

# Results of the 1993 CQ World-Wide DX SSB Contest

BY BOB COX\*, K3EST

**W**hen writing an article about the CQ WW DX Contest results, it's hard to know where to begin. There are so many stories that come flooding to mind that you, the entrants, have related to us over the last nine months. Each of you has a personal tale to tell about getting ready for the contest, some with months of preparation, others with a quick decision to enter the competition.

Just who enters the WW DX Contest? Well, for starters, about 30,000 different people from every part of the planet join in this competition. Of these 30,000 about 3000 sent in log entries. From these numbers it is apparent that most people just want to have a great time working their friends, trying out new antennas, and catching that new country on 80 meters.

But what about those who enter to win? There are thousands of these guys and gals all over the world. Each is confronted with the fact that the world is not propagationally fair. If you are on the west coast of the US, it is a Herculean task to compete against the stations from New England. If you are in New Zealand, you have to hope that the US operators turn their antennas SW. In Japan you are isolated enough to make a world high score seem impossible. But still, something drives each of us on to compete, to try to win, to improve our skill, to try to beat our next-door neighbor or friend in the next city. After all, this is what is important—beating your last year's score; beating your friend in northern Germany; creating a station, which if called upon, can respond to an emergency situation that might arise.

This brings us to the crux of the matter. Is there a way to equalize locations so that everyone has an equal chance to win the "big" one? The answer is not at all surprising. No. Everyone who has thought about this matter understands this fact. What the CQ WW write-up tries to do is, yes, emphasize the world winners, but also give credit to the entrant in Alaska or India who put in an incredible effort. The top-score boxes are important as an example of excellence, but hundreds of battles take place on the country level. There are trophies and certificates enough for all to have a chance to win one no matter where they are located. Now that the sunspots are reaching a low, the world winners are squeezed into more and more specific locations. For those of you who want to compete on a world level, you know where and what you have to do. But for the majority of us, it is enough to work that VS6 on 80, to beat Vlad in Moscow with his three-element Yagi.

The story could begin in Hong Kong, where the multi-multi station of VS6WO was being set up. Located on an apartment roof, the entire station antennas were a logistical challenge. As the operators started to arrive from around the world, they got together over dinner and



*The island IS big enough! Back left: P40L (N5RZ, KRØY), P49T (AA4GA, WX4G, K4PI). Front left: P40C (AA2U) and P40W (W2GD).*

beer to figure out how to have the high Asian score. A few days went by before they even thought about what other stations were doing. They had read that W2GD was going to fly down to Aruba and try to win, but they did not know that John was also trying to set up his station.

Located on the island of Aruba at the QTH of P43GR, John was busy pulling cactus out of his shoe. Aruba is a thorn-bush island, and great care must be taken to avoid several months of excruciating pain from an ambitious thorn. John had just received a set of new monobanders that he was anxious to try out in the test. When nighttime came it was time to get together with the other local hams, who turned out to be the crew of P40L—Jeff, KRØY, and Ralph, N5RZ. They had rented AI6V's QTH in the interior of the island. Carl had put up three towers on a small lot and the guys were busy testing to see if the rotators were okay and how it might be possible to put up a beverage antenna. Over dinner with P40W, P49T, and P40C, they had a great time talking about strategy and band openings. It turned out that P49T was also multi-single (WX4G and K4PI) and was in direct competition with P40L.

Eventually their thoughts turned to the island 100 miles to the SE—Bonaire. They knew that the operators of PJ1B were working very hard to have the best chance of winning the multi-

single category. With four towers and many years of experience, PJ1B was the team to beat. Not many know that Walt, WA3LRO, is the driving force behind PJ1B. At the same time as the Aruba operators were trying to figure out their plans, PJ1B was having a meeting. Over drinks they remembered hearing KP2A warning up that afternoon. Jose, CT1BOH, is a very dedicated contester, and had traveled to KP2A's QTH to try the impossible: win the CQ WW from North America.

Across the world in Europe, Jorma, OH2KI, was looking out over the straits of Gibraltar. In the distance was Africa, where Pekka, OH1RY, was setting up his station overlooking the Atlantic for 270 degrees.

The stories could go on and on: The multi-single of IQ4A located on a mountain overlooking Bologna. In the distance is the villa where Marconi transmitted his first wireless message.

So now let's first look at those operators who spent so much time and effort to try to win a particular category.

## All Band

The all-band category always requires great skill, luck, and iron will. This year's iron man was John, W2GD, operating at P40W. Using a

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## TROPHY WINNERS AND DONORS

### **SINGLE OPERATOR, ALL BAND World**

**P4BW** (Opr. John Crovelli, W2GD)  
**Donor:** Dave Rosen, K2GM  
 WA2RAU Memorial

### **World Low Power 7Q7XX**

**Donor:** Slovenian Contest Club

**World Assisted  
John Siuymmer, CH3EJ**  
**Donor:** Snake River Contest Club

**World QRP  
7Z2AB** (Opr. David Franks, K2XR)  
**Donor:** Doc Sayre, N7AVK

### **U.S.A.**

**John Dorr, K1AR**  
**Donor:** Potomac Valley Radio Club  
 KC8C Memorial

### **Canada**

**David Goodwin, CH2ZP**  
**Donor:** Niagara Frontier Int'l DX Assn.  
 VE3WT Memorial

### **Caribbean/C.A. KP2A**

(Opr. Jose Carlos Cardoso Nunes, CT1BOH)  
**Donor:** Alex M. Kasevich, VP2MM

### **Europe**

**Drago Turin, Jr., S59UN**  
**Donor:** Potomac Valley Radio Club  
 W4BVV Memorial

### **Africa EA8AH**

(Opr. Pekka Kolchmainen, OH1RY)  
**Donor:** Gordon Marshall, W6RR

### **Asia**

**Satoshi Hara, JH5FXP**  
**Donor:** Japan CQ Publishing Company Ltd.

### **Japan**

**Kazuhiko Endou, JA8QNJ**  
**Donor:** Japan Crazy Contesters Club

### **Oceania**

**9M8R** (Opr. Jim Sullivan, W7EJ)  
**Donor:** Northern California DX Clu

### **South America**

**9Y4H** (Opr. Glenn Rattmann, K6NA)  
**Donor:** Yankee Clipper Contest Club

### **SINGLE OPERATOR, SINGLE BAND World—28 MHz**

**Arturo J. Gargarella, LU6ETB**  
**Donor:** Joel Chalmers, KG6DX

### **World—21 MHz**

**ZW5B** (Opr. Jim Hoffman, N5FA)  
**Donor:** French 21170 DX Net/LNDX  
 FY5AN Memorial

### **World—14 MHz**

**ZX0F** (Opr. Atilano de Oms, PY5EG)  
**Donor:** North Jersey DX Assn.  
 K2HLB Memorial

### **World—7 MHz**

**PJ9U** (Opr. Seppo Sisatto, OH1VR)  
**Donor:** Fred Laun, K3ZO  
 K7ZZ Memorial

### **World—3.8 MHz**

**Wolfgang Kraack, DL3LAB**  
**Donor:** Fred Capossela, K6SSS

### **USA—28 MHz**

**Howard Leake, W6AXX/3**  
**Donor:** Donald Thomas, N6DT

### **USA—21 MHz**

**Lawrence Emery, K1UO**  
**Donor:** Bill Gioia, K2EK

### **USA—14 MHz**

**John Bayne, KK9A**  
**Donor:** Southern California DX Club

### **USA—7 MHz**

**W7XR** (Opr. Daniel Handa, W7WA)  
**Donor:** Stanley Cohen, WD8QDQ

### **USA—3.8 MHz**

**John Rodgers, WE3C**  
**Donor:** Arnold Tamchin, W2HCW

### **USA—1.8 MHz**

**Jerry Rosalius, WB9Z**  
**Donor:** J. Bruce Siff, W2GBX

### **Carib./C.A.**

**V26N** (Opr. Robert Hayes, KW8N)  
**Donor:** Snake River Contest Club

### **Europe—28 MHz**

**IR8A** (Opr. Pasquale Speranza, I8QLS)  
**Donor:** Chod Harris, VP2ML

### **Europe—21 MHz**

**Marko Munih, S57EK**  
**Donor:** OH6JW Memorial

### **Europe—14 MHz**

**IT9A** (Opr. Fabio Grisafi, IT9GSF)  
**Donor:** A.G. Anderson, GM3BCL

### **Europe—7 MHz**

**Damijan Peternelj, S59AB**  
**Donor:** Roger Burt, N4ZC

### **Japan—28 MHz**

**Kazunori Kuroki, JR6EZE**  
**Donor:** Take Yokoyama, JL1BLW

### **Japan—21 MHz**

**Tadao Katsuta, JH7DNO**  
**Donor:** DX Family Foundation

### **MULTI-OPERATOR, SINGLE TRANSMITTER World**

**PJ1B** (Oprs.: WA3LRO, K3EST, N3ED,  
 W3UM)

**Donor:** Southern California DX Club  
 W6AM Memorial

### **U.S.A.**

**KC1XX** (Oprs.: KC1XX, AD1C, K1EA,  
 KA1XN, KM3T)

**Donor:** Carolina DX Association

### **Europe**

**OT3T** (Oprs.: DK1FW, DJ4AX, DL1SBR,  
 F6EXV, ON1ACV, ON1APM, ON1ARC,  
 ON1BEJ, ON2AAM, ON2ABE, ON2ALN,  
 ON4AAC, ON4AFZ, ON4AZL, ON4EJ,  
 ON4TJ, ON4UN, ON4WW, ON5EX, ON5NT,  
 ON5UK, ON6TT, ON6UL, ON6WU, Frida,  
 Sylvain.)

**Donor:** Bob Cox, K3EST

### **Carib./C.A.**

**VP2VFP** (Oprs.: AB4JI, K4ADK, KU4J,  
 N4BWS, WA2TMP, WA4DPU)

**Donor:** Eric Scace, K3NA

### **Oceania**

**N6VI/KH6** (Oprs.: KA6SAR, N6DLU,  
 WA6OTU)

**Donor:** Junichi Tanaka, JH4RHF

### **MULTI-OPERATOR, MULTI-TRANSMITTER World**

**EA9UK** (Oprs.: WN4KKK, W6QHS, KK6QM,  
 N6KT, N6TJ, K5TSQ, W6MKB, KA1BQ,  
 OH2MM, EA9KF, EA9LZ, EA9UK)

**Donor:** W6QHS and KK6QM

### **U.S.A.**

**N2RM** (Oprs.: N2RM & KZ2S, N2NT, K3UA,  
 N2AA, K2TW, KQ2M, KR2J, W2RQ, WM2H)

**Donor:** Paul Hellenberg, KS9K

### **Europe**

**G8KPW** (Oprs.: G4BAH, G4PIQ, G4BWP,  
 G4BUO, G4VMM, G4FAM, G4FRE, G3VHB,  
 G7ABQ, NZ1W, G3XTT, G7BKO, G3ZAY,  
 G0AFH HG73DX)

**Donor:** Finnish Amateur Radio League

### **CONTEST EXPEDITIONS**

#### **World Single Operator**

**S21ZW** (Opr. Craig Maxey, KH8AL)  
**Donor:** Stuart Meyer, W2GHK

#### **World Multi-Operator**

**VK9LI** (Oprs.: K6MC, KC6KOO, N6AA,  
 N6CW, N6ZZ, W6KNC, W6XD, WB6OKK)  
**Donor:** The German CDXG & SDXG  
 DJ3NG & DJ4EI Memorial

### **SPECIAL SINGLE OPERATOR AWARD**

**World—All Band Under 18 Years Old**  
**Brian Woelz, N9OFD**

**Donor:** Ham Radio Bookstore

new set of antennas and a great location for the US and Europe. John put his location on the air for the last time before his host, P43GR, QSYs. Winning for the world, John operated about 43 hours.

Farther north was another fierce competitor, Jose, CT1BOH, operating from KP2A's great QTH. Jose finished second in the world, but set an all-time single operator QSO total! He must have meditated for weeks to stay up and

push so hard for 47 out of 48 hours.

It turns out that if the time on the air is averaged for the top 5 stations, it is about 43 hours. If you check out the rest of the top ten world all-band scores, you will see that only FR5DX



(Left) KK6BB/BV and (right) KC6CNV/BV operated from BV2FA's QTH. Shane gave the guys (both under 16) a chance to do well!

stayed at home. All the rest were guest operators looking for that special place to have fun.

In the US John, K1AR, destroyed the competition to continue his dominant role in US contesting. And even he traveled from Long Island to Massachusetts to activate K1EA's automated station. John dominated the high bands over fellow YCCC members Randy, K5ZD/1, and Dean, N6BV/1, who finished second and third, respectively.

The competition in the "rest" of the US was very tough, with Doc Sayer, N7AVK, out Oregon way coming out on top over the station from Tom Sawyer's home town, K4VX/Ø, and N7TT in western Washington.

In Europe Drago, S59UN, operating from NE Slovenia on top of a good location in the middle of a vineyard, took top honors. It was his opening to JA that made the difference over Jorma, OH2KI, who put ZB2X on the air. Both Drago and Jorma are no strangers to tough competition. They both worked very hard to construct good stations. It is interesting that the top scores in Europe are scattered from north to south in zone 15 and zone 14.

Before leaving the high-power single operator category a few other outstanding efforts must be mentioned. Al, WR6R/KH6, seems to love traveling to KH6 for the contest, and who can blame him. He broke into the top 20 from a difficult QTH. Jim, VK9NS, always livens up the contest, and this year he did a great job from zone 32. AH9B/VO2 made a tough zone easy by racking up big QSO numbers. I think he made a lot of Europeans and JA's happy to catch that rare zone.

This year the number of entrants in the low-power category exceeded all other categories. I guess guys were always running low power, but now have a chance to compete with others running equal power. Right up front let's say to please indicate on your cover sheet your power, not your rig type. We cannot make you low power unless you indicate your power and say LP on the sheet. Thanks in advance.

So who walked away with low-power honors

this year? 7Q7XX, putting in his last season before returning to JA. He was closely followed by first-time DXpeditioner N3ADL operating TO5MM. What a great job.

If you check out the rest of the top 10 scores you find S21ZW at #8. Craig, KH8AL, hopped on a plane in Seattle, traveled to Dacca, got licensed while there, put up some wires and a triband, and gave a surprise to many people, especially on 40 long path to the USA. His license ran out before the contest was finished, so that was a serious handicap! 9J2FR and P29KH showed that you can be many places and still compete successfully.

In the US the top ten scores reflect a different make-up than the high-power scores. Barefooting his way to the top score was Jeff in West Virginia. Jeff is a pharmacist, so he must know the right combination of vitamins to keep going. Following closely in second place was K2SG. Just a few QSOs made the difference between these two scores. It was the traditional balancing of QSOs versus multipliers that made the difference. Over in Europe Slovenia made a big showing with four out of the top ten. After it all was checked out, S53EA ended up as the winner.

## QRP

In the QRP category K2XR operating at 7Z2AB demolished all of the competition with an outstanding 2.56 million points to win for the world. Dave honed his HF skills back in the late 1970s while operating with KR2Q on 10 meters at super multi-multi station N2AA (at K2GL) and the results show: Dave had well over 1200 QSOs on 10 meters alone! Congratulations, Dave, and everyone thanks you for handing out a needed mult.

## Assisted

This year somebody finally did an outstanding job in the Assisted category on the world level.

John, CH3EJ, managed to work the proper number of QSOs without glueing his eyes to the packet screen to come up with a winning score. Second place went to Roland, DK3GI, operating club station DLØWW. Closely behind Roland was Jeff. K1ZM/2, who finished first in the US. The Assisted category reflects the active packet systems of Europe and the US.

## Multi-Single

In the most hotly contested battle of this year's SSB contest, three crews went to the ABC islands of what used to be the Netherlands Antilles (before Aruba went independent)—P49T, P40L, and PJ1B. When the dust settled, two of the stations broke the existing world record in the multi-single category with the third station just missing breaking it. After the closest scrutiny to which any logs have ever been subjected, PJ1B edged out P40L by less than 1%. It's a shame that there cannot be more than one winner when super human efforts of this magnitude have occurred.

## Multi-Multi

Gathering operators from three continents is no easy task. That's exactly what EA9UK did to place first in the monster multi-multi category. Operating from a football field using the lights as antenna supports, they bested all comers by about 10 million points. Placing second was VP2EC (alias N5AU). Their score on the low bands was truly marvelous.

Special mention is made here of UW2F. A group of Bavarian Contest Club amateurs traveled to Kaliningrad by car to activate this famous station.

While in the far Pacific, the Southern California Contest Club decided that this was the year to put Lord Howe Island in everyone's log. It's difficult to make QSOs on 20 at noon in the middle of the Pacific.

## For Your Information . . .

The SSB test yielded a total of 3119 logs. You might find it interesting to see what percentage of the these logs came from various continents: South America 3.5%; Asia 12.2%; Oceania 2.5%; Africa 1.6%; North America 38.2%; and Europe 41.9%.

As you can imagine, each year we receive letters of praise and of complaint. Last year we received several letters asking us to remind you that operating below 7040 on SSB is against several regional band plans. In many cases, when an amateur signs his license, he agrees to abide by the IARU regulations. So before you think that it is sure clear below 7040, there is a reason. Many countries cannot legally operate below that frequency. In addition, the country allocations of what frequencies can be used on SSB on 160 have changed recently. Now almost all Europeans operate above 1850 on SSB. If you have any doubts about what the frequencies are, ask someone before the contest.

