

Results of the 1998 CQ WW DX SSB Contest

BY BOB COX*, K3EST

With high expectations of the start of the new cycle, contestants from around the world were prepared for a weekend of great fun and propagation. Hundreds of contestants left the warm comfort of their homes to head for greener pastures. From beginners to seasoned veterans.

The new cycle began by giving 15 meters back in a big way. Ten meters returned but was still the little sister to 15 meters. Overall the conditions were great for most of the world and the bands were alive with signals. Many records fell. However, as the comments in the "QRN" testify, contestants from the British Isles to The Netherlands experienced gale-like conditions and Scandinavia seemed to be in a Faraday cage. Look at the 10-meter and 15-meter QSO totals and you will see what difference a year makes. With 3,540 SSB logs received, the 1998 DX contest turns out to be the largest reported DX contest in history. With hundreds of people getting on planes, into cars, or on boats and heading off to some exotic QTH, the number of countries available to the contestant and DXer soared to 230. So read on and see how everyone did and make your plans now to join in the great contest party: The 1999 CQ WW.

High Power

The all-band competitors sure like to travel. Of all the top ten scores, only one was operating from his own shack. We all owe a special debt of gratitude to these intrepid travelers. They fill up the bands with their excellence and enthusiasm.

The competition for first and second was the closest in years. Operating just south of the equator on either side of South America, Rich, HC8A (N6KT) and Jim, PT0F (N5FA), went all out to take advantage of the improving conditions. Both had arrived in their respective QTH's well before the contest. When the final bell rang, top world honors were garnered by Rich, HC8A. Making nearly 9,000 QSOs is a lot of fast talking. Jim was very close behind. On his first solo all-band effort, he



Joint strategy session for B1A/B1Z groups. Left to right: BA1DU, BA1KA, BA1FB, OH2KI, BA1AJ, OH2PM, OH6LI, OH2BH, BG1SUN, BG1BF, BZ4DCH, BD1CM, OH2TA, BA1RB, and BZ1OM.

sure made a big splash with an outstanding multiplier. Rich's effort was also enough to set a new all-time World All Band record. Congratulations to both. Third place and first place in Africa with a new African record was Bernd, DL6FBL, who put CN8WW on the map. Bernd just edged out Pekka, EA8AH (OH1RY).

As they say in real estate: location, location. And Robert, GI0KOW sure has a good QTH. But the story doesn't end there. He also has put a lot of work into building a very competitive station. Coupled with his operating skills, he took the top spot in Europe. Second place went to Harry, RA3AUU, who traveled over to Belgium and put OT8T (ON4UN's QTH) into many logs. Third place was won by perennial high finisher: 4N9BW.

The U.S. top spot was again claimed by John, K1AR, operating at K1EA. It seems that you might be able to hear Europeans at that QTH without antennas! It sure plays and, with a maestro like John at the wheel, it is tough to beat. Second place honors go to Tom, W2SC, who traveled from Kansas to operate from K5ZD/1. Third place was Bill, W4AN. Bill has built

his station up to the point that he can really make it play. There is a big satisfaction in seeing something you made really work. Three zone 4 stations made the top ten. Steve, N2IC/0 did a fantastic job from out in Colorado edging out Mike, W9RE. Jim, N3BB/5, put Texas in the top ten for the first time in a while.

Low Power

Taking time off from his photography business in Quito, Pedro, HC1OT, decided to see what he could do in the low power category. What he could do turned out to be the #1 score in the world by a large margin. Pedro also set the all time South American Low Power record. About 4,000 miles to the northwest, Dale, XL7A (VE7SV), was also entering the LP category. When the dust settled, he had secured second place world over YS1RR. Special mention should be made of the outstanding job done by Jacky, E31AA (F2CW). He put a new country in a lot of logs.

As always the competition in Europe is fierce in the Low Power category, so to

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TROPHY WINNERS AND DONORS

SINGLE OPERATOR

World All Band

HC8A (Opr. Richard Smith, N6KT)
Donor: Dave Rosen, K2GM
WA2RAU Memorial

World Low Power

Pedro Katz, HC1OT

Donor: Slovenian Contest Club

World QRP

John M. Deslodge, Jr., N6MU
Donor: Lew Sayre, W7EW

World Assisted

Jeffrey Briggs, K1ZM

Donor: Snake River Contest Club

U.S.A

John Dorr, K1AR

Donor: Potomac Valley R.C.
KC8C Memorial

U.S.A Low Power

Ann M. Santos, WA1S

Donor: North Coast Contesters

U.S.A. Zone 3

W7AT (Opr. Lew Sayre, W7EW)
Donor: Bill Fisher, W4AN

U.S.A. Zone 4

Steven London, N2ICB

Donor: CQ Magazine

Canada

VE1JX (Opr. Kenneth Ruddock, K6HNZ)
Donor: Niagara Frontier Int'l DX Assn.
VE3WT Memorial

Caribbean/C.A.

PJ8Z (Opr. Donald Daso, K4ZA)
Donor: Alex M. Kasevich, VP2MM

Europe

Robert Cummings, GI0KOW
Donor: Potomac Valley R.C.
W4BVV Memorial

Europe Low Power

Peter Pfann, DL2NBHU

Donor: Scott Jones, N3RA & Tim Duffy, K3LR

Africa

CN8WW (Opr. Bernd Och, DL6FBL)
Donor: Gordon Marshall, W6RR

Asia

C4A (Opr. Ivo Pezer, 5B4ADA)
Donor: Dayton 2 AM Pizza Gang

Japan

Kazuhiko Endo, JA0QNJ
Donor: Japan Crazy Contesters Club

Oceania

9M6AAC (Opr. Bruce D. Lee, KD6WW)
Donor: Northern California DX Club

South America

PT0F (Opr. Jim Hoffman, N5FA)
Donor: Yankee Clipper Contest Club

South America—Mainland

Horacio Botero, HK6KKH
Donor: Jose L. Bachmann, ZP6CC
& Cesar Ivaldi, ZP5K

SINGLE OPERATOR, SINGLE BAND

World—28 MHz

ZX5J (Opr. Sergio Lima de Almeida, PP5JR)
Donor: Joel Chalmers, KG6DX

World—21 MHz

9J2A (Opr. Akira Minagawa, JA0JHA)

Donor: Robert Naumann, N5NJ

World—14 MHz

8R1K (Opr. Marko Myllymaki, N5ZO)
Donor: North Jersey DX Assn.
K2HLB Memorial

World—7 MHz

IG9T (Opr. Alberto Annesi, IV3TAN)
Donor: Fred Laun, K3ZO
K7ZZ Memorial

World—3.7 MHz

IG9T (Opr. Antonio D. Asta, IT9EQQ)
Donor: Fred Capossela, K6SSS

World—1.8 MHz

VE1BY (Opr. Yuri Blanarovich, K3BU)
Donor: Robert Wruble, W7GG

USA—28 MHz

Chuck Dietz, KZ5MM
Donor: Donald Thomas, N6DT

USA—21 MHz

WBUN (Opr. George Schultz, W8UA)
Donor: David Hueben, KB0ISS

USA—14 MHz

Daniel Handa, W7WA
Donor: Southern California DX Club

USA—7 MHz

Steven R. Kelly, K7EM
Donor: Stanley Cohen, W8QDQ

USA—3.7 MHz

K1FZ (Opr. Lawrence F. Emery, K1UO)
Donor: Arnold Tamchin, W2HCW

USA—1.8 MHz

Wallace Eccles, W8LRL
Donor: CQ Magazine

Carib./C.A.(28 MHz)

Richard Zalewski, XE2DV
Donor: Snake River Contest Club

Europe—28 MHz

9H0A (Opr. Jeff Morris, 9H1EL)
Donor: Chod Harris, VP2ML

Europe—21 MHz

Zdravko Balen, 9A9A
Donor: Tine Brajnik, S50A

Europe—14 MHz

Wilfried Gottschald, DJ7AA
Donor: A. G. Anderson, GM3BCL

Europe—7 MHz

9A5Y (Opr. Ozren Niksic, 9A7W)
Donor: Roger Burt, N4ZC

Europe—3.7 MHz

Tine Brajnik, S50A
Donor: Marconi Contest Club
I3MAU Memorial

Europe—1.8 MHz

Virgis Matilzevicius, LY3BS
Donor: Robert Kasca, S53R

Oceania (21 MHz)

9M8R (Opr. Jim Sullivan, W7EJ)
Donor: Bruce D. Lee, KD6WW

Japan—21 MHz

Tom A. Tatomi, JA5OVU
Donor: DX Family Foundation

Japan—14 MHz

Hiro Shiozawa, 7L1GVE
Donor: Take Yokoyama, JL1BLW

MULTI-OPERATOR

SINGLE TRANSMITTER

World

C56T (Oprs: DL5NAM, DF4RD, OE2VEL,
DL8UD, OE2MON, DL9NDS)

Donor: Southern California DX Club
W6AM Memorial

U.S.A.

KC1XX (Oprs: KC1XX, KM3T, K1GQ, K1DG,
KC1F, AD1C)

Donor: Carolina DX Association

Carib./C.A.

FG5BG (Oprs: N6RV, W6SR, N6ED,
K6RO, W6KK, N6RT)

Donor: Eric Scace, K3NA

Africa

EA8ZS (Oprs: EA8ZS, EA8KK, EA8PP, EA8BYL,
EA8AM, EA8BTA, EA3ELM, EA2KL)

Donor: CQ Magazine

Asia

UP0L (Oprs: UN9LW, UN7LZ, UN0LW, UN7LAN)

Donor: Edward L. Campbell, AH2BE

Europe

TM2Y (Oprs: F6ARC, F6BEE, F6FGZ, F5MUX,
F5NLY, F5SNJ, 9FIE)

Donor: Bob Cox, K3EST

Oceania

T32MP (Oprs: K9MP, N0KV, W0NF, AE7C)

Donor: Junichi Tanaka, JH4RHF

South America

9Y4NW (Oprs: DK6WL, DL4MCF, DL4MDO,

DL4MEH)

Donor: Victor Burns, K16IM

South America—Mainland

CE3F (Oprs: SM3SGP, CE3FIP)

Donor: Tomas Zappini, ZP5AZL &
Renato Bellucci, ZP5XF

MULTI-OPERATOR

MULTI-TRANSMITTER

World

PJ9B (Oprs: K1XX, K2SS, K3EST, K3MM,
KB2ZX, KL2A, N3ED, N6IG, W3UM, WA3LRO)

Donor: Dave, W6NL and Barb, KBBL Leeson

U.S.A.

K3LR (Oprs: K3LR, N3RA, W3GH, ND8L,
K8GL, K9VV, K5TR, K8CX, K3UA, XE2AC, W8JV,
KA3JWJ)

Donor: Paul Hellenberg, K4JA

Europe

M8T (Oprs: G4BAH, G3XTT, G3WGN, OH6YF,
G4VMM, G6CYB, G4BUO, G4TSW, G4JVG,
G4PIQ, G4BWP, G8AEV, G8KRL, G8WCW,
G8OZS, G3PJT, G8HSS, G8AFH)

Donor: Finnish Amateur Radio League

Japan

JA5BJC (Oprs: JA5BJC, JA5FDJ, JA5JCC,
JA5THU, JH5XP, JH5RXS, JR5JAQ, JR5VHU)

Donor: Ryozo Goto, JH3JYS

CONTEST EXPEDITIONS

World Single Operator

E31AA (Opr. Jacky Calvo, F2CW)

Donor: Capitol DX Association

Stuart Meyer, W2GHK Memorial

World Multi-Single

C56T (Oprs: DL5NAM, DF4RD, OE2VEL,
DL8UD, OE2MON, DL9NDS)

Donor: Tachio Yuasa, JA9VDA

World Multi-Multi

T88X (Oprs: JA6VZB, JA1WSX, JF1MIA,
JR6IQI, JQ6GDP, JH0XUP/6, JE2PCY)

Donor: Dieter Loffler, DK9KD

DJ3NG & DJ4EI Memorial

SPECIAL EVENT AWARD

Chinese Radio Sports Association

B1A, B1Z, B4R, B7K

Donor: CQ Contest Magazine

SPECIAL SINGLE OPERATOR AWARDS

World-All Band Under 21 years old

Hamilton Oliveira Martins, PY2XE

Donor: Gene Zimmerman, W3ZZ

World All Band High YL

Emily Thiel, P43E

Donor: Yutaka Tanaka, JH3DPB

KA6V Memorial

end up on top is a real accomplishment. That position goes to Peter, DL2NBU. His UBN was one of the best in the world with a log with very few errors in it. Second place went to Gediminas (LY3BA) using the special call LY63BA. The "bronze medal" goes to T99W. The winners are more or less N/S in central Europe.

In the SOABLP USA category, it was Ann, WA1S, easily coming out on top with over 1.5M. This is Ann's second major win in a row, establishing her as a force to be reckoned with. Ann starting dabbling in this category several years ago and was "surprised" when she made the top ten "without really trying." Now that she is more serious about her effort, you can see that it is really paying off! Low Power (in terms of raw numbers of entrants) is THE MOST competitive category in the CQWW.

Second place goes to Fred, NA2U, with just under 1.3M. Fred is another example of a contesteer who just keeps trying and keeps getting better and better. This is his best place of finish since he started entering this category. He has steadily built up his station and antennas (which are still quite modest by most standards). A great effort Fred; hang in there! Right behind Fred is K1VUT with 1.2M. And the perennial West Coast Top Ten guy makes it again. WA7BNM/7 finishes in 5th place with just over 1M. Great job on those contest calendars, too!

QRP

The QRP category was a big surprise this year. Finishing FIRST IN THE WORLD with 612k is N6MU. Not only is this the first time that a West Coast station has won QRP for the U.S., it is also a first for winning the world—WOW! John (who operated from N6NB's qth at 7,000 feet elevation) has been very active in contesting recently. Told that he had achieved "a coup" in the CQWW, he modestly stated that it was due to a lack of participation by VE3KZ and KR2Q. Come on, John, take your bow! You deserve it!

Second in the world with 575k is another familiar face: YU1KN. Representing the East Coast U.S. and in third place for the world is K2PS with 525k. Fourth place world goes to LU1VK with 518k while the sixth place world finisher was taken by JR4DAH with 419k. It's really exciting to see the top six slots distributed over four continents.

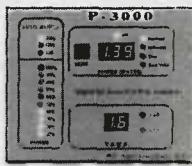
Assisted

The World Assisted class was topped by Jeff, K1ZM. Operating from his new QTH on Cape Cod, Jeff showed everyone how it is done. Second and third place went to last year's one and two. This year, TM2V, operated by F6GYT, outdistanced Roland, DK3GI, at club station DL0WW.

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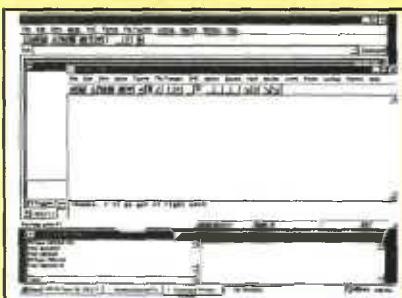
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TEAM CONTESTING

1. Neiger's Tigers Team #1: 63,665,482. By CN8WW (DL6FBL), SU2MT (CT1BOH), ZD8Z (N6TJ), EA9AM (K6NA), P40W (W2GD).
2. Contest Club Finland #1: 28,987,393. By OHØZ (OH1EH), CP6AA (OHØXX), EA8AH (OH1RY), 8R1K (N5ZO), 8P9V (OH6RX).
3. Contesting.com: 22,033,083. By N2IC/Ø, K4AB, W4AN, AA4S, PJ8Z (K4ZA).
4. Yugoslavian Contest Team: 19,145,024. By 4N9BW, 3V8BB (YT1AD), YT1AD (YU1DX).
5. Team Aruba: 18,954,500. By P43A, P43E, P43T, P43W, P4ØB (P43P).
6. Neiger's Tigers Team #2: 17,230,198. By W1WEF, W9RE, WB9Z, V47KP (W2OX), GW4BLE.
7. Crazy German Contesting Gang: 14,828,884. By A61AC (DL2CC), DLØWW (DK3GI), DL3NCI, DL4NAC, DL6MHW.
8. Neiger's Tigers Team #3: 5,043,999. By P4ØN (W5AJ), CT1ELP, NA2U, TL5A (PA3DZN), K3BYV.
9. Don Darias Contest Team: 4,665,198. By GM8V, GM4AFF, GM4YXI, GWØGEI.
10. ZA-TE Plus Team: 3,939,736. By 9A/WA4IMC, 9A9A, 9A6A, 9A7R, 9A2EU.
11. Yugoslavian Single Band Team: 2,271,389. By 4N7B, YT1BB, YU1JW, YT1R.
12. Labre-SP Contest Team: 2,296,032. By PQ2A, PY2XE, PY2KP.
13. Team Tennessee: 1,863,861. By KF4ZR, N4KN, NN4T, NY4T, WO4O.
14. Contest Club Finland #2: 1,620,590. OH2LU, OH6NIO, OH8BQT.
15. TuPY TEAM #1: 895,661. By PR2W (PT2AW), PY2NY, PY2KQ, PY2APQ.
- *16. TuPY TEAM #2: 847,985. By PY2ELG, PY2TI, PY2XE.
- *17. DX Cachafaz's Team: 669,052. By LU4HUG, LU5HY, LU9HOA, LW5HBR, LW6HAR.
18. Contest Club Finland #3: 623,804. By OH3WW, OH5BM.
- *19. Old Friend's Team: 453,603. By S57CQ, S57DX, S58WW.
- *20. Northern Greece Contest Team: 433,432. By SV2CWY, SV2BFN, SV2AEL.

** All Team Low Power*

Roland continues to get a great multiplier. Allowing Barbados to break into the top ten for the first time was 8P6SH. With the spread of the Internet, gateways into packet systems around the world have all but eliminated packet isolation. Second behind K1ZM in the U.S. and fourth in the world was K11G. Third place was taken by Charlie, K3WW, who gave his best for the FRC.

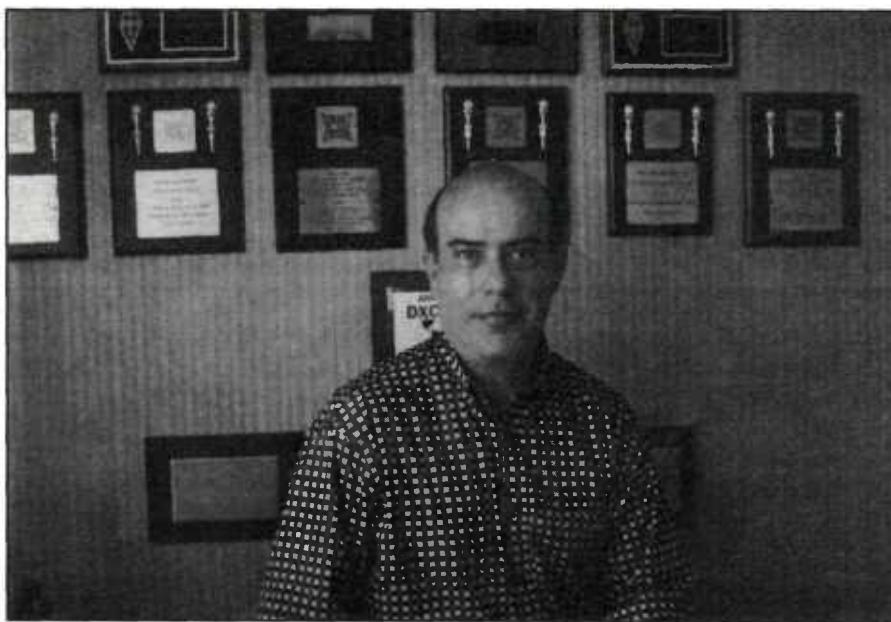
Once again our log-checking found several instances where stations lost points because QSOs were logged on the wrong band. Apparently some operators lose track of their band changes at times.

And again some entrants lost QSOs by grabbing packet announcements and logging the announced callsign without listening to verify the call. The call may be wrong on packet.

Multi-Single

Putting together a world class multi-single operation requires a lot of planning. A lot of groups put in the effort in 1998. Jumping on a plane and heading out to DX locations were dozens of expeditions.

The world's top MS score was a DXpedition by the Bavarian Contest Club,



Pedro Katz, HC1OT, #1 World Low Power.

