

1978 CQ Worldwide DX Contest - CW Results

By LARRY BROCKMAN, N6AR*, AND BOB COX, K3EST#

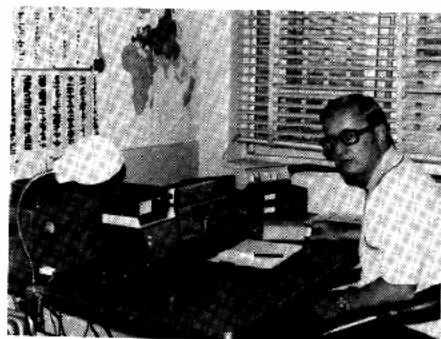
The hour is very, very late, and the static crashes are intense and frequent. Bleary eyed, our hero once more tunes the low end of forty. "What's this", he asks, as he picks up an endless stream of squeals? The S-meter jumps to 10 over 9; the din is deafening. "No apparent recognizable calls in that mess", he reflects. "What a pile-up!" But then, as if by magic, the din is gone; and there, sneaking from behind the static crashes and stragglers is the prize. "... Di di di di di, dah di, dah di, di di dah dah dah, di di di dah dah...", rings out through the headphones. "Holy Mackerel!", exclaims our hero. All of a sudden the adrenaline is flowing. The eyes are now bright and intense. In a flash our hero has his VFO zeroed in on the prize. There, on 40 CW, is zone 23! But *who*? Not to be denied, our hero plunges in with his call. As he comes up for air, he hears the prize once more. JT1AN. "Son of a gun, if only..." and right back into the pileup he goes.

And that's the way it was all over the bands for the 1978 CW contest. Electrifying suspense and action - never a dull moment. With a record 2400 logs received, 1978's total CW and Phone entries broke the 5000 mark for the first time ever, up almost 13% from last year! Not only that, an astounding 4 world records, 18 continental records and 4 stateside records were set - 26 in all. Conditions weren't even all that good, a real come down from the Phone contest we reported on last month.

Single Operator Winners

Marty, OH2BH, operating CT3BZ at his vacation villa in the Madeira Islands, captured the new Single Operator All Band World Record set

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Here's that rare and elusive STORK (love that call) operator, Tom, DL7AV, posting top honors for Africa in this year's 21 MHz single band efforts.

last year by Dick, N6AA at 9Y4VT. This was a sweet victory indeed for Marty, who came in second to Dick in this year's phone contest. Marty's great 5.1 Million score and fine phone

score also won him the combined phone/CW trophy. Congratulations, Marty.

Running close behind Marty were Pete, N6CJ, at KP4RF, and Leif, OZ1LO, at C5AAO, with only 260 K separating the top three scores. Marty's incredible 1790 QSOs on 10 meters, and a few extra country multipliers made the difference.

Three continental single op, all band records fell this year. Besides Marty's new African record, new records were set for Asia by UV9AX, Val; and for North America by KP4RF.

Stateside single op, all band honors went to Rich, W3RJ, who broke W3LPL's 1977 record by 600K. Frank, W3LPL finished second, 200K above his old record also. The East Coasters swept the top four, with W1ZM and N2LT rounding out the field.



Frankford Radio Club's HK0COP crew is shown here along with the Cessna Citation that took them to San Andres. Back row, from left: John, W3MA; Ed, N3ED; Dawson, K3MBF; Chris, the co-pilot; the local tree climber; and Al, N3AD. Front row, from left: Walt, WA3LRO; Francisco, HK0BKX; and Dave, N3RD.

U.S.A. Club Scores

Frankford Radio Club	107,990,050
Potomac Valley Radio Club	84,992,078
Yankee Clipper Contest Club	66,696,804
Southern California DX Club	30,602,847
Western Washington DX Club	27,413,430
Northern California DX Club	20,259,149
Texas DX Society	16,360,481
Southeastern DX Club	14,212,032
Murphy's Marauders	13,601,160
North Texas Contest Club	13,457,488
San Diego DX Club	12,725,070
Central Arizona DX Club	11,603,270
North Florida DX Association	8,440,542
Central Virginia Contest Club	7,041,878
Northern Illinois DX Association	6,817,526
Mad River Radio Club	5,495,254
Delta DX Association	5,187,611
Indy DXers	4,864,998
Williamette Valley DX Club	4,387,151
Michigan DX Association	3,894,895
Colorado Contest Conspiracy	3,593,448
Gloucester County A.R.C.	3,115,241
Kansas City DX Club	3,085,464
Alamo DX Amigos	2,864,594
Eastern Iowa DX Association	2,774,795
Fort Wayne Radio Club	2,666,798
Boiled Owls of New York	2,501,995
Virginia Century Club	2,445,287
ILL WIND Contesters	2,335,038
Flyweight DX Group	1,532,884
Wireless Institute of the Northeast	1,309,288
Milwaukee DX Association	1,176,451
Red Stick DX Club	821,008

Northern Ohio A.R.S.	665,325
Juliet A.R.S.	660,071
Waukegan V.H.F. & A.R.C.	644,635
Neenah-Menasha A.R.C.	581,389
Central Illinois DX & Contest Club	516,877
Northern California Contest Club	403,534
Four Lakes A.R.C.	333,423
Buffalo Area DX Club	244,010
Mississippi Valley DX & Contest Club	228,064

DX Club Scores

Chelyabinsk Region Radio Club	30,095,849
Rhein/Ruhr DX Association	22,955,318
Voroshilovgrad Radio Club	20,031,881
YU DX Club	16,710,916
Kaunas Polytechnic Institute	15,420,960
South German DX Group	13,148,595
Lithuanian Contest Group	11,877,832
Toronto DX Club	11,579,233
Danish DX Group	8,847,001
Channel Contest Group	5,815,807
Leningrad Radio Club	5,214,314
DX Club of Saar-Pfalz	4,108,585
SP DX Club	2,740,770
Shizuoka DX Radio Amateurs	1,468,839
Nagoya University Radio Club	1,207,748
Uniao Besouros do Recife	952,254
DX Hunters Group of Brazil	935,232
Tallinn Radio Club	890,621
Polish Boy Scouts Signal Club	365,028
Association Radioamadores da Biera Alta	316,868
CW Group of Argentina	172,913
Swiss DX Club	43,118

In the Single Band categories, it was the high bands (21 MHz and 28 MHz) that attracted most of the attention. For the first time ever, a CW en-

trant broke 1 Million on a single band. Our congratulations to Jorge, LU8DQ, for his new highest ever single band CW score, a super 1M + 21 MHz ef-

fort. Besides South America, records were set for 4 other continents on 21 MHz - Asia by JA2VUP, Europe by YU3ZV, North America by N6CW, and Oceania by KH6XX. Only the 1970 African record of TJ1AW remained intact, but even that one was in jeopardy, with ST0RK falling just short of the mark this year.

On 28 MHz, new continental marks were set by HI8MOG for North America and 4X4UH for Asia, but it was Ron, FY7BC who won this year's 28 MHz top honors. Doug, VR3AH, was heard all over the place in his fine 20K Single band 160 meter effort, a new Oceania single band record, and tops for the world this year. Likewise, on 80 UI8LAG topped the old Asian record as he took the top spot for 1978, while AH6Z bested VK6HD's old Oceania record on 40 and finished first in the world on that band. Herb, KV4FZ took 14 MHz top honors world wide, adding to his abundant contesting achievements.

Stateside single band efforts by Terry, N6CW (21 MHz) and Bud, W6VPH (14 MHz) set new U.S.A. high marks. In fact, it was a great year for the West Coast in the single band categories, with W6's and W7's in the running on all bands but 10. Rounding out the U.S.A. single band winners were perennial winner K1PBW on 160, W5UN on 40, K5NU on 80, and K8MFO on 10.

Multi Operator Winners

The World High Multi-Operator/Single Transmitter effort for this year was posted by RF6F at 5.9 Million.

STEP UP TO TELREX

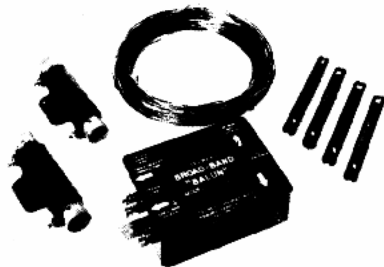
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However, the Voroshilovgrad Radio Club group, headed by UB5EC, fell shy of the 1977 6.1M record set by their rivals from UK6APA at 4L6M. Second place was taken by the HH2CQ expedition fielded by the North Florida DX Club. Cheer up fellows, at least you set a new North American record. Running third in the world, but posting a new 2.9 Million U.S.A. record, was N3RS, manned by our old friends at W3WJD.

Back for an encore after last year's record setting Mutli-Multiphone score, the gang at EA8CR demolished the old world multi-multi CW record by 6 Million points, with their fantastic 17.7M score. They'll doubtless be back at it in the phone contest this year in an effort to recapture the phone mark lost this year to PJ9JR. Several other fine Multi-Multi scores were overshadowed by the awesome EA8CR achievement. Running second was the Chelyabinsk Region Radio Club's EX9A team (normally UK9AAN) which set a new 8.7 Million Asian Record. In third place was Frankford Radio Club's HK0COP team, with a new 8.1 Million North American record. New all time honors for Europe were captured by YU1BCD.

The stateside Multi-Multi team from the K2GL contest club won stateside high at N2AA with a fine 5.1M effort. Close behind were W4BVV and W2PV.

QRPP Category

In the new QRPP category, OA8V set the world high mark, followed by G4BUE. Paul's point total just edged out Chris's fine multiplier count, with the QSO totals about equal. The high U.S.A. score was supplied by W5YZ, with KH6JLH/W8 close behind. Good show, guys, but we are hoping for a larger number of low power entries next year.

Club Competition

An incredible 107 Million points was amassed by the Frankford Radio Club as they locked up a new all time high club score total for the second year in a row. PVRC was second at 84M, with the upstart Yankee Clippers group third at 66 M, followed by the Southern California DX Club way down in the running at 30 M. In the DX Club scene, the Chelyabinsk Region Radio Club unseated the Rhein Ruhr DX Association for the first time in years with a fine 30 Million points. Congratulations on the fine group efforts fellows.

It seems that we've had a number of comments this year on the meaningless 59 or 599 exchange. Some are lobbying for a new exchange format -serial numbers, age, etc. Any way

C.W. TROPHY WINNERS AND DONORS

Single-Operator, All Band

World

Martin Laine, CT3BZ
Donor: W2AB Memorial (K4FW)

U.S.A.

