	(OP: UX1UA)				
•	12,604	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY0ZG	•	75,764	661	16	78	*UX7UN	•	8,892	107	15	63	(OP: UX1UA)				
•	12,584	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY3N	•	14,617	295	6	41	*UX4IXT	•	4,472	32	26	26	(OP: UX1UA)				
•	12,564	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY0ZG	•	14,617	295	6	41	*UX4IXT	•	2,881	29	18	25	(OP: UX1UA)				
•	12,544	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY0ZG	•	14,617	295	6	41	*UX4IXT	•	2,728	34	15	29	(OP: UX1UA)				
•	12,524	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY0ZG	•	14,617	295	6	41	*UX4IXT	•	2,088	44	9	27	(OP: UX1UA)				
•	12,504	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY0ZG	•	14,617	295	6	41	*UX4IXT	•	2,088	44	9	27	(OP: UX1UA)				
•	12,484	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY0ZG	•	14,617	295	6	41	*UX4IXT	•	2,088	44	9	27	(OP: UX1UA)				
•	12,464	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY0ZG	•	14,617	295	6	41	*UX4IXT	•	2,088	44	9	27	(OP: UX1UA)				
•	12,444	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY0ZG	•	14,617	295	6	41	*UX4IXT	•	2,088	44	9	27	(OP: UX1UA)				
•	12,424	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY0ZG	•	14,617	295	6	41	*UX4IXT	•	2,088	44	9	27	(OP: UX1UA)				
•	12,404	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY0ZG	•	14,617	295	6	41	*UX4IXT	•	2,088	44	9	27	(OP: UX1UA)				
•	12,384	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY0ZG	•	14,617	295	6	41	*UX4IXT	•	2,088	44	9	27	(OP: UX1UA)				
•	12,364	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY0ZG	•	14,617	295	6	41	*UX4IXT	•	2,088	44	9	27	(OP: UX1UA)				
•	12,344	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY0ZG	•	14,617	295	6	41	*UX4IXT	•	2,088	44	9	27	(OP: UX1UA)				
•	12,324	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY0ZG	•	14,617	295	6	41	*UX4IXT	•	2,088	44	9	27	(OP: UX1UA)				
•	12,304	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY0ZG	•	14,617	295	6	41	*UX4IXT	•	2,088	44	9	27	(OP: UX1UA)				
•	12,284	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY0ZG	•	14,617	295	6	41	*UX4IXT	•	2,088	44	9	27	(OP: UX1UA)				
•	12,264	15,720	186	11	29	*SM7ATL	"	9,246	208	7	39	UY0ZG	•	14,617	295	6	41	*UX4IXT	•	2,088	44	9	27	(OP: UX1UA)				
•	12,244	15,720	186	11	29	*SM7ATL	"	9,246	2																			