TOP SCORES IN VERY ACTIVE ZONES

ZONE 3

*XL7A.....	3,513,342	GIØKOW.....	7,388,788
W7AT.....	2,838,786	OT8T.....	6,791,449
WC6H.....	2,699,175	GW4BLE.....	4,520,836
W7GG.....	2,512,806	DL4NAC.....	4,395,584
K7RI.....	2,150,582	DJ4PT.....	3,452,766
N7TT.....	2,082,483	F5NBX.....	2,965,933
K6GX.....	1,776,620	*DL2NBU.....	2,049,057
VE7IN.....	1,462,734	GØIVZ.....	1,717,760
KI6CG.....	1,276,560	DJ6QT.....	1,633,980
*WA7BNM/7.....	1,097,250	DL8PC.....	1,574,056

ZONE 4

N2IC/Ø.....	3,777,672	4N9BW.....	5,240,144
W9RE.....	3,588,312	OK1RI.....	4,838,015
WB9Z.....	3,028,104	OHØZ.....	3,742,508
KØRF.....	2,926,228	YT1AD.....	3,023,440
K4AB.....	2,747,136	LY5W.....	1,905,260
K9BGL.....	1,414,992	YZ7AA.....	1,838,467
VE3XN.....	1,340,180	*LY63BA.....	1,707,480
VE3AT.....	1,334,377	IK4ADE.....	1,705,088
W5MN.....	1,272,503	IZ8Z.....	1,695,172
W5WMU.....	1,164,908	*T99W.....	1,653,300

ZONE 5

K1AR.....	5,952,375	JAØQNJ.....	3,093,912
K5ZD/1.....	5,481,048	JA8RWU.....	2,673,128
W4AN.....	4,989,960	JS3CTQ.....	2,211,638
K3ZO.....	3,815,240	JM1XCW.....	1,720,383
N2LT.....	3,572,140	JA7BEW.....	1,504,128
W3BGN.....	3,401,478	*JL1ARF.....	1,238,204
N3BB/5.....	3,232,413	JAØQWO.....	989,080
K2DM.....	3,068,044	JH4ADK.....	978,193
W1WEF.....	2,819,586	JA2BNN.....	922,610
VE1JX.....	2,870,952	*JEØUXR.....	911,616

* Low Power

ZONE 15

4N9BW.....	5,240,144
OK1RI.....	4,838,015
OHØZ.....	3,742,508
YT1AD.....	3,023,440
LY5W.....	1,905,260
YZ7AA.....	1,838,467
*LY63BA.....	1,707,480
IK4ADE.....	1,705,088
IZ8Z.....	1,695,172
*T99W.....	1,653,300

ZONE LEADERS SINGLE OPERATOR

Zone	Call	Score	Zone	Call	Score
1	KL7AC	772,310	21	A61AC	5,424,530
2	*VE2GSO	546,096	22	*ATØMB	803,665
3	*XL7A	3,513,342	23	*UAØYAY	344,311
4	N2IC/Ø	3,777,672	24	VR98BG	795,511
5	K1AR	5,952,375	25	JAØQNJ	3,093,912
6	*XE2DV	1,052,625	26	3W6US	538,450
7	*YS1RR	2,761,850	27	KHØI	3,506,976
8	PJ8Z	8,591,520	28	9M6AAC	8,710,746
9	P40W	14,020,064	29	No Entry	
10	HC8A	17,055,106	30	VK5GN	2,282,132
11	PTØF	16,519,026	31	NH7A	4,393,940
12	XR3M	1,338,350	32	FK8HC	1,505,160
13	LU1HLH	2,664,288	33	CN8WW	15,375,060
14	GIØKOW	7,388,788	34	SU2MT	11,805,734
15	4N9BW	5,240,144	35	6V1C	1,623,378
16	RW4AA	2,778,560	36	ZD8Z	13,715,460
17	EX8W	4,020,525	37	*E31AA	2,589,816
18	RZ9UA	1,211,679	38	ZS6BXN	2,529,660
19	*UAØJH	972,036	39	*FR/DL5JMN	28,714
20	C4A	9,781,930	40	*TF8GX	254,775

* Low Power

SINGLE OPERATOR MAX BOX

QSOs	DXCC
ZX5J	28
9J2A	21
8R1K	14
IG9T	7
S50A	3.7
LY3BS	1.8
ZX5J	28
ZX9A	21
DJ7AA	14
4N7B	14
9A5Y	7
S50A	3.7
SV8CS	1.8
	183
	180
	174
	174
	135
	117
	77

Single Band 40 Zone Club

21 MHz: OE6Z (Opr. OE6MBG), SP5GRM, 9A9A, OM7M (Opr. OM5RW), 9J2A (Opr. JAØJHA).

14 MHz: II3T (Opr. IV3YYK), EA3ATM, K4XS, YO4NF, GM8V (Opr. GM3WOJ), IT9STX, VE7XR, SN2B (Opr. SP2FAX), RZ9UA.



JA6ZPR, all in WW T-shirts. Left to right: JH6ETS, JR6CKX, JR6HVE, JH6JSR, JR6HLR, JH6SQI.

C56T. The group not only took top world honors but set a new African record along the way. Close behind was another Bavarian Contest Club DXpedition to 9Y4NW. It is wonderful to see the BCC getting in on the fun and handing out multipliers to the deserving from exotic

QTHs. Third place goes to FG5BG. They talked their way from a 2 point area into 3rd World high.

The surprise was in Europe, where the extremely accurate log of TM2Y took top honors from F6BEE's country house. Their log is a perfect example of taking the time

to get calls right before you log them. Second in the hotly contested European MS category was the IR4T team operating from their shack 150 feet in the air in a water tower! I guess they bring their own ground with them. Third place goes to the famous Hungarian station, HG1S, operating from southern HA-land.

Taking a year off from MM competition, Matt, KC1XX, put together a fine crew. With his great antenna farm and towers, they vaulted far ahead of the pack to take top USA honors. Standing alone in second place was the Frankford Radio Club station, N2NU. The real close battle was for third through sixth place. K4ISV took third. Much further west and in the thick of the battle was W9JA (now K4JA).

Multi-Multi

The crew at PJ9B once again won the Multi-Multi category. This time with the second highest score ever. They came within 3.6 million of their all-time 57.6 million point score. Their crew had no idea that they would come as close as they did to the record and were as surprised as

(Continued on page 72)

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
HC8A	90/10/17	302/23/52	953/28/82	1174/33/101	2677/35/128	3764/32/121
PT0F	26/13/27	235/19/50	779/26/89	2132/36/138	1647/33/130	3353/29/128
CN8WW	75/8/32	754/19/80	959/22/93	1659/34/109	1777/33/119	2478/27/111
EA8AH	102/12/44	601/26/80	656/22/83	1755/36/117	1593/36/118	3054/29/100
P40W	84/9/22	423/17/65	663/25/85	1593/35/117	1909/34/122	2619/33/124
ZD8Z	26/8/11	116/19/60	366/26/66	1402/34/110	1514/35/124	3566/35/132
SU2MT	64/7/24	433/14/63	592/19/70	1018/33/112	1489/32/110	2876/33/109
3V8BB	217/8/54	564/19/78	642/27/91	873/38/120	1531/34/130	1342/36/117
CAA	150/9/50	314/17/73	757/24/89	1138/32/99	1194/31/111	1552/33/126
EA9AM	119/8/37	441/19/63	436/21/66	807/25/87	1389/32/99	1882/27/107

WORLD MULTI-OPERATOR SINGLE TRANSMITTER

C56T	48/10/28	190/17/60	655/27/88	2716/37/148	1999/36/154	2995/35/153
9Y4NW	92/13/30	358/21/71	921/27/100	2704/35/124	2071/32/131	2471/28/130
FG5BG	122/10/23	460/18/72	585/22/74	2093/34/122	2458/33/127	2497/29/125
TM2Y	216/9/53	492/21/85	798/32/124	1258/37/150	1550/37/144	845/32/139
IR4T	133/11/61	474/23/92	1141/34/131	948/38/155	1898/38/158	457/34/151
EA8ZS	22/4/13	291/12/48	792/27/93	822/34/124	1702/31/121	1528/30/133

WORLD MULTI-OPERATOR MULTI-TRANSMITTER

PJ9B	351/15/41	1062/27/101	2540/34/140	4725/39/185	5190/39/180	5460/35/176
EA9EA	190/10/48	1463/26/99	1608/32/116	3102/40/158	3491/39/153	2808/36/157
V26B	437/15/39	1155/27/101	1792/29/124	3579/38/167	3831/36/170	4315/34/151
P3A	360/9/57	1255/22/94	1992/34/126	2774/39/145	3647/40/159	3047/38/158
IH9P	632/10/68	1059/20/86	1575/33/115	2777/40/151	2487/36/134	2353/36/162
KH7R	152/10/11	911/28/61	1654/35/88	2818/39/141	4173/37/119	3763/36/104



Jim, N3BB/5.

anyone at the final bell. EA9EA finished second just ahead of a half dozen teams from all around the world. P3A broke the Asian record by almost 10 million points, and JA5BJC, from their beautiful mountain top QTH in central JA5, raised the JA record by 800,000 points. Continental leaders were EA9EA (AF), P3A (AS), M8T (EU), V26B (NA), KH7R (OC), and PJ9B (SA).

In the U.S., a remarkable win was posted by K3LR who beat out N2RM for top USA honors, with W3LPL a close third. Tim's crew can be proud of their out-

standing effort. Look at their multiplier totals. Quite outstanding! The U.S. MM leader is usually from the far east coast, but Tim has proven that with the right conditions and crew it can happen further west.

Putting up with gale winds, the gang from M8T finished on top in Europe. This is quite an achievement for the FD-style M8T crew. Not far behind in second place was OT8A. What an effort they had with 76 operators! What a good way to bring many hams into contesting. Third place goes to the famous RW2F crew.



Hugo, XE1CRO, in his first contest.

There was very strong representation from all over the world in the Multi-Multi class this year. The U.S., JA, and European winners didn't manage to crack the top ten. While South America seems to still be the place to be, with Africa coming very close at times. Four of the top ten operations were from North America and two operations from Oceania made the top ten this year. Congratulations to all the teams, who did so much work to build and man these multi-multi stations. These are the beacons that show us what the true potential of all the bands.

Team Contesting

You can have fun with the team category. Five members from around the

EUROPE TOP SINGLE OPERATOR, ALL BAND

Station	160	80	40	20	15	10
GIØKOW	197/9/51	738/19/82	547/22/95	1930/34/118	1425/35/113	431/24/80
OT8T	119/8/55	409/21/82	585/30/120	947/39/138	1125/35/139	293/30/136
4N9BW	233/8/53	411/15/71	771/31/108	924/36/138	1033/36/117	350/33/121
OK1RI	174/9/47	301/11/56	758/27/91	1114/33/106	1043/35/107	343/30/85
GW4BLE	84/6/36	271/11/48	353/21/62	962/31/100	1064/30/101	587/25/85
DL4NAC	125/8/41	227/12/60	542/28/94	831/32/123	930/31/123	263/31/109
OH0Z	54/5/28	559/15/66	636/25/92	1213/34/113	1005/33/116	424/26/85
DJAPT	82/6/34	335/18/66	355/28/83	764/32/107	771/30/105	199/27/82
YT1AD	125/6/44	125/8/44	433/24/77	845/31/95	1079/30/99	193/24/78
F5NBX	51/5/24	278/14/55	283/23/65	566/26/80	1235/29/106	156/23/73

EUROPE MULTI-OPERATOR SINGLE TRANSMITTER

TM2Y	216/9/53	492/21/85	798/32/124	1258/37/150	1550/37/144	845/32/139
IR4T	133/11/61	474/23/92	1141/34/131	948/38/155	1898/38/158	457/34/151
HG1S	384/9/54	879/19/83	1151/34/129	1303/37/129	1766/37/149	479/32/132
TM1C	50/7/50	653/21/79	982/29/112	1588/37/126	1162/33/127	382/24/107
OK5W	46/7/46	389/18/79	1029/32/126	1245/39/148	1190/37/142	250/34/125
CU2V	163/7/23	415/11/33	519/14/48	1139/24/83	1710/27/91	2321/25/89

EUROPE MULTI-OPERATOR MULTI-TRANSMITTER

M8T	668/10/66	1289/26/101	1609/28/129	2737/39/176	1958/40/177	1057/31/155
OT8A	865/10/64	1398/20/87	2089/33/125	2559/38/166	2195/36/158	798/30/139
RW2F	693/11/64	1206/26/101	1531/37/130	2262/38/157	1397/37/155	771/30/129
OH2HE	646/10/63	838/23/96	1535/36/139	2043/40/166	1182/36/143	616/29/138
HGGY	368/8/58	994/16/78	965/26/113	1886/38/148	2190/38/150	978/35/145
DL0CS	632/10/58	1029/22/89	1245/29/126	1354/37/151	1090/38/156	523/29/137

world or from rival clubs in the same country is all you need. Once again the number one team was Nieger's Tigers #1. This team set a new team contesting record of over 63 million points. That works out to be 12.6 Meg per team member! It was only 10 years ago that the single operator record was 12.7 million. Second place honors go to the Contest Club Finland. Putting together Finns from all over the world, the CCF beat out Contesting.com, who finished very high with only one outside the country DXpedition. Congratulations to all the teams.

New All Time SSB Records

WORLD: AB HC8A (N6KT); 28 ZX5J (PP5JR); L21 OK1AUT/5N0; A28 ZZ5G (PY5GU); **AFRICA:** AB CN8WW (DL6FBL); 28 5X1T (ON6TT); L28 9G1BJ; L21 OK1AUT/5N0; MS C56T; **ASIA:** C4A (5B4ADA); 21 5B4AGC; 3.7 5B4/NP3D; L28 5B4/EW1AR; L14 RJ9J (RA9JR); L3.7 4L5O; QA JR4DAH; Q7 JA6GCE; MM P3A; JAPAN: QA JR4DAH; Q7 JA6GCE; Q3.7 JA1AA; MM JA5BJC; **EUROPE:** AB GIØKOW; **NORTH AMERICA:** AB L28 XE2DV; L21 V31MX; USA: A21 N3RD; **OCEANIA:** 21 9M8R(W7EJ); L14 FK8FI; **SOUTH AMERICA:** AB HC8A (N6KT); 28 ZX5J (PP5JR); LA HC1OT; L28 LR0H (LU9HS); L14 LU2NI; A28 ZZ5G (PY5GU)

Special Mention

The CQ WW brings out the best and 1998 was a banner year. The CQWW saw another major breakthrough when such goodies as B1A, China's first Multi-multi and B1Z (Multi-single) hit the airwaves from downtown Beijing. It was a definite BY fiesta, and B1A alone made some 9,000 QSOs, not only handing them out but also introducing the Chinese to the art of contesting during this historic weekend (see photo). The CQ WW congratulates B1A and B1Z and all the hams involved in bringing contesting to Chinese amateurs. There were several real great battles in the multi-single category, especially, in the Caribbean. Check out the results to see how close VP5DX, VP2V/K7AR,



Eli, PT7BZ, always a big signal.



WP2Z (left to right): N2WB, W4WX, W5OXA, W4CJK, AA9TK, VE3FU.

H18/DK8YY, FM5BH, and WP2Z ended up. Wow! Now that is competition. Several single band efforts were outstanding from Africa. Topping the list was the score made by Akira, JA0JHA as 9J2A. He was certainly in the right place. Look at his score from southern Africa: top number of single band QSOs made by a single op. Over in west Africa, 9G1BJ set a new low power, 28 MHz record with an outstanding effort. Last year's IG team reprised their effort on single bands with two world highs and a second place. ZX5J operated by PP5JR was world high 28 MHz with 183 countries, tops for a single operator. In the all band category, Jose, CT1BOH, put his considerable talents behind the SU2MT callsign and gave practically everyone a double multiplier.

Comments

A. Rule Change: In the last few years, several operators have submitted several logs using the same callsign. Persons are now beginning to abuse the single callsign concept. For 1999, there is a new CQ WW rule which reads: "A different callsign must be used for each CQ WW entry."

B. Log Analysis: Ever since the UBN reports became available to the public in March of 1998, the CQ WW Contest Committee has been working hard to increase the depth of analysis and the ease with which we can understand reports. The crunching of log data and the effort to make the analysis as good

TOP SCORES

WORLD		21 MHz		EUROPE		21 MHz		USA	
HIGH POWER		OK1AUT/5N01,590,300		SINGLE OPERATOR		Z31GX539,766		SINGLE OPERATOR	
All Band		5X1Z1,084,671		HIGH POWER		UA4LCQ459,062		HIGH POWER	
HC8A17,055,106		CT3DZ866,392		All Band		RU4PL387,855		All Band	
PT0F16,519,026		TA3D660,136		GI0KOW7,388,788		EA7DBO336,812		K1AR5,952,375	
CN8WW15,375,060		LU5HCl563,849		OT8T6,791,449		YR9P290,832		K5ZD/15,481,048	
EA8AH15,277,596		Z31GX539,766		4N9BW5,240,144		F5BMK256,452		W4AN4,989,960	
P40W14,020,064		14 MHz		OK1RI4,838,015		14 MHz		K3ZO3,815,240	
ZD8Z13,715,460		LU2NI708,344		GW4BLE4,520,836		9A/WA4IMC438,501		N4MO243,460	
SU2MT11,805,734		FK8FI630,605		DL4NAC4,395,584		Z39Z414,711		NY5B173,088	
3V8BB10,881,440		OH0Z3,742,508		CT4PT3,452,766		Z31JA378,184		KF8K168,635	
C4A9,781,930		LU3MDO623,840		DU3RCM564,589		ES2RJ339,328		N6WLX/8158,485	
EA9AM8,749,164		9A/WA4IMC438,501		YT1AD3,023,440		IQ7A335,916		K4SN133,416	
28 MHz		Z39Z414,711		F5NBX2,965,933		S58WW258,366		NW7Q/8132,616	
ZX5J3,322,230		7 MHz		28 MHz		28 MHz		21 MHz	
5X1T2,501,521		S57DX177,642		9H0A892,515		S57DX177,642		K4PC221,998	
LU6ETB2,368,128		YV5DZQ114,048		CT4NH874,665		CT1BWW103,736		W7FP130,739	
6V1C1,623,378		CT1BWW103,736		TM6P584,355		T95A101,505		WD4CNZ55,800	
CX8CP1,513,691		T95A101,505		4O6A450,248		S54A80,128		K1EF/346,400	
FK8HC1,505,160		LU4DX90,896		S53R446,200		UT1T62,177		KG7RZ44,986	
21 MHz		S54A80,128		CT1AHU408,192		IR7S54,900		AF8C27,552	
21 MHz		3.7 MHz		21 MHz		28 MHz		7 MHz	
9J2A3,043,872		4L5O146,316		9A9A1,517,020		SV2CWY84,630		W4UM31,770	
ZX9A2,597,688		YM75TA88,200		OE6Z1,053,032		F2EE49,938		WB2ZTH10,868	
TL5A2,211,366		SV2CWY84,630		IY4W1,005,714		YU1CC48,646		WG1Z8,480	
9M8R1,944,800		F2EE49,938		S50C1,001,662		IK3SSJ47,888		KQ6ES7,014	
P43A1,783,821		YU1CC48,646		GM4FDM907,144		4N1A42,028		K4LDR2,660	
14 MHz		IK3SSJ47,888		S50U842,800		EC1CFD41,676		WA2QNW339,200	
14 MHz		1.8 MHz		14 MHz		1.8 MHz		3.7 MHz	
8R1K1,719,836		HA8BE36,894		DJ7AA1,074,159		HA8BE36,894		WT3W9,196	
CT3BX1,279,785		YU1RA14,250		GM8V1,031,400		YU1RA14,250		W9LYN2,871	
RZ9UA1,211,679		EA1DVY7,332		SN2B1,016,784		EA1DVY7,332		QRP	
DJ7AA1,074,159		SP9RPW6,168		4N7B945,507		SP9RPW6,168		All Band	
GM8V1,031,400		E17IU5,989		OH0MM843,081		E17IU5,989		N6MU621,264	
SN2B1,016,784		DL1KZA4,943		S53M771,876		DL1KZA4,943		K2PS524,901	
7 MHz		QRP		7 MHz		QRP		NØKE499,280	
IG9T973,782		All Band		9A5Y513,342		YU1KN575,600		W6YJ230,144	
9A5Y513,342		N6MU612,264		LZ3ZZ459,511		EA1GT304,792		N1TM189,210	
LZ3ZZ459,511		YU1KN575,600		IK2NCJ/4378,378		LY2FE287,532		W8QZA/6149,580	
IK2NCJ/4378,378		K2PS524,901		YU1LM269,325		YU1LM269,325		NØFW135,870	
YT1BB362,294		K2PS524,901		OM5M270,340		S59D253,270		WA3KNO118,164	
K7EM354,148		NØKE499,280		HA7YS251,085		HA7YS251,085		N4IJ117,950	
3.7 MHz		JR4DAH419,482		S50A357,846		SM3CCT122,304		NQ7X70,680	
IG9T473,594		EA1GT304,792		9A6A235,807		OK1DKS93,312		ASSISTED	
S50A357,846		LY2FE287,532		OK2RZ220,032		IK5RUN85,100		All Band	
5B4/NP3D250,416		JA2DLM270,336		SP7GIQ147,599		IØKHP70,020		K1ZM5,168,493	
9A6A235,807		YU1LM269,325		S51OI107,613		TM2V4,670,048		K4ZM4,335,610	
K1FZ234,260		K1ZM5,168,493		LY61FW90,436		DLØWW4,358,410		K11G4,088,666	
OK2RZ220,032		MULTI-OPERATOR		LY3BS93,610		OE8SKQ2,685,358		K3WW3,488,265	
LOW POWER		SINGLE TRANSMITTER		S57M50,040		S57S2,547,000		K3NZ3,161,220	
All Band		K1G4,335,610		YZ6A49,640		DJ2YA2,445,801		W1GD/22,867,834	
HC1OT5,660,880		KS1L4,088,666		OZ3SK46,368		OL6X2,271,368		K1VR2,861,712	
XL7A3,513,342		K3WW3,488,265		4O6A43,524		OK2FD2,174,589		N3AD2,758,920	
YS1RR2,761,850		8P6SH3,029,400		SV8CS39,284		IO4A2,103,696		K5KG/22,714,067	
E31AA2,589,816		K3NZ3,161,220		DL1MFL1,881,124		N6RO2,314		W2RE2,576,988	
J6/K3LP2,221,698		W1GD/22,867,834		IN3ZNR1,707,198		AA4MM1,254		MULTI-OPERATOR	
EA8AG2,072,406		SINGLE TRANSMITTER		MULTI-OPERATOR		KØCS1,188		SINGLE TRANSMITTER	
DL2NBU2,049,057		9A2EU1,457,708		LY3BS93,610		TM2Y10,381,027		KC1XX8,728,040	
LY63BA1,707,480		Y94NW17,929,236		DF7RX1,319,744		IR4T10,063,075		N2NU6,702,771	
T99W1,653,300		FG5BG12,042,342		ON7RN1,309,902		HG1S8,234,800		K4ISV4,928,232	
LU5VV1,618,176		TM2Y10,381,027		S59AA1,276,560		TM1C7,456,080		W9JA4,879,400	
28 MHz		IR4T10,063,075		YU7AL1,275,000		OK5W6,670,332		N4TO4,775,592	
9G1BJ1,458,044		EA8ZS9,313,670		LY2BTA1,150,515		CU2V6,346,475		K8AZ4,660,446	
XE2DV1,052,625		MULTI-OPERATOR		MULTI-TRANSMITTER		MULTI-OPERATOR		MULTI-TRANSMITTER	
LR0H1,026,564		PJ9B53,994,248							