Richard Klinman, W3RJ
Donor: Frankford Radio Club

Canada

VC7WJ (Opr. Stuart Santelman, K1UA)
Donor: Canadian DX Association

Caribbean/Central America

Lorne Libin, XE1VV
Donor: Mort Grotenstein, N6JT

Europe

George Rumiantsev, UA1DZ
Donor: W3AU Operators

Africa

Martin Laine, CT3BZ
Donor: Gordon Marshall, W6RR

Asia

Valentin Boshchenko, UV9AX
Donor: JA CQ Magazine

Oceania

Chuck Rademacher, ZL1ADI
Donor: Maui Amateur Radio Club

Single Operator Single Band

World (21 MHz)

Jorge Bozzo, LU8DQ
Donor: W2JT Memorial (No. Jersey DX Assn.)

World 3.5 MHz

Alex M. Konnikov, UI8LAG
Donor: Fred Capossela, K6XX

U.S.A. (14 MHz)

Bud Ansley, W6VPH
Donor: No. Illinois DX Association

Canada (14 MHz)

Raymond Post, CG6KW
Donor: Canadian Amateur Radio Federation

Caribbean/Central American (14 MHz)

Herb Schoenbohm, KV4FZ
Donor: DX Club of Puerto Rico

Europe 14 MHz

YU2CDS (Opr. Tomo Huzjak, YU2CT)
Donor: G2LB Memorial from his friends

South America (21 Mhz)

Jorge Bozzo, LU8DQ
Donor: Rafael De Leon, CX3BR

Oceania 21 Mhz

KH6XX (Opr. Danny Eskenazi, K7SS)
Donor: Pacific Radio Amateur Transmitting Society

Multi-Operator Single Transmitter

World

RF6F (Oprs. UB5EC, UB5MCD, UB5MCI, UB5MDC, UB5-059-5)
Donor: Anthony Susen, W3AOH

Multi-Operator Multi-Transmitter

World

EA8CR (Oprs. EA2OP, EA7ALG, EA7TL, EA8CR, EA9EO, OH2BAD, OH2KI/OH3XZ, OH2MM, OH6DX)
Donor: Hazard Reeves, K2GL

U.S.A.

N2AA (Oprs. N2AA, N1XX, W1PM, K2BQ, K2GL, K2NG, K2SS, K2TT, K2UR, WB2SFB, WB2VYA, Robert Walsh)
Donor: Rush Drake, W7RM

Contest Expeditions

World Single Operator

C5AAO (Opr. Leif Ottosen, OZ1LO)
Donor: CQ Magazine

World Multi-Operator

HK0COP (Oprs. N3ED, N3RD, N3AD, K3MBF, W3MA, WA3LRO)
Bill Schneider, K2TT

Top World Single Operator-Combined Phone/CW

Martin Laine, CT3BZ
Donor: John Knight, W6YY

Club Trophies

World High

Frankford Radio Club, 107, 990, 050
Donor: CQ Magazine

Most Improved Radio Club

Frankford Radio Club, 107, 990, 050
Donor: Southeastern DX Club

you slice it, we plan to retain the zone number in the exchange, but perhaps a change from RST would be welcome. Two advantages to a consecutive serial number approach are that it helps us maintain order in the Multi-Single category and it would make it difficult for entrants to pad their logs (some unprincipled guys do that). Please let us know how you feel about this issue so we can consider it for a rules change.

Our duplicate cross-check sheet requirement for bands on which 200 or more contacts were made is beginning to catch on. This year's situation was greatly improved. Beginning next year, we will seriously consider disqualifying an entrant who does not submit a check sheet, since we have now given 2 years of grace to the multitude.

In the last several years computerized logs and cross checking have become very popular. Whether or not you use a computer, we remind you that you must still send us cross check sheets with your log. A com-

puterized alphabetical listing of all calls worked on each band will suffice. On computerized logs, we have no hard and fast rules yet. But, be advised that most of these logs have a great many keypunch errors in them which can hurt your score unless you check the printouts over before you submit them. Most of you don't do that. Also, those clean recopied or computerized logs don't show us what happened in the course of the contest as well as your messy originals. It is particularly easy to bury padded contacts in recopied logs, for example. So, we recommend that you send us a photo copy of your original even when you recopy or use a computerized log.

We had an entrant this year who revealed over 20% error in copying JA call signs in a sample that we cross checked, and this is just not acceptable. We urge you all to concentrate on accuracy, not so much speed. Also, on Multi-single logs that exhibit more than a token number of time rule violations, we now intend to

BAND-BY-BAND BREAKDOWN - TOP ALL BAND SCORES

Number groups indicate: QSO's/Zones/Countries on each band

WORLD TOP SINGLE OPERATOR - ALL BAND

Station	160	80	40	20	15	10
CT3BZ		274/14/41	526/16/49	856/28/84	810/24/64	1790/23/73
KP4RF	57/8/15	334/18/54	672/24/65	1001/30/81	766/29/82	967/26/76
C5AAO	2/1/1	199/11/26	888/22/53	791/26/65	839/26/64	1485/23/69
PJ9CG	47/9/12	283/20/45	559/22/58	747/33/82	881/27/63	746/24/62
ZS5WW		52/6/5	151/18/30	756/30/62	810/28/56	1269/23/58
W3RJ	9/9/8	54/16/36	210/22/65	516/34/88	371/28/76	420/28/83
ZL1ADI		13/4/3	318/15/29	857/30/68	425/22/34	1062/20/35
XE2MX	61/4/3	354/11/14	638/18/26	739/28/56	774/25/44	654/21/35
UV9AX		208/16/42	225/19/48	579/30/67	371/24/60	339/21/59
UA1DZ		298/13/48	292/22/56	653/33/71	593/29/76	169/26/61

WORLD TOP MULTI-OPERATOR - SINGLE TRANSMITTER

RF6F	463/19/65	1069/22/66	1209/35/95	812/28/75	699/23/66
HH2CC	58/8/14	329/17/49	853/21/60	1035/34/89	1236/29/86
N3RS	18/10/15	82/19/53	383/27/79	428/34/90	554/31/91
YU3EY	39/5/15	327/14/54	351/22/73	507/34/96	515/32/77
LX0RL		745/14/59	810/23/65	309/24/63	633/28/77
K1PR	5/5/4	50/16/41	460/27/75	452/30/80	478/30/77

WORLD TOP MULTI-OPERATOR - MULTI TRANSMITTER

EA8CR	123/9/31	564/13/54	1039/19/64	2997/36/112	2693/34/109	2383/31/93
EX9A		651/14/57	1436/26/73	2301/36/103	1471/33/80	1023/28/71
HKQ CDP	21/6/11	565/15/39	1216/23/59	1921/32/88	2217/29/84	1463/24/65
UF6A		769/13/52	1362/22/77	1665/37/107	1345/35/92	1063/28/77
N2AA	62/12/19	164/19/55	427/28/84	980/36/105	863/31/99	498/27/86
W4BVV	25/10/17	144/19/50	595/28/88	810/34/93	447/31/96	414/29/87

USA TOP SINGLE OPERATOR - ALL BAND

Station	160	80	40	20	15	10
W3RJ	9/9/8	54/16/36	210/22/65	516/34/88	371/28/76	420/28/83
W3LPL	16/10/14	41/12/31	192/23/62	192/30/74	614/27/77	304/27/83
W1ZM	18/9/16	52/15/35	231/23/69	346/30/73	364/28/74	354/25/67
N2LT	5/4/3	72/16/37	151/23/62	387/32/75	469/27/76	302/25/78
W7KW	7/5/5	105/14/22	433/25/42	517/31/71	395/27/66	146/21/40
K9DX	18/8/12	60/18/34	250/24/65	470/34/72	389/26/63	154/22/59
K6NA	11/7/7	96/18/25	406/27/50	320/33/70	399/27/57	201/22/44
N9MM	4/3/4	36/15/25	164/25/61	503/32/76	360/28/65	261/24/61
N4RR	5/4/4	46/14/28	202/19/46	392/25/60	400/28/71	242/24/63
W2REH	6/4/5	65/17/42	126/21/51	368/33/84	327/30/82	162/25/65

USA TOP MULTI-OPERATOR - SINGLE TRANSMITTER

N3RS	18/10/15	82/19/53	387/27/79	428/34/90	554/31/91	333/28/83
K1PR	5/5/4	50/16/41	460/27/75	452/30/80	478/30/77	265/25/74
N4AR	10/8/9	40/16/36	373/27/78	423/34/88	492/30/82	250/29/77
K5JA	13/9/10	42/14/23	419/28/74	386/34/85	474/31/85	286/25/70
W3BGN	14/9/11	68/16/38	168/22/65	649/33/85	352/32/88	277/28/77
K4VX	11/7/10	31/13/24	291/26/75	348/31/71	550/29/76	261/29/78

USA TOP MULTI-OPERATOR - MULTI TRANSMITTER

N2AA	62/12/19	164/19/55	427/28/84	980/36/105	863/31/99	498/27/86
W4BVV	25/10/17	144/19/50	595/28/88	810/34/93	447/31/96	414/29/87
W2PV	84/10/18	148/18/51	567/29/83	997/33/102	702/30/95	477/27/84
K3WW	37/12/18	144/21/62	516/26/87	748/35/102	762/32/95	457/29/85
K5RC	21/7/12	110/19/37	614/30/86	773/38/104	756/29/88	522/29/79
KQ RF	27/11/15	172/22/38	691/31/81	681/36/92	618/29/83	281/26/49

uniformly reclassify them as Multi-Multi regardless of their objections.

Credits

It is just absolutely fantastic how our WW Contest has grown since its inception. We think it's the best conceived, best run contest around, and has the widest appeal worldwide. To make it the success it has become requires the dedication and efforts of all of you submitting logs. Also, the fine group of guys who help process the logs deserve their due. This year we have two new members of the CQ WW Contest Committee. Yuri Blarovich, VE3BMV and Jim Sullivan, W7EJ have joined our ranks. Rounding out the committee are Chairman, Frank Anzalone, W1WY; Glen Rattmann, K6NA; Gene Walsh, N2AA; Terry Baxter, N6CW; Lenny Chertok, W3GRF; Gene Zimmerman, W3ZZ; Dave Donnelly, K2SS; Lew Jenkins, N6VV; Fred Morris, AD6C; Tom Taormina, K5RC; Reg Toume, N6SV. A job well done, that's for sure.

And now, in just a few weeks, the 1979 CQ WW Phone contest will be with us (rules in last issue). With the sunspots in high gear, be prepared for a fantastic experience. See you in the melee.

73, Larry, N6AR and Bob, K3EST

USA QRM

111 QSO's per hour to Europe Sunday morning... K1ZZ. 10 Meters revived Sunday and prevented total disaster... W100. Lousy conditions... K1PBW. 25% of all contacts made during 2 1/2 hour JA opening... W2LYL.