**Log submissions:** The contest rules require that you submit a separate log for each band. Do not send a continuous log. If you use a computer to log your contest QSOs, we want your computer disk. The format we need is spelled out in the rules elsewhere in this issue,

## TOP SCORES

### WORLD

<b>SINGLE OPERATOR HIGH POWER</b>	*S24BI 1,250,088 S57EK 1,209,789	S57AV 40,365 4X4NJ 33,592 UT5DK 31,735 S51HB 28,224 *OZ3SK 23,313	21 MHz HA4XN 35,046 EA5GRC 34,681 CL3ZD 31,777
<b>All Band</b>	14 MHz ZX2F 2,111,420 PJ9M 1,864,584 CH7SV 1,302,863 IT9A 1,265,126 YW1A 1,240,000 S52AA 1,177,536	<b>LOW POWER</b>	1.8 MHz OZ3SK 23,313 LA6WEA 13,395 OH1KF 9,568 YL2GUO 8,200 SP2FOV 7,644 UB5TFB 7,290
P40W 13,477,476 KP2A 13,202,298 EA8AH 12,052,110 9Y4H 10,574,676 6V6U 10,541,769 EA8BR 8,425,029 9M8R 6,947,766 8R1K 6,908,256 K1AR 6,596,688 FR5DX 6,212,808	7 MHz PJ9U 1,199,968 T11C 1,052,057 CN2JR 630,126 S59AB 597,204 G3NLY 558,927 YV5MRR 507,276	<b>All Band</b>	<b>ORP</b>
28 MHz LU6ETB 1,551,260 PY3OC 1,121,672 LU5FEW 912,240 LU9MBY 762,508 CX5BW 746,181 L2Q 687,492	3.7 MHz DL3LAB 188,400 IV3TAN 184,080 GM0ECO 182,378 S51OJ 171,570 WE3C 169,020 ON9CJM 158,046	7Q7XX 5,494,609 TO5MM 5,187,524 VP2EJ 4,499,874 HC1OT 4,194,840 EL2PP 3,491,256 HK0HEU 3,137,076 ED8CQ 2,144,004 S21ZW 2,007,372 9J2FR 1,902,810 P29KH 1,853,280	<b>All Band</b>
21 MHz ZW5B 2,834,228 9Y4VU 2,214,450 V26N 2,159,460 ZW0JR 1,438,668	1.8 MHz IV3PRK 43,751	28 MHz LU3HIP 556,750 EA6VQ 499,422 T93M 424,999 PY2PD 424,154 LU1VK 381,669 TI2KSR 322,920	14 MHz IR1T 684,216 IB4M 654,672 LU2NI 442,680 G10SAP 355,540 IR3S 352,444 LU1ICX 313,065
			7 MHz YV6BTF 288,384 TA2BD 104,960 RB5QRW 102,258 LZ1ZX 99,704 YO4FYQ 56,335 IK2EKY 47,940
			3.7 MHz S51AW 67,520 IT9HBT 62,178 S59CAB 57,749
			<b>ASSISTED</b>
			<b>All Band</b> CF-3EJ 8,167,096
			<b>MULTI-OPERATOR SINGLE TRANSMITTER</b>
			PJ1B 22,596,570 P40L 22,442,112 P49T 17,684,346 OT3T 11,803,309 IQ4A 11,609,784 VP2VFP 10,357,209
			<b>MULTI-OPERATOR MULTI-TRANSMITTER</b>
			EA9UK 37,140,597 VP2EC 28,702,788 VP5I 20,720,222 G0KPW 18,718,332 HG73DX 18,653,271 UW2F 16,104,474

### EUROPE

<b>SINGLE OPERATOR HIGH POWER</b>	OK1RI 1,136,610 S58AB 1,068,840 SP7GIQ 946,212 DJ7AA 932,752 YL1WW 781,064	IV3TAN 188,400 GM0ECO 183,162 S51OJ 175,560 ON9CJM 170,367 S52CD 141,700	S59DJK 834,309 DK1QH 769,472 EA3ELZ 760,806
<b>All Band</b>	14 MHz IT9A 1,265,126 S52AA 1,177,536 LZ5W 1,150,237 IB9S 1,106,756 CT1ESV 889,856 GM3WOJ 818,360	1.8 MHz IV3PRK 44,676 S57AV 40,365 UT5DK 31,735 S51HB 28,224 *OZ3SK 23,769 OK1JDX 18,232	28 MHz EA6VQ 499,422 T93M 424,999 OM3CFA 205,590 HA1FF 153,897 CT1ERK 153,232 IK4LZH 139,896
S59UN 5,822,976 ZB2X 5,257,065 OH0DX 4,870,488 EA3NY 4,702,515 GW4BLE 4,366,124 DJ4PT 3,956,526 DL2NBU 3,411,670 G3NAS 3,196,200 G10KOW 2,997,225 GJ0SLY 2,709,760	7 MHz S59AB 597,204 G3NLY 558,927 YT7AA 492,660 SP8YAQ 463,813 DL8OH 398,660 UB4HO 329,175	<b>LOW POWER</b>	G10SAP 355,540 IR3S 352,444 UV3HD 204,624 SP5LKM 132,182
28 MHz IR8A 526,500 CT1AOZ 500,664 *EA6VQ 499,422 S51AY 447,408 *T93M 424,939 S51SO 300,510	3.5 MHz DL3LAB 191,760	<b>All Band</b>	<b>MULTI-OPERATOR SINGLE TRANSMITTER</b>
21 MHz S57EK 1,209,789		S53EA 1,552,536 S59DX 1,539,520 TM6GG 1,518,594 LX1NW 1,210,971 LX1KC 1,049,152 EA3BKI 870,406 S51FA 834,558	7 MHz RB5QRW 102,258 LZ1ZX 99,704 YO4FYQ 56,335 IK2EKY 47,940 UB5ZBF 34,278 YO3JF 18,522
			<b>MULTI-OPERATOR MULTI-TRANSMITTER</b>
			G0KPW 18,718,332 HG73DX 18,653,271 UW2F 16,104,474 OT3A 14,932,489 UR8J 9,141,237 PI4COM 8,805,900
			<b>MULTI-OPERATOR SINGLE TRANSMITTER</b>
			OT3T 11,803,309 IQ4A 11,609,784 TM7C 8,564,011 LZ9A 7,780,144 OH2X 7,379,169 TM2Y 7,116,991

### USA

<b>SINGLE OPERATOR HIGH POWER</b>	K1UO 865,623 K2SS/1 793,776 NG2X 666,246 KS1L 648,384 K3ZJ/8 599,589 WZ3Q/4 516,426	WF5E 125,020 KA5W 105,186	WS1A 966,420 WA2UUK 822,126 AI6E/1 792,090 AA4FI 749,580 W2CRS/0 686,400 KE2ZU 617,760 K0RNZ 591,610 WA7BNM/6 557,190
<b>All Band</b>	14 MHz KK9A 733,698 K7RI 697,151 K9ES/4 503,982 W7IL 485,415 N8JEC 377,019 W1XE/0 307,008	3.7 MHz WE3C 169,020 W6RJ 153,700 AD1G 62,565 W9LT/8 33,441 K2RR/1 33,048 WB7EWC 22,464	1.8 MHz KD4I XT 133,584 KE5FI 127,124 WB5CRG 125,857 KC3PZ 104,400 KA1YIY 92,476 WB2BZR/3 89,625
K1AR 6,596,688 K5ZD/1 5,370,975 N6BV/1 4,785,781 K3ZO 3,857,259 W3BGN 3,481,832 K1RU 3,476,867 W2SC/1 3,439,248 N2LT 3,377,760 W1PH 2,981,356 K2DM 2,805,115	7 MHz W7XR 358,345 KC7EM 328,530 KV0Q 246,048 W1RR 174,330	<b>LOW POWER</b>	N1KWF 168,885 NY5B 159,880
28 MHz W6AXX/3 169,824 *KD4HXT 133,584 *KE5FI 127,124 *WB5CRG 125,857 W9XT/4 115,411 NZ8O 112,875			<b>MULTI-OPERATOR SINGLE TRANSMITTER</b>
			K1VUT 255,600 N4MO 196,482 K2QMF 157,290 KF8UM 138,112 AA4UF 73,800 KD5IA 47,712
			<b>MULTI-OPERATOR MULTI-TRANSMITTER</b>
			N9JF 18,018 N5AHS/3 7,738 WA6WPG 7,128 NI6G 5,735
			<b>MULTI-OPERATOR SINGLE TRANSMITTER</b>
			KC1XX 7,630,228 N3RS 5,846,340 K1DG 5,724,795 K1NG 5,263,608 K1RX 5,053,572 KY3N 5,009,757
			<b>MULTI-OPERATOR MULTI-TRANSMITTER</b>
			N2RM 16,016,190 W3LPL 14,740,472 K2TR 11,868,171 K3LR 10,383,840 W7RM 6,708,236 KY1H 6,017,040

## 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
F4QW	128/9/22	412/15/51	589/25/69	1599/31/115	1827/32/124	2613/31/113
KP2A	278/9/24	729/17/76	1160/30/101	1851/32/97	2092/33/107	2587/27/101
EA8AH	508/9/26	544/17/73	649/25/84	1551/34/103	1423/30/94	2447/25/94
9Y4H	179/8/18	432/18/54	582/23/70	1943/30/78	1515/29/88	2275/22/84
6V6U	7/4/6	51/10/29	407/20/70	2120/33/136	1570/30/131	1696/27/110
EA8BR	10/3/7	286/15/57	828/25/90	864/30/101	1133/29/94	1785/23/105
9M8R	10/6/10	225/23/45	746/35/103	888/35/101	1744/35/103	426/29/78
8R1K	51/8/18	225/11/43	610/22/71	1068/31/98	1068/31/98	1317/24/92
K1AR	28/9/20	255/18/70	261/24/81	994/36/132	1066/31/130	636/28/117
FR5DX	3/3/3	36/15/23	274/26/74	1308/34/126	942/36/117	1090/30/101

### USA TOP SINGLE OPERATOR, ALL BAND

Station	160	80	40	20	15	10
K1AR	28/9/20	265/18/70	261/24/81	994/36/132	1066/31/130	636/28/117
K5ZD/1	34/10/20	232/19/73	250/25/79	762/37/125	924/32/119	557/27/108
N6BV/1	25/7/15	185/15/67	115/24/74	673/36/134	1174/29/128	453/23/85
K3ZO	14/8/13	149/18/58	197/24/74	751/33/115	903/30/108	334/24/76
W3BGN	38/9/21	190/15/56	166/23/68	617/32/113	535/28/103	517/27/107
K1FU	22/7/12	99/15/50	101/21/68	625/35/119	779/30/109	472/24/99
W2SC	13/5/7	114/13/54	167/25/79	533/30/107	940/27/99	463/25/77
N2LT	23/9/16	102/15/53	107/25/71	505/32/115	641/32/117	532/24/111
W1PH	13/7/14	116/15/54	129/24/68	539/36/119	728/29/105	294/20/81
K2DM	19/7/13	131/14/52	167/22/72	636/30/105	549/29/101	323/22/78

### WORLD MULTI-OPERATOR SINGLE TRANSMITTER

Station	160	80	40	20	15	10
FJ1B	111/10/24	937/25/94	1055/29/114	2011/38/147	1829/32/139	3443/30/128
F4Q2L	93/9/29	507/18/79	1267/30/109	2111/37/140	2134/33/142	3427/30/136
F49T	138/7/16	797/18/63	1054/27/91	1763/31/112	2001/32/130	3186/30/112
OT3T	132/11/65	563/23/97	1117/38/138	914/36/131	2003/38/145	497/29/136
ID4A	65/7/54	186/23/97	1101/38/137	1032/37/147	1588/38/160	1108/32/142
VP2VFP	54/5/19	264/15/59	805/24/94	840/33/120	2249/34/123	1388/27/108

### USA MULTI-OPERATOR SINGLE TRANSMITTER

Station	160	80	40	20	15	10
KC1XX	23/9/24	533/23/93	174/29/104	941/39/142	1076/34/141	613/28/136
N3RS	29/10/22	101/19/78	276/34/114	684/37/150	868/33/146	630/27/136
K1DG	31/11/27	239/21/86	175/29/99	768/38/140	1026/33/148	309/28/135
KY3N	22/7/13	230/21/83	182/25/92	629/34/134	1039/32/140	483/26/123
K1NG	37/12/29	124/15/77	172/28/97	875/38/141	928/32/148	297/28/128
K1RX	3/1/2	345/23/92	75/19/62	1087/38/138	579/31/126	524/25/131

### WORLD MULTI-OPERATOR MULTI-TRANSMITTER

Station	160	80	40	20	15	10
EA9UK	319/9/55	1061/24/100	2584/35/137	2962/39/159	3660/40/165	2761/32/128
VP2EC	400/16/54	905/24/106	2351/34/144	2874/36/149	3916/36/151	2442/31/127
VP5L	386/8/26	1123/17/69	1880/32/114	3165/36/124	3524/31/109	2501/29/108
G8KPV	616/12/63	1125/21/101	1674/39/149	2579/39/159	2488/40/173	3981/26/152
HG73DX	517/8/60	1663/26/105	1806/34/124	2755/40/148	2611/39/153	923/34/32
UW2F	930/11/69	1530/26/106	1762/38/138	2595/40/150	2027/38/146	714/28/111

### USA MULTI-OPERATOR MULTI-TRANSMITTER

Station	160	80	40	20	15	10
N2RM	143/13/38	711/23/102	602/34/119	1878/39/174	1890/37/163	1304/28/151
W3PL	177/11/33	664/24/101	551/35/125	1972/39/175	1743/35/160	985/27/141
K2TR	131/12/37	427/30/108	2152/39/166	1102/34/146	747/27/139	
K3LR	98/12/36	442/18/73	424/31/110	1475/38/166	1267/36/156	772/27/138
W7RM	36/9/12	431/21/45	500/32/91	1522/37/132	1445/33/108	289/19/47
KY1H	109/7/19	531/18/63	254/27/97	960/37/134	1124/30/136	598/27/12

but it doesn't hurt to emphasize this information here.

First of all, if you use CT, we want your .BIN file only. Please do not send only your .ALL file or .20 etc. files. Always remember to include your .BIN file. If you use N6TR's program, send your .DAT file. If you use another program (and there are many), send a separate file for each band. The file should be a vertical column of calls in the order you worked them on a particular band, with each call followed by a hard return.

It looks like our personalized report has been well received. If you want one, it is \$8. We must have a readable disk from you. FAX your request to 916-758-9062.

## Thanks

A special thanks to the members of the CQ WW Contest Committee for their dedication to making the contest fun and a fairly judged event. Not only do they look at your logs, but they relay your ideas and suggestions to the whole committee. The hard-working log checkers are K1DG, K3EST, K6NA, KR2Q, KRØY, N3ED, N6AW, W2RQ, W3ZZ, W7EJ, and WA8YVR. A big thank you to N6TR, who created the ever-changing software used to check the logs, and to the keeper of the data bank and all around advisor, N6AA.

Special US gurus who we lean on more than once a contest season are K3ZO and N2AA. Special DX advisors who help us keep an international point of view are CT1BOH, DL6RAI, G3SXX, I2UIY, JE1CKA, OH2BH, OH2KI, CH2MM, OK2FD, PY5EG, SM3SGP, UA9BA, and S50A.

Congratulations to all the entrants and winners. CU in 1994!

73, Bob, K3EST

## DX QRM

Best band turned out to be 10 meters. Too hard to



CU2T (left to right): CU2AA, CU2AE, CU2AF, CU2AP, CU2CE, CU2CR, and CU2DX.

crack the European QRM on the other bands . . . A61AD. My brother BV/KK6BB and I operated from the QTH of BV2FA. We took turns during about 9 hours of operating. Darrel is age 16 and I am 13. We can't wait for the CW contest! . . . BV/KC6CNV. Conditions, especially on 10 meters, were much better than I expected. CT told lots of people I was in Zone 2, which probably helped my rates at times. My wife, although suffering a mild case of pneumonia, insisted I enter the contest. What a pearl! . . . CH2ZP. I'm ARS since 1937. In November 28 I will AM 80 yrs old. . . CT1QF. Madeira has lost a dozen of people and 400 cars in heavy cloudbursts, thunderstorms, and hurricanes from Thursday till Sunday. We were lucky; we only

lost all our antennas at the 800 meter high contest location . . . CT3EE.

For 160 meters I used the duoband dipole and an antenna-turner (with 80 watts only) . . . DK5PD. Surprising good condx on 10 meters, but the QRM especially on the lower bands is stronger and stronger every year. Nevertheless it's always a pleasure to participate . . . DL8PC. Just a small log cue to INTER-RADIO ham radio fair in Hanover, which unfortunately was held on CQ WW Contest weekend . . . DLØMCG. Many thanks again to all stations who were very patient with us QRP stations and see you all next year! . . . DU1CHD/6. Congratulations for this very nice and fun contest. I see you in the next contest

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... EA2BP. This is my first CQ WW DX Contest, and I think this is the best. See you in the CQ WW DX Contest in 1994 ... EA3GHZ.

Our first CQ WW began at noon on Saturday. Too much problems with hard wind (quad spreaders made of PVC). We hope to get them of fiberglass next year. We had a good time! The best way to spend a weekend ... EA4EJP. Poor propagation. 100 watts, a vertical, wind, rain, power line static, and Nebraska's most important football game of the year live on AFRTS right in the middle of it all, followed by trick-or-treaters the NEXT night! What more could a con-tester ask for? I hear Jorma (ZB2X) did well borrowing my REAL contest station on "the rock" (ZB2JL). Good for him! Thanks to all who struggled to hear my "little pistol" station through the muck, and to those who worked me thinking the call was TA7(HI). Any suggestions for a good alternative phonetic for "Echo"? ... EA7HAL.

My first CQ WW Contest. I didn't know what I was doing. Calling, calling—and nobody answered! But next year, beware of me! (HI) ... EC7DXZ. Amp home made broken, TS-930 broken, 40 meter antenna broken, but nobody is dead ... ED4RCT. No propagation, but a lot of fun anyway, above all for the "new young ones." First time with CT, we enjoyed it a lot. Til next year ... F6KAW. Again a very enjoyable contest. Conditions EW were poor and Stateside runs were difficult to sustain. Path to JA was very disappointing. However, this was more than compensated for by the availability of plenty of multipliers. I will be interested to see whether you accept T9, 404, and X5 all for Bosnia! ... G3KMA.

Band sounding good. Went off for meal break on Sunday at 1840Z, and came back to find propagation almost gone. Only worked one more station! ... G3YOG. DVK bought for the contest was useless due RF pick up. Tailwister Rotator kept jamming! But most of all, I had fun! Thanks to all who called a mere G station! Used Super-Duper for logging. It is really Super! ... G4LJF. It was all going very well until the linear packed up on Saturday evening. Luckily it was not a fatal failure, but it left us without full power for a couple of hours ... G8BRA. My first single op. entry—greatly enjoyed, conditions seemed good from Wales, manual logging hard work! ... GW4BVJ/P. For the first time as single operator. TNX to CQ magazine! ... HB9LCW.