*WH2D	A	434,948	794	74	120	"PP5DA	*	495	19	5	4	JK1TCV	"	29,744	114	46	58	RJ3RM	"	46,545	349	19	68	A10D	*	67,886	141	47	135
*KH2/K13DNN	*	11,165	141	15	14	"PR7AR	3.5	36,515	291	15	52	DL4EAX	"	29,524	193	26	96	G3LHJ	"	44,455	349	19	68	W1ZR	*	56,072	184	47	115
KH6YR	A	3,599,360	4089	126	194	"PU8TFA	1.8	16	2	2	2	N3HU	"	28,288	118	32	72	JA4DOX	"	33,072	200	25	53	W1JB	*	37,410	149	43	86
AH7C	*	2,871,149	3313	116	197	"3G1X	7	416,745	1223	33	114	KD4HXT	"	27,913	142	39	59	FM5CW	"	31,536	176	15	58	N1AU	*	22,200	84	33	78
KH7Y	21	478,084	1870	28	66	"XR3A	21	257,982	882	26	88	OK2BWJ	"	26,208	209	24	88	E21AOY	"	31,400	131	22	46	K1TR	*	17,195	73	33	62
KH7B	3.5	321,636	1155	31	67	(OP: K4XS)						OE8NTK	"	26,078	155	29	29	WA1ZYX	"	28,035	229	19	70	W1MAT	*	7,360	47	21	43
*KH6/N0CO	A	78,980	300	49	61	HK30	A	736,376	955	96	236	K0CD	"	23,859	105	40	49	M9O	"	25,862	218	16	51	W1MAT	*	1,071	19	6	15
						Colombia					I1COB	"	22,848	172	27	89	M9O	"	22,800	257	42	48	NE18	*	726	17	11	11	
						HK6K	*	157,552	421	56	116	I2W3WP	"	21,840	93	24	67	I4KRF	"	20,234	212	17	50	K1LT	14	97,240	280	28	102
						HK30	*	72,540	196	56	130	YU3DBK	"	21,476	226	14	77	DL4HG	"	17,922	165	17	41	WT4Z	1.8	42,873	196	17	76
						HK3J	*	17,808	103	27	57	YU2CV	"	21,306	152	26	80	N4PJ	"	15,912	95	19	53	K2NG	A	3,876,374	1862	158	624
YB3JZ	14	58,401	382	22	41	"HK1AR	A	6,913,397	449	130	421	US8ICM	"	21,090	136	35	59	VU2UR	"	13,317	87	20	49	N2L	*	2,655,240	184	155	541
*VC1KA	A	475,692	98	50	146	(OP: RA3CO)					G4ILQ	"	19,197	173	18	61	DM1LM	"	1,208	105	11	40	K2DM	*	1,708,720	1217	124	396	
*VB0DPO	*	380,799	535	82	179	"HK1AA	*	89,010	394	31	59	PA1TB	"	19,080	166	24	82	W7JJ	"	10,218	155	21	57	W2NWK	*	1,392,384	906	128	464
*VE1AA	21	24,525	126	24	51	"HK7/KW6DXI	7	211,998	861	20	69	DL4OQA	"	18,795	207	22	83	JR0GM	"	8,742	87	20	27	K2D	*	1,225,947	1080	115	386
*VB0ZDA	*	20,435	123	16	51	"HK3WPC	*	741	27	8	11	AI2P	"	18,480	102	40	45	W2L	"	5,967	108	9	30	K2ONP	*	1,101,397	920	99	350
*YC2UTX	*	18,836	131	21	47	ZP0R	21	972,332	2138	33	125	YU2CV	"	18,200	217	22	65	PA0ATG	"	4,730	114	9	34	W2LE	*	1,100,223	872	102	357
*YD1HUU	*	16,704	119	23	49	"ZP9EH	A	68,256	198	61	97	RA3EV	"	17,568	140	25	71	Y04II	"	3,910	73	8	28	W2Q	*	1,026,630	79	122	384
*YB0WWW	14	3,680	50	11	21	"ZP6/K1PMR	7	5,950	60	14	21	JA1KEB	"	16,798	91	34	40	Y04II	"	3,096	73	8	28	W2GDJ	*	987,309	852	107	352
*YB0ECE	*	2,163	42	9	12	"Y04AWW	A	5,702,269	3988	140	383	W2LW	"	16,782	130	22	79	JH8DBI	"	1,250	24	11	14	K2AD	*	782,034	655	97	354
*ZD3KWR	7	26,163	189	18	39	"Y04AWW	A	568,540	1611	30	94	DL50K	"	13,200	132	21	79	HR2LTOE	"	13,416	123	30	48	WT4Z	*	761,057	709	110	363
*YC2BXW	3.5	12,663	100	19	44	"Y04DJW	A	51,156	179	56	91	Y04AWW	"	11,988	71	33	48	Y06EX	7	139,440	783	30	110	K2FT	*	233,772	307	84	224