Vladimir, UX7MM.

as possible requires a lot of man hours. Hundreds and hundreds of hours are put into the UBN report before the entrant sees it. This year we have added the feature of marking QSOs which are removed from a log with a minus(-) sign. One of our prime directives, that all logs are treated exactly the same way, is fulfilled by the computer. Each log is rescored by a common .CTY file. The CQ WW .CTY file is updated each year after the contest to include any unusual callsigns or locations.

Access codes are sent out to every entrant who submits an e-mail log. If you sent a disk of your log, your personal UBN is available by sending an inquiry to <question@cqww.com>. If you sent a paper log only, no analysis of your log is easily available to you.

You should review your UBN list to learn how to improve your contesting effort from year to year. If you are human, you make errors. Some do not like to admit this and consider themselves flawless. But you are not. You should seek to improve your skill. The guys/gals at the top are the first to thank the CQWWCC for providing a heretofore unobtainable insight into their logs. They try to improve and so should you. Just as in anything else, practice makes perfect. So what should you make of the report that you receive? In a rough sense you can view your **score retention** as a "grade." Just like when you were in school. So that 90-100 is an "A", 80-89 is a "B," etc. The strong words we have received from contestants everywhere are, "Thanks for this service. I can see how to improve." And that after all is the whole idea. To improve your skill.

C. Packet: Repeating this same paragraph from last year is warranted. The use of packet is perfectly OK for those who claim assisted or multi-operator. Any use of packet in any other category is wrong. If you are going to enter the HP, LP, or QRP categories you cannot receive any packet help. If you want to try to work some new DX countries, packet is an easy way

to do it. Just claim assisted. A serious problem occurs when nine of the top scores in a category play by the rules and one decides to cheat. It is not fair or right that the entrant be entered into the same category as the others.

D. Log Submission: It is hard to believe that only a few years ago there were no e-mail submissions. Boy, how times have changed. Of the 3,540 SSB logs we received this year, 2,215 were electronic! Of those electronic, 1,750 were e-mail submissions! Wow! E-mail is the way to go when submitting your log and summary. It is easy and cheap. Please try it this year. **Send your CQ WW SSB log and summary to <ssb@cqww.com>.** You will receive a robotic response saying that your log was received by the CQWWCC. That will be followed in a while by a personalized access code so you can view your log and UBN report. Try it, you will like it. If you submit your log on a disk, please remember to name the files you send correctly. Do NOT give them names like 99ssb.sum for example. Name them with your callsign, e.g. HS0AC.sum. Please **send your CQ WW CW log and summary to <cw@cqww.com>.**

Many entrants send a paper log which is computer printout without sending a disk or e-mail log. If you use a computer to generate your log, you can create a file from the logging software that you can submit as an electronic log. Please take the time to send in an electronic log. If you do not know how to do it, ask a friend. Your log will help make the checking of all the CQ WW logs better and more accurately certify the winners.

Thanks

Thanks to the CQ WW log checkers who validated the winners and provided insight into many contesting topics. The 1999 crew includes: K1DG, K3UA, K3WW, K3ZO, K6NA, KR2Q, N2AA, N2NC, N3ED, N6ZZ, N9RV, W3ZZ, and W7EJ. Our DX advisors were very helpful in offering advice, providing information and sorting out potential problems: CT1BOH, DL6RAI, EA3DU, F6BEE, G3SXW, HS0/G4UAV, I2UIY, JE1CKA, OH2KI, OH2MM, OK2FD, ON6TT, PY5EG, S50A, UA9BA, VE3EJ. The decoding log team consisted of N3RA, K3LR, W3ZZ, and N5NJ. Special advisors were N2AA, N8BJQ, W0UN, and K3ZO.

Once again a special thanks to Dick, N6AA, who again spent countless hours to make the CQ WW database the best in contesting. Dick received beta test input from Phil, N6ZZ. The CQ WW uses the software developed by Tree, N6TR, to create all scores and analyses. John, K2MM, created the entire WWW log entry information. His robot worked smoothly in acknowledging receipt of a log. Tack, JE1CKA, has maintained the non-log data

on cqww.com. Translations of the rules into Spanish, Japanese, German, and French were done by EA3DU, JE1CKA, DL6RAI, and F6BEE. Larry, N6TW, put in hundreds of hours and he was invaluable in retrieving and processing data from e-mail submissions. Thanks to John, K1AR, for his advice and hard work to make the CQ WW so successful. What you see in the magazine required thousands of hours of work by many people. Thanks to Martti, OH2BH, for providing the information on B1A and B1Z.

Congratulations to all the winners! To participate and have FUN is what contesting is all about!

See You in the '99 CQ WW!

73, Bob, K3EST

DX QRM

Murphy strikes again. After 3 hours of contest I lost final stage of TS950S. It took me almost 5 hours to borrow TS930S from Emil, 9A9A. DX conditions were fair but not as good as they were the week before contest ...

9A2EU. What a competition. This year SOAB Top Ten box scores might be over a hundred million points! **C4A (5B4ADA)**. My first ever SOAB in a CQWW. Glad to be able to make it after 7 years of university studies and other commitments. Great fun. Had 9 hours of sleep despite two alarm clocks. Many thanks to my old school station who hosted me! I will be back! ... **C4W (5B4WN)**. Line noise inhibited full-time operation. Next time better luck ... **CP6AA (OH0XX)**.

I was waiting long time to have again conditions to do a CQWW DX monoband on 10m! Unfortunately, I couldn't stay all time I wanted (particularly on Sunday), but I enjoyed every minute I was on, especially the unexpected opening to the States on Saturday afternoon. It prevented me from having lunch, but it was worth the sacrifice. It was the best opening I ever had: 600 QSOs in 6 hours. WOW! Great fun. I sure will be back next year! ... **CT1EAT**. As always, I have fully enjoyed to run this contest. Propagation was less than ideal for the QRP work, but I could manage to get some successful contacts. I hope to be here again in the forthcoming issues of this great contest. Thank you very much for your good work; please keep on it! ... **CT1ETT**.

Despite an agreement with a nearby record studio, they had to record for a few hours on Sunday afternoon at our best 15m U.S. time and we had to shut off our amplifiers ... **DF3CB**. We did not have too much luck for our first serious attempt as Multi/Single. Right at the beginning the two antenna tuners broke down, packet radio followed soon afterwards, and after 12 hours we lost one amp. Anyway, the real problem was just to come: A few hours later a heavy storm built up, and one after the other we lost all our antennas, so after 22 hours the contest was over... **DF4SA**. It was my first SO contest I got above the magic 1M points. It was a great feeling to hear such good signals on 10m from every continent. Hope to improve for next year on 40m. Who spends for a 40m Yagi? Thanks for the evaluation. You are making a good job! Carry on! ... **DL1MGB**.

This contest is absolutely dedicated to newcomer Holgi, who helped me so much to get antennas working before and during the contest. Storms were so strong ... **DL4NAC**. Conds were lousy; the northern path was absolutely rotten, even with some aurora. Guess I was too much to the north. It's painful to hear the southern European stations working piles of W's, and you can only "search & pounce" ... **DL8OH**. Lucky to there (E3) for the contest. What a shame with 100 watts and a loop antenna. Even if the call adds a few dB, it's very hard to find a clear frequency where people can hear you. Still a lot fun and I hope some of you got a new country ... **E31AA (F2CW)**. Ten meter opening this year was the highlight of the contest for me ... **E14DW**.

I missed the 1997 edition of CQWW SSB due the arrival of the baby in our family. I can't say anymore than that I would never have missed CQWW for anything else in the world. I'll just say that CQWW is now just coming after my wife and my daughter ... **F6HLC**.

Some trouble with the 40m Yagi and the mult station. Nevertheless a lot of fun. See you next year, gentlemen . . . **FMSBH**. Very much enjoyed the contest again. Unfortunately, not able to take part until late on Saturday and then most of Sunday . . . **GOMRH**. Had a big flood at the club station—2.5 feet of water—so intended MS effort was QRT this year! But managed to get on for a few hours and got lots of new band countries . . . **GOMTN**. Gale-force winds nearly blew over my antenna which started up at 90 feet. On Saturday afternoon it had to be lowered to 25 feet and tied down safely . . . **G4AXX**.

Lost main antennas in severe wx condx (70+ mph winds). Continued on makeshift dipole at 40 feet . . .

G4WPD. Lost 40m Yagi after first 12 hours; hurt the score. Anyway, it wouldn't be a contest if something didn't break! . . . **GIOKOW**. Conditions were great. Picked up a lot of new countries and I was amazed when I managed to work ten stations on 160m, my first time on top band . . . **GM3UTQ**. Severe storm hit UK during contest. South Wales was worst affected area with floods and strong gales. Had to wind my crank-up tower down to just 30 feet on Saturday evening and it stayed like that 'til end of contest! Was not conducive to big score! . . . **GW4BLE**. With this year's special call we tried to give more stations a chance to work us on all band. Our next goal is to join the 40 years activity in the CQWW contest. Tnx to everyone . . . **HB5H**.

Very difficult with only one vertical antenna and long wire. I will try to put better antennas for the CW part . . . **HB9ARF**. This was my very first contest from my new QTH. Thanks for the XYL allowed me to do; thanks for the new callsign from my PTT, made everything easier . . . **HA5JI**. Back in the WW after too many years . . . **I2WIJ**. Exciting multinational team's experience: a nice group of operators, most looking for their first time in a real M/M effort, some simple but effective home-made antennas and accessories, a beautiful island, a lot of fun. See you next year from India Hotel 9 Pantelleria! . . . **IH9P**. I lost first night due to a wedding going on Saturday morning, so I couldn't drive from Milan to Bologna till its end. I had fun anyway. Condition poor with W6 and W7 on 40 from CA, worked only W6EEN but good with Pacific area. KH7R was S9 on Saturday morning. I lost VK's from zone 29 that normally it's an easy QSO . . . **IK2NVJ/4 (I04A)**.

First time in CQWW; nice experience. Good propagation in 10 meters. For our working conditions a nice score . . . **IQ9A**. For the first I (IK1GPG) have activated a small MS station with my wife Betty (IK1QFM). Fantastic experience . . . **IR1A**. I, JA1XRH, participated in this CQWW contest for the first time. I will try to do next CQWW again . . . **JAI1XRH**. It was very good propagation on 15m so that I could contact many stations including several Caribs . . . **JASCB/1**. Propagation was not good, but I could enjoy the contest. 400 QSOs would be good enough for 50 watts . . . **JF3PLF/3**. Thank you for picking up my weak signal . . . **JK1ATT**. I enjoyed first over 100,000 points, and I got 9J, Z28, 3DA5, IG9 African station. Especially 10m band was very good. I feel to start of "The 23th cycle" . . . **JR1SGU**.

Low power is fine. Good condx 10m on Sunday. Lost KH6 and FK8 on 10m . . . **LY2BTA**. My plan was over 4M points. Wasn't good conditions to JA and USA. Ten meters was fine with many rare DX. Nine new ones! Waiting now for CW part my favorite mode . . . **LY5W (LY1DR)**. High winds in England made Saturday night an exciting experience. All our towers are temporary and a 3-ele 40m beam on a crank-up tower in 70 mph winds is quite a sight. Amazing that the only damage was to one element! Still we'll be back next time, hopefully in calmer wx and better condx. ood luck with all the scoring . . . **M8P**. First day not so good. Second day was better especially on 10, but Murphy was here on the second day morning. A very heavy windstorm damaged all my wire ants. Must repair some wires to work on the low freqs! . . . **OE2S (OE2GEN)**.

XYL loved the contest. Plenty of time left to enjoy the weekend. Poor opening to JA on Saturday, great openings to W. Lots of activity! GREAT FUN! . . . **OE6Z (OE6MBG)**. This year had even poorer band conditions than the last year. Well, new internet/DXCluster technology helped us to grow mult total by almost 100! . . . **OH1AF**. Our 160m operator almost swallowed his tongue when, out of the blue, he suddenly heard a loud B1A on 1830 kHz, and immediately thereafter an even louder V8A calling B1A, and only a second after that, AH2R also calling B1A. Disappointingly, all managed to disappear quickly so he wasn't able to call them but once with



Alain, FK8FI (left), and Eric, FK8GM, put FK on the map.

no luck. The time was about 1515Z, some 20 minutes past our sunrise. A humble plea to the Far Eastern stations: There is a very good chance for a QSO with Finland on 80 and 160 meters around 1350Z! Anyway, the CQWW 1998 SSB was great fun again, and we certainly hope to hear you all joining us in the "Paksalo Polka" during CQWW CW, too! . . . **OH2HE (now OH2U)**.

The propagation was so poor that I had to search & pounce most of the contest. When I saw the WWV figures of Friday, I mentally oriented to a different approach on this one and had a lot of fun. At least the multiplier total is satisfactory. See ya next year . . . **OH6NIO**. As usual I had great fun. Lot of multipliers come on CQ. See U next year with better antenna and hope better CONDX. . . . **OM7M (OM5RW)**. Broke my personal best records . . . **OL6X (OK1DIG)**. Fabulous contest, great conditions. Congratulations to the winners. Local thunderstorms first day worst in years . . . **P40W (W2GD)**. Talk about local RF leaving Aruba—many stations asked how many of "us" were down here . . . **P43A**. A tremendous gale forced us to keep the crank-up towers in a low positon. If we had extended them to their full height we wouldn't have had any tower left after the storm (and the contest) was over . . . **PA3DWD**.

We had to combine 10 and 160 meters. During this weekend we had a big storm (windforce 10-11). For approximately 10 hours it wasn't possible to turn the beams. This cost a lot of QSOs and multipliers. An AM broadcast station on 828 kHz with 20 KW only 1 km away from us give us so many receiving problems on 160m that it is impossible to hear weaker signals. We missed a lot of stations by this QRM, sri guys. We are working on getting better reception . . . **PI4COM**. Thanks, K3LR, the only one from USA on 40 meters, just under ZP station. Many surprises from everywhere, very nice score. Best QSO number with my R7 . . . **PY2NY**. It was just plain fun! I didn't do it for years, and could hardly imagine that we will be able to make over 1000 QSOs . . . **RA3AA**.

Worked 160m VE1BY, 80m V26B, 80m VP2E, 40m AL7O, SU2MT on 6 bands, AH2R and CN8WW on 5 bands, and many others DX. We have also all bands 151 DXCC countries QSOs during the contest. Glad to see you in next test . . . **RN4W**. Unfortunately, I do not have great antennas for 160/80/40, but I do my best! It was great fun! . . . **RV6LFE**. First time with 3-el Yagi (on 80m). My good old dipole is retired . . . **S50A**. No more wins with 3-element tribander from the city. Next year must run from remote location with much bigger antenna. Another new one—Eritreal. . . . **SP5DDJ**. This contest was second time experience in Central America, and we are very happy with good antenna, equipment, etc., and good friend Keko, TI5KD. MNY TNX! . . . **T15WFM**.

Had lot of fun. The propagation was good, mainly in 10 meters. It was a pity that our 80m antenna didn't work. See you next year from? . . . **TO8B**. Condx on 160 seem to avoid me; another year of rough going to Europe. Tried to be extremely careful while logging. No more UBNs? . . . **VE1BY (K3BU)**. Our first trip to Sept-Îles Quebec (Zone 2). It's a long drive but worth the trip. Nice setup there and Jean Claude (VE2XY) Rodrigue (VE2NN), and Frederick (VA2FFG) were very helpful. Propagation sure is different than it is in "1-land" and we needed to learn a few tricks. There were a couple of nice openings on almost every band,

although northern Europe was missed. Lots to think about and plan for next year . . . **VE2CSI**.

Murphy struck with RF in the shack when on 40 and 80 meters, but we had fun doing the contest, even with repairs made in progress . . . **VE3DC**. The auroral event was pretty noticeable here with only SM2EKM being far enough north to sneak under the curtain. The rest of Scandinavia had to wait for the next day, as did the Russians except for a RN6 who was far enough south to skirt the problem. It was interesting to operate in parallel with the VE3EJ (MM) who is within line of site across Lake Ontario. Came close enough to their 15M score to feel I had done well. Lali, VA3RU, did very well as the main 15m operator! . . . **VE3KZ**. Great to see the 10m band back in all its glory! I missed several countries and zones because the pile-ups were just humongous . . . **VE3SRE**.

Glad to see the bands alive again. 10m and 15m were "meat and potato" bands for me. Some sleep and an Aerosmith concert on Saturday night kept me from having an even bigger total score! . . . **VE3STT**. The bands were great on Friday evening up to Saturday evening. We focused on 10 and 15 meters during the early part of the contest, having been deprived of working these frequencies in the past years. It was great having those runs of JA's again. (Now if we could only talk faster) . . . **VEGFI**. Lots of activity on the bands. Had lots of fun for my first CQWW test. Hope to be back for more . . . **VO1WEF**. We had many hours of high rates. This was a fun trip . . . **VO2WL**. Equipment description: 6 bottles Malibu rum, 5 cases Heinekens, 1 case rum, 10 cases soda, 2 radios, 2 amps, 7 antennas . . . **VP5DX**.

Missed too many multipliers because when the band is open to Asia, everybody runs JA and rarely, if ever, listens for weak non-JAs . . . **VR98BG**. My first contest. I'm 18 years old and it was great! See you next year . . . **XE1EZM**. The threat of a typhoon forced us to take down some of our antennas with 14 hours remaining in the test . . . **XX9X**. It was nice to operate from 1700 meters a.s.l. in the mountains near the city of Stip. Good conditions to USA/JA both days . . . **Z31GX**. Very strange conditions, especially to the US. There was a period when the conditions were changing so fast between North America and South America. In any case I enjoyed . . . **Z31JA**. Murphy 1, Chris 0. Hardware problems, family problems, and thunderstorms sank my All Band plans . . . **ZS6EZ**.