The band was very noisy at sunset, best for me after midnight ... HD3W. Congratulations to anyone who heard me with my modest equipment ... HI8LC. One German operator asked me to turn beam. I explained carefully I couldn't move the palm tree the dipole was connected to ... HP1/KB2DQE. Big surprise running search and pounce USA 60 QSOs/hour on 10 meters Sunday afternoon with 100 watts ... IK2SAI. Great propagation and participation on 15 meters. Contest purpose was to test a new home-built rig. It works! ... IK4UY. This isn't a big score, but WOW!—40 zones in two days! ... IN3QBR. Worked contest only on Sunday. Many rain's QRN but very nice see 10 meters still so populated! ... IU1R.

I tried 40 meter QRP contest first time. Many difficult QSO but enjoyed this contest ... JA2DLM. JA to east coast is very good condition, but negative condition was JA to Europe 10 MHz ... JA2JUF. Poor openings to Europe and east coast of USA from Japan on 10 meters, but I enjoyed 10 meters pretty much ... JA3LDH. I'm writing this on my way to Saipan for CQ WW CW from AH0K/M/M station! Ten meters was poor from northern Japan, so missed lots of mults ... JA8RWU. This is my first entry for SSB part. Unfortunately, I'm planning to half entry for CW part due to attend for my colleague's wedding. Anyway, look forward to CW part ... JK1AJX. I called, called, called! Please pick up my call! ... JK6ISK. During the contest I've got a new country for my DXCC chasing—9L—among the QRM with no pile-up, as well as last year. Thrilling so much! ... JM1APN.

Unfortunately due to the technical problems in helicopter, we were not able to activate Market Reef. Anyhow, super thanks to our marvelous host, OH0RJ! ... OH0M. It was wonderful to experience the possibility of making DXCC in one weekend on a band that everyone considers "dead." Maybe it just needs activation! See you all next year! ... OZ1ADL. Thank you once again for organizing the contest. I really enjoyed

it. The propagation conditions were a real challenge with the constant change in skip lengths. I was beginning to think that North America had boycotted the contest until a 1 hour period on Sunday gave me almost 40 contacts with USA ... OZ2ZZZ. An attempt on the Oceania 14 MHz record which has now stood for 10 years was thwarted by the worst conditions to North America I have ever heard: just 78 Stateside QSOs in 48 hours—ugh! ... P29DX (G4JVG).

During the first day my transmitter broke down; took me about 5 hours to repair it, but still enjoyed it very much. See you next year. This was my first contest ... PA3FHB. A nice contest with a lot of fun. A contest without help from a DX cluster or an SWL. I am an old-fashioned contest. I do it self! But it's give me a lot of fun. Tell the next year, and thanks for your help as a manager in this contest ... PA0JUM. Living (that is contesting, sleeping, and eating) for 48 hours sealed off from the outside at the 13th floor (200 feet high) of the building of the department of electrical engineering at the University of Technology Eindhoven can be characterized as GREAT FUN like ham-students have ... PI4TUE.

Participating in the contest since 1956 (under various signs—RA1KBB, UW1BM, and now U1BA). This contest and March WPX are my favorites. Was some difficulties with that new callsigns in my former country and Balkans! ... U1BA. It was quite a thrill to work PJ9U for a new country on 40meters. Even more of a thrill when he told me that with our QSO he had broken the world record ... V85PB. This is our first contest for the club station but not the last, Hi! ... VE2CLM. This was my first contest and I ran with a long wire ran around my loft under the roof, as I am not allowed to have external antennas where I live. By the way, I loved every short minute of it ... VE3JKN. It's amazing the callsigns you see year after year, almost like a class reunion ... VE3OTL.

Unable to work any JAs. What a difference from my last go at this contest from V63BD! ... VE3SMA. First CQ WW had fun, but VE3HQW kept slave driving us to "run." I wanted to just work DX and "multipliers" ... VE3SMP. As always, a great contest with poor propagation. Operated this year from the Polar Amateur Radio Club at 82n x 62w at Canadian forces station alert, NWT. Temperature outside was a balmy minus 37degrees C, and with no heat in the shack, the temps were 3 degrees C. This was my last big contest from this QTH, as I am scheduled to depart the end of next week. Hope to see you again next year from more warmer climates ... VE3UWC/VE8.

Having the contest on the Halloween weekend was certainly a "trick or treat" event; you were either "tricked" into thinking the band was completely dead or "treated" to the unexpected (and rare) multiplier plowing through the pileup from the "wrong direction"! ... VE3ZD. First contest entered with a computerized logging program. WOW, what a difference! Now I can concentrate on entering even more contests! ... VE8KM. Murphy struck early. Lost my beam to a wind storm on Thursday. Strung up some dipoles Saturday morning ... VO1SF. It is very difficult to get multipliers from Paradise and as powerful US stations are getting on my frequency, it is impossible to hear any others ... VP2VF. Where were NA stations hiding? ... YB3OSE.

I lost 6 hours and 11 minutes due to troubles with generator, another 2 hours and 17 minutes due to troubles with my linear amp ... YT9C (YU1IG). Was a nice contest, but for the first time in Venezuela at Friday 2300Z the electric power failed in all the YV territory and returned at 2345Z. Then my amplifier burned out, and my husband must travel 25 km to look for another amplifier. Was terrible, but I had fun ... YV5NCJ. Glad to be able to confirm "ZL" as a new country for numerous new chums Stateside, but are any hams operating from "Rhode Island" ... ZL1CDX. Our first effort but not the last ... ZL2T. For the first time I sent in a log. Very windy, chilly conditions on a caravan in the Netherlands ... ZS6IR/PA.

Due to a power cut off on Saturday, we had to take along a generator. Dismantling the antennas on Monday morning was not easy in the high winds, with the operators being really tired. Nevertheless, the contest was great fun as always. CU AGN from Vienna next year! ... 4U1VIC. Am temporarily resident in Singapore (until the spring of 1994) and hold the call-

Sign 9V1ZM (not guest operator). Operating the contest from here with a minimal station was certainly quite an experience—an experience in frustration! Most operators from Europe and North America don't listen for this part of the world and certainly don't appear to turn their antennas in this direction! But surprisingly, most people that I worked in NA and Europe thanked me for the new multiplier . . . 9V1ZM.

We did it the old-fashioned way—no packet! . . . VP2EC. Interesting contest. First time as DX and I have to agree that people turn their antennas to the Pacific. We heard many people with no QRM. Worst let down was hearing 9K2ZZ on 3791 calling CQ over and over and not being able to raise him. Biggest surprise was all the Middle East and Africa we did work and how few Europeans. There is always next year . . . WHB/WK6V.

## USA QRM

This is the first contest I have ever participated in. The logging program I borrowed did not have the new eastern Europe countries. I also do not understand the scoring. The score I calculated did not approximate the program score. Despite this I really enjoyed the experience . . . AA3AZ. I ran 15 only until WB5UDX pulled ahead, then went to single all band. (I couldn't let him beat me.—Hi!) Had a GREAT time, DXCC and almost WAZ in 48 hrs . . . AA5ZX. This was my first contest! I went in to it to get new countries, and boy, did I! 31 new ones . . . AA7RW. Biggest thrill—burned up the TS-440 Saturday and the Alpha 374 amp. Had plenty of smoke in shack. First contest entered; great fun; lots of neat contacts . . . AA8GL.

Only worked 23 hrs this time due to equipment failure. Station #2 40 meter quad sits atop the 130 foot shut-fed tower used on station #1 for 160 meters. This coupled 160 meter RF into the station #2 amp; lost a pin diode I think. Guess we can take the brick off now—huh . . . AA8U. The bug has bitten me; will see you in the next contest . . . AB5GU. First ham contest ever, on my birthday, and made 26 countries (new DXCC)—very fun . . . AB6SA. Quite frankly, I am disappointed to see what has become of this contest. It used to be my favorite, hands down. My comments are directed to what I observed during 80 meter operation though I have no reason to believe that it was really that much different on the other bands. This has become a contest between the few—i.e., the few stations that can afford to put up the biggest Yagis on the highest towers. Competition is a wonderful thing, though not when carried to the following ridiculous limit . . . K2RR.

Conditions quite good for this stage of the cycle, but quite a change from a couple of years ago. I always expect good conditions for the CQ WW. Don't know how you arrange it, hi! . . . W3VT/4. A big change in propagation from last year. Fewer QSOs and fewer multipliers—arghhhh! . . . W6RCL. Working SU2MT for last zone needed (34). First time ever sending in contest log in 42+ yrs of hamming . . . W7DOZ. Ten meter propagation was really down compared to 1992 and hurt the score, but I almost equalled '92 score in spite of it. Time to get something on 160 for next year! . . . W8OSK.

Keeping up with packet spots can be quite a challenge! Great test . . . W8WP. We threw this effort together over the week just before the contest and the results reflect this fact! Do not have separate feed lines for the antennas except for the 80 vee that was put up Friday afternoon before the test. Mult station was not even used most of the time due to poor signal and its computer got trashed when the run station was on 20 meters. RFI was a serious problem (so I hear from the neighbors!). One guy called and said that we were coming through his door chime. We ran 100 watts much of the time on Sunday. Bottom line is we had lots of fun! . . . WA1G. Where were the South Americans? . . . WA2HFJ/B.

Enjoyed some time I could put into CQ WW in between taking my two-year-old son out for Halloween and freak ice and snow storms on Sunday which completely coated my antennas . . . WA3FET. Certainly had a fine time again this year. Was never really able to run, but still what can you expect with an antenna on the chimney! Wait until next year with

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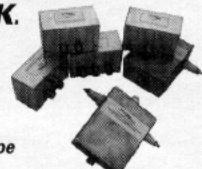
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N/9913 'N' for 9913, 9086, Flexi, etc. \$3.25  
New N/9913 Silver-Teflon, Install like PL-259 \$3.25  
CQ RG-8X 95%, Type IIA non-contaminating 23¢  
CQ-8X MM Solid Dielectric, 95%, Type IIA 27¢  
SuperCable International 9086, better than 9913 48¢  
CQ FLEXI Flexible 9913-type, very low loss 62¢  
R1 Rotator 8 conductor (2x18, 6x24) 20¢  
R2 Rotator 8 conductor (2x18, 6x18) 37¢  
R4 Rotator 8 conductor (2x14, 6x16) 46¢  
#16 Silky 19-strand, Cu-clad, strong, flexible 8¢  
#14 Silky 19-strand, Cu-clad, strong, flexible 11¢  
#14 HD Stranded (7x22) hard-drawn copper 8¢  
#14 CW Stranded (7x22) copper-clad 9¢  
#13 Insulated 19-strand, Cu-clad, tough jacket 15¢  
450 Ladder #18 solid Cu-clad, poly, windows 13¢  
450 Ladder #16, 19-strand, cu-clad, poly, windows 19¢  
300 Ladder New! #18 conductors 13¢  
1/2" Braid Tinned ground braid, any length 65¢  
Coax and cable SALE prices are in 50 foot increments.  
All supplies are factory fresh - no surplus, no seconds.

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Maximum Load Isolation  
Outstanding Load Mismatch Tolerance  
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B1-5K 5 kW 160-10, Precision, High Power \$29.95  
Y1-4K 4 kW 160-10, Yagi-Balun, High-Spec \$24.95  
Y1-5K 5 kW 160-10, Precision, Yagi-Balun \$29.95

4:1 Baluns  
B4-1.5K 1.5 kW 80-10, General Purpose \$19.95  
B4-2K 2 kW 80-10, Precision Voltage-Balun \$22.95  
B4-2X 2 kW 160-10, Low Loss, Current Balun \$39.95  
New RemoteBalun Hi-Power 160-10, Current-type \$47.95

Line Isolators  
4K-LI 4 kW, 50 Ohms, SO-239 In, SO-239 Out \$19.95  
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## REFERENCE CATALOG

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CIRCLE 112 ON READER SERVICE CARD





**AVERAGE % OF STATIONS WORKED  
ON EACH CONTINENT**

USA	AF	AS	EU	NA	OC	SA
1.	3.9	6.5	68.1	11.5	2.1	6.3
2.	5.5	2.3	61.0	18.4	1.6	10.4
3.	7.1	3.4	52.5	21.0	3.8	11.7
4.	6.8	4.7	52.8	21.4	3.5	10.4
5.	5.2	16.7	36.2	24.7	4.0	12.2
6.	2.4	43.0	15.8	20.9	7.8	9.8
7.	2.3	40.0	26.4	15.2	5.2	4.9
8.	6.3	5.5	49.8	20.6	4.6	12.4
9.	7.6	7.6	30.4	31.9	6.5	16.0
10.	4.5	13.1	37.1	26.8	4.9	13.2

EUROPE	AF	AS	EU	NA	OC	SA
S Zone14	3.6	5.8	56.2	30.1	0.6	3.7
S Zone15	2.7	7.8	53.1	32.3	1.2	2.9
N Europe	1.9	7.1	51.6	26.8	0.8	2.1
S.A.(N)	1.1	2.5	22.7	70.0	0.8	2.6
S.A.(S)	1.7	14.8	18.3	59.1	2.4	3.6
AFRICA(N)	2.2	3.5	37.9	51.7	0.7	3.2
AFRICA(S)	2.5	2.7	48.0	43.9	0.4	2.2
JAPAN	2.4	10.5	18.1	41.5	15.7	11.8
OCEAN IA (NW)	0.5	65.2	6.2	21.5	5.1	1.1
OCEAN(SW)	2.2	57.2	21.3	10.6	7.2	1.3
OCEAN(NE)	0.7	20.8	13.8	50.7	10.0	4.0

\*Each number is the average of the top ten disks from that area.

SM7AIO & Y09FU. **SP2KVF**: SP2C2M, SP2JNB, SP2JYR, SP2L2KU, SP2Q2G. **SP5ZCC** Club: **SP6KEP**: SP6LUV, SP-23022. **SP9KMQ**: Cl. L. **TK5MH** & **TK5ML**. **TM2C**: F5LGD, F5QJQ, F6AUS, F6CKH.

**TM2Y**: F6ARC, F6BEE, F9IE, K3NA. **TM5A**: F6IFR, F6GWW, F6CWN, F6ASS. **TM5B**: F5HAS, F5NBX, F6CQD. **TM6AR**: F5P6P, F5PXT, F5RHT, F5ROP, F5SIH, F5PVI. **TM6B**: F5SJP, F5D... F5HVL, F5MPK, F5NKC. **TM7C**: F5MZN, F5SNJ, F6CTT, F6EY. **UB4IWR**: Yblonski P., Popov A., Yblonski W. **UN0FB**: UN7TB1, UN7TB2, UN7T CD, UN7TCS. **US01**: RB11B, RB5II, UF5VM, UB5IO, UB5DL. **UT7W**: US-W-7, UB5WAN, UB5WXC. **UZ0LWC**: UW0LI, UW0LZ, UZ0 07-696, UZ0103-454, UZ0L5. **UZ3DXW**: Boburkov A., Boburkov D., Cheryakov V., Kislov S., Kupwsky G., Titov S. **UZ4AYT**: UA4A Y, UA4AQB, RA4A. **UZ4HXX**: RA4HR, UA4HYX, UA4HGX. **UZ4WWB**: UA4WHW, UA4WGU, Klepanov Alex. **UZ6HWH**: Club. **V31DX**: K16IM, N6YRU, NK7U, WASL. **V7X** & AH6IO, KH6HH, V73A, V73C. **VE2CLM**: VE2XV, VE2MML, VE2HTZ, VE2PAD, VE2DRW, VE2GFS, VE2JFO, VE2GFI, VE2ZCR. **VE2STN** & VE2KMF, VE2LPS, VE2FSU, VE2XID. **VE3SMP** & VE3HQW, VE3BRV. **VE6AD**: VE6TAM, VE6AMR, VE6AJL, VE6RJK, VE6CCM, VE6TFM, VE6CLR, VE6KLD, VE6KBS, VE6KVV, VE6RCJ, VE6GK, VE6XKR, VE6GAV, VE6GD, VE6HAD, VE6GIZ, VE6BIR, VE6DZ, VE6NS, VE6GD, VE6HFV. **VE6SV** & VE6GWC, VE6SQA, VE6NAP, VE6LDX. **VE6ZC**: VE6MSN Maria. **VE7GFC** & VE6VW, VE7DX, VE7NS, VE7XT, VE7GFS, VE7DQC, VE7GAS. **VK1DX**: VK2ILK,

VK1PJ, VK1MQ, VK1LB, VK1FF, VK1MTX, VK1NK, VK1AC. **VK6ANC**: VK6APK, VK6BDJ, VK6TKR. **VP2VFP**: AB4JI, K4ADK, KU4J, N4BWS, WA2TTP, WA4DPU. **VP5N**: K2TD, N2WV, WB2YO. **YY9QR**: VE5CPL, VE5DQ, VE5FX, VE5M2, VE5MX, VE5VG, VE5VF, VE5SWR, VE5TK, VE5PT, VE5TQ. **WB8HKE/VE2** & K2QDA. K2TVY, VE2XY. **W1FY**: N1UFO, N1LOO, W-EGW, KD1QS, K1UTI, W1NXC, N2HFV, K1USL, K1A1HA, W1R, K1A1ZL, N1OAO, K0IT, K1CR1, N1QMA/AC, N1FXE, K1A2E, W1AC4DZC.