Anticipation, exhilaration, frustration, annihilation, exhaustion-all in that order... N3AW. Never again with 100 watts... K2AJV. Neighbor came over to complain about my lighting up his bathroom lights. He left 3 hours later with a copy of the code... K3SME. 9V1RS answered my CQ with just 10 minutes left... N4RV. Trying to find operating time Thanksgiving weekend is a family crisis... AA4DR. Most enjoyable contest of the year-always... W5BE. ST0RK has the World's most fantastic call sign... N5CR. Rotor stop failed and broke 40 through 10 co-axes 25 hours into the contest-had to quit... N6VI. My call is so long it takes two contest QSO's to send it... WB6JMS. Worked a JA on 10 meters using a 150 watt light bulb load... W6SWM. With a decent 10M European opening, the West Coast might have won this one... W7KW (Opr. K7GM). How come conditions always seem to crash on the CW weekend?... W7IR and N7DX. Those 10 Meter African pileups are something else... W7JYW. Like to see the frivolous 599 report changed to something more unique... N7ES. Hope to see more DX activity in the Novice bands... WN7UMU. At 72 years of age, you don't stay up all night... W7BCS. Great to hear the Europeans on 10 instead of just hearing the East Coast working them... K9DX. Noted a new kind of QRM-CBers on sideband in our CW band... N9DP. Happiness is calling CQ on 10 and having D68AD come back... WB9POH. Amplifier blew up, bad thunderstorm, bands poor, QRM terrible- had a great time... W0IUB.

DX QRM

Fantastic 10 M opening... VU2GO. Although a fellow countryman, Murphy showed no mercy... EI2BB (opr. at EI7AA). Received 599 from Japan transmitting into a dummy load... WH2AAF. We need a Q signal to indicate that stations have worked before... VK3AEW. Sure would like to operate from a quiet location for a change... KG6JAR. Good conditions on 160 the first night only!... VR3AH. Had to call VO2BH on phone to get zone 2... VO2CW (Don't we know it, ed). First contest in six years, great to be back... VE1TG. New beam helped... CF5RA. Where were the Europeans? ... VE7CML. Electrical storms bad on 40 and 80... ZS6WW. A most enjoyable contest... ZS2RM. No line voltage for 18 hours!... ST0RK. Biggest pileup only lasted 20 minutes... AP2MC. This year I tried the most difficult band- 40 meters. Even with the 30 dB attenuator, the Eastern European QRM made it difficult to copy the West Coast... I2FGP (ex 601FG. Very funny propagation on 40 this year- unexpected openings in the afternoon to the Far East, the West Coast on Long Path... YO3BEJ. Wow, so many Americans on 10 meters... JH1ENA. There was no one on 14 MHz. because the conditions on 21 and 28 were better... JR1RNC. Great... LX0RL. Worked a lot of JAs... EX9A. Heard ST0RK calling CQ with no takers... HH2CQ. A lot of snow pulled down the 40 meter wires, the AC was off for 3 hours, Murphy sure came around!... YU3EY. The QRM in our operating room was worse than 20M... JH1ZLA.



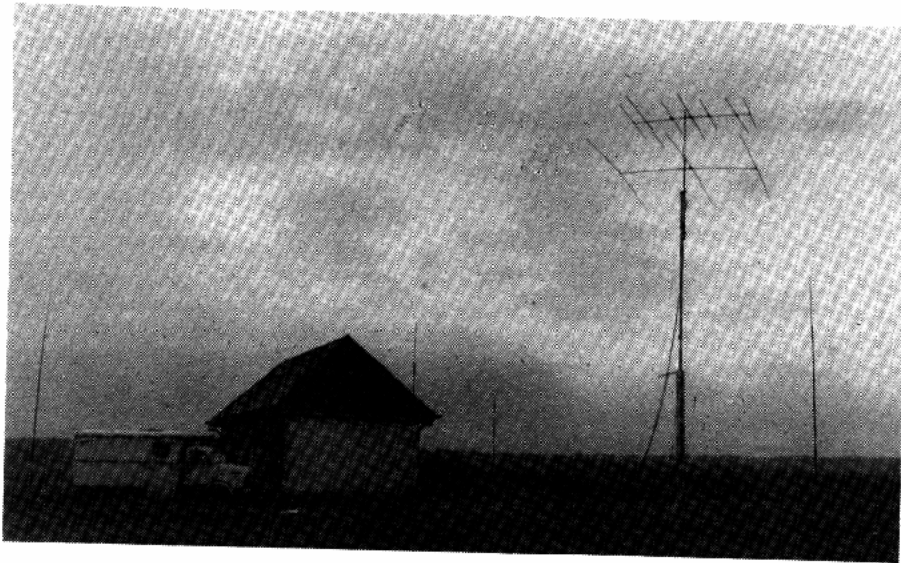
Two of the younger set, WB4SPB and WB4RUA man WB4RUA's station for the contest.



Barb Kelley "mans" the 40 meter position at KL7IRT's multi-multi station. Good show, Barb.



Roger, G3SXW, is shown here at his former EP2IA location. For QSL's check out W4YE.



LX0RL's antennas are shown here - note the wire dipole antennas for the low bands.



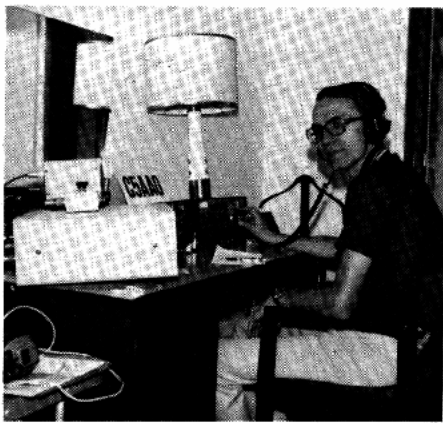
Marty, OH2BH sends this photo of his Madeira Island CT3BZ QTH. Just 5 steps in back of hut there's a 2,000 foot drop to the U.S.A. Wow!

STATION OPERATORS

Multi-Operator Single Transmitter

AL7T & KL7HMO. **DF0SAR**: DL8AN, DL8CH, DL8CM, DL8DL, DL8FF, DL8HA, DK5VD, DK0FR: DJ1HW, DK4GZ, DF9TF, DK1TX, DL8ZN, DF7GR, DF8GL, DF9UT, DJ7GY, DB6GW, DD8GW. **DL0KF**: DL2ZT, DJ2BV, DJ4FZ, DJ8FR, DK8LE, DF3LP, DJ7SW, DJ4SO. **DL0PG**: DK3BJ, DK5JI, DK8QA, DK5PV, DF1QQ, DK9JL, DK2JS, DK1CV, DJ9TQ, DJ1FC. **DL0HN**: DF1SZ, DF1TR, DF3SV, DJ9EV, DK2ZO, DL1HS, DL9TT. **DL0WU**: DJ4AX, DK4TP, DK5EZ, DK4EM, DK6JZ, DL9DY, DL9GSA, DA1UM. **DM3GM**: DM3BGM, DM3SGM, DM2FJM, DM2AGM, DM2DEM, DM2FIM. **DM3PL**: LUTZ, BERND, MATTHIAS. **DM3QD**: DM3PQO, DM3YQO, DM2CMF, DM2DTP. **DM4CN**: 8 OPRS. **DM4FM**: DM4ZFM, DM2FDM, DM4XFM. **DM5VL**: DM2GGL, DM5VVL, DM5VLL. **E11AA**: E12BB, E13CP, E16CW, E17H. **E19CB**: K3RV, N8ET. **F6KAW**: F6ARC, F6ASS, F6AUO, F6BPX, F6EBN, F6FBQ. **G4QSE** & G3R7I, G4GXL, GW4GCG, ANDREW. **HA1KSL**: HA1SL, Nyerges. **HA1KSS**: Bokor, (HA1TI), Csoka, Schanner, Barta. **HA1KZZ**: HA1ZZ, 1XV, 1ZI, Nemeth, Czoipouri, Boilogh. **HA2KME**: Adam, Bereznyci, Gersbosi, Kovdor, Varga, Gararess. **HA2KMG**: Svir, Gerendas, Hitzpal, Pojacsck. **HA2KML**: Inczedi, Nagyszilitsany. **HA2KRZ**: Raduly, Kanizay, Balogh, Simon, Sipas. **HA3KHB**: HA3GO, 3HO, 3HU, Szarka, Harsany. **HA3KNA**: Hegedus, Szabo, Hauszknacht, Kocsi, Neumann, Weisz. **HG5A**: HA5GF, 5FN, 5OM, 3NU, 7RY, 5FM, Voros, Ehmann. **HA5KA1**: Arato, Pocsi, Kovesci, Kovesci. **HA5KBC**: Seres, Tanay, Komantinger. **HA5KBM**: Lukacs, Papp, Vago. **HA5KFL**: Olah, Szollos, Kincses, Baranyi, Szoke, Osztas. **HA5KJC**: Szabo, Matyus, Kovacs, Holman. **HA5KKC/2**: HA5LV, 5MA, 5MD, 5MO, 5KP. **HA5KVB**: Suszter, Simon, Szabo, Gergelyi, Varga, Csepány. **HA5KVC**: HA6ZV, 6ZQ, 6-304. **HA6KZS**: Szasz, Kovacsne, Sapi. **HA7KLC**: HA7LM, 7MS, 7NA, 7-058. **HA7KLG**: 7-015, 7-062, 7MC, 7-032, 7-033. **HA7KSV**: HA7UF, 7SH, Adamecz. **HA8KAX**: Borgula, Toth. **HA8KUA**: Kiss, Maczalik, Miskolczi, Risko. **HA8KWG**: Kulich, Pinter, HA8BM, 8BS, 8AA, 8-753. **HG8U**: HA8UD, HA8UI, HA8ZS, HA8UY, HA8-069, HA8-061. **HA9KOB**: HA8RU, HA9PV, HA9RB, Laki, Fodor. **HA9KDA/p**: HA0HZ, 0HG, Andrei. **HA9KHW**: HA0IG, Papp. **HA0KLE**: Kurucz, Hernadi, Fabian, Deveny, Tomasovzky, Szalontai. **HA0KLU**: Macsuga, Szabo, Szakolczai, Roka, Nagy, Nagy. **HB0AYZ**: HB9AYZ, Roland, HH2CQ: W40RT, WA4DRU, N0TO, W40M, WB4OSN, W2SR, N4XR, HH2TD. **IS0TOA** & **IS0DTK**. **JA3YEE**: JA6HFV, JA3DJ, JA3JF, JE3PZC. **JA2YKA**: JH2QXG, JR3URO, JA4UDP, JH4TCM. **JA4YFH**: JH4DIT, JA4XKI. **JA4YGM**: NHK Ham Club. **JA6YDH**: Nagasaki University A.R.C.K1PR & K1TO, K1XM, WA1MAO. **K2BK** & W2VJN. **K2FL** & **KA2BAO**. **K2TD** & 2M NET. **K3IU** & 2M. NET. **K3MD** & K3VX. **K3SME** & WA3FZQ. **K3YL** & K3PA. **K4CG**: K3WUW, WA3ZJT, N4MO, WB4BQX. **K4EBY** & K1FR. **K4PB** & WA4PWK. **K4VX** & K4YEP, K0CMF. **K5JA** & K5MR, K5RX, N5AU, N5TR, W5GN. **K6DC** & W6BJH. **K6VX** & K6PJY, N6FJ. **K6YK** & WR6ACZ. **K0AT** & W0WP. **K0SR** & W0BHCH.