						PZ5X	A	2,832,285	2820	91	292	Suriname	"	11,929	84	32	47	F5LEN	"	129,844	565	27	116	K2BX	*	211,312	299	64	217
						Y94AA					Y06AEI	"	11,780	150	25	70	Y06AEI	"	56,306	407	17	77	K2QSOS	*	200,168	327	67	195	
*TX3SAM	A	154,896	547	42	70	Trinidad & Tobago					Y06AEI	"	10,738	136	22	69	W9VLL	"	50,025	270	15	60	W2K2H	*	198,588	307	64	183	
						Y94AA					Y94AA	"	10,400	112	19	61	T9T9	"	44,863	370	16	75	N2W	*	180,684	293	65	187	
						Y94AA					Y94AA	"	9,900	109	23	53	YU1ML	"	12,032	214	12	52	K2ZG	*	291,618	393	69	237	
						Y94AA					Y94AA	"	9,790	95	17	38	YU1ML	"	12,632	410	15	74	K2SD	*	254,092	476	74	204	
						Y94AA					Y94AA	"	9,620	58	29	45	F5MPS	"	12,012	127	18	66	EAB0H2BEM	*	245,619	356	78	219	
						Y94AA					Y94AA	"	9,582	48	20	33	SP4DZT	"	11,926	49	35	47	SP4DZT	*	(OP: WBANR)				
						Y94AA					Y94AA	"	8,777	98	19	48	H79CEY	"	29,988	25	14	70	K2EP	*	162,361	278	58	171	
						CW6V	7	984,872	2068	38	134	Y94AA	"	8,330	54	29	41	SP4JF	"	26,640	325	12	60	W2E0	*	145,678	352	79	259
						Y94AA					Y94AA	"	8,134	95	22	61	W5BV4	"	17,287	127	16	43	K2DBK	*	56,206	140	52	105	
						Y94AA					Y94AA	"	8,050	136	22	69	W9VLL	"	50,025	270	15	60	W2K2H	*	15,304	39	64	183	
						Y94AA					Y94AA	"	7,950	104	23	53	W9VLL	"	44,863	370	16	75	N2W	*	180,684	293	65	187	
						Y94AA					Y94AA	"	7,880	109	23	53	W9VLL	"	12,532	153	21	54	K2ZG	*	167,960	298	57	164	
						Y94AA					Y94AA	"	7,720	110	23	53	W9VLL	"	12,032	121	21	49	W2A3AFS	*	24	2	2	2	
						Y94AA					Y94AA	"	7,541	48	20	33	W9VLL	"	12,032	119	21	49	W2VQO	21	19,039	95	20	59	
						Y94AA					Y94AA	"	7,428	130	23	53	W9VLL	"	12,032	117	21	49	W2VQO	7	26,117	121	21	70	
						Y94AA					Y94AA	"	7,348	42	16	70	W9VLL	"	12,032	115	21	49	W2VQO	1.8	5,424	51	14	34	
						Y94AA					Y94AA	"	7,248	128	23	53	W9VLL	"	12,032	113	21	49	W2VQO	*	123,722	275	57	150	
						Y94AA					Y94AA	"	7,166	42	16	70	W9VLL	"	12,032	111	21	49	W2VQO	*	99,552	281	31	105	
						Y94AA					Y94AA	"	7,084	42	16	70	W9VLL	"	12,032	109	21	49	W2VQO	*	128,800	1100	93	230	
						Y94AA					Y94AA	"	6,920	42	16	70	W9VLL	"	12,032	107	21	49	W2VQO	*	123,720	837	125	411	
						Y94AA					Y94AA	"	6,850	42	16	70	W9VLL	"	12,032	105	21	49	W2VQO	*	9,035	51	21	48	
						Y94AA					Y94AA	"	6,780	42	16	70	W9VLL	"	12,032	103	21	49	W2VQO	*	128,800	1100	93	230	
						Y94AA					Y94AA	"	6,714	42	16	70	W9VLL	"	12,032	101	21	49	W2VQO	*	123,722	275	57	150	
						Y94AA					Y94AA	"	6,650	42	16	70	W9VLL	"	12,032	99	21	49	W2VQO	*	9,035	51	21	48	
						Y94AA					Y94AA	"	6,580	42	16	70	W9VLL	"	12,032	97	21	49	W2VQO	*	128,800	1100	93	230	
						Y94AA					Y94AA	"	6,514	42	16	70	W9VLL	"	12,032	95	21	49	W2VQO	*	123,720	275	57	150	
						Y94AA					Y94AA	"	6,454	42	16	70	W9VLL	"	12,032	93	21	49	W2VQO	*	9,035	51	21	48	
						Y94AA					Y94AA	"	6,390	42	16	70	W9VLL	"	12,032	91	21	49	W2VQO	*	128,800	1100	93		