USA QRN

My second contest. I'm hooked! . . . **AD6EN**. Wow! Nice to almost work DXCC on 10m in one contest! First contest with Classic 33 tribander at 70 ft. . . . **AJ4Y**. This is my first entry, although I've operated in CQWW for years now. Hope to make a better showing next year when I get the tower up. Using only verticals can be a real handicap in those pile-ups. But it can still be real fun too! . . . **KB1L**. I'm always amazed at propagation. Fighting to be heard in 20 meter pile-ups to Zones 6/7/8/9 and then working the JA's and ZL's easily with 30 dB weaker signals . . . **K1TH**. First time ever on 10m during a contest opening. Need I say more! . . . **K2CS**. New beam first try, 40 and 80 not working. Fun, fun anyway . . . **K2FR**. This is my first time in CQWW SSB. Put in 3.5 hours, had a blast. Hope next time I can spend more time at it . . . **K2ZQ**.

For many countries, it was the first time that I had ever heard the callsigns, let alone worked them in my 31 yrs of being a ham! Thanks to Dr. Jim Breakall, WA3FET, for this wonderful opportunity . . . **K3CR** (**WA3HAE**). We had a great time! Condx not what we hoped for, but better than last year. New 40m antenna worked well. See you next time . . . **K5MR**. My first time; lots of fun; I'll be back next year. Got to try new elevated vertical on 40, good test . . . **K5OE**. I had a wonderful time! It was awesome having 10m and 15m so productive! The biggest surprise had to be working ZD8Z on 10m, with his signal (as always) sounding like he was in the neighborhood . . . **K6GT**.

First offical (serious) entry into CQWW. Had a ball. Ran single band, single op, non-assist, high power on 10m figuring no one else in this area (northern CA) would with the East Coast competition. Ten meters was booming to JA Friday night/Saturday morning. . . T2x rotator kept sticking Saturday at 70 ft. Had to rock it back/forth to get it loose! What a blast! Serious fun! . . . **K6JOX**. I wanted to break the 6-band low power 10 meter record, which I did, but two or three other guys broke it bigger . . . **K6LA**. Great 10m conditions on Friday and Saturday . . . very poor into Europe from the northwest. Sure was tough listening to everyone else in the country working Europe. Japan saved us once again! . . . **K7CAR**. Hey East Coast: Share the Europeans with us, please! . . . **K7JA**.

First time I worked this contest. Won't be the last . . . **KB0PPA**. Had a blast until the end, when a real blast occurred. A resistor in the 3K-A amplifier fried and arc'd over to 4 kv, POW! Operated low power after 452 contacts. Fixed the amp the next day . . . **KC3TL**. This is the first time I have entered this contest. It was a great contest for me on 10 meters, as I was able to put more countries for DXCC on that band. 20 meters was also hopping, and gave me a couple more new ones. I look forward to next year when I can hopefully do much better . . . **KC8HWV**. The first big contest I've been in. I not only had a great time, but I heard calls in my sleep for two nights afterward. I may be hooked! . . . **KF4ZTJ**. I never intended to submit a log. I never solicited contacts but these were made "giving out points." Before I new it, I had spent at least 15 hours trying to find stations not yet worked and also demonstrating to non-hams what the contest was about. Maybe at least I can represent the "9" call area to some small degree . . . **KF9WM**.

Spent Saturday night showing some non-hams what contesting was about. They liked it so much that they were back at 6:00 AM the next morning and stayed the whole day . . . **KF9YT**. This was my first serious effort on 10 meters and it was exciting. I found the operators were extremely well-mannered, based on my ability to hold a frequency and control of the pile-ups. Wish I had better propagation for access to more multipliers. Also, this was my first contest with CT contest software and it was fantastic. Thank you, CQ, for bringing us these contests . . . **KH6T**. New strategy increased our score 80% from the previous year resulting in a new Zone 31 record. Too bad we didn't have a decent EU opening! . . . **KH7R**.

I have been at the new QTH for 5 months now. Things seem to be falling into place nicely. My highest antenna is at 64 ft. as of now, but hope to change that by spring. Guess it helps being atop a hill with no civilization toward Europe for a few miles. Conditions on 10 were much better the first day; congrats to 5X1T for an outstanding 10 meter score (4200+ Q's 37 Z and 171 countries) wait until the band is awake for both days . . . **KI1G**. Tried to concentrate on 10m. Band was dead enough when contest started; made a few Qs on 15 and 20 just to be sure the rig was working. Learned a little about 10m. Been a while since I operated this band . . . **KJ9C**.

The contest started with me taking the day off and the condx in the toilet. Screamed and yelled all night long for a few Q's. Had a chat with Rich, KL7RA, on 40, and found he was not having too much luck either. And then—what a difference a few hours make. Had a great time on 15 and 10 the next day, and worked into EU the second evening. I think I scared a few Cyprus stations, as they were all I heard on 10 over the pole. Happy with the results. Wish I could have broken a million . . . **KL7AC**. Better condx this year, but looks like I picked the wrong bands to be on. Oh, well, at least the two 4-squares worked better, tnx for publishing low-power breakdowns in *CQ Contest*. Wish I had gotten them before the test . . . **KQ3V**.

My best ever score in CQWW. Ten meters was wonderful to have back again! Still not able to run with the big dogs on 20, but still a lot of fun . . . **N2QT4**.

Only have wire antennas and the 40m full-wave broke some time on Saturday. No wonder I couldn't work anybody on that one! Next year I'll have a tower and tribander with the wires—watch out! . . . **N4CW**. My second year, and love this contest . . . **N3YEA**. Best behaved participants yet. If I could only inform the US hams not to call unless they are in the contest. I was told how slow the traffic was on road 128, was asked to check a fellow's audio and signal both upper and lower, and it goes on. It really frustrates me, what to do . . . **N4KW**. This was a rebuilding year with little to show for a year's work on the tower. Very tough conditions for the current configuration. This was a first year with packet running to the rig. Result: too much DXing and too little running. Hope to do better next time . . . **N4RV**.

Best conditions in years. We all had a great time and will be back again next year to improve our results. This year's score was 60% better than last year; conditions were major difference . . . **N4TO**. Great contest. Beat last year by 100k. My second WW SSB and first time to hear 10m open. Trx all the Q's . . . **N5KB**. Took this opportunity to set up two stations and let some new operators get their feet wet in the world of contesting. It was enjoyable for myself (N5M) and N5XJ to have time to teach some technique. The ribs that N5XJ made were really good . . . **N5VV**. I'm in an antenna restricted area. My antennas are intended to be invisible from the street or neighbors, unfortunately not silent. I just hung the longwire and homebrewed the Yagi. The longwire set off the burglar alarm at 3:30 AM and the Yagi started swinging in the breeze and pointed itself right at the TV in the neighbor's family room. Spent a lot of time talking and re-thinking antennas . . . **N6AFI**.

My all-time personal best, even with a break for soccer games on Saturday. I guess a new antenna and a more active solar cycle helps . . . **N7UJJ**. Great conditions on both 10 and 180 meters! A great time operating . . . **N7KQ**. Have done CQWW Phone since 1984 as WB6FCR/KH6 and WR6R/KH6. Sure nice to do it with a shorter call. Score this year about the same as last year, but it was more fun because Murphy did not happen. Next year will really be fun because I may finally get commercial power! . . . **NH7A**. It sure was fun. Our score was 250% of last year's. The bands are coming back . . . **NK7U**. Thank you JAI! . . . **WBUN** (**WBUA**). Lotsa fun, even with wires . . . **W1UK**. We operated Multi-Op here at what is most definitely a small single op setup, but we enjoyed the contest and did as well as we expected. What do you do when 10, 15, and 20 are all open and you have a tribander. We used the 40 meter beam on 15, and then on 10 meters, to pick up a few great multipliers . . . **W1WF**.

First-ever entry in CQWW. Drake C line, L4B, Cushcraft R-7 at 10 ft. All S&P . . . **W4ASM**. Our second run at this game. Went much smoother than last year but we didn't attempt QRO on the second station. Lots of improvements and nearly doubled our score from last year. The training for NU4JJ and WD4K was valuable experience and I look for great things out of them in the future! It is most humbling to operate the second station with 100 watts and a wire antenna after running the "Big" station with aluminum and a KW! Look for us next year! . . . **WCAT**. Our best effort in our 8-year history. Great openings to Oceania, and 40 meters seemed to be our hottest band for new mults. Worked DXCC on two bands, another first here. Still have to find a way to hold a freq. for big 20 and 15 meter runs. Our main amplifier went QRT on Sunday morning at 1100Z, but quick surgery brought it back after being down over an hour. Nice try, Murphy, but not this year. We doubled our score from 1997! . . . **W4NC**.

I think this is the first time in 6 years that I cannot complain about the weather! It was a beautiful weekend. Sure was good to hear 10 and 15 meters opening again. However, 80 and 160 never did open in my area . . . **W5CWQ**. Ten meters was great! Happy propagation is here . . . **W7JB**. First time on the air on HF since around 1969! Despite low score, had a great time . . . **WA2BHJ**. This was my all-time best score for any contest! The band conditions were definitely better than they've been since at least 1992. My only regret (very small one) was that I didn't make DXCC for this contest (93 unique countries) . . . **WA2CNV**. Nice to see 10m very alive again for this event. Solar Cycle 23 was a bit "too good" on Sunday afternoon giving 50 MHz paths to Ecuador! . . . **WA5IYX**.

Glad to see bands opening again. Had a good time working a few new ones. Thanks to ops who pulled through the QRP stations . . . **WA5OJI**. Best score

ever for me. First time over 1000 QSOs and first time over million points . . . **WA7BNM/6**. This was my biggest effort ever. I spent 24.5 hours on the bands and for the first time made some 80 and 40 meter contest QSOs. Working low power unassisted with an attic antenna was tough, but I was able to work some new DX countries to add to my DXCC totals. Next year I will have some kind of outdoor antenna. My congratulations to those DX ops who were able to pull me out of the mud . . . **WF2B**.

It was a blast to travel around the world in a weekend and never leave the comfort of my home-sweet-home. Viva Team Tennessee and Tennessee Contest Group! . . . **WO4O**. Competition seems to be increasing in the SOLPAB category. It's not enough to simply show up anymore. With all the talent I heard on the bands this weekend, it's getting to be a real low-power slugfest. Wait until next year! . . . **WS1A**.

Station Operators

Multi-Op Single Transmitter

3E1DX: HP1XVH, DL5RBW, DL1RRB, DL9RCF. **4N7Z**: 4N7TA, YT7XT, Ivan, Anrei, 4N7NN, Stan. **4U1ITU**: OM1AM, OM2RA, OM3BH, OM3LU, OM3RS. **4U1VC**: DH3IAJ, DL1ANT, DL5IS, DL5IS, K7AWD. **492L**: 9A2VJ, 9A3AG, 9A4KD, 9A3DF, Varga, 9A4NF, **9A5D**, 9A3NY, 9A4NC, 9A4DU, 9A5DU, 9A6KEB, 9A6KCC. **9A7A**: 9A4RX, 9A3TR, 9A6DM, 9A4BT, 9A8A, 9A7V, 9A2ME, 9A3OS, 9A4PA. **9A7P**: 9A6NHH, 9A5AEI, 9A3RE, 9A6NPM. **9A9D**: 9A4KK, 9A4WW, 9A4DD, 9A4UJ, 9A5YA, **9H3WD**: OK1AD, OK1AYU, 9Y1VKA & 9Y1WB, **9Y4NW**: DK6WL, DL4MCF, DL4MD, DL4MEH. **A45ZU** & **G6MRF**, G6PZA, **A55NT** & **N5NJ**, **AABU** & **K8MJZ**, W8MJ, N8NX, KF8QE, K7X8, ND5S, W8EB, K8KS. **AB2DE**: KC2AU, N2KPB, KB2YJT, KB2IB, **A2EF** & **WR21AF6P**: WA6LOS, W1L1Y, K06GX, N6VYV, KC6JYQ, KE6KYM, KD6JIE, KC6JYQ, N6WWD, KD6IWA, N6WJN, KC6KPA, KD6VIV, KE6EJK, KE6IKW, KE6KTF, KD6DCG.

AY6D: LU2EU, LU3DW, LW4DX, LW5DX, LW6ETR, LW7DX, LW8DX. **B4AR**: BA4RC/Chen, BD4RFX/Dragon, BD4RF/Dave, BD4RD/Ken, BD4RE/Yee, BY5QN/Chen, BG4REK/Kun. **BY2HT**: Leo, Huang, Chen, Li, Zhang, A. Zhang, Cai, Beedlow. **BY2JCY**: Li Mingshou, Jiang Ximing, Zhang Xinghong, Yan Yi, Yuan Guangpeng, Song Peng, Zhang Yang, Zhang Xin, Shang Rao, Li Chung Shzng, Zhang Jiz, **C56T**: DL5NAM, DF4RD, O2EV2, DL8UD, O2EMON, DL9NDS. **C6A/K6T**: K16T, WR6Q, KA6WHA. **C3E3**: SM3SGP, CE3FIP. **C02BC**: Winston, Bob, **CQ9K**: CT3BD, CT3BM, CT3CD, CT3DL, CT3FH, CT3HK, CT3IA, CT3KN. **CS1A**: CT1DXQ, CT1FAC, CT2FU, CT2GD, CT2VF, **CU2V**: DL4XS, DL3KDV. **CX1K** & **CX1J**. **DF6AT**: DF6OV, DL9NC, **DF8HO**: DL1AUZ, DL20BF, DL3TD, DL4ALB, DL4MM, DL5ANT, DL5AXX, DL7VOA.

DF0HTE: DF7ATW, DH4SBO, DK1SAM, DL1SFK, DL3SB, DL5NAH. **DF3CB** & **DK2GZ**, DL1ZIH, DL3NED, DL5MF, **DF4SA** & **DK8TU**. **OH8DX**: DF8XC, DF8AE, DK5QN, DL1YDI, DL8YFC, DL1YAW. **DK0PI**: DL3BA, DF3GA, DL7AOS. **DK40T** & **DK1QH**, DL1YF, DJ7VP, DL9YED. **DK6WQ**: DL3QW, DL8QJ, DL6YFB. **DL0AD**: DL6RDE, DJ5RE, DJ6RN, DK1RP. **DL0TS**: Club. **DL2DBH** & **DK9DZ**, **DL9L** & Others. **DN1MA**: DL7MAE, Robert, Markus. **DX100DX**: W1JP, DU1SAN, 4F2KWT, DU1MHX, DU1JXP, DU1KBE, N9BXH, N6JFO, DU1NOP, AC6CP, DY1SNL, DY1KXR, DY1LVA. **DX1E**: DY1FDD, DU1KQG, DY1KXF, DY1FYU, DY1RAN, DU1RSM, DY1FLE, 4F1RG, 4F1EJD. **E1A02** & **E1A04**, EA1EEY & EA1CS, EA1DZB, EA1CUB, EA1BXW, EA1BV, EA1FEL & EA1BFZ, EA1ACP. **EA3RKG**: EA3BOW, EA3BOX, EA3DQG, EA3EIO, EA4ML & EA4CT, EA4ET, EA4TX, EA5GRC, EA7JB, EA7WA, EA4KA, EA4EPJ, EB4AKI. **EA4NU**: Club.

E4A4T & **E4A4TI**, **EA4TD** & **EA4AEW**, **EA5BY** & **EA5BXT**, EA5EU, EA5FD, EA5GRV, EA5IK, EA5KW, **EA5PK** & **EA5DW**, **EA5URP**: EA5ON, EA5OFV, EC5CPL. **EA5YJ** & **EA5CMQ**, **EA8NL** & **EA8BVH**, EA8AKN, EA8BHS, EA8BIK, EA8BVX, EA8CAJ, EC8ABT, EC8APU, **EA8ZS** & **EA8KK**, EA8PP, EA8BYL, EA8AM, EA8BT, EA8ELM, EA2KL, **ED1BD**: EA1BD, EA1ALD, **ED1US**: EA1US, EA1DA, **ED2OB**, EA2ANG, **ED2RC**: EA2CYB, EA2BFM, EC2AFA, EA2ARW, EA2ABM, **ED2WW**: EA2MQ, EA2ATU, EA2CCG, EA2CNB. **ED3PX**: EA3HB, EA3JG, EA3AR. **EK8WB**: Petrosian, Ratovestan. **ES5O**: ES5MC, ES5MG, ES5QX, ES5RN, ES5RW, ESSRY. **F0KFC**: F6BNH, F6BGC, FSUAM, FB1CMF, F5AVK, F4BGO, F1ADG, F6FNL, F50WB, F4CFR, FC5BG: NGRV, W6SR, N6ED, K6RQ, W6KK, N6RT, **FM5BH** & **FM6BH**, FM5DN, FM5DP, FM5FJ.

G8B: G4L0P, G3QZY, G4VXT, M1ACI, G4YRF, G8ATD, M0BIK, G1GNS, G40XD, G3EUS, G8FFM, G4LWA, G0BVW, G8BEG, M0AJF, G40XD. **G8Q**: GODYW, G0MKN, G0DSH, G0SAH, G0UYN, G0WAT, G1LLW, G1GUW, GL8LC, G6PWS, G0VSA, G3ZWW, G4KZD, M080Z, G3RWL, G4WSL, G3ZZY, G0MIC, M1CYT, **G8Y**: M0AYO, G4UW, G7LXK, G0LPX, G4KCT, **GM3USLP**: MM0BRG, MM0BQM, MM0BQN, GM0BQE. **H43KNA**: HA3NS, HA3NU, HA3FTA, HA3OU, HA3OV. **HB5H**: HB9CIP, HB9BLQ, HB9CAT, HB9CXZ, HB9FBG, HB9FPB, HB9FBG, HB9SUL, **HB5OK**: HB9FAQ, HB9FBM, HB9PUE, HB9FB5, HB9DOA, HB9SUL, HB9FBL, HB9QAB, **HB5RL**: HB9AUS, HB9BYT, HB9FWB, HB9FBQ, HB9F0R, HB9SD, HB9YC, HB9DQK, HB9EEX, HB9ZHA, Emanuele, Damiano, Silvano. **HB9AJM** & **HB9ACC**, HB9AIB, HB9ALM, HB9APU. **HG1S**: HA1TJ, HA1DAE, HA1DAC.

H3/ON4ANT & **ON4GG**, ON4AME, ON5LW, ON4CBA, ON4AWK, ON4ANN (YL). **H1B/DC8YY** & **DL1JD**, DL3ALI, DL4JAN, DL4JS, **HSDAC**: HS1CKC, HS0GBI, E21EIC, HS1BZY, HS0VGC, HS6NDK, HS6MYW. **H21AB**: K3NA, GW0RHC, G3UPT, G7SLP. **IK4QJM** & **I24COW**, **I02A**: IK2RZP, IK2HKT, IK2CIO, IK2XRV, IK2XRS, I2IFT, IK2AHB, IK2YYS. **I02L**: I2OKW, I2ZACZ, I2W2HAJ, IK2YYE. **I09A**: IT9AJP, IT9CML, IT9NO, **IR1A**: IK1GP6, IK1QFM. **IR3P**: IV3TDM, IV3JVJ, IV3BK, IV3BTY, IV3NTA, IV3WPR, IV3FAS, IV3NV, IV3NU, IV3BSV, IV3WWF, IV3WZG. **IR4T**: 4UHF, 14YSS, 14JMY, IK4IEE, IK4MHB, IK4UPB, IK4MTF, IK2SGC, IK2OEL, **IR5T**: IT9GSF, IT9STG. **II2C**: IK2ULH, IK2JEF, I2ZAHF, IK2WQK. **IV3RAV**: IV3HYD, IV3WQF, IV3GHY, IV3HJF, IV3RCH. **I23ALM** & **I23ALS**, IK3TZ, IK3OGI, IW3FQM, IW3HUG, IZ3ALO.