**W1OP**: K1PLX, N1QQG. **W2AX** & K2KM, K2LE, K2SX, N2UN, NA2M. **W3GNO** & W3ZZ, K3SKE, N3HH. **W4AQJ**: N3JSR, KD4RDF, KE4HAH, KD4UGI, KC4QFR, WA4ABY, N9HZQ, K0DI, Greg Swelduk. **W4NC**: WB4QON, N4YHK, KD4RQB, N2KTY, KC4VY. **W4PRO** & WB4GCS, K04MR. **W5KFT** & W5VZL, K65DV. **W6EEN** & K6CX, K6KAP. **W6OAT** & W6RGG. **W6REC** & KN5SO, W6VU. **W6TDI**: N6OPR, KN6LM, NA2D, KC6ZIQ, N6WZI, KN6SE. **W8FN** & KF8TY, KU6E, NZ4K. **W9UJ**: K91MM, N9CHN, W99NOV, KC9L, KF9FT, KF9XN, KF9AV, N69V, K9KVA. **W9KDX** & K9RG, K9RN, K9SW, N9HXT, N9NXC, W9NE. **WA0PUJ** & K0LJL, K0LUXQ, N0BBS, N0YPC, WNT. **WA1G** & WA1ML, N1YL, AA1CN, K-XM. **WA1PMA** & N-NRR, N1PFV, N1JZQ, W51F. **WA6IET** & W2KVA, KC6CEX, AH6MM, W6TKF, W2Q. **WA7EGA** & W57I. **WB7AVD** & K7MM. **WB8G** & N8DPH. **WB8MTT**: WB8MIW, K8GBK, W8KX, N8LAS, K8OL, N8SFD.

**WF1L** & WXYI, W1RX, WE1B, AA1BL, AA1FN, AA1EY, KD1KI, NIKKY.

N1FG, N1FN, N1LDQ, Chris. **WK2N** & N2KLD. **WV0C** & K0VM, W0EJ, K0DAS, KC0VT, N0MMA, KD9KX, N0LNO, KA0YSQ, KA70EN. **WX0B/5** & AA5OR, K5NE, NA5Q, NM5M. **WY3T** & N3JMX. **X5AT**: XE2DRW, XE2YR, XE2AFL, XE2AHN, XE2LV, XE2KB. **XE2DV** & AA7CM, A17B, N2WEW, WZR. **XL7U**: VE71TQ, VE7GNV, VE7GL, VE7FVH. **YM1KA/70**: TA1DCE, TA1AN, TA1BW. **YO9KEP/Club**. **YR0F**: Y0SDDF, Y0G6DV. **YS1X**: YS1FAF, YS1GMV, YS1JRG, YS1MAE, YS1RAY, YS1RRD, YS1TQ. **YT0T**: 4N10DX, YU1RA, **YU1BDK**: YU1JU, Dimitrijevic. **YU1HFG**: YU1JOO, YT1EEJ, YU1ML. **YV4FM** & YV4YC. **YV5USB**: YV5NQZ, YV5MSV, YV5NEH, YV4FIH. **ZS4Q** & ZS4K. **ZS5HAM**: ZS5ENK, ZS5JR, ZS5BFM, ZS5GMM, ZS5AL. **ZS6TDK**: ZS6WT, ZS6VCO, ZS6ZS, ZS6AKZ, ZS6BRZ, ZS6CAR, ZS6RF, ZS6AJ, ZS6SPN, ZS6BOT.

**STATION OPERATORS  
Multi-Op Multi-Transmitter**

**4N1Z** & YU1AVQ. **4S0DX**: DJ8CV, DL-EU, DL9JT, DK4JT, DL8EAQ, DG1EBL, DL4FBE, DK5EF, DH1JY. **9A1A**: 9A2RA, 9A2DG, 9A2AW, 9A2EL, 9A2HD, 9A2SD, 9A2MP, 9A2KL, 9A2OH, 9A2DQ, 9A2LI, 9A2NI, 9A2MM, 9A3FI, 9A3GQ, 9A3ZA, S6KRW, S63RY, YJeko. **CH9DH**: N2NL, N2HZ, VE1DH, VE1DX, VE1GJ, VE1JV, VE1RM, VE1MY, VE1WF, VE1WH, VE1YY, VE1ASJ, VO1QF. **DF0DX**: DK3DM, DF8AE, DK10T, DL3YCV, DL1YDI, DL1YAJ, DL4YBM, DL1YAW, DJ2QV, DK2YI, D-1YDM, DF8XC. **DL0XX**: DF1JC, DF8JK, DH1JG, DJ2YE, DJ5FE, DK8EY, DL1EKJ, DL3EBX, DL6EAQ, DL8DAW. **DX10BT**: DU1WT, DU1MTH, DU1JXP, Armand, Ron, Mario, Kiko. **E1WA** & **E1KR**. **EA9UK** & **WA4KN**: W6QHS, K6QOM, NGK1, N5TJ, K5TSC, W6MKB, KA1BO, OH2MM, EA9KF, EA9LZ. **ED4RCT**: EA4ABB, EA4DYN, EA4KJ, Juliar, Patricio, Gemo, Benjamin, Jesus, Antonio, Miguel-Angel, Alfonso.

**FJ5AB** & K2IBW, N2HIG. **G0KRP**: G4BAH, G4PIQ, G4BWP, G4BIJ, G4VMM, G4FAM, G4RBE, G3VH, G7ABQ, N2IW, G3XT. G7BKQ, G3ZAY, G8AFH. **HB4FG**: HB9AGC, HB9AB, HB9ALM, HB9DL, **HC0E**: HC1HC, HC1PF, HC1KQ, HC1JQ, HC1HN, HC1EA, HC1JCL, HC1DVE, HC1JMN, HC1NS, HC1-I, HC1CK, HC1BL, HC1EV, HC1KE, HC1MA, HC1GZ, HC1B, HC1BE, HC1BE, HC1EVE, HC1J, HC1FT, HC1LU, HC1JP, HC1JV, HC6XE, VE3ONK. **HG73DX**: HG1S, HG5A, HG6N, HA1TJ, HA1TD, HA1DAC, HA1DAE, HA1AH, HA5GF, HA5IW, HA5WQ, HA5AWH, HA5ML, HG5CCC, HA5UA, HA5FM, HA7BV, HA7ZY, HA5OM, HA5TI, HA5WE, HA5EN, HA6QO, HA6NY, HA6ON, HA6ND, HA6PQ. **I03A**: IK30RD, IJ3SS, I3MAY, I3QJZ, I3KVV, I3FV, I3BON, IK3LMA. **JA0YAK**: JK2PVL, J80HYT, JG7JMO, JF8TJU, JMV2NZ, J80ETP, Y. Kozawa, J3BDM, JF9DC, S3VZL, 7M1FOD.

**JA1YDU**: JH0NZ, JH0IFE, J01RUR, J01RMV, JK3GAD, JJ30LZ, JF7TK, JG3AFM, JI2UYK, JH0CZQ, JG0B8Q. **JA1YXP**: JF1QDQ, JI1UTP, JI1QJ, JI1AE, JS1NN, JS1EX, 7K1QOE, 7K1EWD, 7L1CB, 7L1DGK, 7L1ET, 7N1SPY, JI2T5Y, JS2KHH, JI7CJM. **JA3YU**: JA3JM, JH4WE, JF2BNC, JJ3MK, JJ3CIG, JG5SG. **JA3ZOH**: JH3DPB, JI3PFR, JE3MAS, JG3JEV, JG3JK, JI30PA, JI3KKG, JI3CCB, JH4IF, JI4NM7, JH4ISF, JF4FUF, JG4ZLV. **JATYRR**: JA7CCE, JA7CFE, JA7CLN, JA7FJO, JA7JUD, JA7LBY, JA7ZOV, JH7VHZ, JH7LV, JJ7XGF, J01NBV. **JR1ZTT**: JE1ATM, JI1XCM, JI4JY, JE0BK, JI1JF, /K2CWI, JI4WV, JH0UUU, JI1LWQ, 7K3FSG, JI6MPP, JI1AQU, JI3KJW, JI9FFO. Kawakami. **K2TR** & K2XA, K2QNP, N1JF, N02D, N2DU, WA2SLP, WA4VKD, WB2EAR. **KJ3ANS** & WA2VKM, KF23H, W3GK, NU3L, K3YC, N3GX, WF3H, N3OWG, N3IYX, N3KVN.

**K3I** & NA3K, K3IE. **K3LR** & K8CX, WR3G, W9E, N880, W8BYR, N8BY, W3GC, WCXF, N8L, N8EJ. **K8CGC**: K8AQM, N8EZ, N8JMN, K2BX, W09INF, K8C0K, K8E6F, K8GBZ, K8E6L, N8QZD. **KU7Z** & K7LAF, K7LU, N7K7, N7L6P, N7DF, N7LWA, N7LB, N70J, N7L7I. **KY1H** & KE1KE, N01P, K1MB0, K2FMM, W1M1K, AA1AA, KB1BV, AA1AS, WA1ZAM. **LA5M**: LA1PHA, LA5EIA. **LU4FM**: Club. **LY7A**: LY3BBE, LY1751, LYR1B53, LY3NDA, LYR346, LY2QA, LY2NK, LY2BMM, LY2FM, LY2BDW, LY2EUH. **N2MM** & K2PS, WB2R, AA2NS, K3BHX, W3KJ. **N2RM** & K2ZS, N2MT, K3UA, N2AA, K2TW, K2QM, KR2J, W2RQ, W2VH. **N4DW/1**: CLUB. **N6AW** & N6GU, N6NU, K1J6C, K7JYE, KD6NAC, KD6ITX. **N6CO/3** & WD3U, WF3T, K3LHD, K3SWZ. **N90** & W9SU, N9I, NR, V90RT, N9KZ, AA9HZ, N9PHG, W9YT, W09J, AF9A, NF2L & KY2T, K2BU, WY2X. **NQ4I** & Crew.

**NX0I** & N0BIV, AK2A, KM0I, K0V8U, K0VXU, K0LW, K2TLM, AB0X, K00EI. **OH3AT**: OH3DC, OH3FS, OH3NB. **OT3A**: DB3EBM, OF1JM, DK3DD, DL1EK, DL2KMS, ON1AEI, ON1AFF, ON1AFN, ON1ARZ, ON1AWB, ON1BDK, ON1GL, ON2AIC, ON4AID, ON4AL, ON4AKI, ON4AKV, ON4AM, ON4AN, ON4ANT, ON4AOI, ON4APA, ON4ASB, ON4ATV, ON4AW, ON4AV, ON4BN, ON4DB, ON4FG, ON4FI, ON4GG, ON4MV, ON4OE, ON5AI, ON5BI, CN5CD, ON5DH, ON5OT, ON5UM, ON5VL, ON5VE, ON5W, ON5M, ON5ML, ON6PU, ON6PV, ON6VK, ON7BJ, ON7KB, ON7NB, ON7NO, ON7SF, ON7YQ, ON7YU, ON7YZ, ON7YY, ON7YZ, ON8RI, ON8FC, ON8L-LUC, ONL2389, ONL4335, ONL6975. **PA3BET** & **PA3COM**: RT5UO, PA3BFB, PA3BUD, PA3DMH, PA3ERC, PA3EWP, PA3FD0. **PA3FOA** & **PA3GRO**. **PR4B**: PY4BA, PY4RHB, PY4JDS, PY4OY, PY4VE. **R6L**: UB3IW, UB5IG, UV6LPL, UA6LV, UA6LO, UA6I501066, UA6I501210, UA6I501403.

**SN60**: SP 23022, SP6DVP, SP6CYX, SP6OUK, SP6IHE, SP6SNT, SP6TTF, SP6LUV, SP6CYV. **SP9KAT**: Ewa Balcer, SP9NLK, SP9CAY, SP9GNW, SP9XUV, SP9CUB, SP9OUV. **UR8J**: RB3JA, UB2JX, UB2JZ, UB3JD, UB3JK, UB4IX, UB5JMF, UB5JW, LB7-067-2. **US7I**: UB2JZ, UB3IO, UB3IM, UB5IUA, UB5IFZ, UB5-073-4014, UB1KW, RB4II, RB1IA, RB4IH, **UW2F**: RA2FA, UA2FF, UA2FJ, UA2FM, UA2FX, LA2ZF, C7FRX, DK2ZY, DK6WL, D-4MCF, DK4YW, DL63AI. **UZ0SXF**: UW0SN, UA0SU, UA0SU, UA0SLT, Yuri. **V26B**: WT3Q, N3BNA, AB2E, KA2AEV. **VE7Z2Z**: VE6ZE, VF6WP, VF5FN, VF5VI, VF7AV, VF7CY, VF7JMN, VF7PRS, VF7PTT, VF7RK, VF7RBL, VE7SK, VE7TCP, VE7XYL. **VK9LI**: K6MC, K6G0O, VK50O, N6AA, NECW, NEZZ, W6KNC, W6XD, W6B0K. **VP2EC**: K5RX, KC5EA, N5AL, NEHGB, VP2EM. **VP5L**: AB4NS, AB4UF, AB4XA, AC4ET, KC4FWS, K04GC, N4KE, N5RR, N4L, N04J, N04Y, W4FDA, W4SME, WA4DRU, W84EYX, W84KSP, W84K.

**VS6W**: NA9D, 9V1YC, KJ4VH, OH2XX, VR2G0, VS6YHT. **W0AH** & A99C, W93EA, K9PV, K2FV, N0AXL, W9JP, W3LP & KA1G, H2P, W3KE, KC3EK, W3EKT, N3GB, N3KT, K3PA, WA6GVG, K99FX, N0B5H. **W4MYA** & WA4DAI, N4EH, K04PI, WA4HM, AC-08, W4DR, K44J, WA4GM, AD4XE, K4DI, K4GM, K4JR, K4KYS, KC4ZRH, NA4UY, K4KWN, WB4GVZ. **W7RM** & W7R, NV7E, N0XX, W87SRW, K16FF, P2D0I, K7ZSD, WREJ, K7RO, AA7X. **W82PK/H0** & K2PF. **WB8W6V** & K6NAL, KF6HI, Y3RZ & YB3AS. **ZL2K**: ZL2BI, ZL2IQ, ZL2JF, ZL2MF, ZL2QY, ZL2AI, ZL2AGY, ZL2AMI, ZL2BSJ, ZL2TQ, ZL2LJ, ZL2NF, ZL2AHQ, ZL2AL, ZL2QM, ZL2ARF, ZL2TK, ZL2TXK, ZL2LZ, ZL2RF, ZL2UBG, ZL2KW. **ZP80A**: ZP8XHM, ZP5RDP, ZP5CGI, ZP6HR, ZP5JLC.

**WORLD TOP 10 QRPp  
All Band**

1. 7Z2AB ..... 2,590,845
2. F5BEG ..... 525,770
3. N1AFC ..... 349,752
4. EA3RQ ..... 325,376
5. K1GKE ..... 309,276
6. UA9CUA ..... 303,525
7. N4JF ..... 297,920
8. JA2IVK ..... 268,822
9. UB4FXX ..... 268,488
10. LY1DR ..... 260,832

**WORLD TOP 10 ASSISTED  
All Band**

1. CH3EJ ..... 8,167,096
2. DL0WW ..... 4,475,610
3. K1ZM/2 ..... 4,436,796
4. TM2V ..... 4,417,302
5. K2WVK ..... 3,668,210
6. AA2DU/1 ..... 3,411,507
7. N3AD ..... 3,110,508
8. KC1F ..... 2,909,280
9. DJ2YA ..... 2,850,320
10. K3WW ..... 2,660,427

**TEAM CONTESTING**

1. **YCCC Captains: 23,147,048.** By K1AR, N6BV, W1PH, W2SC, K5ZD.
2. **Salt City DX Contest Team: 5,584,353.** By WA2UUK, KE2BV, K2ZJ, NA2A.
3. **4 OMs and a YL: 4,064,916.** By J37K, N8BJQ, KF8HM.
4. **Team: 888,631.** By N3NNU/HR1, K2YJL, WP4CTD, N4CBR.
5. **Black Hole Contesting Conspiracy: 192,198.** By ND1H/0.
6. **Team Norway: 53,511.** By LA3DV, LA1WJA, LA5FBA, LA8WG.

Number groups after call letters denote following: Band (A = all), Final Score, Number of QSOs, Zones, and Countries. An asterisk before a call indicates low power. Certificate winners are listed in boldface. (All country terminology reflects the DXCC list at the time of the 1993 contest. The 1994 contest will reflect political changes since that time.)