K0UK & K9MWM, K0CL, W0KEA. **KL7HR** & KL7IKX, WL7ABB. **KL7PJ** & AL7H, WA9IXF. **LA1H**: LA4KQ, LA8UL, LA9QI. **LJ2S**: LA6YT, LA6ZT, LA4XT. **LX0RL**: LX1PD, DJ9NX, DK1PD, DK5GB, DK5HH, DK6QI. **LZ1KKZ**: Rusev, Tenev. **LZ1KOZ**: Marinov, Zlatanov, Kaykiv. **LZ1KPM**: Paskalev, Zdravkov, Valtchev. **LZ1KRB**: Djambazov, Stoyanov, Jordanov. **LZ2KRR**: Mihajlov, Ovtsharov. **LZ2KSB**: Sabviev, Kivilov, Genov. **LZ7A**: LZ1AM, 1AQ, 1BC, 1CQ, 1FP, 1GU, 1VW, 1UO, 2YE, Pavel, Bojidar. **N1AC** & W11HN. **N3DG** & N2SB, K3KNH, N3RG, N3RL & 2M NET. **N3RS** & WA3NNA, W3XU. **N4AR** & K4KSC, N4KG, W8KIC. **N4CQ** & K4GFH. **N4RA** & WD4AXM. **N4TX** & 2M NET. **N4UM/CGA**: WA4YUE, WD4IYS, WD4IYC. **N4UM**. **N6UC** & N7RK. **N7EF** & 2M NET. **N9BN** & AA9N, KA9BBO, N9AKW, WD9BHB, WB9VLV, WB9ZBK. **OK1ALW**, DWA, ADS. **OK1KCF**: Club. **OK1KCI**: OK1AMI, 1AIA, 1DIS, 1WC, 1MIL. **OK1OFK**: Club. **OK1KPU**: OK1AXA, 1MUF, 1JDX, 1AUN. **OK1KPZ**: Club. **OK1KQJ**: Club. **OK1KRQ/p**: OK1DFQ, OK1IAM. **OK1KRY**: OK1AQG, 1AQO, 1DCM, 1DCM, 1DMW, 1DGC. **OK1KSO**: Club. **OK1KTW**: Club. **OK1KUR**: OK1AET, 1AYE, 3CLD, 3CLF, 3CWG. **OK1KYS**: Club. **OK2KMR**: OK2BQ2, 2SSS, 2SAA. **OK2KOD**: OK2BDI, Duidolf. **OK2KPS**: Club. **OK3KAP**: OK3CWU, OK3CGI. **OK3KTD**: OK3CES, 3TCV, 3TBA. **OK3RKA**: OK3TAM, 3TDP, 3COX, 3-26 016. **OK3VSZ**: OK3ZAF, 2FM, PQ, FON, EK, AS. **OK5TLG/p**: OK1DFW, FCW, MMW, RF6F: UB5EC, UB5MCD, UB5MCI, UB5MDC, UB5-059-5. **SK2GJ**: SM2EKQ, SM2FJG, SM2BFH, SM2ICQ, SM2DZU. **SK7CC**: SM7GNT, SM7IDF. **SP1PEA**: SP1CU, SP1ETC. **SP1PTT**: SP1HXC, SP1CNV. **SP2ZFJ**: SP2FAP, SP2ASJ, SP2HLO. **SP3KEY**: SP3HXH, SP3ASN. **SP3PAA**: SP3FLR & others. **SP2ZHB/2**: SP2HJL, SP2FQT, SP2FHY. **SP5KJP**: SP5JAA, SP5DDJ, SP5YCC. **SP5PWK**: SP5SIP, SP5DOX, SP5AWV, SP5AUC, SP5TI, Sottota, SP5DER, SP6KZW: SP6BNR, SP6CQO, SP0097 WR. **SP6PAZ**: SP5HEK, SP6DVP. **SP7KTE**: Club. **SP9KBY**: SP5GRM, SP9BAC. **U5WF** & UB5WE, UB5WCW. **DOLZHENKOV**, **ONISCHENO**, **TIMOFEJEV**. **UK1NAD**: UA1NAY, UA1NBF, UN1-088-333. **UK1TAR**: UA1TAC, UA9-090-117, BELOV. **UK1ZAM**: UA1ZAU, UA1-143-115, UA1-143-144. **UK2AAB**: KOSAREV, PILOSYAN, ZINKEVICH. **UK2AAP**: BILCHENKO, HUDAKOV, TROCEVSKY. **UK2AAR**: ANTSIPEROWICH, DIGILEWICH, KARAJCHENCEW. **UK2AAX**: UCZDS, UCZ-009-522, UC2-009-523. **UK2ABA**: UC2AAP, UC2AFE, UC2-009-499. **UK2ABC**: UA2FCZ, UC2-009-478, UC2-009-479. **UK2BAG**: UP2BAA, UP2BAD, UP2BAE, UP2BCG, UP2BGN, UP2BZ, UP2BDT. **UP2BAT**: UP2-038-628, UP2-038-898. **UK2BCC**: UP2BDW, UP2-038-346. **UK2GKW**: UQ2GFM, UQ2ON, UQ2-037-83, UQ2-037-1035. **UQ2OAA**: GORDYENKO, KOROBUSCHENKO, MELNIKOV. **UK2PAD**: UP2BCU, UP2PAV, UP2-038-728. **UK2PAP**: UP2BCI, UP2OX, UP2PAX, UP2-038-575. **UK3AAC**: UA3AGX, UA3DPP, UA3-170-276, UL7-03115UA3. **UK3ABB**: UA3ABZ, UA3AEM, UA3AKE, UA3AKQ, UA3XAC, UA3-170-885, UA3-170-888, UW3FI. **UK3QBM**: UA3QAI, UA3QCU, UA3QGX, UA3-121-1518. **UK3WAB**: UA3WBC, UA3WZ, UA3XJ, UA3-135-228, UL7-026-199, UV3WT. **UK3XAA**: UA3-127-021, UA4HFG, UA4HGZ. **UK3XAM**: UA3-127-376, UA3-127-808. **UK3ACA**: BAUKOW, IVANOW, OLSHANSKIJ. **UK4HAP**: UA4HAM, UA4HBP, UA4HCR, UA4HGF, UA4HHL.



Leif, OZ1LO, sported this fine layout for second high World single operator honors at C5AAO.



Dave, WA2HZR, relaxes after the contest at AP2MC. Let's have an encore, Dave.



The gang at EA8CR (front, from left: EA2OP, OH2BAD, HH6DX, OH2MM; back, from left: EA8CR, EA7TL, EA9EO and OH2KI) show us the brass key they used to rack up the all time high CW mode multi-multi record. Aw, come on fellas!

UK4LAA: UA4LAJ, UA4LAS, UA4LM. **UK4WAA:** FILIPPOV, KUZNETOV, MARKOV, SATTAROV. **UK4WAB:** BARANOV, KRYLOV, PANKOV, SAKERIN. **UK5GEC:** UB5GBW, UB5GDY, UB5GX. **UK5HAB:** UB5HEH, UB5-071-73, UB5-071-330. **UK5JAO:** DOLOTOV-SKY, GRIN, KUKSOV, ZYUGRO. **UK5LAK:** UB5LJC, UB5LJW, UB5-077-750. **UK5MAF:** UB5-059-2, UB5-059-200, UB5-059-577. **UK5MAG:** UB5MBP, UB5MDP, UB5-059-11, UT5HP. **UK5MBE:** BALNOV, DYBLJA, KUDELIN, KUSHNIR, SKVRICOV. **UK5MBF:** MELNIKOV, PRIJMA, SMOLKA. **UK5MBO:** CLUB. **UK5MBW:** UB5MFA, UB5MGM, UB5MHT. **UK5MDI:** IZOTENKO, KARPENKO, RYNDIN. **UK5QAC:** UB5QA, UB5QDU, UB5QFS. **UK5UAC:** UB5UFY, UB5-065-1701. **UK5UBB:** UB5-065-271, UB5-065-750, UB5-065-837. **UK5VAA:** ANITSOY, DOBROVOLSKI, LISOVSKY, PETRI. **UK5WBG:** DESIATNIKOV, KISHCHUK, LUPIY, MARKEVICH. **UK6AAA:** CLUB. **UK6FGF:** UF6BN, UF6FDF, UF6-012-301. **UK6QAA:** UF6QAN, UF6-014-68, UF6-014-74. **UK6WAA:** UA6-086-104, UA6-086-147, UA6-086-177. **UK7CAC:** UL7CAZ, UL7CBP. **UK7JAA:** BORYSHNIKOV, KINSFATER, ZAKHAROV. **UK8AAI:** UI8ACI, UI8BI. **UK8HAA:** BEGUAUEDOV, CEPELEV, STEPANENKO. **UK8JAA:** UJ8JAU, UJ8JCL, UJ8JCO, UJ8JCR. **UK9ADY:** UA9AAF, UA9AAX, UA9ADH, UA9ADI, UA9AFZ, UA9AJA, UW9AT. **UK9QAA:** UA9QAQ, UA9QH, UA9-134-172. **UK9SAY:** UA9SAX, UA9SCE, UA9SCJ, UA9SCT, UA9SCU, UA9TS. **UK9UAC:** CLUB. **UK9WAA:** CHAMATDINOV, NESTERENKO, SANAGATULLIN. **UK0AAC:** UA0ABB, UA0ACQ, UA0BW, UA0-103-267. **UK0LAK:** SHCHELKUNOV, A, SHCHELKUNOV, V, MIZOSHNIHENKO. **UK0ZAB:** UA2BF, UA0ZBT, UA0ZBW, UA0ZCG. **VE1AI & VE1AJP, VE1MX, VE3OCU:** VE2DZE, VE3KKU, VE3EKA, VE3CXL. **VU2GO:** VU2TS, VU2DAS. **W1MX:** K1MK, WA2EYC, WA4TTG. **W2KI & K2PO, WB2OOG, W2MO:** WA2LWT, WA2LXU, WA2QIC, WA2YLA. **WB2SST & WA2HGM, W2UI & N3KR, W2YV & N2NT, W3BGN & K3OX, N3BB, W3EYV & 2M NET, W3GG & N3AM, WB3DSX, WB3FGR, W3GNQ & 2M NET, W3NX & W3HB, W3NZ & N3AMK, W3UO & 2M NET, W3YFV & W3AOP, W4DM & 2M NET W4EI & WB4DBK, WB4RUA & WB4SPB, WA4RVC & K4IF W5AC:** K5GN, WB5YOT. **W6BIP & WA6DU, W6UA & W6UM, W9LT & K9UWA, WD9DSU, W9FC, W9FFF & WB7EEH, WH2AAF & WB6SSE, Y03KWF:** Capraru, Gradescu. **Y06KNL:** Club. **Y06KNN:** Y06AW, 6XU, Y08KGB: Club. **Y08KGV:** Y08AMT, Y08AJG, YU3EY: YU3DM, 3EY, 3FK, 3TBW, 3TVI. **ZL2WB:** ZL2BCW, ZL2AKW, ZL2CD, ZL2OM, ZL2ARN, ZL2AYZ. **4U1UN:** WA2CBB, W2AGW, W2ZZ, W2YY, W2TO, W2GM, W2RS, K5VJN. **W6QL/6Y5:** W6QL, W6KG.