JÄØYAK: 7M2UKR, 7M4AEI, JG7JMO, JI70ED, JI7TOR, JL7UP,
JL7SGO, JFØSVO, JGØFEMU, JIØTAG, JØWB0, JHØNVX, JHØSQJ,
JHØUSD, JHØVVG, JRØDVM, Kanke, Hasegawa. **JÄ1ELTY & JA1LZR**,
JA1QGT, **JÄ1YGX:** 7L4WEZ, J02FWB, **JÄ2YKA:** JI7JRO, Y.Niwa,
JN2FMH, **JÄ6ZL1:** JGØPJO, JL6ELU, JG6WYS, **JÄ9YAH:** J9KVF,
JG2KK, J12OK, JN2QCV, JM2FCJ, JEBAOV, JL2DEG, JRK9ZR,
JØDQY, **JÄ9YBA:** Nada, JRGQN9, JFØEGG, Sugimoto. **JE6ZH1**:
JR6GKT, JA6SHL, JF6DEA, JI6BRB, JL6MPR, JMCIP, JG6EZG,
M.Miura. **JF2JU1 & JS2LHL:** JH7AFF & Others. **JH7PKU & JA9SYS**,
JHØBDK, JH7DXZ, JØ1BVM, **JIZ2JE:** JA2BY, JA2BJH, JA2BIL,
JA2BIV, JM2CCL, JQ2BBC, **JU2JS:** JA2AXB, JA2JDR, JA2JSF,
JH2MYN, JH2UVL, JR2XOM, JE2HCJ, JG2TSL, JA1XHE. **J3BFC &**
J3GKE.

JR1ZT: JM4HHH, 7M4AZB, JJØCRL, JF4YE, 7L1XCM, JFØMQX, JK2FGD, JRØUUU, K. Furuta, K. Furukawa, Y. Megumi, N. Momoko, 7L1ETP, JK8CHX, JM3CRK, 7L3CQP, Hashimoto, JH6RFT, JK1JHU, JRØXHL, **KØDU & KØCL**, KØUK, NØZA, **K1QDV3 & K3UT**, W2ZR, W4BA, K14KH, KGLEW, W6NRJ, **K1RO & K1ZZ**, KA1ZD, N1ND, K5FUV, N5KO, **K1TO/4 & K1TO**, KA9FOX, NJ2L, K2KV & K2DO, K2KV, K2SG, N2GA, WMVZ, K2HAB, K2NG & KR2W, N1ZR, **K2OWE & K2GMY**, K2TR & WA2PL, NJ1F, KEP, NM2G, K2XR & WB2BHC, K2OWR, VE3XAP, N2YFH, **K300 & KB3CLQ**, K3TUP & Others, **K4ISV & K4UVH**, K4CM, K4UU, K4C4MS, K4CKN, **K4DJ & K4EP**, K4FZLX, 584FM, **K4RC**: Williamsburg Area ARC, **K4VUD & N4GI**, **K5GN & K5ZD**, K5MDX & WQ5L, W5UE, KRAQQ, N5FG, **K5MR & N5RZ**, K5KA, N5TR, K5RX, NGSM, **K7ON & NU7I**, **K8AZ & K8DX**, K8MR, K8NZ, W8GN, W8KIC, WB8K, WT8C, **K8BTi**: KBVBY, NE8I, K8DPA, K8GXO, **KC1AL & NI1PZZ**, **KC1IXX & KM3T**, K1GQ, K1DG, KC1F, AD1C, **KC7V & KY7M**, K7SP, N7MB, **KC8KUO & KCLB8H**, **K9ST & K9ASQS**, K9QQR, KB8EY, **KF2KK &**

N1QDA, W7YY. **KG2BN** & Others. **KG2FH** & KB2WVY. **KG4CM** & KG4AU (W3VN). **KG4PT** (N8QBN). **KG6MD** & WAGR. **KG6OK** & Others. **LAW8**: LA4DCA, LA8SDA, LA9EEA, LA9HW, LA9SEA. **LU1NF**: LU1NDC, LU8NA, LU1NAF, LU4NAZ, LU6HCV, Otto. **LU8XW**: Radio Club Ushuaia. **LX2LX** & LX1NO. **LY4KZLE** & LY2QJ, LY1DS, LY2OM & LY2BUU, LY2TX. **LY3AV**: LY1CO, LY1CX, LY1DA, LY3BP. **LY3MV**: Aleinikovas, Kunickis, Ceakauskas, Urbanavicius. **L1ZKS**: Karagyozov, Hadjitanatos. **LZ9A**: LZ2CQ, LZ2CJ, LZ2DF, LZ2EV, LZ2JE, LZ2PO, LZ2PS, LZ2TX, LZ4UU. **M8G**: GØLRE, GI1AHM, GØUFZ, G4WJR, GS3ZE, GW0TD, GT7SUR, M1ADC, G4TZR, MGØKLKP, GØLTB. **M9B**: CG4AFS, CG4HUL, CG4HUL, C4TNE. **M9S**: C4ACO, M4ACO.

M8B, G3GAF, G3UJO, G4PWA, G4N1S, M8S: G4AGU, M0AGQ, M0ATQ, M1CJ, **MMM0AM/P** & MM1AVA, MM1CP, MM1BM, GM7L0L, GM4UZY, GM4XZ, GM4WL, GM4YI, GM0ALX, GM0-CLN, NB1J & Others, **N0NI** & W0FLS, W0ETC, N0AV, K0KD, W0V, N1A0 & N1ZPC, KB1CHS, N1RL1, **N1AU** & WC1D, **N1IA** & KA1EKR, N1SOH & W1FM, **N1SP** & NK1F, **N1TB** & N1UJV, **N1WR/3** & NSWZ, N3AFT, N3HRT, **N2LRB** & WA1KMM, **N2NU** & K2W1, W2REH, WW2Y, **N2ZX** & K2YR, NA2NA, **N3DL** & WU3M, **N4RV** & KT4W, **N4TO** & AE4RO, AE4SW, N4TO, NT4TT, W4JAM, **N5CM1** & K5W0, WB2LMA, K5D5BL, **N5HRG** & K9MK, **N5WNL** & N5PJ, WD6GTY, WL7FT, **N6J**: N6DE, K6ENT, AAE6G, KEP7, KX7KG, KC7DZZ, **N7KO**: K70X, M. Smith, **N8NR** & N9AG, N8BQJ, **N8PR/4** & W4ADJ, **N4SB** & K5TT, K5YP, N5OT, W5AO, W0RRY, **NE3F** & KS3F, K3ATO, NT3V, **NJ5S** & KAT7GLA, NJ1UCO, KM5DH, KC5TST, **NK7U** & K7ZQ, K7MK, N7BZ, W7ZRC, KC7DPD, KD7CB, **NP2B** &

W4TB & K7ZB, K7WB, N7BZ, W7ZCB, KG7FD, K7DYG, **N7ZB**,
WD4JW, W4OV, **NP2N/B** & WA0QMU. **OE1:** OE1JNB, OE3DSA,
OE1NPW, OE1BKW, **OE5:** OE5GEA, OE5MKM, OE5BWN,
OE5ERN, OE5MPR, OE5MTN, OE5AMO, **OH1AF:** OH1MDR, OH1MM,
OH1NOA, OH1JAY, OH6K2P, **OH6AW:** OH6MSZ, OH6UV, OH6EME,
OH6KS, **OH7A4C:** OH4XX, OH6LN1, OH7MH1, OH7KIR, OH7MS,
OH7WV, **OH7AB:** OH7MM, OH7UE, OH7JVD, OH7NVU, OH7MN,
OH5JOC, OH1WZ, OH7MA, **OK1KC:** Club, **OK1KU:** OK1UG, OK1FC,
OK1IU, **OK2KD:** OK2WB, OK2HJ, **OK2KD0:** OK2BHM, OK2WAZ,
OK2BNX, OK2BJ, **OK5W:** OK1AEZ, OK1CF, OK1WF, OK1FKD,
OK1DD, TA2ZW, OK1JR, **OK2L:** OK2PDK, OK2HBY, OK2PEM,
OK2JPR, **OK50:** OK1HRA, OK1FCL, OK1FU, OK1UV, OK1NC, **OK5T:**
OK1DRN, OK1FHI, OK1FLM, OK1HSK, OK1MD, OK1RR, OK1TC,
OK1TV, OK8ANM, CE8PPA, **OK5A:** OK2PLK, OK2BMA, OK2CPD,
OK2UQ, OK2BMJ.

0M3A: OM3CGN, OM3DX, OM8AM, OM8AW, OM9WR,
0M3KW: OM7ARC, OM7AB, OM7AC, OM7AA, OM7ALH, **0T8C:**
OM4ACA, OM4AJZ, OM4ALT, OM4ANI, OM4BCB, OM4CEQ, OM5OF,
OM6SK, OM6MR, OM7UN, Dirk, **0T8K:** OM4ADZ, OM4ATV, OM4AVA,
OM4AVT, OM4BCJ, OM4BCR, OM4ON, OM5SY, OM6HN, OM9CB,
OM1DI, OM1-4531, **0T8L:** OM1AFN, OM1DL, OM1DFZ, OM1DMO,
OM4AHF, OM4AKL, OM4AST, OM4BR, OM4CAF, OM4C1, OM6NL,
OM6NZ, **0T8P:** OM4GO, OM4LM, OM4LEH, OM4LCW, OM4LDJ,
OM4LZ, OM5OO, OM6AH, OM6MH, OM6QR, OM6VL, OM7PC, **0T8R:**
OM4AYL, OM4CFV, OM5RA, OM4BAQ, OM4CFX, OM4CHL, OM4AGY,
0T8R: Club, **0Z7HAM:** OZ1ETA, OZ1BIZ, OZ1MAT, **0Z7HVI:** OZ5DK,
OZ1JCX, OZ5AMA, **PA3DWD & PA2COR**, PE1LAU, PA3AV, **PA4CC:**
PA3BAG, PA3EPD, PA3BSQ, PB0A7, PB0A1U, **PI4WAL:** PA0ABM,
PA0RBB, PA0U1L, PA3AGL, PA3HG, PE1PTQ, PE1RNT, PD1AEB,
NI-1945, NI-11252, PA-9011, PA-9851, PA-10121.

NL-4845, NL-11753, PA-9813, PA-9851, PA-10431.
PT2CM: PT3QZ, PT2BAT, PT2LEL, PT2EZ, Andre, Renato, Thiago,
PY3UEB & PY3KID, PU3SPY, **RA3AA** & RX3ACs, **RK3YYM:** UA3YBA,
UA3YFA, UA3YMG, **RK4HYT:** RX4HB, RA4HBS, RA4HBT, **RK4WKA:**
UA4WA, RW4WA, UA4WAN, **RK6XWY:** Lopatin, Plataow, Golowko,
Berbekow, Apshaew, **RK9AWN:** RA9AX, RK9AC, **RK9CW:** RZ90C,
UA9CDT, RA9CMQ, UA9FOY, R9UCC, UA9CIR, RA9COK, **RK9CZ0:**
R9XCAZ, R9VCFY, R9VCDW, **RK9SWF:** RZ9SR, RA9ST, **RK9SB:**
R9USR, RW9TZ, RA9SKW, **RM6DA:** RN6BN, RA6CM, RA6CQ, RA6AX,
RA6BY, RV6YY, RX6BA, RA6YDX, RU6AB, **RN3R:** UA3RAR, UA3RJY,
RA3RFA, **RN4W:** RU4WJ, RW4WM, RW4WR, UA4WF, **RZ9AZA:**
RA9AB, RU9AN, RU9AZ, RZ9AR, RZ9AZ, UA9AJ, UA9BA, UN4L,
RZ9AZH: RA9ACT, RU9ACM, HA1015-05526-015, S61CH, S61CH.

RZ9AZN: R9A90T, RW9UA, U9ALE, **S50G:** S51F, S51QN, S56M, S56W, S57MD, S58M, **S50S** & S52ZW, **SK6AW:** SM6DER, S561QD, SM6MOJ.
K6DG: SM6RXZ, SM6SMY, SM6SIF, SM6TKT, SM6TZD, SM6WB, SM6WKE, SM6WKH, SM6WKG, SM6WKB, SM6S1U, SH6ACE, **SK7BQ:** SM7BHSM, SM7BOX, SM7GXR, **SM4VPZ** & SM4AO1, **SN0KRT:** SQ9FRV, SP9ADU, **SN0S0N:** SO9EZ7, SQ9HHT/9, **SN0ZDH:** SQ5JBK, SP5IKC, SQ5HAR, SQ5CSW, SQ5EXM, **SP6KFA:** SP6MLG, SP6-1012WR, SP6-1011WR, **SO6Z:** SP3DWL, SP3HRN, SP3JZR, SP3RBI, SP3RBR, SQ3HMM, SP6HEO, SP6XRZ, SP8NR.

T32WBM: KOMP, NOKV, WB9NF, AE7C. **T70A:** DF6G, DL2MEH, DL4ABR, DL4OCL, DL5XAT, DL80BC, IK4SJX, IKT4VP, T77CD, T77LL, T77WI. **TF31RA:** TF3AX, TF3GB, TF3RB, TF3HP. **T15WFM:** T15KD, JA6WFM, JM6EBU, JM6UUA. **F51TK:** F5LND, F5TRO, F6CTT, F6FVFY, F8AKS. **F6MCB:** F6ARC, F6GZ, F5MUX, F5NLN, F5NSJ, F9IE. **TM3A:** F5RXL, F6EXV, F5SSG, F5OZ. **T08B:** EA3BT, EA3WL(Y).

TX8UA: FK8FU, FK8HA, FK8VHT. **UD6M:** UA6LO, UA6LV, UR5MVZ, RV6LOB, UT6IZ. **UP0L:** UN9LW, UN7LZ, UN8LW, UN7LAN. **UR3IWA:** UT3IM, UR5IFB, UR5IFX, US2IMA, US2IES. **UR4E:** UR5EAY, UR5ECW, **UR4IWU:** UR5MB, UR0MM, US5MAX, UR5MCA, **UT3IZZ:** UT3IM, UT3IT, UX3IW, UX3IA. **UT4UWC:** US-U-007, US-U-003, US-U-092, US-U-091, US-U-109, US-U-073, US-U-075. **UT7Z:** Club V73AX; V73A, V73AT, V73BN, V73UX, **VAA3SK** & VAA3MW, VA3AJA, VA3PC, VA3WTO, VE3KXX, **VE2CQW** & VE2DX, VA2CL, VA2JTR, VE2XID, VA2DOS, VE2LHR. **VE2CS1:** KE1U, K1JB, K1MV, VE2XY, **VE3DC:** VE3BK⁺VE3OZY, VE3AJ1, VE3VNYY, VE3OCY, VE3Z02, VE3SMF, VE3SS, VE3VMO. **VE3MIS:** VA3AJC, VA3PIE, VA3QMX, VE3GXT, VE3IMG, VE3SQG, VE3USC. **VE5SF** & VE5CPU, VE5TP, VE5DX, VE5RC, VE5JCJ, VE5SHH. **VE6AO:** VE6BIR, VE6JKZ, VE6RTL, VE6TC, VE6CZJ, VE6KC, VE6SI.

W4SAR & KF4AD, KE4ZBZ, KU4GC, KF4WXD, **W6EEN** & K6XQW,
W6QX & K2AU, KACDJ, KB2VCY, **W7IG** & K7CQ, N7LNU
N7HA, W7SIR, **W8PLP**: N8VYS, N8JM, KC8HGF, N8YQJ, KB8SPS
N8DEF, **W9JA** & K9GS, K9GY, K9JY, N9A, N9FH, W9EV, **W9LT** &
K9ZJ, K8QOL, KU4KV, N4SLR, **WA1RR**: N1RJF, N1HRA, K1JN
K1B1LN, KA1VMG, **W9ND** & W9U1, **W01N** & K1WD, N1FA, **WP2Z**
W4WX, N2UVB, W4CUJ, VE3FU, W50XA, AA9TK, **WP3A** & WP4NHM
KP2BH, NP3A, **WV1M** & N1IXF, N1TVL, YE5B: YB5QZ, YB5PD, **YL8M**
YL2KL, YL3DW, YL2GM, YL2AG, **YU1HFG**: 4N1DX, 4N1YL, YT1PN
YT1VA, YT1TR, 4N1FTD, 4N1FMN, 4N1FL, **YY4AA**: YY4FZM, YY4YC
YY4FJJ, YY4FJK, YY4GLD, YY5CVE, **ZP9X**: ZP9XG, ZP9XB, ZP9SC.

Station Operators Multi-Op Multi-Transmitter

4U1UN: IK2BKH, K2QK, **8Q10:** DL7L0, DL7L0, DJ7TO, DL2RUM, DL7BY, DL7UTM, DL7VRO, DL7VLY, ON4CHE, DK1BT, DL3APC, DL1SYL, DL1SX1, DL7VLA, **AA10N** & W1RH, **AD1T** & K1ZD, N1KWR, WA1ZYX, **AE4F**, K2WHS, KS4CG, KE4OFF, **AB1H**: JG3RPL/K6FB, JR3VRO/WX8M, J13ERV/NH2C, J7HQXJ, JR8VSE, JH1NB/NK3ZB, JP1JFG/N1UJ, JK3GAD/AL7NC, JR7M0W/M1030, **B1A**: BA1ON, BA1AB, BG1HBF, BZ1BM, BG1SUN, BZ4DCH, BG1AZ, BG1BF, BZ1OM, OH2K, OH2PM, OH2TA, OH2YY, OH6LI, OH2BH, **BW0R**: BV2KI, BV2KS, JH3GNC, JP1RIW, **CQ2RC**: CQ2JX, CQ2OJ, **DK5EZ** & DG3EX, DL1QW, DL3EBX, DL4EBW, DL9JT, DL6EAQ, **DL0CS**: DD7LC, DQ8LAM, DL5JA, DQ9MT, DK2OY, DK8LV, DL1LAA, DL1QO, DL2LAR, DL3LB, DL4GBA, DL4RDJ, DL6RAI, HA1AG, **DX1DBT**: Don Bosco Technical College Club.

OK3UT: DS3HC, DU3WG, DU3AR, DU3MB, DY3QKA. **E22AA:** HS1CHB, E21ZC, E20MYS, E20NVH, E20NGF, E20LIB, E20JPJ, HS0/OEGZA, HS0/IK1LZF. **E22AAD:** JA6GIJ, JA6LCJ, JF1PK, JE1JKL. **EAC3CN & E3A3LV:** EA3CKX, EA3EJY, EA3ESJ, EA3EZD. **EA9EA:** EA1AK, EA4DX, EA4KD, EA4KR, EA7IL, EA7KW, EA7TH, EA7TL, EA9AI, EA9AZ, EA9GK, EA9KB, EA9UG, **ED4RAX:** EA4AHW, EA4ABW, EA7CD, EC4ANZ, Diplomado 29/65564/XI. **ED7VG:** EA7HV, EA7ATX, EA7EZQ, EA7GNC, EA7CCA. **HB9/H9AON & Others:** HG6V, HA2RX, HAGNO, HAGNF, HAGNL, HAGNY, HAGPX, HAGON, HAGDX, HAGOB, HAGOI, HAGOO, HAGSW, **IH9P:** K7FL, ZS6NW, IT9WPQ, IT9BLB, OK1FUA, KR7X, WA7EQW, I8QLS, W1NA(18ZW), IN3QB, IT9DQH, IT9TQH, IT9EW, IW9EIN, IW9GEF. **I2B:** I2CMA, UK2HNA, **J3A:** W8KKF, W8LWQ, N0AT, N0KK, K5PN, W5WW, K6HR, NH7C, E57RE, DL6LAL, IK6CAC, IV3VIA, VE3ZR.
LA1VLA: LA1PDE, LA1ATK, LA1OZU, **JF1A1ZC:** JF1N1KT, JF1KOD.

JATYPA: JA1PEJ, JA1ATK, JA1QJK, JH1ATO, JM1NTK, JF1KFO
JRA1CRA: JA1YXP: TN3ZPJ, JE1CKA, JFTTFK, JH1EAQ, JH1GTV
JY1DRO, J2JOF, J2LFA, JL2TAW, JM1UWB, JP1OGL, JQ1BWR
JR1AIB, JS1INN, N3NQL, H.Masuda. **JA4EKO:** JE3MAS, JA4EKO
JF4UF, JG4CLV, JH4NMT, JH4VND, JN4FEU. **MASBJC:** JA5BJC
JA5FDJ, JA5JCC, JASHTU, JH5XPF, JH5RXS, JR5JAQ, JR5VHU
JADZPR: JH6SLR, JH6ETS, JH6SQI, JRB6SC, JRH6VE, JR6CKX
JR6HLR, J0C6EG, **JN1YUW:** Shizu, Nanbu, Hirashima, Miyazaki, Kan
Hirose. **JR7ZIT:** JK1BEY, JQ1UKK, JK7KCC, **KOU&KEON:** KB0NUV
KINU & Others: K1RZ & KF1V, K1PJC, K1C, K1OZ, KA1UQ, KR1C
K2RD & W1CU. **K3ANS & WF3H:** K2NO, W2CG, AA2WN, KCZ2A
W3LR, W0RSJ3C. **K3OI & W3CM:** K3II & K3CT, K3TEJ, K3PQ, **K3L**
& N3RA, W3GH, ND8L, K8GL, KV9V, K5TR, K8CX, K3UA, XE2AO
W4V, K2JW1, I.