### SSB RESULTS SINGLE OPERATOR NORTH AMERICA

Call	Final Score	QSOs	Zones	Countries	
<b>K1AR</b>	<b>A 6,596,688</b>	<b>3250</b>	<b>146</b>	<b>550</b>	
<b>K5ZD/1</b>	<b>A 5,370,975</b>	<b>2759</b>	<b>151</b>	<b>524</b>	
<b>N6BV/1</b>	<b>A 4,785,781</b>	<b>2635</b>	<b>134</b>	<b>503</b>	
<b>K1RU</b>	<b>A 3,476,867</b>	<b>2098</b>	<b>132</b>	<b>457</b>	
<b>W2SRC/1</b>	<b>A 3,439,248</b>	<b>2230</b>	<b>125</b>	<b>423</b>	
<b>W1PH</b>	<b>A 2,981,356</b>	<b>1822</b>	<b>131</b>	<b>441</b>	
W1WEEF	2,704,290	178	114	431	
W1Q0	1,756,440	1063	135	460	
KC1SK	1,730,606	1156	119	423	
W1ZK	1,316,574	980	122	364	
W1BR	1,301,340	950	114	378	
W51Y	1,221,852	1012	101	336	
KA1DWX	1,063,638	880	102	335	
WA1ECA	645,437	620	90	285	
AK1N	619,570	601	101	272	
K1WJL	499,554	556	77	242	
W1MK	410,380	547	70	214	
W01P	316,512	420	84	204	
K1EF1	293,290	378	76	202	
NC1A	220,864	353	63	169	
K1FWF	171,022	264	61	172	
W1HIN	167,010	217	79	206	
KJ3QCC/1	153,612	279	51	153	
WY1C	151,497	319	66	113	
KD2LUJ	103,104	213	55	124	
W1ENZ	79,380	195	43	104	
W1FV	43,100	158	25	75	
W6FG/1	17,661	81	33	54	
AED1	4,368	52	19	29	
WA1VRD	3,996	40	10	30	
<b>K1U0</b>	<b>865,623</b>	<b>1581</b>	<b>36</b>	<b>151</b>	
<b>K2SS/1</b>	<b>793,776</b>	<b>1470</b>	<b>35</b>	<b>149</b>	
<b>K81L</b>	<b>648,384</b>	<b>1281</b>	<b>33</b>	<b>143</b>	
NTCC	400,960	870	31	129	
WS1M	254,185	528	32	113	
KD1MW	7,524	53	19	38	
<b>W1LQ0</b>	<b>131,625</b>	<b>352</b>	<b>25</b>	<b>100</b>	
K5IN	36,708	160	21	63	
K1DI	21,868	115	19	52	
W1IK	4,480	44	11	29	
<b>W1RR</b>	<b>7</b>	<b>174,330</b>	<b>483</b>	<b>29</b>	<b>101</b>
W1YY	79,209	248	26	91	
<b>AD1G</b>	<b>3.7</b>	<b>82,505</b>	<b>262</b>	<b>21</b>	<b>76</b>
<b>K2RR/1</b>	<b>33,048</b>	<b>163</b>	<b>17</b>	<b>64</b>	
KB1H	23,370	111	18	64	
<b>*W51A</b>	<b>A</b>	<b>966,420</b>	<b>848</b>	<b>93</b>	<b>320</b>
<b>*A1G/1</b>	<b>792,090</b>	<b>755</b>	<b>98</b>	<b>292</b>	
*K1VWL	553,320	574	95	265	
*K41LG	469,540	515	83	257	
*WK10	384,384	530	61	203	
*WA1EQU	371,000	526	62	188	
*K81KM	204,073	330	64	162	
*KITN	152,865	237	62	175	
*AA1AK	138,570	315	38	117	
*WB1EDI	135,261	284	40	113	
*AA1CB	97,340	200	40	101	
*K1V5J	52,390	153	42	88	
*K1FIR	39,776	124	35	78	
*WA2SCA/1	7,452	50	23	41	
*K1KCD	2,584	27	14	24	
<b>*KA1YIY</b>	<b>28</b>	<b>92,476</b>	<b>288</b>	<b>25</b>	<b>97</b>
*KA1PRD	2,400	31	13	19	
*N1OCS	861	24	9	12	
<b>*N1KWF</b>	<b>21</b>	<b>168,885</b>	<b>428</b>	<b>27</b>	<b>112</b>
<b>*K1A1TR</b>	<b>148,030</b>	<b>399</b>	<b>26</b>	<b>105</b>	
*W21QL/1	98,631	295	24	93	
<b>*K1VUT</b>	<b>14</b>	<b>255,600</b>	<b>638</b>	<b>30</b>	<b>112</b>
*N1OEG	42,164	174	21	62	
*K5FJW/1	35,516	154	19	62	
*N1IST	26,270	154	17	57	
<b>N2LT</b>	<b>A</b>	<b>3,377,780</b>	<b>1910</b>	<b>137</b>	<b>483</b>
<b>K2DM</b>	<b>2,805,115</b>	<b>1825</b>	<b>124</b>	<b>421</b>	
<b>N2NU</b>	<b>2,751,175</b>	<b>1766</b>	<b>134</b>	<b>419</b>	
W2HPF	2,661,088	1767	123	420	
K2ZJ	2,625,978	1775	122	416	
AA2GO	1,726,415	1251	107	380	
W1GD/2	1,360,840	936	117	403	
KE2VB	1,241,055	1030	102	333	
WA2UDT	835,584	784	100	284	
NA2A	776,968	730	90	304	
KE2OP	724,707	662	93	292	
WA2C	584,276	686	81	227	
WA2ASM	513,629	631	75	218	
KC2Q	471,440	543	82	250	
WB2RAJ	441,766	496	91	247	
W2FXT	430,780	456	85	255	
KF2KT	423,160	360	76	279	
KE2NMV	421,029	445	103	265	
KA2H/MJ	391,875	487	67	213	
K2FL	359,712	455	70	218	
K2MP	319,507	414	79	204	
WB2MWW	319,060	433	63	202	
WA2MBM	306,078	395	85	193	
NA2Q	278,081	404	60	163	
N2CKH	210,420	316	68	184	
WA2SYN	175,175	277	74	171	
KE2WY	169,945	290	62	159	
WR2V	153,340	282	56	149	
WF2Y	122,385	223	61	133	
N2LSJ	118,92	268	46	120	
KB2DE	101,067	210	51	125	
KC2YX	93,366	192	53	129	
N2QCA	85,606	200	53	111	
N2MZH	75,50	201	40	110	
KB2POP	67,962	155	43	98	
K2KIT	59,830	151	47	108	
WB2ABD	56,364	157	38	94	
WB2WBU	43,362	153	26	73	
WB2VFC	40,491	142	25	74	
KL2CF	38,406	148	31	80	
W2FR	34,980	102	47	85	
K2RXN	28,518	111	28	70	
NA2K	23,280	92	34	63	
WB2JFP	19,558	94	26	51	
AZ2NU	17,184	67	34	62	
N2OVS	4,182	45	22	29	
W2YY	747	25	18	23	
K2PEQ	741	13	8	11	
<b>KA20FO</b>	<b>28</b>	<b>87,901</b>	<b>239</b>	<b>26</b>	<b>105</b>
W2ZKE	37,260	140	22	68	
K2EEK	35,343	114	24	95	
<b>NG2X</b>	<b>21</b>	<b>666,246</b>	<b>1337</b>	<b>35</b>	<b>119</b>
WB2YOH	196,560	479	29	135	
WY2V	48,970	212	17	66	
<b>K2MGA</b>	<b>14</b>	<b>210,094</b>	<b>511</b>	<b>33</b>	<b>113</b>
W2IMO	79,300	282	21	79	
H8RAM/W21	368	23	6	8	
<b>AA2LC</b>	<b>7</b>	<b>25,820</b>	<b>112</b>	<b>20</b>	<b>61</b>
W2U0	264	8	4	8	
<b>WA2AOG</b>	<b>3.7</b>	<b>14,396</b>	<b>98</b>	<b>13</b>	<b>48</b>
<b>W2FCR</b>	<b>1.8</b>	<b>4,429</b>	<b>56</b>	<b>10</b>	<b>29</b>
W2VO	2,016	38	10	18	
<b>*K2SG</b>	<b>A</b>	<b>1,576,995</b>	<b>1195</b>	<b>111</b>	<b>372</b>
<b>*K2AUUK</b>	<b>A</b>	<b>822,126</b>	<b>715</b>	<b>106</b>	<b>332</b>
<b>*K2E2U</b>	<b>A</b>	<b>617,760</b>	<b>591</b>	<b>94</b>	<b>302</b>
*N2M1R	579,550	603	82	264	
*K2PBZ	461,944	905	65	161	
*W2GZE	454,860	488	83	259	
*W2KHQ	323,736	460	65	181	
*N2PEE	228,855	387	59	160	
*N210H	181,330	295	63	163	
*WB2MRX	160,974	302	56	142	
*N2N2C	103,200	215	43	117	
*N2P2G	98,242	188	68	158	
*W21Z	93,474	207	44	118	
*N2LED	86,392	208	45	111	
*W20MV	82,595	223	38	101	
*N21YR	78,048	204	43	101	
*N2LDV	75,411	182	42	105	
*N20DQ	43,306	158	36	82	
*N2KJM	42,581	140	44	79	
*W2FGY	34,562	121	35	74	
*KB4VJ2	30,789	119	29	70	
*N2M1R	29,963	112	6	67	
*AA2QZV	24,745	107	37	64	
*W2C2V	20,328	96	32	52	
*WB2CKQ	16,362	79	26	55	
*N2LQO	15,222	80	34	52	
*N1T2V	12,960	72	27	45	
*N2LTK	12,096	67	20	44	
*N2MUN	4,263	89	20	43	
*W2Y5W	3,652	38	19	25	
*KE2SX	2,760	32	15	25	
*W2F2V	1,508	26	13	13	
*N21NM1	990	18	6	16	
*N2KYP	980	29	11	23	
*N2M1G	325	9	5	8	
<b>*N2LDU</b>	<b>28</b>	<b>52,630</b>	<b>227</b>	<b>20</b>	<b>75</b>
*K2Z1	23,788	118	20	56	
*N2LBJ	19,400	106	18	50	
*N2L2M	15,990	92	18	47	
*KA2AW	13,872	86	17	39	
*K82NXH	12,712	92	17	40	
*K2YJ/LM	11,102	72	18	43	
*N2MAI	8,052	79	14	30	
*N2TDT	8,050	76	16	30	
*K2SWZ	5,192	46	14	30	
*K2PUL	4,716	47	14	22	
*N2UHR	2,937	33	11	22	
*W2YVYA	1,664	23	11	15	
<b>*K2MFY</b>	<b>21</b>	<b>140,130</b>	<b>366</b>	<b>26</b>	<b>109</b>
*W2BZTH	55,000	209	25	75	
<b>*K2QMF</b>	<b>15</b>	<b>217,290</b>	<b>377</b>	<b>31</b>	<b>116</b>
*WA2ASQ	38,967	150	22	71	
*N2TAT	2,432	28	9	23	
<b>K3Z0</b>	<b>A</b>	<b>3,857,259</b>	<b>2348</b>	<b>137</b>	<b>444</b>
<b>W3BGN</b>	<b>3,481,832</b>	<b>2063</b>	<b>134</b>	<b>462</b>	
<b>K3M3</b>	<b>2,422,536</b>	<b>1645</b>	<b>129</b>	<b>394</b>	
K3MD	2,67,084	1107	107	306	
K3DX	1,107,778	929	103	366	
K3ZTS	761,668	706	94	297	
K3TEJ	624,515	619	33	282	
K3JT	601,920	613	32	288	
NA3AM	511,560	581	36	229	
W13P	407,208	525	39	213	
AD3Z	338,613	330	30	251	
N3YC	338,326	446	71	207	
N3UN	337,800	477	78	222	
N3FDL	301,500	327	74	261	
K3UGJ	215,000	360	52	153	
W3VF	214,654	329	56	176	
W3HIR/3	189,420	365	51	159	
N13I	154,440	249	53	171	

Table with columns: Country/Region, Code, Values. Rows include W7HR, K7WOC, \*NX7K, \*W7TSO, \*\*WW7Q, \*WN7J, \*W7QN, \*WR7E, \*AA7PM, \*N7WWQ, \*N7DYB, \*KI7RK, \*KI7KT, \*KI7NL, \*W7HS, \*K7NPN, \*KD7H, \*KB7OPR, \*AA7VY, \*AA7RW, \*KA7FF, \*KB7UIS, \*KB7KLT, \*KB7OLZ, \*WJ7S, \*KB7M.

Table with columns: Country/Region, Code, Values. Rows include K8MR, WABSAE, K8AD, KE8KG, KBUCN, WBBBMV, KBOT, A8BGL, WBBBUQ, NB8COA, WD8LTM, WA8RSA, WBSJU, N8LKS, WX8S, AC8W, K38DB, NB8V, WRFJ, WB8YTQ, NS8D, A8AV, N280, K3ZJ, WD8E, NB8XS, NB8JEC, KB8AE, W8AVPA, A8DC, W9L1, WB8XD, WB8U7, \*N8II, \*KF8HM, \*KB8JL, \*W8YGR, \*KB8EL, \*AF8C, \*KG8AL, \*KE8YE, \*NB8QW, \*NB8WAK, \*KB8IHI, \*AA8ML, \*KE8NH, \*NB8WZ, \*NB8PA, \*KB8DWE, \*KA8VFL, \*NB8ZAT, \*WZ8T, \*KF8UM.

Table with columns: Country/Region, Code, Values. Rows include W9C, NE9U, W9OP, K9ZQ, W9BTPQ, ND9D, W9BCV, W9DA, W9NA, K9BG, AA9GC, NB9J9, N9BFD, K9UQN, KA9WBX, K9XJ, WD9HTC, W9KA, KA9JDL, AA9GC, W9CA, KE9WQ, KB9AIT, K9OSH.

Table with columns: Country/Region, Code, Values. Rows include W89YXY, \*W8GIL, N8LCR, \*KK9A, K8BGL, K8CAN, W9OF, W9JOO, K9VNF, \*KD9ST, KO9Y, W89TJ, \*K89G, KE9U, \*WB9Z, \*KB9DL, \*KB9LN, \*KB9L, \*KB9N, \*KB9P, \*KB9Q, \*KB9R, \*KB9S, \*KB9T, \*KB9U, \*KB9V, \*KB9W, \*KB9X, \*KB9Y, \*KB9Z, \*KB9AA, \*KB9AB, \*KB9AC, \*KB9AD, \*KB9AE, \*KB9AF, \*KB9AG, \*KB9AH, \*KB9AI, \*KB9AJ, \*KB9AK, \*KB9AL, \*KB9AM, \*KB9AN, \*KB9AO, \*KB9AP, \*KB9AQ, \*KB9AR, \*KB9AS, \*KB9AT, \*KB9AU, \*KB9AV, \*KB9AW, \*KB9AX, \*KB9AY, \*KB9AZ, \*KB9BA, \*KB9BB, \*KB9BC, \*KB9BD, \*KB9BE, \*KB9BF, \*KB9BG, \*KB9BH, \*KB9BI, \*KB9BJ, \*KB9BK, \*KB9BL, \*KB9BM, \*KB9BN, \*KB9BO, \*KB9BP, \*KB9BQ, \*KB9BR, \*KB9BS, \*KB9BT, \*KB9BU, \*KB9BV, \*KB9BW, \*KB9BX, \*KB9BY, \*KB9BZ, \*KB9CA, \*KB9CB, \*KB9CC, \*KB9CD, \*KB9CE, \*KB9CF, \*KB9CG, \*KB9CH, \*KB9CI, \*KB9CJ, \*KB9CK, \*KB9CL, \*KB9CM, \*KB9CN, \*KB9CO, \*KB9CP, \*KB9CQ, \*KB9CR, \*KB9CS, \*KB9CT, \*KB9CU, \*KB9CV, \*KB9CW, \*KB9CX, \*KB9CY, \*KB9CZ, \*KB9DA, \*KB9DB, \*KB9DC, \*KB9DD, \*KB9DE, \*KB9DF, 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Table with columns: Country/Region, Code, Values. Rows include \*ML7DU, \*KL7FAP, ANGUILLA, \*VP2EJ, ANTIGUA, V26N, BAHAMAS, C6AFT, BELIZE, \*V31JU, BERMUDA, \*VP9MZ, BRITISH VIRGIN ISLANDS, VP2VF, CANADA, K1J8/CH9, VE1XDX, VY2SS, VO1LT, \*VF1L, \*VO1SF, \*VE1GFH, \*VA1AB, CH2PZ, AH98/02, VE2AYU, VE2AWR, VE2OTT, VE2DR, \*VE2GH, \*VE2PEP, \*VE2EW, \*VE2JDR, \*VE2DSX, VE3WSM, VE3ST, VE3PN, VE3MM, VE3LPE, VE3UTT, VE3RM, VE3ZD, VE3ZOTL, VE3RW, VE3ABG, VE3DD, \*VE3ITA, \*VE3DG, \*VE3FN, \*VE3ZH, \*VE3EFE, \*VE3SRX, \*VE3JK, \*VE3HX, \*VE3MA, \*VE3MJ, \*VE3MVV, \*VE3K, \*VE3JDS, VE4RP, VE4CQZ, VE5ZD, VE5GC, VE6SF, VE6AGV, VE6J, \*VE6KT, \*VE6BNX, \*VE6JAV, \*VE6XD, \*VE6XS, VE7IN, VE7HDX, VE7YD, VE7R, VE7SZ, CH7SV, VE7XR, VE7CC, VE7BS, \*VE7CFD, \*VE7CFA, \*VE7ABC, VE7MK, \*VE7UW, VE8A, TI1C, \*TI2KSR.

Table with columns: Country/Region, Code, Values. Rows include CUBA, \*CL3ZD, DOMINICA, J73WA, DOMINICAN REPUBLIC, \*H18C, GREENLAND, OX3KM, GRENADA, J37K, GUADELOUPE, \*FG, \*WABRAY, \*FG5GA, HAITI, HH2PK, HONDURAS, HR1RMG, \*HR1ERL, \*H3NNU, /HR1, MARTINIQUE, \*TO5MM, MEXICO, XE2MX, XE1MC, XE1VC, \*XE3RKK, \*XE2PQ/1, MONTSERRAT, \*VP2MEU, PANAMA, \*HP1, \*KB2DOE, \*HP1DR, PUERTO RICO, \*WP4CTD, SAN ANDREAS ISLAND, \*HK0HEU, SAINT MARTIN, \*PJ8CW, ST. KITTS AND NEVIS, V47KP, V47NS, V44NK, U.S. VIRGIN IS., KP2A, \*NP2I.

Table with columns: Country/Region, Code, Values. Rows include CUBA, \*CL3ZD, DOMINICA, J73WA, DOMINICAN REPUBLIC, \*H18C, GREENLAND, OX3KM, GRENADA, J37K, GUADELOUPE, \*FG, \*WABRAY, \*FG5GA, HAITI, HH2PK, HONDURAS, HR1RMG, \*HR1ERL, \*H3NNU, /HR1, MARTINIQUE, \*TO5MM, MEXICO, XE2MX, XE1MC, XE1VC, \*XE3RKK, \*XE2PQ/1, MONTSERRAT, \*VP2MEU, PANAMA, \*HP1, \*KB2DOE, \*HP1DR, PUERTO RICO, \*WP4CTD, SAN ANDREAS ISLAND, \*HK0HEU, SAINT MARTIN, \*PJ8CW, ST. KITTS AND NEVIS, V47KP, V47NS, V44NK, U.S. VIRGIN IS., KP2A, \*NP2I.

Table with columns: Country/Region, Code, Values. Rows include AFERICA, ASCENSION IS., ZD8VJ, CANARY IS., EA8AH, EA88R, EA8AD, EA8BCAL, EA8BWW, \*ED8CQ, \*LABBXQ, \*EA8IN, \*EA8IY, CEUTA AND MELILLA, EA9KQ, \*ECSAD, IVORY COAST, \*TU4EI, CHINA, \*BY1QH, \*BY4BN, \*BY4BC, \*BY5AQ, ALASKA, AL7CO, NL7KJ, A.7MX, COSTA RICA, TI1C, \*TI2KSR.