UA9ACZ, UA9AGR, UA9AIS, UV9FN, UW9BY, HB9ZE & HB9ALU, HB9BLO, HK0COP: K3MBF, N3AD, N3ED, N3RD, W3MA, WA3LRO. **JA1YFG:** JE1PYM, JG1CFO, JG1EED, JG1QNV, JG1SYJ, JI1RCB, JJ1EFG, JE3GPG, JH1CQQ, JA0LXZ. **JA1YHA:** JG1BQD, JH1LGH, JA5WIO1, Ja7UES, JA9GAE. **JA1YXP:** JF1VYR, JI1HGD, JA4QNJ, JA4XPT, JH4KAN, JH4OWG, JA5IEP, JR6NJD, JH7JPO, JA8MRV, JA8RWM, JA0XUF. **JA1ZLO:** JE1JJI, JR1ANA, JR1FIG, JR1SWB, JH2CXX, JH2LZR, JH4EBN, JH6HDL, JA9FUU, JF1YFP: JE1QDQ, JH1OGC, JH1MTS, JH1RDI, JR1NPH. **JH1YDT:** JA1EPK, JE1QMV, JF1EAL, JF1EPK, JF1ODO, JH1GNU, JR1AOC, JR1FNR, JA0VSH. **JH1ZLA:** JA1KSO, JE1GWP, JE1OMO, JF1BUI, JH1DTC, JH1OCO, JI1HXR, JJ1BMB, JR1JFO, JH2IRH, JA7AKQ. **JA2YEF:** JE2ATB, JE2LDO, JF2GNY, JH2TBS, JH2VOR, JR2LDM, JR2TPD, JR2TWA, JR2VDA. **JA3YBF:** JE3MCC, JE3OPD, JE3PED, JF3ELY, JH3KIL, JH3NFZ, JR3AJZ, JR3UPO, JR3VSW, JH4CES, JH4DHX, JH6UBZ, JH0FQP. **JA3YKC:** JR2SQU, JA3ODC, JA3REU, JA3UPK, JA3WJJ, JE3KCC, JE3MXQ, JF3KJJ, JF3SFP, JH3AIU, JH3GLP, JH3JRB, JH3KWQ, JH3PKS, JH3PRR, JH3VJT, JH3VOT, JR3AFH, JR3KEG, JR3KIN, JR3RIU, JR3WLK, JH3XGK, JH4ETH, JA5GZB, JA5TDH, JA9UDU. **JA4YQO:** JA2SCJ, JA4HXC, JA4QVM, JH4AQA, JH4GYV, JA5POE, JH6CGU, JH6KDD. **JA7YAA:** JG1IGW, JG1UJD, JA7KPK, JA7WBW, JH7AEF, JH7LIS, JH7OSI, JH7Sfy, JH7WTC, JR7DQN. **JA9YBA:** CLUB STN. **JA0YAN:** CLUB STN. **K3RL & AA3B, K3FD, K3OA, W3AA, W3BI, K3WW & K3VA, K3VW, K3WJV, W3GRW, 9Y4VU, K5RC & K5GA, K5LZO, K5TU, K5WA, K5ZD, KA5CHW, N5AM, N5JJ, W5VQ, W5VAH, K8LX & K8GM, K8MD, N8EA, W8WA, W8KPL, WA8ZDT. K0RF & K0GU N0RR, W0CP, W0UA, W0UN, W0ZV, WD0DSU. N2AA & N1XX, W1PM, K2BO, K2GL, K2NG, K2SS, K2TT, K2UR, WB2SFB, WB2VYA, N4WW & AA4NA, KB4DU, W4EF, N4GG, N4RJ, N4SA, N4ZL, K0OO, N6ND & N6KA, N6RM, WB6HGJ, W7KHN. OH1AA:** OH1HU, OH1MD, OH1NH, OH1NK, OH1OG, OH1RM, OH1TV, OH2FS, OH3ZE. **OYGFRA:** OY2H, OY2J, OY3H, OY4R, OY5O, OY5NS, OY7K. **SK2KW:** SM2CEW, SM2CPF, SM2DGU, SM2DLZ, SM2DMB, SM2DMU, SM2DQS, SM2EKM, SM2EPR, SM2GGM, SM2GMZ, SM2HAK, SM2HTF, SM2HZQ. **SK5AJ:** CX1AAC, SM5AD, SM5AYY, SM5BNZ, SM5CAK, SM5OBN, SM5CEU, SM5CNQ, SM5DPS, SM5HPX, SM5GLC. **UFGA:** UP2BBT, UP2BCR, UP2BDF, UP2BEG, UP2BFL, UP2NK, UP2OO, UP2OU, UP2PBW, UP2O38 1541. **UK2BBB:** UP2BAS, UP2BAW, UP2PX, UP2MB, UP2-088-517, UP2-038-727. **UK4WAR:** UA4WXP, UA4WAM, J. Fomin, A. Kuznetsov, V. Mogunov, T. Ohotnikov, T. Yamilov. **UK5IBB:** UB5-073-313, UB5-073-433, UB5-073-209, UB5-073-2887. **UK6LAZ:** UB5-073-420, UB5-060-901, UA4-156-366, UA6-101-152. **UK6LEZ:** J. Gamzelev, S. Kiblitky, W. Indienko, V. Chermensky. **W1RR & W1KM, W2PV & K1AR, K1DG, K1EA, K1RA, K2AV, N2FB, WB2ODP, AA4KB, K9ES, W3FA & K3ZZ, W3ABC, W3XY, WA3KCY, WA3ZAS, N8II, W3MM & K1OME, K1PT, K3GM, K3OO, WA3UYD, W3TV & W3AOH, W3VW, W4BVV & K2BA, K3KU, K3NPV, W3IUU, W3ZZ, WA3AMH, W4BQF. YU1BCD:** YU1FD, YU1NQW, YU1NZV, YU1OCV, YU1ODU, YU1ODS, YU1OQI, YU1OQZ, YU1PCF, YU1QBC. **4U1ITU:** G3ZEM, SM0CCE.

STATION OPERATORS

Multi-Operator Multi-Transmitter

EA8CR & EA2OP, EA7ALG, EA7TL, EA9EO, OH2BAD, OH2KI/OH3XZ, OH2MM, OH6DX. EX9A: RA9AIL, UW3BO, UK6APA, UL7LAY, UL7LEZ, UA9AEN, UA9AN,

TOP SCORES

WORLD		USA	
Single-Op	All Band	Single-Op	All Band
C73BZ	5,135,104	W3RJ	2,186,948
KP4RF	4,908,186	W3LPL	1,837,230
C5AAO	4,874,559	W1ZM	1,804,960
PJ9CG	4,436,556	N2LT	1,801,314
ZS6WW	2,864,224	W7KW	1,660,500
W3RJ	2,186,948	K9DX	1,657,978
ZL1ADI	2,063,712	K6NA	1,587,087
XE2MX	2,048,010	N9MM	1,580,049
UV9AX	1,966,670	N4RR	1,405,812
UA1DZ	1,935,315	W2REH	1,390,311
Single-Op		Single-Op	
Single Band	28 MHz	Single Band	28 MHz
FY7BC	581,117	K8MFO	151,440
ZE1BL	376,737	W1LK	123,384
4X4UH	308,485	K5TJ	120,087
H18MOG	298,540	K4BAI	114,798
ZE8JN	255,162	W8WPC	107,378
G3MXJ	241,040	K1SA	100,985
21 MHz		21 MHz	
LU8DQ	1,011,220	N6CW	302,211
KH6XX	816,102	K4RV	277,851
ST0RK	499,296	N5CR	246,384
YU3ZV	493,816	K8CX	242,892
KH6GMP	395,458	N6TV	223,808
VK4QK	394,026	N1GL	189,924
14 MHz		14 MHz	
KV4FZ	860,580	W6VPH	468,312
W6VPH	468,312	N4EA	312,611
EL2AV	402,112	K9AM	292,680
YU2CDS	387,933	K8ZH	266,476
YU1ALZ	313,875	K3FN	249,250
UA4PNW	312,816	W2SUA	235,752
7 MHz		7 MHz	
AH6Z	387,750	W5UN	139,050
I2FGP	172,809	N6AW	121,140
ZL1AMO	166,282	W4MJ	100,686
JA2INO	161,160	W5WMU	97,929
UQ2GCN	157,635	K6ZM	92,304
YU4OY	156,216	K7UR	83,076
3.5 MHz		3.5 MHz	
UI8LAG	110,552	K5NU	19,240
UP2NV	107,250	N7RM	13,392
9K2EX	95,760	WB3AVN	11,772
YU1ACS	86,009	N7DF	11,427
UQ2GDW	82,863	K1MM	8,120
OK1DOK	70,956	W5VX	7,301
1.8 MHz		1.8 MHz	
VR3AH	20,310	K1PBW	6,006
YV1OB	12,798	K6SE	4,437
YU3EF	8,294	W8LRL	3,876
DJ8WL	8,288	W1BB/1	2,716
OK1ATP	7,890	N4PN	2,139
YU2OB	6,296	K5UR	1,296
Multi-Op		Multi-Op	
Single Xmtr	Single Xmtr	Single Xmtr	Single Xmtr
RF6F	5,866,744	N3RS	2,887,920
HH2CQ	5,256,944	K1PR	2,371,600
N3RS	2,887,920	N4AR	2,323,280
YU3EY	2,591,979	K5JA	2,246,264
LX0RL	2,389,965	W3BGN	2,192,400
K1PR	2,371,600	K4VX	1,985,277
Multi-Op		Multi-Op	
Multi Xmtr	Multi Xmtr	Multi Xmtr	Multi Xmtr
EA8CR	17,734,970	N2AA	5,073,642
EX9A	8,721,019	W4BVV	4,914,408
HK0COP	8,141,975	W2PV	4,737,378
UF6A	8,101,088	K3WW	4,572,884
N2AA	5,073,642	K5RC	4,431,636
W4BVV	4,914,408	K0RF	3,548,934

Number groups after call letters denotes following: Band, (A=all), Final Score, Number of QSO's, Zones and Countries. Certificate winners are listed in Bold Face.