W3VJ, KA3QWJ.
K6SC & **K6NO**, **K9NS** & **AA9D**, **K9DX**, **K9HMB**, **K9PW**, **K9RS**, **K9U**, **W9RM**, **W9QA**, **KB1H** & **AA1CE**, **K1EBY**, **NB1U**, **KB1DF**, **N1XYS**, **K1NG**, **KD2KS** & **K2WB**, **KF9YT** & **N9VVV**, **KH7R** & **KH6ND**, **KH6TO**, **KH7U**, **AH60Z**, **KL7Y**, **ND3A**, **K9QQ**, **K9PG**, **K9NW**, **AH7F**, **KH7L**, **WH6XR**, **WH6H**, **AH6LV**, **NH6XO**, **KV1W** & **W1CSM**, **N6RM**, **K1MBO**, **KE1FO**, **LAT1K**, **Club**, **LU4FM**, **LU1FA**, **LU1FAM**, **LU1FAR**, **LU2FT**, **LU2FY**, **LU3FF**, **LU3FCK**, **LU4FA**, **LU4FPZ**, **LU4VF**, **LU5FAO**, **LU5FU6A**, **LU6FUQ**, **LU6FGQ**, **LU8FT**, **LU9FEC**, **LU9FIC**, **LU9AY**, **LY5A**: **LY2PAJ**, **LY3BY**, **LY3MM**, **LY2FY**, **LY2LA**, **LY2KWD**, **LY2IJ**, **LY1BA**, **LY7A**: **LYR-346**, **LY3DR**, **LY20C**, **Toleikis**, **LY3DA**, **LY62B**, **LY3RJ**, **LY2NK1**, **LY4AA**, **LY2UF**, **LY2KZ**, **LY2AO**, **LY3IT**, **LY2ML**, **LY2NK**, **LZ5Z**: **LZ1UO**, **LZ1BMV**, **LZ1HST**, **LZ1MCJ**, **LZ2HM**, **LZ3FM**, **LZ3SM**, **LZ3DJ**, **Vasco**, etc.



IR1A: Max, IK1GPG, and Betty, IK1QFM

PI4COM: PA3BWD, PA3BXC, PA3CAL, PA3DXA, PA3ERC
PA3EWB, PA3FOA, PE1P7S, IJ9GGH, P19B; K1YY, K2SS, K3EST

PA3EW, PA3JW, PA3JZS, JH3WPS, **J9B**: K1XK, K2SS, K3E5T, K6V2C, K2XZ, KL2A, N3ED, N6IC, W3UM, WASLRO, **PY3MH**
PU3AGP, PY3AFS, PY3BZA, PY3FOX, PY3MRZ, PY3PAZ, **RN3D**,
RK3AW, RW3FO, RA3ATX, RW3AG, UA3QDX, RW3FF, RV3BA
RU3BA, RW3DVN, RX3DCX, RZ3FA, RK3FA, RV6HY, UA1MTO, Ross
SA, Dima, Old Alex, **RW2F**: RA2FA, RA2EZ, RN2FA, UA2FB, UA2FP,
UA2FF, UA2J, UA2J, UA2FX, UA2FZ, Andre, Dima, **SK6NP**,
SM6FUD, SM6BUV, SM6MVE, SM6PIS, SM6VUL, SM6WQA
SM6WBQ, SM6WWK, Rickard, **SP5ZC**: SP5MBO, SP5UAF, SP5UAS
SP5TAT, SO5PBM, SO5PBT, SO5EBL, SO5EBJ, SO5HAB, SO5JSF,
SO5JVB, Jarek, **T8BX**: JA6VZ, JA1WSX, JF1MA, JR6IQI, JQ6GDP,
JY6UWV, JY6V, **IE2PDW**, **TM2I**: EA-ESTCOM, F5SHM.

JH0JDX, JH0JF, JZC2YV, **TM2LEA**: F5A, F5B, F5NH.
V26B: AB2E, KA2EV, N2TK, N3BNB, W3CF, K3MQH, WT3C,
N3OC, WX0B, NM5M, ZP5AZL, **VE3EJ** & UT4UZ, VA3EFM, VA3NA,
VA3RU, VE2ZP, VE3EJ, VE7CQ, VE7NT, VE7ZO, **VE3SY** & VE3BUO.
VE5RI: VE5CJR, VE5CMA, VE5FC, VE5FD, VE5FF, VE5FN, VE5SJ,
VESTR, VE5WI, VE6BBP, VE6GJA, VE6EZ, **WE6JJ** & VE6LDX, VE6MR,
VE6RIT, VE6STE, VE6DDG, VE6BLA, VE6DXX, VE6MAG, VE6TX,
VE6JO, VE6YD8, VE6WQ, VE6JTM, **VP5T**: WA2YVA, WA3RHW,
N2VW, **YY2SS** & AA1AA, K2N2J, K2XT, VE6DX, VE6GJ, VE9MY,
VY2CC, VY2CD, VY2GWM, VY2LI, W1VE, **W1FJ** & W1KM, NB1E,
KU4BP, KQ1F, KX1M, N1TR, **W1QG** & Others, **W1QK** & AA1YM, N1GS,
N1TMG, N1TV, W1QJ, W1QK, K2ZZ, **W1WFZ** & K1MK, W1YK:
N1F1Y, N1PFC, N2YHK, N8YXR, **W2A**: Club, **W1A2X** & K2LE, K2SX,
K2UJII, N1IN, N2M2, W2AX, W2IJ, VE14L, VE1XT.

K2UO, N2UN, NA2M, W2A, W2I, VE1AL, VE1KL.
W2XT & **W2ED**, KB5U, N2UYV, N3QDC, KE2HG, N2VM, WA2BZ,
W2VRK, KB2VR, **W3LPL** & K1HTV, K1RA, K1RZ, W2GG, ND3R,
N3GB, K2KIY, A3YM, K3RA, KD4D, K5OF, NOKP, **W3RM** & W3FV,
KF3B, **W3PP** & A1AK, NW3Y, N6ZQ, KE3ZR, NX3A, K3FT, N3WDJ,
N3YHC, N3KNT, **W4MYA** & K4BAM, KB4DI, KB4YPN, KD4XJ,
KF4QCY, N4EHJ, N4ZJ, W4DAA, W4DR, W4HZ, W4MYA, W4PFB,
(5X4F), W4SPT, WA4DAJ, WA4ODM, WK4Y, WU4G, Lilly, **W6FSJ**
Others, **W7RN** & K1TA, K1TY, K5ZM, NC7M, K7KX, K7TS, K7ST,
WA8RJY, NT7O, **W8ZA** & KS3X, K3DNE, WD3A, **XX9K** A6BBH, K507,
K6JL, K6MC, N6AA, N6ZZ, W6XD **YB3ZES**: YD3JTR, YD3MBM,
YD3TYO, Y3T3W, YD3BHR, YC3DM, YC3SZM, **Y7ZW**: YT7DQ,
Y7ZMJJ, Y7ZRLY, YU7M0, **ZM2K**: ZL2AM, ZL2IO, ZL2IR, ZL2ST,
ZL2DX, ZL1CN, ZL2BL, ZL2AR, ZL2AF, ZL2AS, ZL2UB, ZL2PB, ZL2BS,

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

SSB RESULTS SINGLE OPERATOR NORTH AMERICA

UNITED STATES

K1AR	A	5,952,375	3121	156	559	N7UN/2	1,006,824	875	114	347	N3QYE	42,720	157	39	81	*N4DL	A	887,295	872	101	296	K1BCG	1,276,560	1478	106	218	
K2DZ/D	"	5,481,048	3080	145	497	N2MR	899,101	816	101	312	W3JRY	17,200	76	30	56	*W040	"	829,830	793	110	307	W6TK	1,006,170	1149	105	225	
	(Opn. W2SC)					WA2NHA	818,125	849	86	299	K3MLA	28	55,737	215	28	71	*W4PJ	"	532,926	563	91	261	N6IC	621,152	705	105	224
						N2WK	775,719	727	113	328	W3KHQ	21	195,534	485	32	121	*K4IE	"	445,822	593	94	244	NN6XX	471,761	629	66	197
						N2CU	643,440	711	77	259	A1QO	146,300	378	31	90	*W4LC	"	350,446	469	72	202	M6NG	303,249	441	91	180	
						K2WK	593,205	643	103	252	K3MD	122,000	419	27	98	*K4LQ	"	301,840	422	74	206	K6GT	290,966	466	81	166	
						K2OY	500,180	527	106	250	K3CR	14	543,904	1188	38	146	*N1CC/4	"	301,530	422	77	208	W6KNB	270,300	469	74	138
						K2FR	385,296	535	65	211					(Opn. WA3HAE)	"	277,970	435	75	191	N6VH	253,800	415	82	143		
						W2UDT	307,468	457	71	207	KB3AGZ	"	18,970	102	17	53	*N4IG	"	244,215	395	64	179	KG6AO	231,312	393	83	154
						W2LU	306,504	382	89	208	*K03V	A	1,195,116	916	120	369	*K5DXR/4	"	169,970	311	64	166	N6TV	230,860	375	83	155
						WA2CNV	287,330	437	76	219	*WW3S	"	910,610	834	100	310	*K3TD/4	"	167,473	297	73	150	KE6EFO	187,912	442	63	103
						WR2V	279,112	397	70	208	W3UJ	57,850	727	84	266	*K04IBI	"	140,976	289	47	131	K6HRT	175,967	364	63	124	
						N2UM	255,774	403	82	200	*NV3V	270,900	453	69	189	*W4JH	"	130,756	255	48	146	K6FO	167,272	308	77	129	
						K2AW	229,596	368	56	172	*WB3CIW	257,854	413	53	176	*KT4XA	"	102,414	231	56	118	N6IBP	165,356	167	76	115	
						W2OMV	222,443	363	61	180	*N3KQJ	191,754	345	52	149	*W4KYW	"	85,094	197	50	107	W6ISO	145,200	314	61	115	
						N2CA	174,476	324	53	159	*KB3MM	93,100	213	47	128	*W4SD	"	67,942	162	50	111	N6AZR	115,362	363	59	115	
						K2EWY	169,260	291	63	147	*KF3BQ	53,592	168	43	89	*W4RK	"	60,768	31	41	103	WW6V	113,796	265	61	113	
						K2KV	162,140	300	56	144	*W3YD	52,394	176	39	95	*AA4KD	"	60,102	167	53	109	N6AFI	104,574	270	68	106	
						K2ZS	154,912	312	54	152	*N3VEA	45,124	150	39	77	*K4UVT	"	51,340	128	34	88	K6II	97,600	261	64	96	
						WA2WVL	136,427	207	73	154	*WA3JJM	36,934	145	44	82	*KA8FSM/4	"	37,211	134	39	88	W6MFC	96,436	216	65	105	
						W2OP	118,371	257	63	148	*N3NTG	35,032	117	38	78	*KF4ZTJ	"	30,353	132	49	78	K6XB	95,811	245	64	94	
						N2O	113,022	236	53	129	*N3NZ	17,346	92	34	64	*KS4RX	"	27,573	173	29	72	W6ZBA	94,848	249	59	93	
						W2HCA	107,439	228	52	155	*N3EYB	8,437	57	19	40	*KC4AUU	"	27,430	155	47	83	N6ZBZ	115,362	363	59	115	
						AE2T	106,506	213	53	130	*WA3YSW	5,900	48	23	36	*K4YX	"	27,234	126	35	67	N6TNX	91,770	195	69	121	
						W2FY	100,227	190	45	112	*N3RW	95,536	313	26	86	*KE4YTC	"	23,265	118	32	67	N7UE/6	88,734	263	53	85	
						N2ZU	54,000	131	52	92	*W3CP	21	49,686	214	20	78	*KE4JH	"	22,517	95	31	88	K6TTT	70,744	162	56	92
						K1Y	34,440	116	43	77	*K1EF/3	14	46,400	189	21	79	*KT4HN	"	22,454	95	37	72	N6TNW	51,380	147	51	89
						K2YB1	31,702	159	35	86	*W13W	3.7	9,196	104	11	33	*W4BDNL	"	18,616	70	41	63	W6YM	9,504	64	23	31
						K2SKO	25,235	131	33	70					*K4BRJ	"	14,620	94	37	49	W6YA	28	420,930	1166	32	103	
						N2KI	1,405,107	977	114	396					*N4WYR	"	12,717	65	33	48	W6NL	"	389,838	1097	30	99	
						K1CN	604,500	596	96	276					*AA2GS/4	"	7,412	47	32	36	K6BIM	202,080	641	30	90		
						N1API	596,594	745	71	246					*N4BTQ	"	3,783	36	15	24	K6JXO	175,000	297	71	31		
						N1EZC	503,084	567	85	261					*K4JY	"	103,847	341	25	88	K6MA	15,780	96	26	34		
						W1ZS	422,940	563	66	219					*K4TRH	"	72,490	267	26	84	N6IFV	8,924	74	18	28		
						W1AX	393,952	532	65	216					*K4WVW	"	48,985	195	27	52	W6VO	4,387	82	19	36		
						W8HAP/1	332,400	496	77	223					*K4YRL	"	35,026	161	24	59	K6AW	21	400,400	1162	33	113	
						K1BV	309,118	505	67	187					*K4RHT	"	18,688	120	18	46	N6WSY	246,272	732	31	105		
						WB1GEX	274,594	410	69	182					*K4MVK	"	12,925	97	17	38	NJ6P	201,696	559	32	100		
						K1AE	224,361	339	63	194					*W4JIK	"	9,212	75	13	36	N6WR	14	33,321	146	32	55	
						KM3T/1	158,641	336	46	127					*K4DSL	"	2,604	33	11	17	W7CB/6	7	32,508	152	28	56	
						KE1IH	138,170	261	56	149					*K4CYVA	"	840	18	9	12	N6HY	8,950	71	18	32		
						K2EKO	122,380	207	50	144					*K4UU	"	204	7	6	6	W6KW	3.7	102,717	405	33	68	
						W3T/2	122,380	207	50	144					*W9CNF/4	"	165	6	5	6	N6R0	1.8	2,314	147	11	15	
						W1DEO	37,146	127	53	98					*N4MO	21	243,460	625	31	117	*WAB7BNM						
						W1FV	32,857	122	32	71					*K4KSN	"	133,416	404	30	106	/6	A	1,097,250	1033	120	279	
						K1BW	16,287	61	36	53					*NY4T	"	47,940	204	24	78	*N6JM	"	374,214	488	93	189	
						WS1M	28	209,880	598	29	115					*K5WTA/4	"	10,229	73	16	37	*W6DEU	"	364,140	469	103	186
						KB1DEA	18,340	112	17	53					*K4PC	14	221,998	594	34	123	*K6UM	"	300,690	440	92	165	
						KA1PRD	12,644	93	14	44					*W6ACN/2	"	55,800	240	20	80	*W6VM	201,708	301	84	150		
						N1UVA	1,200	21	10	15					*W4UM	7	31,770	140	23	67	*W6PLJ	200,194	369	77	122		
						K1DWO	14	154,354	394	35	107					*K4LDR	"	2,660	39	12	26	*W6KY	189,431	380	71	116	
						AA1TKD	1,030,050	602	21	86					*K6QW	"	172,476	417	64	125							
						K1LZ	122,605	518	23	90					*W5DEG	"	120,466	320	66	96							
						KR1G	74,263	301	22	81					*W5OQ	"	118,184	291	65	93							
						W1MK	5,940	63	16	38					*W5DQE	"	10,420	284	52	87							
						AA1BU	1.8	4,042	60	12	31					*W5DQE	"	11,16,495	302	60	123						
						*W1A1S	A	1,516,347	110	144	383					*W5DQE	"	12,908	354	78	180						
						*K1VUT	A	1,241,934	1005	106	355		</														