K4WW	93,920	226	47	113	W8UWZ	1.8	37,400	248	22	78	R9AKM	*	447,752	698	67	192	G4IY	A	England	DLSYM	*	693,864	1117	96	323	
W4DFW	93,177	189	61	128	W8TN	*	6,890	67	15	38	R9AOC	*	158,364	326	63	149	G4MTN	*	678,000	DJ3WE	*	678,000	907	94	358	
K4GMH	85,952	294	36	100	WB9Z	A	1,574,716	1122	139	433	R9AMC	*	140,556	315	66	146	G4MTN	*	619,347	DM1TT	*	619,347	210	109	322	
W4LT	76,466	196	50	123	W9XT	*	1,390,109	1057	118	379	R9AMX	*	133,704	271	60	156	G4NKC	*	565,250	D4LME	*	565,250	1147	75	275	
W4ZE	71,410	152	52	133	K9IMM	*	1,231,452	1010	113	361	R9ACB	*	107,004	214	61	161	M0BPO	*	524,172	DF5ZV	*	688,92	144	72	326	
K14TZ	66,198	177	51	126	N9CK	*	1,140,544	853	115	387	R9AUR	28	247	15	6	7	G4YB	*	515,812	DJ8OP	*	515,812	783	95	323	
K0COP/4	61,560	145	57	114	N9CK	*	541,413	534	91	296	R9ACK	21	28,890	168	25	65	D1NEO	*	503,412	DJ1RE	*	503,412	903	79	285	
N4TL	52,920	160	38	97	N9XX	*	508,725	530	95	304	R9APM	14	603,100	1645	31	117	D1RE	*	476,619	DJ7RO	*	453,700	840	63	262	
W4MY	48,015	130	58	107	N9FH	*	462,560	451	99	293	R9ZHG	7	358,386	1212	34	104	G3VKW	*	442,520	D6F6V	*	442,520	694	76	294	
AD4YQ	44,496	135	44	100	K9CT	*	447,020	430	101	311	E9S5C	3.5	511,872	1600	28	100	G4OKU	*	373,722	D6KVA	*	373,722	503	98	300	
NV4B	38,550	109	53	97	K19A	*	440,325	602	84	225	R9WUSA	*	349,776	1130	27	99	M0OKT	*	16,830	D3EBX	*	366,165	749	63	246	
W4OV	35,358	113	50	92	N9SI	*	430,400	108	292	RT9S	*	330,660	958	29	103	G4EHT	*	4,365	DJ1JN	*	363,370	808	61	229		
KU4G	34,001	116	36	85	K9FOX	*	421,056	419	96	291	R9A	*	309,858	860	30	99	G9A	14	193,614	DM3PKK	*	329,703	653	69	222	
K4DGW	21,364	93	37	72	WE9V	*	403,920	476	93	247	R9A	*	(OP: WA9SP)	*	*	*	D5MZ	*	319,370	855	59	234				
K2SD/4	11,550	93	36	69	N9ZR	*	323,505	437	84	231	R9K9D	*	255,623	969	24	83	(OP: M5BN)	*	*	*	*	*	*	*	*	
K4APG	10,512	55	26	47	K9XV	*	310,310	361	86	255	R9U9T	1.8	43,216	256	13	60	ES2DJ	A	611,040	DK1FW	*	312,480	423	76	284	
WG4M	6,305	49	28	37	WE9R	*	266,060	404	71	180	R9U9W	A	1,198,305	1081	118	347	ES5MC	*	320,460	770	72	222				
N4NM	3,740	37	16	28	K9OR	*	185,571	320	56	181	R9WUM	*	284,410	691	74	164	ES5DB	*	81,989	320	38	125				
N4PQX	21	29,070	123	21	69	K9UON	*	127,920	225	51	154	R9A0JF	*	2,838	57	16	27	ES1GF	*	65,254	313	49	109			
W4SO	14	433,108	34	135	N2B/J	*	116,352	241	56	146	R9KAB	7	109,271	538	29	84	ES5RY	14	385,910	D1FQO	*	264,661	570	64	247	
KU5B/4	7	303,564	882	36	128	N9CO	*	96,600	211	48	127	R9A	*	(OP: BA4TB)	*	*	*	ES4RD	*	240,097	545	66	233			
K1IZZ/4	246,789	661	31	122	K9AO	*	93,147	210	51	132	BA4RF	A	1,894,150	2093	116	314	ES5OX	1.8	201,105	D5LWX	*	238,334	462	72	197	
K4CZ	3.5	50,508	201	19	73	W9FX	*	46,422	133	54	103	BD4SP	*	100,155	332	58	107	RW6HX	A	3,252,200	DK7UO	*	218,880	518	56	172
W6LZ/T4	1.8	38,496	157	18	78	W9SN	*	34,086	106	32	82	BT4B	*	98,784	348	63	105	DLS5W	*	191,958	215	97	84			
W4DR	*	10,915	105	13	46	W9RN	*	32,760	113	49	77	R9A	*	(OP: BA4TB)	*	*	*	DL5AWI	*	190,440	528	53	177			
N5JR	A	555,764	553	84	290	A9ADY	*	5,605	77	22	37	R9A	*	(OP: BA4TB)	*	*	*	DL5JOM	*	188,000	337	65	170			
W5GA	*	487,009	591	201	297	N9SDT	*	2,277	74	32	37	R9A	*	(OP: BA4TB)	*	*	*	DSF5L	*	180,648	407	59	175			
WT5U	*	166,712	329	64	165	N9AU	7	106,455	277	30	111	R9A	*	(OP: BA4TB)	*	*	*	DL1ELY	*	178,794	374	62	196			