Table with columns: Country/Region, Code, Values. Rows include KENYA, SZ4JD, \*SZ4FO, \*SZ4BI, LIBERIA, \*EL2PP, MADEIRA IS., \*CT3BD, MALAWI, \*707XX, MOROCCO, CN2JR, \*CN2JF, MOZAMBIQUE, C91J, A.3,79,500, REUNION IS., FR5DX, SENEGAL, 6V6U, SIERRA LEONE, \*9L1CF, \*9L1J, SOUTH AFRICA, ZS6STU, ZS6AS, ZS6HO, ZS6WB, ZS6SA, ZS6EZ, \*ZS6AXF, \*ZS6YA, WALVIS BAY, ZS9/ZS4NS, ZAMBIA, \*QJ2FR, ZIMBABWE, Z21HS, \*Z2LIE.

Table with columns: Country/Region, Code, Values. Rows include ASIATIC RUSSIA, UA9XL, UA9XCW, RA9XW, UA9CI, UA9MA, UA9AT, \*UA9SHM, \*UZ9OWD, \*RW9AB, \*UA9XF, \*RA9XS, \*RA9FF, \*RA9XU, UA9SL, UA9KCL, \*RA9BR, \*RABSS, \*UJ9ST, \*UA9CKA, AZERBAIJAN, UD6DKW, BANGLADESH, \*S21ZW.

Table with columns: Country/Region, Code, Values. Rows include ASIATIC RUSSIA, UA9XL, UA9XCW, RA9XW, UA9CI, UA9MA, UA9AT, \*UA9SHM, \*UZ9OWD, \*RW9AB, \*UA9XF, \*RA9XS, \*RA9FF, \*RA9XU, UA9SL, UA9KCL, \*RA9BR, \*RABSS, \*UJ9ST, \*UA9CKA, AZERBAIJAN, UD6DKW, BANGLADESH, \*S21ZW.

Table with columns: Country/Region, Code, Values. Rows include ASIATIC RUSSIA, UA9XL, UA9XCW, RA9XW, UA9CI, UA9MA, UA9AT, \*UA9SHM, \*UZ9OWD, \*RW9AB, \*UA9XF, \*RA9XS, \*RA9FF, \*RA9XU, UA9SL, UA9KCL, \*RA9BR, \*RABSS, \*UJ9ST, \*UA9CKA, AZERBAIJAN, UD6DKW, BANGLADESH, \*S21ZW.

CYPRUS				*JK1VQY 14				*JG6CVO 7				PAKISTAN				OK1RI											
5B4YX	21	586,487	1632 28 93	*J4PMX/1	15,801	85	24	45	*JG6CVO	7	40,704	167	31	65	*AP5N	A	1,041,600	1517 95 225	OK1RI	21	1,136,610	2459 40 133					
4L/AHOM 28	483,936 1175 34 108			*J47KCL/1	15,744	102	24	40	*JG6CVO	7	37,107	159	28	65	(Opr. SP5DIR)				OK5A	14	809,172	2227 38 133					
4L/3W3R 1.8	15,609 124 7 36			*J41POS	2,176	28	15	19	JH7KV A	1,979,904	1844	122	262	SINGAPORE				(Opr. OK2PZV)									
INDIA				*J41ATK	1,320	22	10	12	JH7GV	119,070	234	75	114	*9V1ZM 21				149,292	632	33	99	OK1YAP	*	421,518	1291 38 125		
*VU3MDB A 593,085 971 81 204				*J41AAV	204	7	5	7	JH7BFW	113,715	251	75	96	TAIWAN				OK2IBC	*	191,389	781 31 96						
*VU2MCC 21 227,097 888 29 88				*J41LZR 7	29,667	122	31	56	JH7MSQ	295,684	771	32	101	*BV/KC6CNV A				50,313	409	38	55	OK2FD	3.7	50,475	403 13 62		
ISRAEL				*J41N1V	4,796	41	16	28	JH7MHO/7	22,780	127	25	43	*BV/K6BBB A				45,360	432	35	46	OK1JDX 1.8	18,232	348	6 47		
4X/S59FR A	2,007,410 1802 90 292			*J41SPY 3.7	1,664	29	12	14	*JH7XQV A	447,118	721	77	141	*BVJP1R1W A				31,980	256	33	49	*OK1EP	A	389,259	511 88 263		
4X1DR 2.1	557,360 1454 32 113			JH2UVL A	1,279,783	1295	118	231	*JH7VSO	53,344	160	62	86	TURKEY				OK2RAB	*	219,024	522 65 143						
4X1VF	721,428 355 35 123			JH2ADH	285,285	417	82	165	*JH7VBE	57,684	148	60	78	*YM2DS A				234,702	524	28	125	*OK2DE	*	59,368	162 56 125		
4X6FR 14	788,015 1633 35 138			JH2GHP	35,490	155	31	60	*JH7BMZ	19,360	103	35	45	*TA2BD 7				104,960	562	9	55	*OK2ON	*	39,000	226 31 94		
4X4NJ 1.8	33,592 226 7 45			JF2PTA	27,107	201	44	65	*JH7FJU	13,845	147	36	58	*U.A.E.				33,592	226	7	45	*OK2SWD	*	32,848	168 23 65		
*4X6ZK 21	453,476 1098 30 116			JJ2POV 21	77,517	282	32	67	*JH7LWK	9,455	35	27	34	A61AD A				33,592	226	7	45	*CL6A	*	29,580	208 28 74		
JAPAN				JJ2LUN 14	136,704	373	36	92	*JH7AQR	34,928	212	24	35	*U.A.E.				33,592	226	7	45	*OK2E	*	24,852	161 25 84		
JH1AEP A	1,949,325 1758 131 264			JL2ICO	114,948	434	31	62	*JH7XMO 28	11,696	101	18	25	*U.A.E.				33,592	226	7	45	*OK2BUL	*	5,885	47 11 44		
JR1GSE	388,042 683 84 118			JL2CHD	720	16	13	10	*JH7CQL	4,284	51	14	20	*U.A.E.				33,592	226	7	45	*OK1AJN 28	63,459	309 20 79			
7J7ABC	208,800 460 70 104			JH2HFD 7	30,690	119	32	61	*JH7MAD	580	16	8	12	*U.A.E.				33,592	226	7	45	*OK1BMW	*	19,126	111 23 50		
7J1AQC	106,018 266 66 92			*JH2AMD A	147,384	340	62	122	*JAT7WD 21	234,696	670	34	93	*U.A.E.				33,592	226	7	45	*OK2PHH 21	120,156	418 30 94			
(Opr. K3DJ)				JZ					*JAT7HQR					*U.A.E.				33,592	226	7	45	*OK1DJ0	*	63,771	344 24 63		
JH1UBK	98,500 187 74 123			*JH2DJ	30,320	133	33	47	*JAT7VNF	133,977	443	31	80	*U.A.E.				33,592	226	7	45	*OK1FHI	*	49,500	243 25 65		
JR1JCC	93,920 624 64 96			*JH2VHS	13,130	73	28	37	*JAT7VEI	50,323	209	30	61	*U.A.E.				33,592	226	7	45	*OK2TH	*	28,960	146 22 58		
JR1PIR	7,290 53 25 29			*JH2BEY	10,153	65	30	41	*JAT7DOT 14	150,125	432	33	92	*U.A.E.				33,592	226	7	45	*OK2BCZ 7	10,088	179 9 43			
JF1NZV	1,943 23 11 18			*JH2RUV	9,982	69	22	40	*JAT7WFC	92,925	312	32	73	*U.A.E.				33,592	226	7	45	*OK1FPS 3.7	29,700	148 10 30			
JH1IHH	3,135 39 15 18			*JH2LGS	3,204	65	20	32	*JAT7XP	4,428	40	18	23	*U.A.E.				33,592	226	7	45	*OK1DXI	*	3,976	76 8 43		
JJ1NNJ 21	96,657 348 29 72			*JH2PEI	99	9	6	5	JABRWU A				2,367,708	2000	136	290	*U.A.E.				33,592	226	7	45	*OKSSAZ 1.8	1,334	47 8 27
JS1MRM	49,764 234 24 54			*JH2UUR	335,400	922	35	95	*JR0GB/8 21	71,852	288	28	64	ALAND ISLANDS				DENMARK									
7K2GNK	29,016 172 21 41			*JH2YCC	14,508	114	20	32	*JH6DHV	64,386	256	30	68	OH00X A				4,870,488	3805	140	496	OZ5EV A				373,584	567 83 261
JE1UAC	2,272 71 12 20			*JH2QOC	9,353	87	19	28	*JH8PJA	28,872	153	26	46	OH09J 21				609,928	205	31	97	OZ9SI				69,230	301 39 122
JE1GZB 14	7,120 62 17 23			*JH2PKB	5,847	69	16	23	*JH8UE	20,280	101	26	52	ALBANIA				*OZ5PA				5,601	165 39 52				
JH1FYC	5,617 53 16 25			*JH2SHH	1,584	31	10	14	*ZA/OK2PSZ A				317,968	974	57	215	*OZ1NN 21				238,274	853 27 82					
JH1XCV 7	115,712 377 35 78			*JH2JFF	151,168	430	35	93	*JH9CCG A				125,913	312	49	92	*OZ4MD 7				77,328	363 32 112					
JK1OPL	65,435 216 30 57			*JH2YAC	2,992	32	15	19	JJ9FSQ	18,549	83	41	40	*OZ2RO				58,149	363 26 91								
JH1OVF	3,848 40 20 17			JR3NZC A	586,040	707	101	198	JH9SG	23,472	114	22	50	*OZ2RH 1.8				182	10 4 9								
*JH1HG 3.7	19,788 113 24 44			*JH3YKV	215,064	379	76	130	*JH9KX 7	20,280	101	26	52	AUSTRIA				*OZ1ACB A				81,836	271 45 119				
JA1ELY	16,146 115 17 37			JJ3SAC	176,088	355	64	120	*JH9DF	61,835	155	57	92	*OZ1WE				69,150	221 34 106								
*JK1AJX A	310,752 502 81 153			JA3WB	96,360	236	53	94	JH9EM	17,544	79	36	50	*OZ2PI				40,386	156 35 92								
*JK1GXU *	288,951 444 82 157			JA3CE	51,968	71	42	74	*JH9LX 9 28	4,563	50	18	21	*OZ5MJ				39,716	128 67 47								
*JK1LZC	286,638 501 75 127			JH3RHR	43,188	149	17	26	*JH9NV 21	44,528	187	27	61	*OZ5ABD				17,472	120 24 67								
*JK2DOD	203,175 405 72 117			JA3OG	39,534	214	27	39	*JH9VVF	41,148	183	25	56	*OZ1BUR				1,800	38 12 24								
*JK3SRU/1	186,138 300 92 151			JH3DL	2,304	26	13	19	*JH9XAT	10,682	93	18	31	*OZ1FOY				1,395	41 9 22								
*JK4AEG	142,842 303 71 108			JH3SSW 7	29,326	128	31	55	*JH9JUD	176	8	4	4	*OZ2ZZZ 28				52,976	220 24 88								
*JK5RIM	113,208 284 65 94			*JH3JUC/3	242,757	397	86	157	*JA9IKL 14	3,636	39	15	21	*OZ5D				2,520	50 9 21								
*JK6KQ	106,928 250 60 104			*JH3JOT	56,056	220	33	65	*JH9CAV 7	17,064	92	28	44	*OZ1KRF 14				68,470	410 21 61								
*JK7BUI	87,016 233 56 90			*JA3IBT	2,386	16	19	30	*JH0NJ A				2,581,723	2314	126	281	*OZ1HXQ				57,696	148 21 75					
*JK8TYK	85,065 213 59 91			*JG3WCZ	1,664	18	14	18	JA0GZ	1,289	61	31	40	*EA6VQ 28				499,422	1678	33	108	*OZ4QA				7,038	135 9 37
*JK9WYQ	48,708 139 52 80			*JM3QIS	1,519	23	14	17	JR0GFM 28	6,331	121	20	31	*EAWY 21				3,420	47 10 26	*OZ1FMO 7				2,16C	72 3 27		
*JA1QN	42,240 141 46 61			*JK3DGX 28	18,005	104	27	38	JA0JHA 21	1,097,451	2100	140	413	EAGZS 14				3,256	48 11 26	*OZ3SK 1.8				23,313	394 8 49		
*JK2MPA	39,672 144 46 70			*JA3LDH	17,095	102	24	41	JA0UMV	224,316	628	35	89	BELARUS				ENGLAND									
*JK3RMM	34,440 116 54 69			*JH3RIY 21	211,024	635	33	88	*JA0WOW A	117,610	279	77	113	UC2AFM A				250,393	584	55	166	G3NAS A				3,196,200	2504 116 409
*JK4BNN	32,386 95 45 82			*JH3DRB	130,060	333	35	105	*JH2NX	1,678	294	66	81	UC2L 14				77,408	376	30	88	G3KMA				1,315,004	1265 107 414
*JK5VOC	32,235 120 45 60			*JH3HVV	15,386	123	19	30	*JH2AHX	109,953	237	61	110	UC2WEV 7				7,599	119 7 44	G3TMA				1,280,032	1521 82 280		
*JK6JG	32,040 142 35 55			*JH3MXP	6,840	64	19	26	*JH2GCI	53,333	155	54	79	*UC2SN 3.7				19,234	264	10	49	GX0FOS				943,710	1356 83 332
*JK7APN	30,690 120 44 49			*JH3EHE	144	6	4	5	*JH2SGW	50,400	162	51	69	ON5G0 21				481,232	1020	35	121	GGLP				159,488	420 63 193
*JK8IVT	19,090 38 38 45			*JH2CBC	24,276	110	37	47	*JH2VVC	16,720	101	33	47	ON6TJ 7				27,064	212	11	57	G0AEV 28				112,451	408 25 114
*JK9HGF	18,786 34 41 52			*JH2PEI 21	116,130	421	31	67	*JH2KQK	15,300	102	22	28	ON9CJM 3.7				158,046	1274	18	88	G4LJF 21				521,520	1326 38 126
*JK1IUF	17,175 39 31 44			*JA0RMS	78,500	284	29	71	*JH2QKH	5,916	139	21	37	*ON5LF A				83,951	250	457	142	G3XSV/7				178,299	738 23 66
*JK2HFA	12,480 76 28 37			*JH2QKH	15,300	102	22	28	*JH2JQK	1,332	50	10	13	*ON5FU				46,376	240	33	103	G3NLY 7				558,927	1816 37 126
*JK3RHM	7,720 59 20 28			*JH2QKH	15,300	102	22	28	*JH2AW	608	14	5	11	*ON5CZ				15,051	137	21	66	G4JFS A				229,824	606 47 181
*JK4GBL	6,944 48 28 34			*JH2QKH	15,300	102	22	28	*JH2RBJ	4,800	41	13	37	*ON5V				12,980	140	13	42	*G6Q				75,616	297 38 124
*JK5ASO	5,565 40 25 28			*JH2QKH	15,300	102	22	28	*ON5G0	12,980	140	13	42	*ON6CQ 14				55,356	427	21	63	G4GAF				74,498	272 45 148
*JK6PJK	5,264 34 26 30			*JH2QKH	15,300	102	22	28	*ON4XG	54,708	318	23	74	*ON6Q 14				55,356	427	21	63	*G0KTN				61,654	236 45 124
*JK7RDU	2,923 49 26 31			*JH2QKH	15,300	102	22	28	*T9'T A				31,075	215	26	87											