AA7A	119,964	287	43	113	*WA8YLZ	554	20	11	13	*WA0DCB	61,963	181	43	88	VE7NKA	21	197,824	1004	25	63	*EA8AG	A	2,072,406	1893	95	276							
KA7TDH	119,250	275	52	107	*KFBK	21	168,635	432	30	115	*KI0LF	61,016	200	48	68	VE7XR	14	736,980	1816	40	133	*EA8AD	A	464,224	1118	48	115						
K5T7	115,710	278	45	100	*N6WLX/8	"	158,485	407	32	113	*KR6NA/Ø	56,025	211	47	88	*XL7A	A	3,513,342	3050	140	143	*EA8AEI	28	145,368	469	28	80						
K7NO	112,085	295	44	101	*NW7O/8	"	132,616	383	30	107	*WB0B	29,484	146	30	48	*VE7TLK	"	452,350	1059	77	141	*EA8BXQ	21	134,229	487	20	81						
N7JXS	74,620	201	56	84	*KABWQL	"	28,566	132	19	55	*KB0WPY	28,747	131	35	54	*VE7C1	"	98,154	350	51	72	CENTRAL AFRICA											
W7ST	71,070	188	58	80	*KFC8C	14	27,552	131	22	60	*KB0VVT	14,664	133	40	54	*VE7GFS	28	189,486	948	24	63	TL5A	21	2,211,366	3685	39	174						
KE7RT	61,074	210	47	70	W7LBN	35,298	200	84	121	W9RE	A	3,588,312	2090	156	495	*X07X	21	382,004	1664	28	70	(Opn. VE7AH)											
KI7ZE	22,149	82	45	62	WB9Z	"	3,028,104	1814	165	483	*K0PTY	3,956	40	15	28	*VE7ABC	"	110,700	631	26	56	ZF2DR	14	859,880	3012	34	106	(Opn. VE7AH)					
KC7SSN	11,275	77	26	29	K9BGL	"	1,414,992	1152	133	359	*N0LER	145	10	5	5	CAYMAN ISLANDS						CEUTA & MELILLA											
KI7LS	4,897	54	26	33	W9OP	881,790	810	100	299	*N0FK	17	5	4	4	EA9AM	A	8,749,164	5074	132	459	*EA9	/EA7RU	A	772,260	1234	51	160						
N7RT	28	243,072	697	31	97	K9CAN	713,868	650	105	299	*K0RXP	28	9,850	77	15	35	*EA9AR		546,700	678	72	236	EA9AM	A	8,749,164	5074	132	459					
K7CAR	103,596	429	21	62	K19A	546,120	649	104	266	*AA0XJ	2,660	32	13	22	COSTA RICA	T17DBS	21	425,703	1482	27	96	COSTA RICA											
W7EB	99,120	458	25	59	K9HUU	345,943	477	93	206	*AA0TY	21	76,627	279	24	85	CUBA	KL7AC	A	772,310	1270	75	163	CUBA										
W7AYY	42,411	226	20	47	WA9TPQ	328,856	451	85	211	*K0TYP	3,956	40	15	28	EL SALVADOR	YL7A	A	734,491	1600	80	131	EL SALVADOR											
KJ7WK	16,176	123	18	30	K9UQN	322,650	486	60	179	*N0VLP	145	10	5	5	HR1JPT	A	133,198	1125	36	58	EGYPT	SU2MT	A	11,805,734	6472	138	488						
W7UPF	21	120,226	361	32	103	W9BCV	246,048	415	75	189	*K0VLP	17	5	4	4	HONDURAS	KL7AC	A	125,775	491	52	71	HONDURAS	SU3YM		5,628	67	7	21				
W7IC	89,466	367	27	84	N9LCR	187,920	328	67	165	*K0VLP	17	5	4	4	MEXICO	KL7RA	7	93,415	475	26	59	MEXICO	E9A	A	2,589,816	2584	87	279					
W7WA	14	781,440	1532	39	146	W9RN	142,437	228	85	152	*K1R1	A	650,090	1171	75	176	ERITREA	YL7A	A	2,761,850	2938	122	333	ERITREA									
W7IL	"	310,288	726	38	126	N9STL	136,771	268	79	154	*K1R2	A	21,359	155	12	41	GHANA	WL7KY	"	530,511	1331	65	116	GHANA									
AD7U	"	92,434	355	31	82	WB9LRK	72,747	209	43	94	*K1R3	A	2,345	25	15	20	MALI	WL7KY	"	31,964	225	27	34	MALI									
K7EM	7	354,148	891	34	108	KF9YR	30,444	477	47	71	*K1R4	A	2,419,520	2166	25	70	MADEIRA ISLANDS	KL7FAP	7	24	2	2	MADEIRA ISLANDS										
W8AEE/7	3.7	18,836	142	24	44	K9EKG	26,877	130	35	58	*K1R5	A	1,052,625	3759	32	93	LIBYA	WL7FAP	"	408,375	2198	51	67	LIBYA									
K7ZZZ	"	6,950	59	20	30	N9WKW	24,240	102	35	66	*K1R6	A	133,198	1125	36	58	LIBYA	WL7FAP	"	428,260	1088	79	117	LIBYA									
K7HBN	"	519,414	644	93	205	W9GL	85,012	289	27	79	*K1R7	A	135,455	341	67	118	MALI	WL7FAP	"	47,912	201	47	59	MALI									
K7JTH	"	467,575	539	101	216	K9IG	21	243,474	585	34	120	*K1R8	A	2,105,625	3759	32	93	MADEIRA ISLANDS	WL7FAP	"	417,560	1829	30	80	MADEIRA ISLANDS								
W7N7J	"	460,653	570	100	191	W9OF	221,564	499	33	131	*K1R9	A	2,050,889	4885	133	440	MADEIRA ISLANDS	WL7FAP	"	270,800	1362	28	72	MADEIRA ISLANDS									
N7IR	"	304,325	435	88	171	N9VVS	43,741	212	19	64	*K1R10	A	255,136	989	30	89	MADEIRA ISLANDS	WL7FAP	"	108,962	678	28	58	MADEIRA ISLANDS									
N7UJJ	"	294,508	491	78	166	(Opn. N9VVV)					*K1R11	A	146,336	1115	24	44	MADEIRA ISLANDS	WL7FAP	"	146,336	1115	24	44	MADEIRA ISLANDS									
AB7RW	"	133,734	281	66	120	K9YNF	14	87,075	264	31	98	*K1R12	A	2,419,520	2166	25	70	MADEIRA ISLANDS	WL7FAP	"	146,336	1115	24	44	MADEIRA ISLANDS								
W7LAR	"	71,604	226	40	77	K9DX	7	25,270	114	23	72	*K1R13	A	2,419,520	2166	25	70	MADEIRA ISLANDS	WL7FAP	"	146,336	1115	24	44	MADEIRA ISLANDS								
W7BJB	"	69,483	206	55	104	K9SH	16,646	77	23	59	*K1R14	A	2,419,520	2166	25	70	MADEIRA ISLANDS	WL7FAP	"	146,336	1115	24	44	MADEIRA ISLANDS									
KC7ZRH	"	56,406	199	43	76	*N9SXT	A	449,668	631	82	234	*K1R15	A	2,419,520	2166	25	70	MADEIRA ISLANDS	WL7FAP	"	146,336	1115	24	44	MADEIRA ISLANDS								
AB7II	"	42,360	141	49	71	*K9RM/M	"	400,400	508	71	204	*K1R16	A	2,419,520	2166	25	70	MADEIRA ISLANDS	WL7FAP	"	146,336	1115	24	44	MADEIRA ISLANDS								
KW7N	"	41,776	161	43	69	*W9GG	"	296,856	451	69	197	*K1R17	A	2,419,520	2166	25	70	MADEIRA ISLANDS	WL7FAP	"	146,336	1115	24	44	MADEIRA ISLANDS								
KC5AC/7	"	34,740	162	34	56	*K9OP	"	156,849	264	78	153	*K1R18	A	2,419,520	2166	25	70	MADEIRA ISLANDS	WL7FAP	"	146,336	1115	24	44	MADEIRA ISLANDS								
N7MOK	"	27,580	145	28	42	*K9QVB	"	136,525	374	60	155	*K1R19	A	2,419,520	2166	25	70	MADEIRA ISLANDS	WL7FAP	"	146,336	1115	24	44	MADEIRA ISLANDS								
WA2OCG/7	"	18,630	118	20	34	*AA9ATB	"	128,526	301	55	131	*K1R20	A	2,419,520	2166	25	70	MADEIRA ISLANDS	WL7FAP	"	146,336	1115	24	44	MADEIRA ISLANDS								
WU9UB	"	14,628	103	27	42	*K9YAX	"	105,792	220	52	116	*K1R21	A	2,419,520	2166	25	70	MADEIRA ISLANDS	WL7FAP	"	146,336	1115	24	44	MADEIRA ISLANDS								
W7GTO	"	2,080	24	15	17	*N9WQ	"	83,476	193	57	107	*K1R22	A	2,419,520	2166	25	70	MADEIRA ISLANDS	WL7FAP	"	146,336	1115	24	44	MADEIRA ISLANDS								
K7JJA	28	244,976	743	32	90	*K9JC	"	56,650	218	30	73	*K1R23	A	2,419,520	2166	25	70	MADEIRA ISLANDS	WL7FAP	"	146,336	1115	24	44	MADEIRA ISLANDS								
W7USA	A	672,980	707	102	278	*K9AB	21	56,100	196	24	78	*K1R24	A	2,419,520	2166	25	70	MADEIRA ISLANDS	WL7FAP	"	146,336	1115	24	44	MADEIRA ISLANDS								
KE6GG	A	668,099	712	93	266	*K9VQJ	"	22,320	123	21	51	*K1R25	A	2,419,520	2166	25	70	MADEIRA ISLANDS	WL7FAP	"	146,336	1115	24	44	MADEIRA ISLANDS								
WB8TLJ	A	586,170	637	91	243	*AA9VHM	"	12,900	99	17	33	*K1R26	A	2,419,520	2166	25	70	MADEIRA ISLANDS	WL7FAP	"	146,336	1115	24	44	MADEIRA ISLANDS								
K5IID/8	A	581,046	659	85	254	*W9LYN	3.7	2,871	46	10	19	*K1R27	A	2,419,520	2166	25	70	MADEIRA ISLANDS	WL7FAP	"	146,336	1115	24	44	MADEIRA ISLANDS								
W2UOP/8	A	576,020	612	90	257	N2IC/B	A	3,777,672	2336	155	436	*K1R28	A	2,419,520	2166	25	70	MADEIRA ISLANDS	WL7FAP	"	146,336	1115	24	44	MADEIRA ISLANDS								
K8MR	"	567,853	591	95	266	KD8SQ	"	2,926,228	2063	149	405	*K1R29	A	2,419,520	2166	25	70	MADEIRA ISLANDS	WL7FAP	"	146,336	1115	24	44	MADEIRA ISLANDS								
N8MZ	"	453,776	608	80	236	K9BGM	"	1,037,562	995	116	286	*K1R30	A	2,419,520	2166	25	70	MADEIRA ISLANDS	WL7FAP	"	146,336	1115	24	44	MADEIRA ISLANDS								
KC8KE	"	298,245	431	83	212	K9WMM	"	626,640	667	106	265	*K1R31																					

ASIAN TURKEY												KYRGYZSTAN																	
*YM75ROT	A	425,587	714	52	159	*4XOF	A	1,412,545	1501	84	271	JA2BNN	A	922,610	1186	113	197	JQ6NAW	7	53,088	250	26	58	EX6W	A	4,020,525	3447	119	382
(Opr. TA3BN)												JH2AMH	"	247,520	497	80	62	JH6EJG		33,454	150	24	62	EX6Y	28	241,536	921	37	101
*TA8J	-	23,970	94	31	63	*4XOT	"	974,283	1230	58	209	JH2AQI	"	213,279	334	84	169	*JA6UHK	A	799,498	845	127	275	EX6MDA	28	140,193	674	25	86
*TA3YJ	28	63,765	348	15	50	*4Z5JQ	"	147,576	319	50	122	JA2FSM	"	179,452	338	72	131	*JA6EML	"	404,054	580	84	182	EX2T	7	44,280	225	17	65
*TA3D	21	660,136	1833	34	118	*4XTF1MM	"	58,116	231	24	63	JE2LUN	28	67,200	237	37	75	JH6OPP		160,752	353	74	130	KOREA					
*YM75TA	3.7	88,200	473	11	59	*4X1VF	28	904,639	2155	33	134	JS2LGN	21	635,400	1668	35	115	JH6FTJ		76,516	197	50	98						
(Opr. TA3J)												*4X6DK	"	128,472	457	26	75	JH7IPR/6	"	36,569	147	36	61	*HL1CG	A	186,580	375	61	129
												*4Z6FW	21	75,036	500	18	34	*JA6ODU		35,947	135	36	67	*HL5YI		18,352	108	27	47
ASIATIC RUSSIA												*4X1KS	"	3,984	44	14	34	*JA2OJ	"	115,624	286	51	98	KUWAIT					
UA9K	A	900,694	1245	99	252	JAPAN						*JA2GHP	"	83,006	276	40	81	*JA6AKV		17,836	86	35	56	9K2HN	A	5,331,053	3119	140	497
UA9KM	"	319,464	553	82	179	JM1XCW	A	1,720,383	1919	113	244	*JA2REJ	"	66,920	196	51	89	*JH6AAM		3,744	36	11	28	9K2ZZ	28	124,542	544	25	74
UA9MR	-	187,452	324	66	180	JF1OPL	"	722,466	864	104	202	*JA2BEY	"	65,018	218	42	76	*JL6RNY		2,108	55	30	32	LEBANON					
UA9CKS	-	178,200	388	61	159	JR1LEV	"	410,080	634	82	151	*JA2CNZ	"	31,108	124	24	59	*JR7HOD/6		1,575	32	15	20	OD5NJ	A	372,970	695	45	145
UA9JD	-	170,570	512	44	141	JA1QOW	"	199,977	418	69	122	*JA2BHJ	"	21,870	100	35	46	*JA6EFT	28	41,184	222	27	45	OD5PN	A	431,388	795	53	154
RZ9UR	-	85,904	198	59	123	JA1HP	"	190,992	404	63	121	*JA2BLJ	"	15,752	129	38	50	*JA6BIF	21	65,044	257	26	66	KOREA					
UA9OC	-	84,744	213	67	131	JA1BPN	"	75,325	219	54	77	*JA2JTKX	"	9,024	62	28	36	*JK6ISK		42,273	204	25	52						
UA9SNQ	-	42,817	263	25	89	JH1CTV	"	71,071	215	51	92	*JA2RFG	"	3,240	62	21	31	*JE6FPP	14	3,549	37	16	23						
UA9XEN	-	9,656	68	30	41	JA1ANA	"	47,190	138	60	70	*JA2IER	"	592	15	7	9	J7BEW	A	1,504,128	1444	126	258	MACAO					
RX9SX	-	3,450	29	21	29	JA1XPU	"	13,860	82	29	48	*JG2VSF	28	6,380	57	16	28	JATC		106,731	221	65	111	XX9AU	21	7,752	198	14	20
RW9WS	28	73,332	385	26	71	JH1FSF	28	101,230	396	33	73	*JR2LIS	21	130,080	527	29	67	J7DSN	21	782,420	1950	38	104	OGASAWARA ISLANDS					
RK9JWV	-	12,650	239	18	32	JH1UUT	"	47,748	262	23	46	*JR2BXO	"	15,180	133	21	34	J7FTF	14	493,890	1169	39	124						
RA9JP	21	154,500	772	30	55	JH1SKQ	"	27,066	143	28	50	*JA2IZA	"	12,768	90	21	35	JH7LRS	7	87,936	345	30	66	PAKISTAN					
RZ9UA	14	1,211,679	2554	40	149	JA1FB	"	1,368	26	9	9	*JA2JVL	"	11,025	77	32	31	*JR7WAB		789,519	1227	92	175	TAIWAN					
RA9DZ	-	247,066	767	31	100	JE1LFX	21	382,181	995	37	114	*JA2XOA	"	3,744	51	11	21	*J7NVF		704,258	854	106	201	TAJIKISTAN					
RX9FG	-	75,680	318	20	68	JH1YBK	"	267,402	799	33	90	*J02WA/2	"	18	2	1	2	J7UFI		83,020	215	57	83	THAILAND					
RA9FEU	-	4,880	53	10	50	JR1MQT	"	221,052	723	33	76	*JM2CCL	14	1,638	26	8	18	J17VUR		69,212	189	56	87	TURKMENISTAN					
**RW9HA	A	606,698	933	82	212	JR1OXU	"	142,154	468	33	80	*JE20TM	3.7	1,248	24	10	14	JM7JMG		13,790	75	30	40	UNITED ARAB EMIRATES					
**RW9QA	A	364,095	573	64	197	J1FDF	"	25,365	267	29	66	J3CTQ	A	2,211,638	2041	122	285	J7BRH	28	61,971	275	33	64	A61AC	A	5,424,530	3540	123	455
(Opr. WA6URY)												J1F1VFF	"	19,090	412	62	121	J8RUW	A	2,673,128	2209	140	312	EZ8CQ	21	52,160	305	17	47
(Opr. WA6URY)												J1G1VKA	"	105,775	382	72	119	*JH3CUL	A	354,025	535	95	194	EZ8CW	A	53,955	186	35	64
(Opr. WA6URY)												J1G1VKA	"	10,490	341	57	113	J3D5VJ	"	205,725	371	60	135	VIETNAM					
(Opr. WA6URY)												J1G1VKA	"	137,412	262	76	122	J3D5VJ	"	176,595	389	62	121	9W2TO	A	538,450	1198	95	180
(Opr. WA6URY)												J1G1VKA	"	128,094	290	63	102	J3D5VJ	"	38,400	45	16	24	*J8AZC	A	19,964	132	25	37
(Opr. WA6URY)												J1G1VKA	"	19,080	249	64	96	J3D5VJ	"	38,400	45	16	24	JH8F0Z		23,218	205	15	23
(Opr. WA6URY)												J1G1VKA	"	19,090	249	64	96	JH8F0Z		20,912	357	23	39	JY7TH	21	111,150	854	27	68
(Opr. WA6URY)												J1G1VKA	"	19,090	249	64	96	JH8F0Z		20,912	357	23	39	WEST MALAYSIA					
(Opr. WA6URY)												J1G1VKA	"	19,090	249	64	96	JH8F0Z		20,912	357	23	39	9M2PS	A	268,370	698	79	156
(Opr. WA6URY)												J1G1VKA	"	19,090	249	64	96	JH8F0Z		20,912	357	23	39	EUROPE					
(Opr. WA6URY)												J1G1VKA	"	19,090	249	64	96	JH8F0Z		20,912	357	23	39	ALAND ISLANDS					
(Opr. WA6URY)												J1G1VKA	"	19,090	249	64	96	JH8F0Z		20,912	357	23	39	OH0Z	A	3,742,508	3891	138	500
(Opr. WA6URY)												J1G1VKA	"	19,090	249	64	96	JH8F0Z		20,912	357	23	39	(Opr. OH1EH)					
(Opr. WA6URY)												J1G1VKA	"	19,090	249	64	96	JH8F0Z		20,912	357	23	39	OH0MM	14	843,081	2670	39	144
(Opr. WA6URY)												J1G1VKA	"	19,090	249	64	96	JH8F0Z		20,912	357	23	39	(Opr. OH2MM)					
(Opr. WA6URY)												J1G1VKA	"	19,090	249	64	96	JH8F0Z		20,912	357	23	39	OE5BVM	A	154,008	538	44	80
(Opr. WA6URY)												J1G1VKA	"	19,090	249	64	96	JH8F0Z		20,912	357	23	39	OE6Z	21	1,053,032	2342	40	154
(Opr. WA6URY)												J1G1VKA	"	19,090	249	64	96	JH8F0Z		20,912	357	23	39	OE1EMS		747,192	1768	38	153
(Opr. WA6URY)												J1G1VKA	"	19,090	249	64	96	JH8F0Z		2									