W5K1	*	154,346	261	66	163	N9FN	3.5	1,677	27	14	25	R9A	*	(OP: BA4TB)	*	*	*	DK2SL	*	164,220	481	49	166			
N5ZK	*	125,851	288	48	139	(OP: W5AP5)	*	(OP: W5AP5)	*	*	*	R9A	*	(OP: BA4TB)	*	*	*	DK7ZH	*	161,564	426	50	189			
KA5M	*	113,206	205	66	148	WA0MHJ	A	1,324,927	972	117	392	R9A	*	(OP: BA4TB)	*	*	*	DL7YT	*	158,172	254	81	213			
K5GM	*	111,168	244	64	128	K9UK	*	648,645	639	102	313	R9A	*	(OP: BA4TB)	*	*	*	DK3DU	*	151,740	309	70	200			
K5HDM	*	80,960	198	52	108	WB0HCH	*	625,560	708	112	278	R9A	*	(OP: BA4TB)	*	*	*	DL3DRN	*	188,000	337	65	170			
N1C/5	*	63,750	173	57	113	N5IN/0	*	465,360	560	86	250	R9A	*	(OP: BA4TB)	*	*	*	DL4F1D	*	180,648	407	59	175			
WA5VSK	*	60,144	173	60	119	K9RC	*	400,932	417	108	279	R9A	*	(OP: BA4TB)	*	*	*	DL4RCK	*	145,396	491	45	178			
W5TB	*	56,108	154	57	109	K9OB	*	136,510	447	91	236	R9A	*	(OP: BA4TB)	*	*	*	DL4RN	*	143,815	300	50	195			
AF5Z	*	48,654	139	60	93	K9EIJ	*	345,952	476	88	216	R9A	*	(OP: BA4TB)	*	*	*	DL4RN	*	138,752	319	68	203			
N5JX	28	7,379	78	15	32	K9AD	*	257,580	429	78	187	R9A	*	(OP: BA4TB)	*	*	*	DL5KU	*	122,320	495	46	174			
W0VX/5	21	39,168	161	24	72	K9ST	*	228,780	329	75	204	R9A	*	(OP: BA4TB)	*	*	*	DL5JW	*	110,682	333	51	147			
KU5B	7	296,622	882	36	126	K9YR	*	166,413	311	67	154	R9A	*	(OP: BA4TB)	*	*	*	DK0AE	*	107,212	331	50	146			
N5JB	*	113,337	324	34	113	NOIM	*	158,625	273	70	165	R9A	*	(OP: BA4TB)	*	*	*	DL5JW	*	112,320	405	46	174			
AD5VJ	*	9,940	66	21	49	AC0W	*	132,158	267	73	148	R9A	*	(OP: BA4TB)	*	*	*	DL5JW	*	112,320	435	46	174			
W5ZO	3.5	16,274	192	22	57	WA2MNO/0	*	131,080	235	65	167	R9A	*	(OP: BA4TB)	*	*	*	DL5JW	*	112,320	435	46	174			
NX5M	1.8	20,514	109	18	60	K9EOL	*	109,151	216	64	153	R9A	*	(OP: BA4TB)	*	*	*	DL5JW	*	112,320	435	46	174			
K6TA	A	1,205,100	1016	127	323	K9HBS	*	98,193	189	66	147	R9A	*	(OP: BA4TB)	*	*	*	DL5JW	*	112,320	435	46	174			
K6XT	*	766,476	671	132	321	K9MPH	*	89,199	219	53	134	R9A	*	(OP: BA4TB)	*	*	*	DL5JW	*	112,320	435	46	174			
N6WS	*	792,688	730	118	294	W9QJ	*	82,782	240	74	145	R9A	*	(OP: BA4TB)	*	*	*	DL5JW	*	112,320	435	46	174			
K6RIM	*	507,600	547	102	274	W4RKJ/0	*	78,581	215	58	121	R9A	*	(OP: BA4TB)	*	*	*	DL5JW	*	112,320	435	46	174			
N2NS/6	*	455,264	540	103	223	K9COP	*	57,967	145	57	112	R9A	*	(OP: BA4TB)	*	*	*	DL5JW	*	112,320	435	46	174			
N6QQ	*	441,214	556	98	236	NI0C	*	57,240	140	46	113	R9A	*	(OP: BA4TB)	*	*	*	DL5JW	*	112,320	435	46	174			
N6KX	*	56,950	132	54	116	W9GM	*	45,600	134	43	107	R9A	*	(OP: BA4TB)	*	*	*	DL5JW	*	112,320	435	46	174			
W6TK	*	50,094	171	43	78	W9AL	*	21,008	106	41	63	R9A	*	(OP: BA4TB)	*	*	*	DL5JW	*	112,320	435	46	174			
K6EJ	*	22,185	107	38	49	VE3UTT	A	1,401,728	1207	105	361	R9A	*	(OP: W1AJT)	*	*	*	DL5JW	*	112,320	435	46	174			
K6DWK	*	21,076	119	50	74	VE3CFK	*	1,233,696	1720	94	268	R9A	*	(OP: W1AJT)	*	*	*	DL5JW	*	112,320	435	46	174			
W1RH/6	*	9,112	59	28	39	VE3KF	*	801,021	282	107	330	R9A	*	(OP: W1AJT)	*	*	*	DL5JW	*	112,320	435	46	174			
K6ST	*	7,056	51	27	36	VA3DX	*	292,448	492	69	178	R9A	*	(OP: W1AJT)	*	*	*	DL5JW	*	112,320	435	46	174			
N0UT	*	2,795	42	20	23	VA3PL	*	218,112	497	78	206	R9A	*	(OP: W1AJT)	*	*	*	DL5JW	*	112,320	435	46	174			
W6RKC	7	19,520	117	20	44	VE3NWA	*	193,648	493	53	143	R9A	*	(OP: W1AJT)	*	*	*	DL5JW	*	112,320	435	4				