C.W. RESULTS
SINGLE OPERATOR
NORTH AMERICA
UNITED STATES

W1ZM	A	1,804,960	1365	130	334
K1VR	1,089,600	974	116	284	
K1Z2	832,284	808	116	250	
W1PL	650,826	686	99	247	
K1WB	502,478	648	85	192	
W100	416,255	544	91	180	
W1XX	412,788	602	79	167	
W1XS	411,522	468	104	217	
W1BH	382,766	441	97	217	
W1FJ	356,622	449	95	199	
K1CO	248,220	371	89	163	
N1RI	141,860	274	71	134	
K1WJ	138,546	284	62	117	
WA1UZH	130,240	292	49	111	
K1MEM	127,534	247	67	120	
W1HX	122,080	201	91	133	
K1BV	120,780	336	32	90	
K1GO	98,820	210	58	125	
K1FIR	72,663	171	57	102	
W1GCU	58,368	171	41	87	
K0TB/1	55,187	319	50	123	
K1ER	46,565	128	52	87	
N1YL	41,496	122	50	83	
W1UJU	26,978	106	30	64	
W1VV	22,878	88	34	59	
WA1JGK	20,884	87	38	54	
W10PJ	6,519	53	18	35	
W1PLJ	5,850	44	20	50	
K1JK	5,995	41	17	50	
W1LK	28 123,384	401	26	80	
K1SA	100,985	378	26	69	
W1NG	92,494	322	26	77	
WB1ANT	48,000	225	23	57	
W1WY	34,358	152	23	59	
K1TN	19,344	90	20	25	
AD1Y	3,280	34	15	25	
N1GL	21 189,924	550	29	60	
WA1FCN	84,825	341	23	64	
AA1M	5,612	73	15	31	
K1SF	1,403	21	6	17	
W1YN	14 224,523	678	32	85	
W1YG	140,304	447	31	80	
W1GG	97,882	327	30	79	
AB1J	6,885	50	19	32	
K1MM	3.5 8,120	80	16	40	
K1EDA	940	23	8	12	
K1PBW	1.8 6,005	57	12	27	
W1BB/1	2,715	34	9	19	
N2LT	A 1,801,314	1386	127	331	
W2REH	1,390,311	1055	130	329	
W2IB	1,214,760	1027	128	299	
W2GD	1,099,947	1018	116	285	
K2BU	1,046,848	1047	100	252	
K2LE	1,016,136	916	114	282	
AE2A	911,880	954	97	243	
N2RM	842,823	897	98	235	
W2AEE	791,903	857	93	236	
(Opr. WA2ZKY)					
N2MM	741,950	717	98	257	
K2UA	631,890	730	91	215	
W2TT/2	570,648	570	97	215	
N2MR	483,298	529	102	232	
W2LYL	428,934	546	89	202	
W2YC	276,850	437	77	168	
N2MA	268,332	401	90	146	
W20Y	239,120	367	74	170	
K20IL	238,422	373	69	168	
W9RR/2	238,248	414	70	146	
W2RJA	163,904	289	67	130	
K2PA	142,912	280	60	46	
W2XL	139,988	264	70	128	
K2SB	136,998	285	59	118	
W2NS	134,940	279	57	116	
K2MFY	117,486	241	64	119	
W2FTY	108,324	200	71	133	
WA2LOG	80,033	169	55	108	
WA2IKO	60,095	176	46	73	
W2SGK	54,621	128	51	102	
WB2LJK	51,876	151	48	84	
K2PE	51,120	132	53	89	
K2SX	36,462	130	52	66	
W2FS	29,792	105	44	68	
K2FUJ	25,668	94	38	54	
WB2HO	24,400	96	37	63	
W2AORX	23,920	94	37	55	
W2GGE	18,360	80	26	58	
W2HAZ	15,980	71	32	53	
W2IY	11,440	52	37	51	
AAZZ	9,765	75	19	25	
WAZEYA	8,946	53	33	38	
K2HPV	7,440	51	27	33	
W2HAE	7,208	50	25	43	
W2WN	5,328	47	19	34	
AB2W	3,780	49	7	20	
WAZWSD	2,236	32	23	20	
W2FGY	1,144	18	12	14	
N2RT	336	8	6	8	
N2IN	323	10	7	10	
WAZTFC	28 77,794	284	25	72	
WAZZWH	5,510	50	12	26	
N2GC	21 82,283	273	30	77	
W2AZO	39,712	206	20	48	
W2DW	4,635	35	16	29	
W2SUA	14 235,752	729	32	82	
(Opr. N2CDO)					
K2VV	222,548	698	32	86	
W2AO	154,105	455	34	85	
N2HI	15,624	117	18	38	
W2RR	6,556	56	18	26	
(Opr. WA2A0G)					
W2ER	7 59,258	266	24	73	
K2IGW	61,540	275	24	61	
AC2U	19,812	103	22	56	
W3RJ	A 2,186,948	1580	137	356	
W3LPL	1,837,230	1359	129	341	
K3NA	927,043	927	109	268	
N3DA	904,596	856	116	247	
W3GRF	871,444	657	117	271	
W3FV	849,758	807	113	264	
K3CY	623,040	671	110	220	
K3SA	620,704	659	96	230	
W3OV	611,375	657	101	234	
N3LR	565,632	691	92	196	
N3AW	531,576	691	83	193	
K3NZ	473,473	584	93	208	
W3GU	472,323	414	86	181	
K3II	469,350	561	89	209	
N3UN	404,547	486	95	204	
W3AZ	365,014	483	87	191	
N3AFU	360,412	526	70	169	
K3NL	356,445	485	85	182	
K3ND	331,390	397	103	207	
W3GRS	326,400	453	86	169	
K3RA	297,474	408	85	173	
N3II	251,808	367	87	171	
WA3LXUJ	248,832	379	81	162	
W3KT	227,912	334	77	171	
W3GK	227,128	354	77	155	
W3UJ	224,547	307	111	156	
N3VV	214,635	396	71	134	
K3UEJ	212,164	354	86	150	
W					