EW6TT	21	7,685	65	17	36	*OL7C	86,765	352	38	147	UA4CJJ	1.8	4,484	113	6	32	GERMANY	9,963	81	22	59			
EW6TU	3.7	10,980	209	8	37	(Op. OK1FKV)	86,765	352	38	147	*RX3RC	A	856,508	1079	114	352	DJ4NAC	A	4,395,584	2918	142	550		
*EU1SA	A	266,500	588	76	224	*OK2PMS	60,261	343	39	120	*A3A8L	"	671,150	1112	103	303	DJ4PT	"	3,452,766	2506	141	477		
*EW6DF	28	34,365	288	19	60	*OK2BUG	47,748	223	40	133	*RK3BY	"	428,970	683	95	300	DJ6QT	"	1,633,981	1487	126	439		
*EW6GB	21	33,282	261	15	84	*OK1FRT	39,235	219	31	102	RV6LFE	"	346,652	682	78	238	DL8PC	"	1,574,056	1472	129	448		
*EW1NA	"	30,788	173	21	65	*OK2SWD	36,375	160	25	100	*UA4ASE	"	275,931	615	60	210	DJ2DX	"	1,237,470	1128	120	381		
BELGIUM																								
OT8T	A	6,791,449	3478	163	670	(Op. RA3AUU)	30,330	213	32	98	*RW4PK	"	230,174	425	78	209	DJ3HJ	"	843,625	1019	96	329		
ON4XG	"	199,989	457	53	190	*OK2DU	31,330	213	28	38	*RU3FF	"	198,450	455	65	180	DJ8UCC	"	708,186	706	102	291		
ON4DPP	14	512,856	1772	34	119	*OK2PK	7,986	43	28	38	*A6LHML	"	161,660	349	67	169	DJ5BV	"	686,670	795	106	364		
*ON7RN	A	1,309,902	1368	106	340	*OK2PMW	20,448	101	23	49	*UA3LHL	"	130,104	423	52	182	DL6MHW	"	427,028	718	94	310		
*ON4AUP	"	56,400	246	39	111	*OK1GZ	4,056	45	15	24	*RA1OJ	"	110,565	299	55	140	DA0GF	"	413,100	951	68	232		
*ON5II	"	51,168	212	51	105	*OK1KM	21	151,034	464	32	125	*RA3UAG	"	72,466	267	50	148	DK2DQ/P	"	394,552	585	85	246	
*ON5PJ	"	26,950	149	30	80	*OK2TH	18,750	100	25	50	*UA4FER	"	66,612	254	43	113	DJ8UVJ	"	363,341	865	78	241		
*ON5CZ	"	9,291	81	25	32	*OK1MM	100	45	16	25	*UA4LBK	"	61,758	276	33	113	DJ1AO	"	333,336	713	60	168		
*ON4LCX	"	5,508	60	15	19	*OK1DV	14	1,443	30	7	30	*U1BA	"	50,862	240	38	109	DJ9RD	"	297,483	530	78	245	
*ON4LDK	"	5,161	40	15	29	*OK1HRR	3.7	17,741	300	7	53	*RW1QM/1	"	44,545	228	37	114	DL9NCR	"	292,545	467	81	216	
*ON4KMB	"	2,001	30	10	19	*OK1HXH	"	3,040	90	6	34	*RX3AEX	"	41,748	191	45	102	DLFNLU	"	285,344	531	68	228	
BOSNIA-HERZEGOVINA																								
T94DO	28	20,485	116	23	62	OZ9Y	A	1,487,589	217	77	270	*UA1AFZ	"	38,416	274	19	93	DJ3HZN	"	226,672	437	69	179	
T97M	14	495,818	1674	36	137	OZ1HQX	"	1,088,530	1513	93	305	*UA2ZDA/6	"	37,875	190	27	74	DK4I0	"	106,371	417	67	190	
*T99W	A	1,653,300	2212	115	380	OZ5EV	"	336,114	432	94	332	*UA1AKE	"	28,428	117	42	96	DJ8MW	"	175,426	61	67	178	
*T94LW	"	244,998	688	51	183	OZ3SK	1.8	46,368	671	11	61	*UA4QK	"	12,212	89	22	50	DLYBR	"	122,324	286	54	158	
*T99T	28	72,924	275	23	95	*OZ1ACB	A	198,492	520	68	170	*UA4QK	"	12,212	89	22	50	DLGUNF	"	121,888	303	58	150	
*T91ENS	21	167,382	559	34	119	*OZ7AEI	"	58,090	297	33	124	*UA4QK	"	12,212	89	22	50	DJ400	"	108,297	294	49	140	
*T92M	"	28,080	146	22	56	*OZ4NA	"	55,714	217	42	136	*UA4QK	"	12,212	89	22	50	DJ3SR	"	100,648	279	51	133	
*T95A	7	101,505	704	20	81	*OZ5ABD	"	49,296	236	34	122	*RA3XWD	28	37,916	217	21	65	(Op. RX3-X48)	"	91,043	223	53	128	
*T91EXA	3.7	30,485	446	11	56	*OZ1JVK	"	42,912	230	31	118	*UA1OMZ	"	3,367	46	14	23	DJ2PL	"	83,226	300	43	151	
BULGARIA																								
LZ50Z	A	589,680	1237	81	270	DY6VZ	A	1,717,760	1987	103	337	*UA4LCQ	21	459,062	1447	36	142	DJ1YH	"	91,043	223	53	128	
LZ6A	"	573,699	978	95	262	M8X	"	966,672	1258	99	312	*UA4LCQ	21	459,062	1447	36	142	DJ2PL	"	83,226	300	43	151	
LZ1BJ	"	170,872	464	61	187	GØVSN	"	778,898	998	81	301	*UA4PL	"	387,855	1317	36	133	DJ4DCC	"	77,814	311	45	153	
LZ1BG	"	11,484	61	33	54	G3UFY	"	472,668	666	81	276	*RA3DNC	"	92,837	409	27	100	DJ5RBR	"	77,751	255	48	115	
LZ32Z	7	459,511	1979	37	132	G3VAO	"	205,065	417	64	181	*UA1ACC	"	50,648	273	25	79	DL6MDT	"	77,280	242	51	109	
LZ1RN	"	25,056	272	13	59	G3SEM	28	55,521	342	22	71	*UA1AN	14	47,200	314	23	77	DL6DH	"	47,278	194	40	114	
LZ2FQ	"	4,346	90	8	33	G3TBK	"	294,275	810	30	119	*UA4ACP	"	15,774	132	18	48	DJ5ZB	"	47,261	134	63	104	
LZ1ZJ	"	525	17	8	13	G4WTD	"	215,118	891	33	78	*RA1AW	"	46,002	285	26	76	DJ6AX	"	45,934	190	33	86	
LZ1ZC	"	121,800	398	31	109	G4WPE	1.8	9,774	202	7	47	*RA1XAL	"	37,716	233	18	66	DH4JQ	"	38,874	173	33	81	
LZ1ZC	"	99,015	428	29	86	G4WVQ	"	36,398	145	24	68	*RA3DNK	"	4,37	15	7	12	DJ3DCY	"	25,420	141	33	91	
LZ2MP	3.7	48,450	266	29	66	G4WZQ	"	7,916	105	22	62	*RK1OWW	7	4,620	79	9	33	DJ9XW	"	13,818	120	19	79	
CRETE																								
*SV0LK	A	164,565	597	51	156	DY6VZ	21	202,264	1183	30	101	*RU3DX	3.7	31,248	334	14	58	DJ5JH	28	121,930	370	20	108	
CROATIA																								
9A2YC	A	415,338	644	94	247	ES1RA	A	60,786	175	59	139	FINLAND	A	462,565	867	75	280	DJ1ZU	"	84,401	351	22	83	
9A4X	28	382,356	1187	35	136	ES1OX	"	37,268	118	54	100	OH6RE	A	133,536	360	51	163	DJ0SG	"	57,334	292	22	87	
9A7R	"	290,700	984	34	146	ES1LR	"	50,028	211	38	94	OH2VZ	"	110,561	348	54	155	(Op. DL4RCE)	"	(Op. HA5J5)	91,043	223	53	128
9A4D	"	182,698	505	31	136	*G4NRM	"	43,240	199	28	86	OH1BOI	"	43,516	179	37	135	DJ9X	7	32,884	339	16	20	
9A2AJ	"	150,891	510	33	126	*G4NRM	"	33,810	220	28	70	OH1BV	"	39,984	145	42	76	DJ9ZB	"	17,544	132	33	123	
9A9A	21	1,517,020	3139	40	162	*G4NRM	"	20,056	177	18	61	OH1BV	"	30,096	121	43	71	DJ3EM	"	1,801,996	105	175	53	
9A3MR	14	131,709	675	30	99	*G4NRM	"	10,887	123	14	43	OH1LEG	A	204,828	351	75	228	DJ2AL	"	4,982	85	12	35	
9A5Y	7	513,342	2063	36	135	*G4NRM	"	34,118	157	34	140	*OH2LNH	"	12,194	101	26	65	DJ7ALM	3.7	45,765	508	13	68	
9A4KA	"	1,519	31	9	22	*G4NRM	"	1,312	41	6	20	*OH6RC	"	10,296	68	27	61	DJ2JX	1.8	3,528	40	13	36	
9A6A	3.7	235,807	1620	28	115	*G4NRM	"	5,544	80	10	34	*OH4YT	"	9,454	84	17	41	*DL2NBNU	A	2,049,057	1710	128	489	
*9A2EU	A	1,457,708	1498	123	430	*G4NRM	"	287,124	736	59	225	*OH1UP	"	2,867	44	14	33	*DF7RX	"	1,319,744	1308	114	430	
*9A5JM	"	5,952	54	15	33	*G4NRM	"	22,950	174	27	75	*OH2BPA	"	27,968	204	21	71	*DL1MGB	"	1,096,959	1178	99	372	
*9A2RD	21	229,067	614	37	114	*G4NRM	"	1,716	44	7	26	*OH2BPA	"	2,340	58	7	29	DJ3E0	"	501,025	591	103	207	
*9A	"	43,516	314	21	71	*G4NRM	"	1,716	44	4	17	*DL8SDC	"	261,396	501	67	207	DJ8NBJ	"	199,652	499	73	211	
CZECH REPUBLIC																								
OK1RI	A	4,838,015	3733	145	492	ES1OMS	"	813,024	109	104	328	FRANCE	F5NBX	A	2,965,933	2569	120	403	DJ4NAC	A	1,705,088	1939	102	346
OK1EP	"	896,831	1207	97	366	UA6JY	"	238,928	472	78	196	F5NBX	"	1,213,485	1415	104	351	DJ4PT	"	1,695,172	1854	110	404	
OK1FRO	"	75,886	332	44	142	RV3YR	"	225,138	418	77	237	TM5L	"	5,935,999	2569	120	403	DJ5LBR	"	1,173,600	193	105	371	
OK1AVY	"	3,120	57	19	29	RV1CC	"	104,901	312	60	159	F5NBX	"	10,887										

*EA1FDI	310,596	964	29	103	*UR4QSG	18,216	131	24	64	*Y8C8VAC	37,572	221	35	58	*LW1EGD	169,924	813	24	68	*PY2ELG	132,405	549	26	71			
*EA1CBX	161,980	726	20	71	*US9OA	9,504	100	18	36	*Y8CRBC	34,400	299	15	28	*LW5HBR	142,222	790	23	71	*PT7ZAA	70,448	363	21	53			
*EA3FCQ	156,807	500	27	106	*UT5UQO	36	3	1	3	*YB2LAB	28	221,650	633	33	*LW5EJU	135,405	620	22	63	*PP5VB	68,508	342	26	73			
*EA7QO	100,857	448	25	51	*UT7QF	21	125,022	539	29	105	*YB2ERL	21	108,194	418	27	*LUSHY	116,857	509	26	75	*PU2LQD	60,840	350	28	76		
*EA3TI	97,569	330	24	87	*UT1HT	6,270	43	17	38	*YC6DEM	25,935	161	25	40	*LWGSHAR	89,475	511	21	54	*PY5BF	20,532	112	23	64			
*EA7AKJ	53,064	241	22	66	*UTUJK	14	200,825	769	38	107	*YC0MZI	14,700	96	19	41	*LU5EVK	78,156	361	22	56	*PY3GPP	20,286	170	20	43		
*EA1CXH	33,810	191	20	50	*UX3MO	67,045	388	27	88	*YC3SZM	1,440	26	11	13	*LU5FSM	61,171	414	22	61	*PY2EDY	19,458	125	22	47			
*EA7ALO	22,500	111	19	56	*UR4EWL	49,106	363	22	64	*YC0LOW1.8	42	3	3	3	*LU9APM	50,640	319	19	40	*PY5DC	16,306	124	21	41			
*EA5DIT	19,437	80	25	68	(Opn. UR6EX)				*LU7VJ				*LU4HUG				*PY5RSM				14,938						
*EA5AJA	13,208	91	18	34	*UT1WW	2,432	62	8	24	*LU9AWM				*PY1WAG				11,970				67			49		
*EA6GMB	12,844	111	18	34	*UT1T	7	62,177	618	19	73	(Opn. UR7TZ)				*PU2UIB				10,812				109				
*EA7DB	21	336,812	1172	35	126	*US5ESP	3,397	47	9	34	*LU5HCl				8,957				79				18				
*EA3OP	219,304	701	32	126	*UX3M	3.7	34,200	366	13	62	*PK8VHN				*PU2XLO				8,595				37				
*EA1CVY	193,110	612	28	95	*US8IBS	(Opn. UR3MP)				*LU2BA				*PY5JO				4,356				67					
*EA1FFH	117,468	570	24	93	*GW4BLE				*LU3FR				*PY2EJN				4,212				33						
*EA7ANM	105,910	715	21	64	*GW0GEI				*LU1FNH				*PY2SEL				4,171				61						
*EA3NB	102,225	299	32	109	*GW4BVJ				*LU1HTF				*PY5VYQ				4,030				75						
*EC3AJW	57,680	273	28	84	*GW4BT				*LU3ES				*ZY2DX				3,488				63						
*EA3BIM	47,937	274	19	68	*GW8GT				*LU4D				*PY2PBY				3,488				120						
*EA1BAF	37,655	230	19	66	*GW3JXN				*LU5MD0				(Opn. LU4DA)				(Opn. PY2QE)				3,168						
*EA1HA	24,565	213	21	64	*YU1RE				*LU6AMD				*PU1KDR				3,128				3,128						
*EC4DJY	14,508	145	17	45	*YU1KX				*LU4DX				*PY1KDR				8,957				7						
*EC3ALV	11,904	109	18	44	*YU1KX				*LU4JX				*PY2EJN				2,700				31						
*EC4AGJ	8,700	79	10	50	*YU1KX				*LU4JW				*PY2SEL				4,212				33						
*EC3CMT	7,564	87	16	45	*YU1KX				*LU4JW				*PY2TNT				4,212				33						
*EC3AGM	7,038	75	15	36	*YU1KX				*LU4K				*PY2XW				1,519				22						
*EC5AL	6,160	64	12	43	*YU1KX				*YU1KX				*PY2AYE				1,430				1,421						
*EA3KT	3,564	55	8	14	*YU1KX				*YU1KX				*PYUBPY				2,547				7						
*EA4BL	14	147,668	657	31	103	*YU1KX				*YU1KX				(Opn. PYUBPY)				(Opn. PUBPY)				204					
*EA3AJP	88,303	457	26	87	*YU1KX				*YU1KX				*PY2GYS				204				204						
*EA4OI	65,653	326	28	85	*YU1KX				*YU1KX				*PY2GZ				54,918				120,020						
*EA3FP	46,752	270	22	74	*YU1KX				*YU1KX				*PY2APQ				54,918				250						
*EA3CT	35,432	222	19	67	*YU1KX				*YU1KX				*PY2QI/7				53,361				205						
*EA5TN	4,464	70	12	36	*YU1KX				*YU1KX				*PY2RQW				51,377				252						
*EC1CFD	3.7	41,676	408	13	56	*YU1KX				*YU1KX				*PY2RQI				24,600				176					
*EA3FF	17,270	182	11	52	*YU1KX				*YU1KX				*PY2AER				3,094				41						
*EA1DVY	1.8	7,332	115	6	41	*YU1KX				*YU1KX				*PY2T1				7				80					
(Opn. SM4JHK)																											
*SM7HSP	360	12	10	12	*YU1KX				*YU1KX				*PY2WYS				204				6						
*SM3ARR	18	3	3	3	*YU1KX				*YU1KX				*PY2GYS				54,918				124,020						
SWEDEN																											
SM5CEU	A	816,262	1209	116	374	*YU1KX				*YU1KX				*PY2GZ				54,918				120,020					
SM5BZI	A	303,072	570	82	270	*YU1KX				*YU1KX				*PY2APQ				54,918				250					
SM5CSS	A	191,187	407	70	221	*YU1KX				*YU1KX				*PY2QI/7				50,566				205					
SM3CVM	A	23,500</td																									

CX7CC	"	54,390	219	54	93	EA2BTQ	"	8,721	82	13	38	NN3Q	"	1,990,856	1266	126	458	KKØDX	"	118,352	231	75	133	DL8OH	28	156,600	440	34	146												
CX6VM	"	735	15	11	10	JQ6PAQ	"	5,203	57	15	28	N3MKZ	"	1,981,968	1209	133	495	KØØLO	"	115,206	243	67	115	DL3ARK	"	25,564	154	21	56												
CX8CP	28	1,513,691	3893	32	117	DLD1DQY	"	782	20	8	15	K3ND	"	1,822,824	1158	133	449	KNØL	"	28,749	110	40	71	DL3NCl	21	222,332	642	36	127												
CX5X		1,451,680	2989	33	139	(Opn. CX6VM)		117	6	4	5	NE4UK	"	1,341,886	1106	115	396																								
CV4Y	"	1,327,885	3233	34	121	RK4SWF	14	56,810	286	27	88	N3ZA	"	1,298,313	886	125	418																								
CX4BAD	"	535,800	1968	23	77							KB3TS	"	1,160,280	922	112	383																								
CV1A	"	455,936	1510	29	99							W6CN	"	39,072	166	31	57	K3AR	"	1,133,640	771	123	413																		
CX7BF	"	269,705	1155	23	72							SP9EWO	"	31,816	280	20	62	W3CC	"	976,212	735	110	414																		
CX7BY	21	631,270	1813	36	129	JAT7CX/1	"	564	23	10	14	LUT1HN	"	860,626	774	96	323	K3CP	"	824,208	743	110	352																		
CX2SA	14	199,038	517	35	112	J4GCE	7	31,195	146	24	61			J4GCE	"	749,904	769	99	309	K3EVN	"	566,749	563	94	299																
*CX9AU	A	817,966	1121	98	236	KH8OE	"	1,302	40	5	5	SP4FGQ	3.7	6,713	118	8	41	W3IZ	"	618,192	559	108	316																		
*CX8BAE	28	273,945	1073	27	78	SP3J	"	5,320	132	5	35					W3OV	"	594,440	607	97	288																				
*CX5BE	"	178,220	887	24	71							KB3AUG	"	575,230	592	108	302																								
*CX7DA	"	101,708	443	22	72							W3HVO	"	546,820	598	97	283																								
VENEZUELA						OK1AJ	"	3,330	88	5	32	K3BSA	"	512,694	586	82	231																								
*4M5E	A	1,184,352	1436	80	258	(Opn. YV5NWG)	"	732	77	4	2	KU3X	"	487,944	598	81	243	K3KFD	"	429,975	510	81	270																		
*YV5JBI	"	240,588	513	51	112	P40N	"	420	12	9	11	N3NT	"	357,884	421	82	241																								
*YV7QP	"	73,168	199	44	92	P40N	1.8	2,240	72	5	23	W3KV	"	319,800	432	87	225																								
*Y44GLF	28	101,640	679	24	46	P40N	"	91	5	2	5	N3GPU	"	288,768	408	65	191																								
*Y44GMB	"	7,488	99	15	24							KF3BE	"	239,280	394	63	177																								
*YW3B	21	119,171	782	22	81							N3UQ	"	172,140	319	60	168																								
*YV5DZQ	7	114,048	431	21	75							AA3LX	"	114,240	247	57	135																								
QRP						K1ZM	A	5,168,493	2547	165	582	K1G	"	4,335,610	2282	149	573	K1M	"	4,088,666	2370	138	496	K1VR	"	2,861,712	1592	147	521												
N6MU	A	621,264	666	106	238	W1NG	"	2,563,040	1457	143	521	N1DG	"	1,837,996	1160	135	472	N1DG	"	1,610,724	1066	105	354	N3RS	28	469,030	1002	33	145	K4MA	A	2,454,293	1435	153	503						
YU1KUN	"	575,600	698	87	313	W1NG	"	1,244,600	917	100	381	N3RS	"	2,016,152	1276	135	468	N3RD	21	994,850	1900	37	160	K4NA	"	2,245,884	1350	153	480												
K2PS	"	524,901	618	79	234	W1NG	"	631,490	581	105	304	N3RD	"	22,092	96	27	57	N4R0T/4	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
LU1VK	"	518,169	797	81	168	W1NG	"	572,234	607	85	255	N4R0T/4	"	49,206	130	49	90	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
JR4DAH	"	419,482	605	89	177	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
EA1GT	"	304,792	632	58	190	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
LY2FE	"	287,532	736	53	241	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
JAD2LML	"	270,336	455	95	169	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
YU1LM	"	269,323	737	58	227	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
S59D	"	263,270	556	76	234	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
HA7YS	"	251,085	605	62	223	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
N1TM	"	130,244	324	60	178	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
RW9AB	"	115,900	385	25	97	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
OK1DKS	A	93,312	292	46	146	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
IK5RUN	"	85,100	241	68	162	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
RZBZR	"	80,432	211	65	111	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
UA9KCL	"	80,250	263	49	76	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
NQ7X	"	70,680	207	45	79	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
IØKHP	"	67,585	243	49	109	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
Y02EY	"	32,207	199	82	107	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
WA5OJY	"	30,780	127	32	76	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
SP4CQU	"	30,090	113	39	79	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
W3TT	"	29,640	107	40	74	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
Y04AAC	"	26,433	191	27	72	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC	"	2,245,884	1350	153	480												
IØYQV	"	24,645	142	29	64	W1NG	"	515,899	730	111	110	N4R0T/4	"	49,206	130	33	145	K4TC	"	1,479,345	951	141	438	K4NC</td																	

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K1RX	6,492,362	3324	164	633	VP5T	12,930,489	9893	130	461
N6AW	6,308,100	3702	166	486					
KV1W	5,625,042	3085	152	581					
K3II	4,944,000	2555	156	594					
W7RM	4,766,768	3320	162	442					
K3ANS	4,152,995	2313	163	574					
N98ITU	3,576,591	3625	161	516	IH9P	26,830,830	10878	175	715
K2RD/1	3,521,259	2001	146	505					
W3MM	2,797,508	1524	150	536					
KB1H	2,725,056	1593	144	520					
N2MM	2,619,540	1609	137	493	EA9EA	32,346,460	12662	183	731
W8ZA	2,205,000	1502	137	463					
W2XT	2,162,741	1422	135	472					
AA1ON	2,139,375	1628	125	400					
N5VY	2,087,372	1956	132	376					
W1YK	1,885,845	1430	117	392	B1A	10,143,924	0739	159	454
KF9YT	1,651,552	1371	125	386					
AD1T	1,439,532	1176	112	374	P3A	29,108,800	13073	182	738
W10KQ	1,371,762	1080	113	400					
K3DI	1,226,491	874	129	452					
K6SG	1,141,975	1043	123	302					
KD2KS	1,085,248	887	115	381					
W1WFZ	965,490	689	99	303	JA5BJC	11,949,168	6394	171	561
K0UE	366,270	530	88	202	JA1YXP	7,447,465	4504	168	485
AF4EF	250,260	464	85	206	JA4EKO	7,059,610	4136	171	514
W6FSJ	158,782	362	75	122	JA6ZPR	4,152,384	2880	148	386
N1Kwj	56,550	163	42	103	JA1YPA	2,021,208	1926	132	292
4U-UNITED NATIONS									
4U1UN	2,141,820	3323	84	242	JR7ZIT	182,025	408	75	150
					JN1YUU	17,168	103	28	46
ANTIGUA									
V26B	30,539,106	15390	179	739	XX9X	10,890,408	8767	169	485
CANADA									
VE3EJ	20,373,276	9613	183	741	8Q7IO	3,679,669	2981	126	421
VY2SS	16,331,830	8909	165	652					
VE6JY	5,655,329	5829	129	360	BW8R	1,987,270	3222	115	255
VE5RI	2,139,456	3169	108	244					
VE3SY	894,288	1067	101	271					
CUBA									
C02FRC	728,726	1584	79	175	E22AAA	339,184	756	75	157
					E22AAD	105,938	469	63	98
GRENADA									
J3A	25,015,908	14132	171	652	OT8A	15,288,750	9898	167	739
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AFRICAN ITALY									
CEUTA & MELILLA									
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A blue cartoon-style rocket ship is shown flying upwards through a cluster of blue and white stars of various sizes. The rocket has a single visible fin and a small flame at its base.



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