IZ3KKE	*	47,995	173	48	97	Y05CBX	14	259,120	933	36	122	UW5Q	7	720,330	2279	38	157	Jamaica	10,377,640	6148	157	571	OH4XX	1,160,397	1582	108	381		
IZH1V	*	21,183	263	15	54	Y03JW	7	177,264	1032	32	112	UU1CW	1.8	4,998	76	10	39	San Andres/Providencia	5,634,708	5288	116	383	OH2BJ	236,402	896	68	221		
IK2ECP	*	9,240	102	16	39	Y03JOS	*	157,872	882	30	108	UR5E	1.8	16,579	244	9	50	OCEANIA	5,249,490	4036	113	353	TM2Y	6,564,192	4371	169	639		
IK1QBT	28	5,358	91	11	36	Y05KIP	*	85,786	553	23	95	(OP: Y05OHO)	*	(OP: UR5EDX)	*	*	*	Australia	6,445,756	4260	167	636	TM2S	4,848,102	3828	144	562		
IK2CJ	14	763,045	1974	38	153	(OP: IK2JUB)	*											Seychelles	5,249,490	4036	113	353	TM4Q	4,233,255	3830	139	524		
I2GPT	*	77,300	378	26	74	San Marino	A	25,877	176	32	81	VK4AN	21	436,494	1134	34	104	AFRICA	5,634,708	5288	116	383	F6KNB	2,337,270	2809	108	353		
IO3P	7	670,605	2215	34	145	(OP: IV3VN)						VK1AA	7	641,390	1469	35	120	South Africa	5,249,490	4036	113	353	DP4T	6,445,756	4260	167	636		
I2GWE	*	43,754	259	29	102	Scotland	A	229,977	527	49	204	VK6DU	*	19,440	170	19	26	Seychelles	5,249,490	4036	113	353	DC3CB	5,032,102	3296	162	637		
IO3N	3.5	375,570	1794	31	104	GMEVS	A	200,790	396	64	227	AH6NF	14	1,040	22	9	11	AFRICA	5,249,490	4036	113	353	DR4A	3,839,238	3239	157	545		
IO4T	*	232,848	1553	26	86	(OP: IV3RLB)	GM4EV	*	5,394	70	17	45	ZS1FZ					South Africa	819,766	1258	70	181	DP9A	3,215,788	2846	145	577		
IR2C	*	159,962	830	25	96	(OP: IZ4EFL)	GM2T	21	85,332	492	26	93	YB3MM	A	55,297	193	41	80	Asia	819,766	1258	70	181	DR5N	2,825,104	2704	118	439	
IK1YDB	1.8	137,360	1019	20	81	(OP: IK2PBM)	GM3SEK	7	197,862	987	32	115	YB3IZK	*	299	21	9	14	Asiatic Russia	819,766	1258	70	181	DL4WA	1,418,162	2770	108	413	
RN2FA	A	266	7	7	7	Kaliningrad	GM5A	3.5	266,541	1466	27	96	YD0NGA	21	11,592	98	12	34	Germany	1,043,860	1505	93	317	DK0MN	988,160	1414	98	357	
YL2KO	A	2,661,352	2695	146	486	Latvia	YT5A	A	3,510,340	293	148	520	(OP: YT3WV)	YT2FG	*	1,226,046	1699	99	367	DP5RF	284,992	633	65	227	DP4T	6,445,756	4260	167	636
YL5T	*	919,484	1098	113	344	(OP: YL3DO)	YU9VK	*	691,878	1093	85	275	(OP: YT3WV)	YT2U	*	164,754	476	52	174	DM5A	284,992	633	65	227	DC3CB	5,032,102	3296	162	637
YL9T	*	765,496	1311	90	322	YT1LA	7	950,404	2805	38	158	(OP: YT3WV)	YT0A	*	866,745	286	31	158	DR4A	3,839,238	3239	157	545	DR4A	3,215,788	2846	145	577	
YL2KF	*	4,784	60	17	35	YT1R	*	455,286	1875	37	132	(OP: YT3WV)	YT2T	*	97,970	881	20	81	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
YL2VV	1.8	129,987	1022	20	79	(OP: YL3DO)	YT1R	*	321,900	1279	36	138	(OP: YU1UN)	YT1R	*	50,098	606	12	62	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448
LY2IC	A	954,492	1373	95	367	Lithuania	YT1BH	*	321,900	1279	36	138	(OP: YU1UN)	YT1BH	*	1,361,700	1628	98	202	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448
LY4U	*	35,264	357	20	50	YT1BU	3.5	50,098	606	12	62	(OP: YU1UN)	YT1BU	*	961,324	1392	85	181	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
LY3BA	*	18,144	93	29	83	YT1BV	1.8	157,953	1181	22	89	(OP: YU1UN)	YT1BV	*	728,676	769	102	249	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
LY1R	*	12,772	118	26	77	YT1BW	*	97,970	881	20	81	(OP: YU1UN)	YT1BW	*	568,140	877	94	161	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