N6VR	15,856	99	19	37	W7MB	14	203,286	689	31	71	WD9INS	25,410	106	47	58	W0DX	14	161,008	504	34	82	DOMINICAN REPUBLIC					
W6YMH	13,846	120	17	26	W7OF	23,664	98	28	59	K9QXY	16,560	75	31	49	W0ZZ	114,126	362	32	80	H18MOG	28	298,540	1394	24	68		
N6CWX	302,211	852	32	91	K7PM	12,076	120	20	18	N9RC	15,770	78	37	46	W0SR	2,175	35	11	18	H1BLC	14	53,502	319	25	49		
N6TV	223,808	766	30	74	W4VGM	10,896	80	20	28	W9QWM	15,224	77	41	47	W0VX	286	10	7	9								
K60Q	83,296	393	25	51	K7UR	83,076	342	25	61	W9TNZ	14,350	64	34	48													
N6IH	20	2	2	2	N7SW	41,554	193	27	52	W09HX	7,360	100	17	29													
W6VPH	468,312	1105	36	116	N7RM	13,392	138	15	21	W9ZA	83,754	313	27	72	KL7RA	903,312	1722	76	140	J3ABF	28	36,355	294	15	40		
W6XI	23,217	118	22	49	N7DF	11,427	141	13	26	N5DP	55,298	228	24	62	KL7IRT	144,330	658	31	54								
N6AW	121,140	462	30	60	W7XZ	1,180	32	10	10	W9RE	53,088	231	25	59	KI7AF	126,654	468	56	58								
K6ZM	92,304	442	25	47	K7IX/7	221	17	6	7	K9DAF	45,484	196	22	61	KI7DVE	100,978	631	32	26								
N6RA	53,110	201	29	65						W9ZTD	42,484	181	24	62	KI7EWP	6,300	69	14	21								
K6RU	41,726	235	25	37	N8JW	759,759	766	120	243	W9YYG	38,880	182	24	56													
N6CE	3.5	3,154	41	16	K8GL	498,454	565	103	223	W9S9H	30,856	148	24	52													
K6SC	1.8	4,437	162	13	16					K9ARZ	7,203	59	18	31													
					W8BTN0	320,212	415	96	181	K9RN	180,776	528	31	87	W1RFM	52,687	540	14	33								
W7KW	A	1,660,500	1603	123	246	W8RSW	317,397	487	78	163	K9PPY	130,592	423	32	74	V/P9	3.5	52,687	540	14	33						
					(Opr. K7GM)	W8BALG	265,428	452	84	135	K9AM	292,680	748	36	99												
N7XX	1,112,228	1321	110	182	K8BE	223,660	401	73	139	K9RF	204,750	594	35	90													
					(Opr. W1KKM)	K8HV	169,312	312	73	135	K9CLO	149,034	458	35	83	W1K0	A	154,880	650	34	76						
W7IR	1,029,105	950	133	252	W8DQI	126,484	230	74	132	W9GIL	88,944	297	32	77	V01F8	28	40,068	276	18	45							
K7RI	720,508	920	106	178	W8GDC	64,064	168	63	91	W9JL	60,900	209	33	67	V01H9	7	72,996	490	16	50	XE2MX	A	2,048,010	3220	107	178	
					W8YGR	32,890	96	48	82	W9BW	40,592	176	28	58	V02CV	A	28,150	282	24	26							
W7NI	611,563	774	111	172	K8MR	29,792	115	43	55	K9KU	80,704	289	27	77	VE1AH	A	827,310	1056	93	234	XE1VV	839,965	1648	85	148		
K7ZA	424,593	610	93	154	AF80	11,592	72	29	43	K9RS	35,328	154	25	67	VE1AN	90157	488	36	53								
W4ZLC	319,701	64	74	109	W8K4P	6,600	55	21	29	K9FN	31,255	137	28	67	VE1EP	1,512	24	10	11								
AA7A	258,312	348	106	176	W8MBV	3,760	39	19	21	K9CJ	23,147	107	21	58	VE1G2	28	100,620	579	20	58	VP2MU	A	685,392	1380	64	154	
W7IUV	243,294	348	103	155	W8CAO	2,345	29	20	15	K9BN	22,599	111	26	55	VE1UNB	30,745	260	18	37								
W7ZR	216,535	510	69	86	W8KAC	1,035	15	8	15	K9SM	5,762	54	16	27	VE1BNN	21	2,756	42	6	10							
K7NF	207,493	514	65	78	K8MF0	151,440	446	30	90	W9OC	4,200	38	17	25	VE2AYU	A	493,183	840	85	172							
K7ND	195,978	415	75	103	W8WPC	107,378	368	26	80	W9L	12,810	88	19	42	VE2WA	63,640	225	64	108	HP1AC	A	41,666	230	29	54		
K7LAY	154,512	364	59	89	W8WVV	16,897	103	19	42	K9KM	6,678	69	16	26	VE3AGU	A	1,181,460	1723	91	200							
W7NP	134,136	346	58	80	W8RRR	4,816	45	14	29	W9VA	4,280	46	15	25	VE3ADU	314,650	635	74	143	K4PRF	A	4,908,186	3707	135	379		
N7CW	124,047	261	65	114	AC8P	784	18	8	6	W9CA	589	21	8	11	CH3GCO	201,888	635	56	88								
W7ZMD	114,912	317	61	83	W8ADKJ	378	13	7	7	K9BGL	448	13	7	9	VE3JCV	59,400	265	45	63								
W7JYW	105,750	275	61	89	K8CX	242,892	711	30	87	K9ZZ	856,680	864	118	245	VE3EDC	50,402	143	63	95	VP2LGR	A	1,063,012	1646	92	192		
W7QS	102,204	243	54	99	W8UA	103,200	358	28	72	W0VU	256,688	388	84	160	VE3FEA	16,798	108	34	40								
K7UJ	89,838	268	53	73	W8DSO	35,076	164	24	50	W0IUB	219,145	395	77	128	VE3KZ	28	162,946	664	27	76							
N7AM	71,568	225	52	60	K8ZH	266,476	763	32	92	W0JZ	196,560	304	83	157	VE3BMV	21	137,856	586	28	68							
N7ES	58,240	247	44	47						W0JU	178,746	359	74	112	VE3JTO	14	16,065	164	16	29	W4UY	A	722,439	1343	74	169	
N7CM	47,422	141	54	77	W8TA	157,780	487	35	80	AB0X	178,177	312	80	143	VE3FAC	7	4,082	153	6	7	PJ7						
K7WA	40,144	150	52	52	W8TWA	87,615	322	30	69	AB0W	135,718	277	80	119	VE3SC	3.5	2,189	104	6	5							
W7KKR	19,184	96	40	48	W8UD	55,278	229	28	55	W8FBO	104,904	212	72	116	VE3BQ	18	700	73	3	2							
W7IIT	12,711	98	28	29	W8UVZ	58,212	221	26	72	AB0W	104,904	212	72	116	VE3INQ	1.8	100,128	470	44	52	KV4FZ	14	860,580	2482	35	105	
W7GZA	11,741	68	25	34	K8CV	38,916	155	24	68	W8QZTN	97,641	206	60	147	VE4SW	A	100,128	470	44	52							
W87SIR	10,620	75	30	29	W8RLR	3,876	19	14	24	K8SVX	84,729	177	75	108	VE5AAD	14	2,314	91	7	6							
K7PCC	9,614	93	19	19	K9DX	1,657,978	1341	132	305	AC7K	84,840	189	68	108	CF5RA	7	44,336	345	23	45							
W7JKA	9,560	70	22	28	N9MM	1,580,049	1328	127	292	W8G0B	82,425	199	61	96	VE6AYI	A	333,512	1145	71	117							
W7MCU	9,435	68	24	27	W9QA	565,278	645	108	205	K8RWL	65,125	188	46	79	VE6MP	131,401	569	41	60								
W7LCC	3,976	49	13	15	W9RW	387,092	504	101	183	W8YEF	57,970	145	57	98	CG6KW	14	221,760	950	28	62	EA8FO	A	721,468	1154	56	36	
W6ETH/7	2,720	21	19	15	K9BC	337,214	460	100	178	W8RT	51,842	128	67	94	VE7CC	1,115,684	1922	103	165								
K7WQD	2,535	25	17	22	N9NS	306,544	432	93	179	K8BRO	45,018	136	52	70	VE7CMK	365,876	1051	68	78	SU11M	A	31,324	127	18	64		
N7MW	82,625	319	25	60	W9PDQ	242,608	372	85	151	W8UZ	23,552	90	44	58	VE7CML	21	176,606	1037	27	46							
N7U	50,778	290	26	37	K9IL	208,505	347	73	150	K8FFC	18,336	77	44	52	VE7BBO	1.8	246	19	3	3							
N7ZZ	135,129	505	30	63	K9BK	92,316	214	59	98	W8BJ	16,046	83	32	39													
N7RO	75,312	380	24	48	K9AB	67,044	185	51	97	K8JBJ	3,939	37	16	23	CANAL ZONE	28	39,900	300	16	34							
W7EJ	67,900	342	26	44	W9JUV	66,633	189	61	106	W8YK	95,400	429	27	63	DOMINICA	1.8	396	14	7	11							
W7AYY	23,972	163	19	33	W9RY	57,528	139	63	90	N8CP	28,148	177	24	38													
WN7UMU	2,064	36	12	12	K9UON	35,360	127	44	60	K8VGB	16,680	101	21	39													

MADISON DOUBLE YOUR WARRANTY POLICY

Any large piece of gear we sell you (average \$300 or up) we will **double** your warranty period!
FOR EXAMPLE: A 3 month warranty = 6 months from date of purchase. 1 year = 2 years from date of purchase.

(OUR RELIABLE SERVICE DEPARTMENT REPAIRS NON-WARRANTY GEAR, TOO!)

Simply send your rig in a good shipping carton, postage prepaid, with a copy of your receipt showing date of purchase. We will repair promptly and return by best way.

NOTE: Manufacturers do not cover final in most cases, but we will try!

Try Our Competitive Prices, Too!

You, the customer, can only benefit from the Madison Double Your Warranty Policy.

Call Don - K5AAD or Mike - W5VVM for specific warranty claim questions.

POLICY SUBJECT TO CHANGE WITHOUT NOTICE



MADISON
Electronics Supply, Inc.
1508 McKinney, Houston, TX 77002, 713/658-0268

LIBERIA										ASIA																											
EL2AV	14	402,112	1305	29	74	JA2IU	31,293	208	24	33	JA1AVI	4,950	55	12	18	UJ8JAS	14	269,445	947	33	82	OK1FAR	28	88,700	367	26	74										
MADIERAS ISL.										INDIA																											
CT3BZ	A	5,135,104	4266	105	311	JA4VAD	30,192	173	27	41	JA1CMD	28,380	185	27	33	UJ8AR	7	48,230	321	24	41	OK1ATT	28	39,278	195	24	58										
RHODESIA										IRAN																											
ZE3JO	A	163,366	538	25	73	JA9SOT	27,115	190	24	31	JA1CND	25,300	195	22	28	JA9SOT	27,115	190	24	31	JA1CND	25,300	195	22	28	UJ8AQ	7	39,032	337	18	38	OK3CTD	28	11,634	97	14	28
ZE1BL	28	376,737	1414	25	64	JE1HOC	25,300	195	22	28	JA2AJA	19,656	171	19	23	JZ1NO	7.0	161,160	667	27	58	OK3CFP	28	9,956	95	15	23										
ZE8JN	285,162	993	25	61	JA7ARW	14,050	25	21	29	JR1AOC	108,472	429	31	60	UHRDI	21	21,600	211	15	35	OK2BLG	28	7,622	94	15	22											
SOUTH AFRICA										ISRAEL																											
ZS6WW	A	2,864,224	3038	105	211	JA7ARW	12,878	112	22	25	JA1CJF	146,734	540	32	62	OE5CWL	A	177,760	482	59	143	OK2BEB	28	28,860	210	53											
ZS2RM	222,458	513	51	96	JR2MLP	6,600	70	18	22	JA1EWR	5,270	60	15	19	OE3RF	72,900	376	36	72	OK3CAN	28	20,475	162	20	43												
ZS2CW	62,177	219	37	60	JA1OP	5,344	66	14	18	JA1EWR	5,270	60	15	19	OE1KU	5,880	56	8	27	OK2ABU	16,864	110	21	41													
ZS6ME	28	136,008	632	21	51	JA1EWR	5,270	60	15	19	JA6PL	4,653	66	13	20	OE1ZG	46,233	202	28	71	OK1AJO	10,388	142	20	29												
ZS1HF	87360	230	18	52	JA7ARW	12,878	112	22	25	JA6PL	4,653	66	13	20	OE3PUW/1	23,912	173	18	43	OK1JPH	2,349	40	12	17													
SOUTHERN SUDAN										IRAQ																											
STORR	21	499,296	1496	31	81	JA7ARW	12,878	112	22	25	JA1AAT	2,030	28	14	15	OE1DA/3	21	83,398	352	29	69	OK1M50	810	20	8	12											
ASIA										ISRAEL																											
VU2JN	28	16,176	193	12	36	JA7ARW	12,878	112	22	25	JA1AAT	2,030	28	14	15	OE1DA/3	21	83,398	352	29	69	OK1M50	810	20	8	12											
EP2IA	A	1,537,820	1760	90	250	JA7ARW	12,878	112	22	25	JA1AAT	2,030	28	14	15	OE1DA/3	21	83,398	352	29	69	OK1M50	810	20	8	12											
424TA	A	145,383	385	37	92	JA7ARW	12,878	112	22	25	JA1AAT	2,030	28	14	15	OE1DA/3	21	83,398	352	29	69	OK1M50	810	20	8	12											
4X4UH	28	308,485	1257	29	74	JA7ARW	12,878	112	22	25	JA1AAT	2,030	28	14	15	OE1DA/3	21	83,398	352	29	69	OK1M50	810	20	8	12											
4Z4WE	21	92,072	410	22	46	JA7ARW	12,878	112	22	25	JA1AAT	2,030	28	14	15	OE1DA/3	21	83,398	352	29	69	OK1M50	810	20	8	12											
JAPAN										MACAO																											
JA1BWA	A	750,233	941	114	169	JA2AXB	191,808	683	34	62	CR9AJ	21	98,477	916	22	49	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49									
JA1KUV	571,620	963	85	125	JA2ANA	183,172	688	30	62	HL9TD	21	29,160	255	24	36	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA2MGE	513,540	884	117	153	JA3XCL	180,875	638	33	66	9K2DR	A	369,792	674	53	139	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1GDM	502,916	782	93	143	JA1AYJ	151,536	597	30	58	9K2EX	3.5	95,760	525	16	56	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1NLX	302,331	608	76	103	JA1CJF	146,734	540	32	62	CR9AJ	21	98,477	916	22	49	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	287,130	587	73	101	JA1EWR	5,270	60	15	19	HL9TD	21	29,160	255	24	36	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	252,672	488	81	107	JA1EWR	5,270	60	15	19	9K2DR	A	369,792	674	53	139	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	229,712	440	80	116	JA1EWR	5,270	60	15	19	9K2EX	3.5	95,760	525	16	56	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	213,000	596	50	75	JA1EWR	5,270	60	15	19	CR9AJ	21	98,477	916	22	49	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	187,992	426	75	93	JA1EWR	5,270	60	15	19	HL9TD	21	29,160	255	24	36	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	186,219	336	88	121	JA1EWR	5,270	60	15	19	9K2DR	A	369,792	674	53	139	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	159,194	419	63	74	JA1EWR	5,270	60	15	19	9K2EX	3.5	95,760	525	16	56	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	132,673	305	83	98	JA1EWR	5,270	60	15	19	CR9AJ	21	98,477	916	22	49	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	131,054	317	75	79	JA1EWR	5,270	60	15	19	HL9TD	21	29,160	255	24	36	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	108,460	336	56	60	JA1EWR	5,270	60	15	19	9K2DR	A	369,792	674	53	139	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	103,936	301	59	69	JA1EWR	5,270	60	15	19	9K2EX	3.5	95,760	525	16	56	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	102,168	351	49	50	JA1EWR	5,270	60	15	19	CR9AJ	21	98,477	916	22	49	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	100,362	319	59	70	JA1EWR	5,270	60	15	19	HL9TD	21	29,160	255	24	36	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	98,252	292	47	74	JA1EWR	5,270	60	15	19	9K2DR	A	369,792	674	53	139	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	96,905	196	78	108	JA1EWR	5,270	60	15	19	9K2EX	3.5	95,760	525	16	56	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	96,363	269	54	75	JA1EWR	5,270	60	15	19	CR9AJ	21	98,477	916	22	49	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	93,366	257	60	73	JA1EWR	5,270	60	15	19	HL9TD	21	29,160	255	24	36	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	87,075	259	63	66	JA1EWR	5,270	60	15	19	9K2DR	A	369,792	674	53	139	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	87,429	266	49	54	JA1EWR	5,270	60	15	19	9K2EX	3.5	95,760	525	16	56	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	80,740	234	51	53	JA1EWR	5,270	60	15	19	CR9AJ	21	98,477	916	22	49	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	69,425	310	23	33	JA1EWR	5,270	60	15	19	HL9TD	21	29,160	255	24	36	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	66,566	290	40	43	JA1EWR	5,270	60	15	19	9K2DR	A	369,792	674	53	139	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	64,260	182	58	77	JA1EWR	5,270	60	15	19	9K2EX	3.5	95,760	525	16	56	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	63,591	185	58	65	JA1EWR	5,270	60	15	19	CR9AJ	21	98,477	916	22	49	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	61,740	220	47	51	JA1EWR	5,270	60	15	19	HL9TD	21	29,160	255	24	36	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	54,936	194	47	62	JA1EWR	5,270	60	15	19	9K2DR	A	369,792	674	53	139	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	50,397	181	53	54	JA1EWR	5,270	60	15	19	9K2EX	3.5	95,760	525	16	56	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	49,100	177	37	63	JA1EWR	5,270	60	15	19	CR9AJ	21	98,477	916	22	49	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	41,888	194	37	60	JA1EWR	5,270	60	15	19	HL9TD	21	29,160	255	24	36	MA	21	98,477	916	22	49	MO	21	98,477	916	22	49										
JA1N2X	36,244	160	40	42	JA1EWR	5,270	60	15	19	9K2DR	A	369,792	674	53	139	MA	21	98,477	916	22	49	MO	21	98,477													