*Y04FYQ	7	56,335	482	21	74	EA/7G	*	54,680	167	44	116	*EC3DCF	*	11,454	36	20	49	*UB4LSB	*	742	512	28	95	ZL1AAS	14	222,336	558	34	110
*Y03.F		18,522	210	14	49	EA3EVM	*	47,070	200	33	57	*EC5AAI	*	10,048	130	18	46	*RB5ELM	3/	11,751	203	7	39	*ZL1AXB	28	171,648	1208	20	28
<b>SARDINIA</b>													<b>WALES</b>				<b>NORFOLK IS.</b>												
IS2LLJ	A	58,233	243	34	107	EA3ABJ	*	46,125	222	34	91	*EC5CWE	*	4,947	137	14	37	*UB5TFB	1.8	7,290	150	6	34	WK9NS	A	4,448,664	3926	128	268
IS2GSR	A	5,974	50	22	36	EA3ACU	*	33,655	171	36	91	*EC7DXZ	*	3,002	40	13	25	<b>PAPUA NEW GUINEA</b>											
IS0QDV	7	172,508	948	29	93	EA3ACV	*	19,710	196	21	69	*EA7FJN	*	2,886	49	10	29	<b>SOLOMON ISLANDS</b>											
*IS0NHT	A	335,279	741	49	162	EA3CZM	*	18,666	100	31	57	*EC7DYV	*	170	7	5	5	<b>ARGENTINA</b>											
*IS0LDT	*	4,664	65	14	39	EA3GJM	*	18,300	90	36	64	*ED5ABE	14	128,270	769	18	83	LUB8FDZ	A	543,808	1239	67	109						
*IS0ZCR	28	1,952	31	10	22	EA1CZF	*	12,300	99	25	50	*EA7HAL	*	70,551	347	25	92	LUB8HF	*	63,470	199	49	61						
<b>SCOTLAND</b>													<b>YUGOSLAVIA</b>				<b>SOUTH AMERICA</b>												
GM4AFF	A	738,030	1179	77	260	EA7CA	*	3,819	40	21	36	*EA5GJK	*	8,272	141	9	38	*YU7AJM	*	50,646	230	36	102	<b>BOLIVIA</b>					
GM3BCL	*	556,050	861	66	209	EA7HAB	28	31,570	42	15	20	*EA5GRC	3.7	34,581	333	14	65	*YU7SF	*	30,352	179	32	80	CP1FF	A	142,131	316	60	117
GM3JKF	21	40,986	301	18	51	EA5EBY	21	615,519	1775	35	113	*EA2ABM	**	31,108	333	12	65	*YU1RA	28	5,782	50	16	33	CP1DM	A	116,144	387	46	66
GM3WQJ	14	818,300	2165	40	130	EA5E7H	**	504,504	1612	32	100	*EC3CIL	*	19,411	272	8	51	*YU1MI	3.7	2,449	84	4	27	<b>BRAZIL</b>					
<b>GIORGIA</b>													<b>SWEDEN</b>				<b>CHILE</b>												
GM0ECC	3.7	182,378	1400	19	79	EA6ADV	*	492,755	1537	34	105	SM5AOE	A	1,175,714	1308	104	315	CE3FIP	A	5,603,808	3855	129	367						
*GM0EFT	A	413,270	784	65	221	EA1DZV	*	205,408	704	32	99	SM0HTE	**	1,029,528	939	110	294	CE4ERT	28	294,104	1026	19	78						
*GM0WNI	G	191,475	495	55	170	EC5AAN	*	10,048	100	18	45	SM3BIZ	*	562,375	735	94	315	XQ8ABF	7	315,900	1181	30	70						
*GM4CUX	*	52,537	236	40	107	EA5EIL	*	6,480	54	18	30	SM3C5S	*	443,085	840	70	187	*CE2EZE	A	1,657,415	1793	87	231						
<b>SICILY</b>													<b>SVALBARD</b>				<b>CHILE</b>												
IT9VDQ	A	1,324,576	1968	89	335	JW4X	7	271,320	953	31	88	SM3CER	*	85,995	212	90	153	XQ3SIX	14	32,020	378	27	59						
IT99A	14	1,265,126	3009	39	163	SM5A5A	*	56,250	428	22	68	SM5GRC	*	23,064	300	14	48	<b>COLOMBIA</b>											
IB9S	"	1,106,756	3115	40	148	EA2BP	*	25,275	231	16	59	SM3GHI	*	23,064	300	14	48	5K3W	A	115,823	1044	61	98						
<b>ITALY</b>													<b>SWITZERLAND</b>				<b>NEW ZEALAND</b>												
*IT9LPH	A	174,496	371	75	212	EA3AL	7	171,414	734	23	84	SM6BJI	*	45,584	147	16	62	ZL4NFZ	A	507,650	663	99	187						
*IT9ZYT	"	15,015	128	18	47	EA5B8M	7	171,414	734	23	84	SM6K2V	21	253,872	685	40	124	<b>NEW ZEALAND</b>											
*IT9JWV	21	311,640	1062	38	121	EA1KW	*	35,670	238	15	67	SM6RC	14	1,247	39	8	21	5K3W	A	115,823	1044	61	98						
*IT9RYJ	"	216,376	863	33	103	EA5AL	*	19,54	164	13	48	SM6BDS	A	148,190	401	47	156	<b>NEW ZEALAND</b>											
*IT9HBT	3.7	62,178	560	16	70	EA3NA	*	16,020	87	20	69	SM6RCS	*	28,224	192	41	106	ZL4NFZ	A	507,650	663	99	187						
<b>SLOVAK REPUBLIC</b>													<b>OCEANIA</b>				<b>NEW ZEALAND</b>												
OM3WST	28	1,612	28	10	21	EA3CCN	1.8	15,776	284	9	49	VK5GN	A	1,948,926	1980	100	243	ZL4NFZ	A	507,650	663	99	187						
OM3C8U	14	641,335	2048	35	110	*EA3BK1	A	878,408	1182	86	263	VK3KTZ	*	1,308,888	1243	110	233	ZL4NFZ	A	507,650	663	99	187						
OM3CQR	7	250,902	957	39	120	*EA2CLU	"	737,262	1054	83	250	VK8AV	*	581,410	815	83	177	ZL4NFZ	A	507,650	663	99	187						
*OM3CRH	A	114,818	350	49	138	*EA3CWT	"	667,530	950	88	306	VK4AAG	*	273,216	631	60	106	ZL4NFZ	A	507,650	663	99	187						
*OM3YEB	"	106,554	348	36	93	*EA5PX	"	633,609	133	62	217	VK3EW	7	188,055	617	31	74	ZL4NFZ	A	507,650	663	99	187						
*OM3RDP	"	76,320	376	34	144	*EA3CWS	"	560,556	133	68	208	*VK2VM	A	337,909	648	61	154	ZL4NFZ	A	507,650	663	99	187						
*OM3TLU	"	71,001	62	33	14	*EA7FTR	"	470,304	102	49	135	*VK3PU	"	264,264	636	77	126	ZL4NFZ	A	507,650	663	99	187						
*OM3CWF	"	18,056	136	19	46	*EA5CGU	"	412,155	651	88	26	*VK2ARJ	"	160,602	354	69	105	ZL4NFZ	A	507,650	663	99	187						
*OM3CFA	"	2,412	43	11	25	*CA3CKX	"	406,290	693	65	225	*VK2AYD	21	334,686	1081	30	77	ZL4NFZ	A	507,650	663	99	187						
*OM3CFA	28	205,590	583	31	123	*EA3GHQ	"	344,680	790	58	222	*VK4NEF	"	39,772	233	21	40	ZL4NFZ	A	507,650	663	99	187						
*OM3MYK	21	14,064	141	15	33	*EA1JO	"	332,004	584	67	225	*VK8BE	"	3,819	69	9	12	ZL4NFZ	A	507,650	663	99	187						
*OM30M	"	12,236	120	14	32	*EA3GJH	"	191,352	561	53	185	*SM7SEA	28	19,943	124	21	56	ZL4NFZ	A	507,650	663	99	187						
*OM3YCH	"	8,850	85	18	32	*EA4AV	"	180,320	317	69	176	*SM8JAM	"	17,319	131	15	54	ZL4NFZ	A	507,650	663	99	187						
*OM3CTA	14	58,760	393	23	81	*EA2CMG	"	146,676	383	45	159	*SK4UW	"	9,570	165	13	45	ZL4NFZ	A	507,650	663	99	187						
*OM3YCL	3.7	20,176	382	6	46	*EA3JU	"	143,280	401	52	147	*SM4HJJ	"	2,958	50	10	24	ZL4NFZ	A	507,650	663	99	187						
*OM3TEG	"	13,200	247	7	43	*EA1ET	"	118,590	333	51	150	*SM0TGG	"	2,100	30	9	26	ZL4NFZ	A	507,650	663	99	187						
*OM3CNS	"	6,854	146	7	37	*EA5YJ	"	117,888	382	47	145	*SM0GRD	21	14,278	127	21	38	ZL4NFZ	A	507,650	663	99	187						
<b>SLOVENIA</b>													<b>BRUNEI</b>				<b>EAST MALAYSIA</b>												
S59UN	A	5,822,976	3734	154	515	*EA3CCH	"	110,538	367	46	132	V85PB	A	1,503,882	1379	128	259	OM8R	A	6,947,766	4039	163	440						
S59AY	*	505,869	964	74	253	*EA7BHO	"	108,062	326	46	96	*V85BJ	A	185,220	453	58	89	<b>HAWAII</b>											
S51AY	28	447,408	1201	31	125	*EA1URV	"	101,074	267	52	142	KG6DX	28	476,190	1488	34	76	WR6R/KH6	A	5,057,280	4460	127	257						
S51SD	"	300,510	874	35	127	*EA1FFC	"	99,568	297	55	141	*KN4DG	A	300,135	672	67	98	NH6XM	28	144,584	790	22	40						
S57EK	21	1,209,789	2643	39	134	*EA4DT	"	84,078	297	40	122	PH95L	*	1,394,525	1162	117	349	AH6JR	21	539,028	1999	31	62						
S58AB	"	1,068,840	2777	38	142	*EA1URV	"	73,060	336	31	99	RY2E	"	1,268,592	1522	119	375	AH6MZ	*	85,176	467	25	33						
S52KD	"	662,796	1816	38	115	SA30R	"	53,409	201	37	82	UB70						KH6FGK	14	448,282	1331	31	87						
S52AA	14	1,177,536	2812	39	153	*EA3FSZ	"	53,118	239	40	77	DJ5BV	A	1,810,470	2128	107	328	KH6CC	1.8	11,392	238	8	8						
S57DX	"	797,308	2224	39	149	*EA2CNT	"	49,880	195	50	95	RB5EL	*A	1,810,470	2128	107	328	*KH6GMP	*	624,954	1171	70	117						
S59EA	"	656,640	1944	39	132	*EA1FED	"	44,895	214	31	92	H89LW	A	35,620	329	48	92	*NK6GSS	A	1,027,978	1750	79	123						
S57AL	"	605,720	1912	33	119	*EA3CFF	"	38,000	190	33	119	H89DX	21	34,720	111	33	107	*YB8BYS	*	5,292	31	25	29						
S59AB	7	597,204	2178	38	121	*EA1AAA	"	38,000	190	33	119	H89FAX	1.8	11,515	238	8	41	*YB8BYS	*	5,292	31	25	29						
S510J	3.7	171,570	1834	22	83	*EA1A1	"	38,000	190	33	119	H95X	A	1,810,470	2128	107	328	*YB8BYS	*	5,292	31	25	29						
S52C	"	141,700	954	19	81	*EA5AFC	"	38,000	190	33	119	TA1BY	A	60,781	304	40	93	*YB8BYS	*	5,292	31	25	29						
S57CW	"	90,950	924	16	69	*EA1EXU	"	38,000	190	33	119	UB70						*YB8BYS	*	5,292	31	25	29						
S53DCM	"	87,513	765	17	76	*EA5FG	"	38,000	190	33	119	DJ5BV	A	1,810,470	2128	107	328	*YB8BYS	*	5,292	31	25	29						
<b>SPAIN</b>													<b>INDONESIA</b>				<b>NEW ZEALAND</b>												
EA3NY	A	1,552,536	1503	115	427	*EA3JG	"	38,000	190	33	119	YB8ARF	A	483,688	837	75	131	ZL4NFZ	A	507,650	663	99	187						
EA7BA	A	1,607,200	1998	89																									

HK3JH 21 971,964 2290 29 118	GM0GNT "	32,292 206 32 85	NB1B "	341,016 405 80 232	K4RD "	26,857 92 37 70	JH1JUT "	226,345 420 79 124
*HK3MKQ A 332,688 509 76 163	JA1GTF "	30,576 121 39 52	WA1KSY "	262,072 380 68 193	K4PR "	24,064 114 37 57	JQ1VNM "	25,308 78 48 66
ECUADOR								JK2YOC A 64,500 250 46 79
HU3W 7 23,760 160 18 36	Y08CMB "	26,705 171 28 81	KAI1CV "	189,230 272 56 198	K04FQ "	13,552 60 31 57	JF3JCG A 327,060 511 172 58	
*HC10T A 4,194,840 3669 105 285	JASCDL "	25,029 103 44 59	W1AX "	161,040 237 58 181	N4HOH 3.7 9,966 89 12 43	JR4QZC A 524,426 570 102 227	JAR02H A 168,364 318 76 120	
FERNANDO DE NORONHA								JH3LCU/A 174,724 309 80 129
ZX0F 14 2,111,420 3699 36 157	OK2BAT "	22,151 156 28 55	NG1J "	150,443 260 48 163	K5MR A 1,434,150 1188 118 332	JA0HYU 24,794 93 39 59	JQ1NGT 21 134,003 490 30 73	
(Opr. PY5EG)	IK1TWC "	17,174 124 27 35	K1TR "	140,910 236 73 158	K6MG/5 "	1,286,904 921 128 388	JK7ADM 21 8,648 77 20 26	
FRENCH GUYANA								JH6ETS 7 7,252 53 21 28
FY5FY A 4,957,992 3629 113 355	N8AXA "	13,074 73 21 50	WA1FCN "	106,446 296 46 148	K5WC "	55,870 140 57 94	JK1GKG 3.7 3,132 33 12 24	
GUYANA								W5ASU 510,300 688 90 234
8R1K A 6,908,256 4339 127 417	JA1AA "	10,431 75 25 32	KAI2KI "	62,785 172 45 100	W5ASP 494,870 504 90 260	W5A5U 306,114 381 93 225	W5AC 145,323 225 68 173	
(Opr. OH6D0)	Y07XEW "	8,578 136 22 54	N1KWJ "	50,256 163 35 91	K5EC 126,792 226 70 145	W5XJ 46,782 126 43 95	W5UDX 21 245,375 572 33 118	
NETHERLANDS ANTILLES								NSNMX 14 56,760 214 28 82
PJ9M 14 1,864,584 3644 36 140	LY3BA "	8,442 83 21 46	NO1J "	42,560 130 44 89	N3AHA/A 1,312,192 1056 122 325	AA6MC "	1,132,200 931 134 310	
PJ9U 7 1,199,968 2637 34 120	SP7DZA "	7,680 83 19 41	WT1T "	37,675 100 41 96	AAG6M "	724,224 714 110 270	AA6YX 6/75,024 632 117 275	
(Opr. OH6RM)	RA3THN "	7,520 160 9 38	AA1M 28 15,478 80 20 51	W5XJ 64 4 4 4	K6SG 315,230 400 94 196	K6XC 14 2,224 114 10 210	K6X 659,499 632 110 255	
(Opr. OH1VR)	SP5HEJ "	7,004 71 20 48	KAI2FK 7 64 4 4 4	W6SDM 315,230 400 94 196	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
PARAGUAY								AAGJ 217,008 291 80 194
*ZP1B0 A 8,129 99 31 49	Y09AHX "	6,240 72 19 33	K1ZM/2 A 4,436 796 2171 154 563	W6UL 192,800 350 64 136	W6UL 161,155 304 64 129	W6PU 147,840 245 80 144	W6SDM 50,085 172 42 63	ARF0 41,261 124 47 74
*ZP6XR 28 29,664 81 16 32	RV3ME "	3,404 117 6 31	K2W/K 3,668 210 1868 149 546	KM6XX 161,155 304 64 129	K6PU 147,840 245 80 144	W6SDM 50,085 172 42 63	ARF0 41,261 124 47 74	K6G 28 21,462 106 23 50
PERU								KM6V 7 49,410 213 26 55
O44NR A 2,148,038 2218 103 234	IK0LS "	2,585 35 21 26	KE2NL " 2,489 817 1395 138 489	K6G 315,230 400 94 196	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
O4MED 39,976 111 64 88	PA3CAL "	2,340 42 14 31	KF2O " 2,066 278 1177 129 477	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140	AAGJ 217,008 291 80 194
*O4AZV 28 243,511 860 25 76	LU1FNH 28 35,230 186 20 45	W6ON 21 156,599 373 31 118	K2WV " 3,668 210 1868 149 546	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140	AAGJ 217,008 291 80 194	W6UL 192,800 350 64 136
SURINAME								K6G 315,230 400 94 196
PZ5JR A 518,665 739 73 172	KA8NRC " 29,319 125 20 67	OK1AF " 1,292 28 8 11	K2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	K6G 315,230 400 94 196	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191
TRINIDAD AND TOBAGO								NGDA 231,552 396 76 140
9Y4H A 10,574,676 6866 130 392	LU2DW " 24,564 131 20 49	K2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
(Opr. K6NA)	W6CN " 21,360 129 18 42	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
9Y4VU 21 2,214,450 3936 36 154	JF3EJU " 14,734 105 21 32	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
URUGUAY								AAGJ 217,008 291 80 194
CX5BW 28 746,181 1648 33 120	W6CN " 21,360 129 18 42	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
CX6BZ " 198,843 847 21 58	JF3EJU " 14,734 105 21 32	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
CX8SS " 2,604 31 14 17	JH9URT " 11,100 85 20 30	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
CX7BF 14 619,482 1588 36 98	9J6UR " 9,628 94 17 41	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
VENEZUELA								AAGJ 217,008 291 80 194
4M5I A 899,688 1991 46 106	N9TFF " 3,456 36 10 22	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
(Opr. YV5EQ)	IK1Y " 3,317 43 10 21	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
YV1DRK A 717,761 977 80 173	J1BY " 3,168 123 10 14	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
YV1A 14 1,240,000 2690 34 121	SP5AN " 1,292 28 8 11	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
(Opr. YV1AW)	WB2IWA/G " 1,200 22 0 14	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
YV5NCJ " 742,212 1593 34 125	V7EKS " 144 8 3 3	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
YV5MRR 7 507,276 1313 28 104	K9SU 21 156,599 373 31 118	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
4M5B 3.7 154,287 667 18 61	OK1AF " 1,292 28 8 11	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
(Opr. YV5FL)	W3P " 1,200 22 0 14	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
*YV5NXE 28 4,833 74 13 14	W4QQA/A " 292,480 334 79 240	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
*4M5X 21 307,536 820 29 100	K2J " 292,480 334 79 240	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
*YV6BTF 7 288,384 1021 23 73	K2JF " 292,480 334 79 240	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
QRP								AAGJ 217,008 291 80 194
7Z2AB A 2,590,945 2170 96 319	JA2DLM " 4,995 46 19 26	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
(Opr. K2XR)	JH1JUN " 1,992 32 11 13	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
F5REG " 525,770 1421 79 291	W8QZV/A " 1,254 25 9 13	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
N1AFC " 349,752 512 54 182	OB5ZHQ 3.7 9,966 89 12 43	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
E43RQ " 325,376 727 56 201	OK5THV " 8,364 206 5 36	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
IK1GKE " 309,276 533 74 210	SP4FGG " 5,624 149 4 34	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
UA9CUA " 303,525 530 55 158	Y11BB " 960 42 8 8	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
NA1F " 297,920 443 65 180	JH1HRJ " 299 0 6 7	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
JA2IVK " 268,822 406 100 157	SP2JGK 1.8 7,084 144 6 38	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
UB4FFX " 268,488 619 64 200	RV3DDG 1.8 7,084 144 6 38	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
(Opr. UB5FJA)	UA3VVH " 4,838 129 6 35	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
LY1DR " 260,832 825 48 198	SP5CJQ " 2,784 85 4 28	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
P40C " 252,640 558 48 112	RA3ASE " 987 44 5 16	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
(Opr. AA2U)	UN9LVC " 690 21 5 10	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
KA1CZF " 250,868 388 60 176	UA3VVE " 640 34 4 17	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140
RV9C " 225,959 405 51 146	SP5NMG " 486 29 3 18	N2AF " 1,200 22 0 14	KE2NL " 2,489 817 1395 138 489	W6UL 192,800 350 64 136	N6MB 301,608 388 93 191	W6RL 279,545 317 157	KTev 265,212 352 87 191	NGDA 231,552 396 76 140