LY80	14	699,916	1769	40	156	Sicily	YT1BX	*	165,600	682	98	290	(OP: YU1UN)	YT1BX	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448
LY4G	*	78,546	316	26	88	YT1BY	*	165,600	682	98	290	(OP: YU1UN)	YT1BY	*	93,628	122	44	80	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
LY1C	7	60,528	544	17	80	YT1CZ	*	165,600	682	98	290	(OP: YU1UN)	YT1CZ	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
LY7M	3.5	249,480	1546	27	99	YT1CX	*	165,600	682	98	290	(OP: YU1UN)	YT1CX	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
LY3M	*	102,690	997	22	68	YT1CY	*	165,600	682	98	290	(OP: YU1UN)	YT1CY	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
LX5T	7	347,424	1558	35	141	Luxembourg	YT1DZ	*	165,600	682	98	290	(OP: YU1UN)	YT1DZ	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448
OM7CW	A	2,429,301	2322	139	470	Slovakia	YT1E	*	165,600	682	98	290	(OP: YU1UN)	YT1E	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448
OM8AG	28	8,896	92	14	50	YT1F	*	165,600	682	98	290	(OP: YU1UN)	YT1F	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
OM3CG	21	335,040	850	37	155	YT1G	*	165,600	682	98	290	(OP: YU1UN)	YT1G	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
OM7PMV	14	37,062	240	17	70	YT1H	*	165,600	682	98	290	(OP: YU1UN)	YT1H	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
OM5MS	3.5	524,547	2003	32	132	YT1I	*	165,600	682	98	290	(OP: YU1UN)	YT1I	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
OM6OM	1.8	197,152	1179	22	88	YT1J	*	165,600	682	98	290	(OP: YU1UN)	YT1J	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
OM6KW	*	36,490	353	20	69	YT1K	*	165,600	682	98	290	(OP: YU1UN)	YT1K	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
PA1TC	*	112,093	387	40	157	YT1L	*	165,600	682	98	290	(OP: YU1UN)	YT1L	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
PG3NM	*	110,592	389	48	144	YT1M	*	165,600	682	98	290	(OP: YU1UN)	YT1M	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
PA0KHS	*	98,880	410	45	120	YT1N	*	165,600	682	98	290	(OP: YU1UN)	YT1N	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
PA5KT	*	45,440	192	38	104	YT1O	*	165,600	682	98	290	(OP: YU1UN)	YT1O	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
PA50	*	38,467	217	33	110	YT1P	*	165,600	682	98	290	(OP: YU1UN)	YT1P	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
PA3EWP	14	457,184	1405	38	144	YT1Q	*	165,600	682	98	290	(OP: YU1UN)	YT1Q	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
PA0JED	7	81,312	404	26	106	YT1R	*	165,600	682	98	290	(OP: YU1UN)	YT1R	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
PA2AWU	*	29,870	197	21	82	YT1S	*	165,600	682	98	290	(OP: YU1UN)	YT1S	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
PA5R	*	17,095	229	26	149	YT1T	*	165,600	682	98	290	(OP: YU1UN)	YT1T	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
PA4VHF	3.5	375,636	1779	32	106	YT1U	*	165,600	682	98	290	(OP: SP2JMB)	YT1U	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
GI4NKB	A	431,673	986	63	246	YT1V	*	165,600	682	98	290	(OP: SP2JMB)	YT1V	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
LA6FJA	7	204	17	5	12	YT1W	*	165,600	682	98	290	(OP: SP2JMB)	YT1W	*	1,094,058	1352	80	262	DR5N	2,825,104	2704	118	439	DR5N	2,105,075	2282	127	448	
Poland	*	728,334	1123	81	306	YT1X	*	165,600	682	98	290	(OP: SP2JMB)	YT1X	*	1,094,058	1352	80	262	DR5N	2,825,104									

# Andrew Cinta® Cable Assemblies



All assemblies are tested to ensure optimum performance.

## CNT600 (LMR type)

Connector: N, PL259, TNC & 7/16  
Burial: Yes, UV Resistant: Yes.  
Shields: 2 (100% bonded foil +90% TC Braid) VP 87%.  
Attenuation 3.9dB @ 2 GHz at 100ft.  
Usage 450 MHz and Higher.

## CNT195 (LMR type)

Connector: N, PL259, TNC, SMA, & BNC  
Burial: Yes, UV Resistant: Yes.  
Shields: 2 (100% bonded foil +90% TC Braid) VP 80%.  
Attenuation 0.45dB @ 2 GHz (3ft Jumper).  
Usage 1 MHz and Higher.

## CNT400 (LMR type)

Connector: N, PL259, TNC, SMA, BNC.  
Burial: Yes, UV Resistant: Yes.  
Shields: 2 (100% bonded foil +90% TC Braid) VP 85%.  
Attenuation 6.0dB @ 2 GHz at 100ft.  
Usage 450 MHz and Higher.

## CNT240 (LMR type)

Connector: N, PL259, TNC, SMA, BNC.  
Burial: Yes, UV Resistant: Yes.  
Shields: 2 (100% bonded foil +90% TC Braid) VP 84%.  
Attenuation 3.0dB @ 150 MHz at 100ft.  
Usage 1 MHz and Higher.

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K3DI

NY4A  
AI6V  
W6OAT

W7RN  
WC8VOA

W9MU  
NONI  
NOVU/9  
K0DXC

VE7SV  
VE7GL

ZF1A  
Dominican Republic

HI3A  
VP2MSC

Montserrat  
Turks & Caicos

VP5W  
U.S. Virgin Islands

AFRICA  
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EF8M

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10894

161

631

D4C

CT9L

Madeira Islands

17,428,866

8836

146

553

ASIA

Asia

RK9CWB

B7P

B4B

China

4,219,101

4036

134

375

P3F

20,468,448

9377

163

629

Cyprus

3,777,817

1595

121

456

RK9CWB

420,510

1149

75

139

Z37M

LA8G

CS5NRA

388,877

1545

48

185

YU1ARC

2,287,190

2795

118

403

S52ZW

5,803,138

4594

159

578

EE2W

AM5R

8,190,136

7113

158

575

HB9CT

6,621,460

5488

146

564

SK6M

4,722,525

4643

144

551

HB9CT

14,179,922

9632

173

684

EA6IB

9,674,577

6625

184

685

T93J

1,456,320

1802

125

319

HS0AC

1,456,320

1802

125

319

EE2W

AM5R

8,190,136

7113

158

575

ED8A

18,146,604

9296

147

551

J3A

15,100,800

9690

151

553

W3LPL

13,939,191

6322

175

698

K3LR

13,247,624

5782

179

705

KC1XX

12,761,902

5982

171

667

NO4I

9,702,672

4969

167

637

K1TTT

9,144,404

4583

162

640

W2FU

7,830,540

4043

156

609

NR4M

6,930,000

3770

158

592

W3PP

6,239,482

3436

145

574

K5GO

6,150,760

3566

163

607

KB1H

6,083,392

3224

151

583

W4MYA

5,742,647

3027

153

590

KORF

5,443,026

3059

170

561

W8AV

3,747,769

2226

147

550

N6RO

3,554,880

3155

155

405

W3OIH/9

2,350,135

1701

449

KD1EU

1,583,225

1234

116

429

W6UE

266,500

451

82

178

LY2BLN

LY3BY

LZ3RS

NOFW

N1NN

N5AU

N5ESA

N7UA

N9LF

N9SF

NP3W

NX2PKW4

OOGZ

OH0MM

OH1HPY

OH2BAI

OH3WD

OKHPT

OK1KTD

OK2SDF

OK2ZYL

PA0RBO

PH0AS

RA4H0

RA4NAJ

RA4UVK

RA6EV

RK3SWB

RJ3DFW

RX6AY

RX9WN

RZ2AF

RZ3DSN

RZ3FWF

SF7WT

SJ4F

SK5PZ

SM5APS

SM5ENX

SM5GMZ

SM6BSK

SP1DMX

SP2ZEX

SP2P0V

SP3AMZ

SP4GDC

SP4KDX

SP5ELM

SP5IC5

SP6CZ

SP7CWW