**MULTI-OPERATOR  
SINGLE TRANSMITTER  
NORTH AMERICA**

**UNITED STATES**

KC1XX	7,630,228	3368	162	640
K1DG	5,724,795	2548	160	635
K1NG	5,263,608	2433	156	620
K1RX	5,053,572	2513	137	550
WA1G	1,625,640	1044	119	45*
WIOP	1,418,769	1195	112	347
WA1PWA	875,259	768	97	324
W1BK	840,166	658	112	367
N1AU	649,640	540	105	33*
K1CLN	600,400	567	95	300
WF1L	500,721	548	84	263
W1FY	468,855	499	79	266
AA1GC	301,675	420	71	204
KA1X	295,960	430	67	178
K1GW	125,190	234	53	142
N1JX	54,670	165	53	101
<b>K2WI</b>	<b>3,359,961</b>	<b>1643</b>	<b>146</b>	<b>583</b>
<b>N2BA</b>	<b>3,074,846</b>	<b>1853</b>	<b>135</b>	<b>457</b>
W2AX	2,256,872	1279	139	493
KB2HZ	1,592,631	1016	127	442
N2SS	1,586,064	1004	119	454
K2TE	1,469,344	903	128	456
N2IWE	541,597	590	81	262
K2QY	261,240	365	95	195
W2KN	86,528	193	53	116
AA2X	53,106	121	50	109
N2AUK	45,908	207	23	69
N2SLM	41,968	149	37	85
AA2MF	30,660	174	17	67
N2LSK	15,300	77	25	50
<b>N3RS</b>	<b>5,846,340</b>	<b>2567</b>	<b>160</b>	<b>646</b>
<b>KY3N</b>	<b>5,009,757</b>	<b>2445</b>	<b>145</b>	<b>582</b>
NN3Q	2,921,184	1534	140	532
NX3A	2,352,840	1505	121	459
NE3F	2,254,324	1249	140	519
K3CP	1,536,190	1011	125	464
AK3Z	1,506,455	900	120	429
W3GND	1,335,360	929	126	418
K3NZ	1,140,973	849	119	360
K3JVO	830,596	697	116	360
N3MKZ	795,132	650	105	363
NSJLL	581,040	665	95	265
NM3K	552,400	499	92	308
WY3T	266,054	377	68	206
<b>K4ISV</b>	<b>3,726,976</b>	<b>2011</b>	<b>155</b>	<b>549</b>
<b>AA4G</b>	<b>2,556,036</b>	<b>1562</b>	<b>145</b>	<b>499</b>
K8SCH4	910,089	1013	87	246
KD4RH	894,992	748	107	320
KQ4ZP	412,867	431	96	253
W4AOL	332,031	433	91	210
KM4GW	214,320	351	69	177
KR4FH	125,120	111	30	134
W4NC	71,669	177	30	99
<b>W5KFT</b>	<b>2,932,248</b>	<b>1770</b>	<b>151</b>	<b>487</b>
<b>WX0B/5</b>	<b>2,317,932</b>	<b>1705</b>	<b>138</b>	<b>420</b>
N5OK	1,256,605	1167	121	321
NJ1W5	1,166,540	1063	123	347
N5FG	173,463	308	60	141
K5HKX	163,593	294	67	152
KB5WUS	51,840	244	46	82
<b>W6AIE</b>	<b>1,649,235</b>	<b>1028</b>	<b>129</b>	<b>286</b>
<b>W6REC</b>	<b>1,556,100</b>	<b>1416</b>	<b>118</b>	<b>281</b>
K7YNO/6	1,518,126	1380	120	307
W6EEN	1,127,984	1115	118	259
KG6LF	1,000,692	1051	112	249
W6OAT	560,735	487	128	305
W6TOI	105,560	281	56	89
<b>K8PP/7</b>	<b>1,991,142</b>	<b>1630</b>	<b>135</b>	<b>351</b>
<b>W7AEGA</b>	<b>1,925,136</b>	<b>1541</b>	<b>129</b>	<b>332</b>
N7RO	2,209,389	1121	113	266
W37AVD	2,079,960	1133	110	294
N7UJ	98,496	250	61	101
<b>K8LX</b>	<b>3,042,256</b>	<b>1705</b>	<b>144</b>	<b>500</b>
<b>W8FN</b>	<b>2,482,458</b>	<b>1472</b>	<b>143</b>	<b>495</b>
AA8U	1,584,334	1261	130	352
W38MTT	691,900	650	109	298
W38G	466,908	605	75	217
KB8VN	269,997	333	81	220
KF8BT	240,502	384	80	173
KF8SG	28,737	128	37	66
<b>K9K</b>	<b>4,935,684</b>	<b>2381</b>	<b>159</b>	<b>595</b>
<b>W9KDX</b>	<b>3,331,824</b>	<b>1873</b>	<b>142</b>	<b>514</b>
K9UWA	1,954,587	1120	144	503
W3JZ	969,059	795	112	351
NF9D	97,660	210	59	131
<b>AB5K/8</b>	<b>2,565,828</b>	<b>1863</b>	<b>140</b>	<b>402</b>
<b>NC0P</b>	<b>2,000,700</b>	<b>1313</b>	<b>144</b>	<b>441</b>
WA0PUJ	1,841,280	1363	146	414
KF0H	1,435,632	1008	137	391
NB0NG	772,022	603	107	275
WV0C	584,402	857	102	236
KB0WR	375,648	432	94	218
K8LIR	207,240	305	77	187
NB0UZ	40,446	142	48	78

**BELIZE**  
V31DX 9,762,120 6960 142 461

**BRITISH VIRGIN IS**

VP2VFP 10,357,209 6600 138 523

**CANADA**

VY9QR	4,190,472	4210	133	335
CH2SEX	3,867,808	3857	126	308
VE7GFC	3,807,520	3689	124	300
V66SV	3,199,105	3141	130	325
CH6ITT	2,232,678	2997	105	249
W0MH-K	1,426,976	2089	83	221
A/E2				
XL7J	1,411,704	2584	80	163
VE3SMP	997,084	1153	94	260
VE2STN	692,300	991	76	223
VE6AD	442,549	1140	74	119
VE2CLM	167,100	532	46	104
VE6ZC	13,107	134	25	26

**EL SALVADOR**

YS1X 7,751,022 5839 145 441

**MEXICO**

XE2DV 5,009,850 5504 128 277  
XA5T 2,184,042 2893 101 248

**PUERTO RICO**

NP4Z 6,505,520 5052 125 435

**TURKS & CAICOS IS.**

VP5N 5,040,984 5024 114 394

**U.S. VIRGIN ISLANDS**

NP2V 4,098,276 6659 98 263

**AFRICA**

**THE GAMBIA**

C51A 6,454,958 4873 104 342  
C56V 5,353,284 5187 87 261

**MADIERA ISLANDS**

CR3M 7,193,424 4439 131 422  
CT3EE 1,143,561 1455 62 205

**REPUBLIC OF SOUTH AFRICA**

ZS5HAM 2,176,902 2113 103 248  
ZS6TDK 1,393,392 2073 65 166  
ZS4Q 1,613,975 1985 83 192

**ASIA**

**ASIATIC RUSSIA**

UZ0LWC 1,048,168 1419 108 236

**CHINA**

BY5QB 27,222 239 32 46

**ISRAEL**

4Z7M 4,997,432 3256 115 406

**JAPAN**

JJ3YBB	4,374,750	2747	156	414
JH5ZJS	3,829,386	2434	157	404
JA8DIO	3,234,153	2266	146	361
JH5ZCP	2,747,850	1887	150	375
JA7YAA	1,973,580	1591	138	306
JA1ZLO	1,970,268	1567	140	312
JA3YKC	1,677,654	1338	140	317
JA8YBY	1,555,713	1534	114	253
JG2ZQZ	1,154,761	1073	127	260
JA6YCL	1,075,100	1197	102	223
JA32NJ	1,024,875	1021	121	254
JA9YAA	945,534	989	116	238
JA9YAV	735,878	799	121	220
JA2YKA	24,564	118	36	51
JA2YAF	21,600	101	39	51

**KAZAKHISTAN**

UN8FB 260,043 538 62 141

**KOREA**

HL8O 429,751 1033 66 137

**KUWAIT**

9K2ZZ 7,165,620 4747 131 433

**SAUDI ARABIA**

HZ1AB 8,093,392 4235 142 532

**THAILAND**

HS0AC 1,925,053 3100 107 266

**EUROPE**

**4U-GENEVA**

4U1T1U 2,584,008 2965 116 388

**4U-VIENNA**

4U1VIC 3,731,640 3482 128 477

**ALAND ISLANDS**

OH8M 2,591,296 2875 125 483

**AUSTRIA**

OE2XEL	6,219,402	3624	157	589
OE6CLD	6,120,576	3927	151	553
OE1XTU	2,994,898	2371	133	429
OE5XVL	550,830	983	73	232

**AZORES IS.**

CU2T 5,497,275 4453 114 411

**BELGIUM**

OT3T	11,603,309	5226	175	712
ON7UN	5,291,264	3275	143	561
ON6AH	3,152,700	375	105	347
ON6BR	1,462,470	1745	94	316
OT3O	1,165,290	1746	85	273

**BULGARIA**

LZ9A 7,780,144 4466 179 687  
LZ1KNP 107,280 395 44 136

**CORSICA**

TK5MH 1,627,248 2437 73 275

**CROATIA**

9A3B	2,552,500	2970	126	374
9A/OH6XY	952,085	1464	98	293
9A1CED	513,792	1602	46	177
9A1CDH	352	22	4	12

**CZECH REPUBLIC**

OK5W	8,916,480	4463	167	643
OK2KDD	1,289,730	1527	103	340
OK1OKE	516,084	973	77	271
OK2KDS	473,920	774	82	238
OK1IWW	330,690	671	76	226
OK2OSU	115,045	537	42	131

**ENGLAND**

G82AA	3,439,884	2787	136	515
G8SDX	2,977,856	2662	107	369
G5KQ	1,517,784	1700	91	348
G2PXV	1,019,540	1499	77	303
G3FJE	459,044	723	84	280
GX0FUN	454,306	900	62	227
G82AVC	380,680	864	73	234
G08BA	128,856	455	47	135

**EUROPEAN RUSSIA**

UZ3DXW	2,706,140	3138	123	380
RS3A	2,166,570	2450	128	415
RX3RXX	1,845,350	2220	111	313
UZ4WNB	1,445,405	1887	110	371
UZ4HXX	905,000	1477	94	246
RZ1AYX	730,221	1205	91	310
UZ6HWH	561,522	1306	76	237
UZ4AYT	374,697	871	68	279
RZ1AWO	164,876	553	39	149

**FINLAND**

OH2X	7,379,169	4178	171	606
OH7W	3,328,290	2924	141	426
OH6VR	2,323,200	2134	133	417
OH9AR	715,750	1028	94	315
OH1AD	523,319	871	93	280





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Add a QMS Antenna Tuner System to your SSB.

## \$895.00

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Trucks are America's working rigs. And now, with a QMS strapped on the side, they're also one of the world's best station configurations. It may look a little unusual, but the QMS gives any mobile HF-SSB an almost unbelievable jump in reception and transmitting range (3-20 db). Match it with a cutting edge SGC HF-SSB and it will blast holes through major mountain ranges and probably some laws of physics. Power and focus are everything in HF-SSB ham rigs. Buy this and own the best 3/4 ton base station on the road.

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N6AW	3,846,085	2575	152	405
W7RM	6,708,236	4223	151	436
KG8CW	2,201,100	1437	135	445
W0AIH/9	3,568,878	2292	147	495
NE9O	3,296,664	2233	131	427
NX0I	2,117,605	1445	149	446

<b>ALASKA</b>				
KL7Y	7,062,600	6048	144	330

<b>ANGUILLA</b>				
VP2EC	28,702,788	12,889	177	731

<b>ANTIGUA</b>				
V26B	11,846,252	8347	135	469

<b>CANADA</b>				
CH9DH	14,649,546	9501	142	536
VE7ZZZ	5,699,840	5254	137	351

<b>CAYMAN ISLANDS</b>				
ZF2JI	9,428,352	7370	136	435

<b>ST. MARTIN</b>				
FJ5AB	4,458,012	4302	109	333

<b>TURKS &amp; CAICOS IS.</b>				
VP5L	20,720,222	12579	153	550

<b>AFRICA</b>				
<b>CEUTA &amp; MELILLA</b>				
EA9UK	37,140,597	13547	179	744

<b>ASIA</b>				
<b>ASIATIC RUSSIA</b>				
UZ0SXF	947,920	1281	100	240

<b>HONG KONG</b>				
VS6WO	10,793,254	8822	157	490

<b>JAPAN</b>				
JAS3OH	6,054,560	3474	164	468
JA1YXP	4,136,600	2672	163	396
JA1YDU	3,772,594	2554	158	380
JA7YRR	2,618,067	2111	132	305
JABYAK	2,180,945	1803	140	305
JR1ZTT	1,623,240	1633	122	238
JA3YUA	1,342,800	1302	114	259

<b>SRI LANKA</b>				
4S0DX	2,750,960	2438	124	378

<b>EUROPE</b>				
<b>BELGIUM</b>				
OT3A	14,932,489	8938	164	699

<b>CROATIA</b>				
9A1A	17,565,936	10531	178	701

<b>ENGLAND</b>				
G0KPW	18,718,332	9364	177	797

<b>EUROPEAN RUSSIA</b>				
R6L	7,708,961	5209	167	642

<b>FINLAND</b>				
OH3AT	78,668	796	40	102

<b>GERMANY</b>				
DF0DX	8,387,560	5650	166	591
DL0XY	1,682,928	1872	108	414

<b>HUNGARY</b>				
HG73DX	18,653,271	10285	181	722

<b>ITALY</b>				
IQ3A	7,551,528	4473	158	568

<b>KALININGRAD</b>				
UW2F	16,104,474	9558	181	720

<b>LITHUANIA</b>				
LY7A	4,618,284	3983	153	555

<b>NETHERLANDS</b>				
PI4COM	8,805,900	6023	150	595

<b>NORWAY</b>				
LA3M	106,200	349	47	133

<b>POLAND</b>				
SN60	3,504,498	2926	132	474
SP9KAT	420,080	789	76	219

<b>SPAIN</b>				
ED4RCT	1,513,200	1873	107	283
FA1WA	1,008,140	1298	91	289

<b>SWITZERLAND</b>				
H84FG	1,163,750	1337	107	383

<b>UKRAINE</b>				
UR8J	9,141,237	5904	673	188
US7I	6,509,250	5491	161	589

<b>YUGOSLAVIA</b>				
4N1Z	5,646,949	5055	146	503

<b>OCEANIA</b>				
<b>AMERICAN SAMOA</b>				
WH8	1,387,386	1824	101	185
/WK6V				

<b>INDONESIA</b>				
YE3Z	233,192	403	77	129

<b>LORD HOWE ISLAND</b>				
VK9LI	10,881,894	7689	144	370

<b>NEW ZEALAND</b>				
ZL2K	8,935,066	6257	142	355
ZL2T	3,270,672	2902	122	280

<b>NORTHERN MARIANA IS.</b>				
WB2P	3,911,946	3936	124	229
/KH0				

<b>PHILIPPINES</b>				
DX10BT	1,577,615	2019	94	197

<b>SOUTH AMERICA</b>				
<b>ARGENTINA</b>				
LU4FM	13,078,884	7057	150	487

<b>BRAZIL</b>				
PR4B	5,124,540	3966	113	333

<b>ECUADOR</b>				
HC0E	15,452,712	8014	147	507

<b>PARAGUAY</b>				
ZP00A	6,176,040	4449	116	365

### CHECK LOGS

Our thanks to the following stations who sent in check logs: 404D, 9A1CRJ, A71CW, AA1WX, C-19NH, DJ0SH, DK2XX, DL/PAGTV, DL1ASF, DL1JFI, DL1SWG, DL2DWA, DL5AMF, DL5DWW, DL5JRA, DLSYWM, DL6JUL, DL7UMF, DL7VJO, EA1AJJ, EA1AW, EA1DKF, EA1TAC, EA1FBO, EA1FI, EA2BXJ, EA3EJW, EA3HB, EA4BD, EA5AEN, EA5BZS, EA5DCL, EA5GMB, EA5GFM, EA5GPN, EA5SM, EA5ZW, EA6ACX, EA6MO, EA7ABL, EA7LTT, EA7WG, EA7GY, EA9TQ, EC1DLE, EC3ABF, EC3CYT, EC5CQI, EC5CVO, ER7Z, FG/KD6WJ, JW7FD, K9EMG, K-7UR, KP2/KW8N, LA110, LA2IZ, LA2JX, LA2QM, LA4KF, LA4LN, LA5JX, LA8HGA, LA8KHA, LA9LO, LA9NM, LY2BAG, NJ9Z, OESBVO, CEGIMD, OH1XX, OH2FQ, OH200, OH3GZ, OH3TY, OH5NCG, OK1AD, OZ1EU0, CZ7BW, PA0VU, PA3BTH, PY1AJK, RA3GCC, RZ1NWT, RZ6LY, SM0BNK, SM0CSX, SM0MC, SM0UEV, SM2KAL, SM2LWU, SM3CBR, SM4AWC, SM5BBS, SM6BZE, SM6LJP, SM6PVB, SV7AYV, SM3MHD, SP-0189-GD, SP2CYK, SP2FAP, SP2GKC, SP2IUI, SP2WFP, SP3HD, SP3JIA, SP3MY, SP3NUY, SP3NYI, SP4AS, SP4ERB, SP4GDC, SP4HKN, SP4TBM, SP5GKN, SP5JTM, SP5MXY, SP6AG, SP6AIJ, SP6COP, SP6CFE, SP6EY, SP6HFZ, SP6JZB, SP6RGB, SP6TGA, SP6TRH, SP6URF, SP7DRV, SP7LGE, SP7GAQ, SP7SEG, SP7VCA, SP8MCP, SP8NAD, SP9AVZ, SP9BBH, SP9CLO, SP9DAE, SP9MAN, SP9MOH, SP9PPO, SP9TCE, UA1GK, UA3WCN, UA4CAA, UA4PPR, UA4ZA, UA9JX, UB3IFD, UB4CWA, UB6RAF, UB6XAN, UJ8RA, UN7FW, UT7Y, UZ3UWA, VE2EM, VE3VID, VE6EDS, W80ZAV, YL2GD, Y03AS, Y03FRI, Y05FCW/P, Y060BH, Y06CRU, Y08SAC.