PERU		25.305	251	15	20
0A4AHZ	7				
VENEZUELA					
YV1NX	A	856.514	1194	75	166
YV40Y	7	156.216	740	18	51
YV10B	1.8	12.798	151	10	17

QRPP					
0A8V	A	199.383	550	51	72
G48UE	"	192.280	547	49	141
W5YZ	"	116.560	226	80	108
KH5JLH/W8	"	106.930	234	58	112
OK1DKW	"	94.628	449	44	120
SM5CCT	"	92.443	338	45	124
W4SPOC	"	84.784	309	51	61
WA4IAR	"	78.507	208	55	88
WA2JOC	"	29.402	89	42	80
WOPNE	"	19.600	94	42	56
VE5JQ	"	18.564	217	22	20
HB9IK	"	15.908	159	21	61
JAGBUK	"	15.879	90	34	33
JF3WNK	"	13.192	78	28	40
W1PWW	"	8.804	47	30	41
W7RRJ	"	5.032	50	16	18
G3JUD	"	4.272	79	14	34
JH1HTK	"	2.268	34	13	15
K8EEG/G	"	8	2	2	2
K1LWV	28	55.112	240	24	59
OK3ANG	"	10.120	79	17	27
WD9ENH	21	5.060	45	14	30
OK1ASQ	"	1.040	22	8	12
4Z4UO	14	20.436	182	8	31
VE4NU	"	2.409	114	6	5
KL7BT	"	1.134	20	9	12
OK3CAA	1.8	9	4	1	2

MULTIOPERATOR SINGLE TRANSMITTER

NORTH AMERICA UNITED STATES

K1PR	2,371,600	1710	133	351
N1AC	1,104,201	1075	102	255
W1MX	1,009,656	1003	109	270
W2YV	1,884,696	1401	129	223
W2KI	663,552	737	101	223
W6SST	624,630	789	87	195
K29K	542,278	625	96	218
W2UI	369,648	494	84	188
K2FL	363,200	413	98	222
K2TD	354,000	449	88	207
W2MO	41,984	130	48	80
N3RS	2,887,920	1798	149	411
W3BN	2,192,400	1528	140	364
W3GG	999,984	1070	100	232
W3NX	603,479	511	113	246
K3MD	558,056	636	95	221
K3IU	408,654	475	98	213
K3YL	393,600	612	77	169
W3GNQ	301,077	474	82	161
W3UD	291,868	411	80	82
N3RL	267,244	351	93	191
K3SM	205,016	332	77	155
W3EVW	143,220	245	82	138
W3YFV	69,500	177	56	83
N4AR	2,323,280	1568	144	370
K4VX	1,985,277	1492	135	334
N4RA	585,042	618	105	242
K4CG	492,081	664	82	185
W4EI	463,151	584	94	205
WB4RJA	366,520	416	108	232
K4PB	350,075	496	80	195
W4DM	224,968	342	82	162
N4TX	160,380	290	72	148
K4EBY	128,898	239	78	120
N4CO	77,696	215	45	83
W4ARVC	28,254	102	41	61
K5JA	2,246,264	1620	141	347
W5AC	906,675	875	125	280
K6XV	1,288,966	1397	115	207
K6DC	670,710	832	104	179
W6BIP	628,653	845	103	166
K6YK	140,448	242	93	131
W6UA	138,000	218	85	145
N6UC	69,888	256	41	55
W87FFF	70,672	226	47	65
N7EF	61,776	325	35	31
W9LT	1,066,256	947	127	285
N9BN	65,664	183	59	93
K9KQ	1,306,755	1299	119	236
K9AT	686,784	745	105	231
K9SR	239,564	390	83	138

ALASKA

KL7HR	446,512	1011	63	113
KL7PJ	326,060	902	57	83
AL7T	278,630	988	49	61

BAHAMAS ISLANDS

N4UM/C6A	2,369,400	3668	93	207
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CANADA

VE1AI	1,270,447	1475	103	250
VE30CU	598,050	1037	91	179

HAITI

HH2CQ	5,256,944	4696	133	369
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JAMAICA

W6QL/6Y5	1,170,702	2239	69	165
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UNITED NATIONS BUILDING

4U1UN	424,564	1743	48	70
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ASIA

INDIA	633,930	1049	83	172
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JAPAN

988,694	1066	125	214
400,113	721	84	119
121,965	274	77	96
102,096	275	66	86
1,547	31	10	7

ASIATIC USSR

UK9SAY	1,658,004	1697	100	272
UK9ADY	1,636,475	1812	89	246
UK9UJO	601,475	1123	71	174
UK9DAA	453,530	911	54	136
UK9WAA	188,632	488	42	110
UK9AAC	821,025	1360	87	180
UK9LAK	331,568	743	79	133
UK9ZAB	313,390	1023	61	83

GEORGIA

5,866,744	4252	127	367
232,120	1181	19	51
231,978	700	35	88

KAZAKH

595,576	1195	71	147
31,005	174	18	47

TADZIK

701,628	1342	67	169
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TURKOMAN

845,312	1264	73	183
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UZBEK

71,706	247	35	79
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EUROPE BULGARIA

1,135,632	1370	110	291
706,746	1056	100	266
491,416	1514	60	182
187,005	668	56	139
113,220	261	69	111
18,414	115	37	56
3,686	71	10	28

CZECHOSLAVAKIA

1,511,170	1517	118	315
1,416,271	1566	114	329
920,023	1257	103	283
580,020	1042	80	237
428,383	845	62	145
341,364	880	62	145
322,958	701	78	185
261,030	625	70	154
239,680	875	70	154
202,608	609	58	143
166,358	437	47	106
118,900	515	44	106
70,752	401	34	100
48,910	339	61	85
44,541	383	19	82
31,650	127	30	45
24,219	151	27	54
7,729	85	18	21
5,699	62	17	27
2,496	65	9	24
1,824	32	14	24

ENGLAND

860,124	1343	85	228
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FRANCE

605,070	1502	78	187
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GERMANY (FRG)

2,033,520	2091	112	332
1,600,159	1557	115	358
1,474,968	1633	108	336
1,168,557	1482	94	267
869,400	1165	95	250
511,300	1007	86	204

GERMANY (GDR)

1,009,125	1368	105	270
442,980	905	81	195
436,150	888	79	196
418,462	112	67	188
105,462	535	41	121
93,930	376	51	155
42,400	316	33	73

HUNGARY

2,168,894	2326	119	323
1,099,593	1502	106	277
1,071,656	1351	103	285
894,204	1346	104	250
619,458	1314	70	188
609,708	1081	87	211
579,150	916	92	205
519,284	955	91	181
515,440	1077	76	196
455,364	1057	69	165
408,616	749	83	181
380,250	930	69	165
320,917	669	74	195
278,300	784	66	154

264,364	727	57	155
250,755	693	62	157
227,760	649	58	150
218,400	770	55	140
190,856	617	56	138
188,739	653	60	140
152,334	504	54	132
135,136	480	47	117
115,515	344	54	97
96,228	341	49	113
81,650	319	45	97
37,968	238	32	80
28,380	270	25	61
19,866	206	15	62
15,862	120	26	51
13,475	137	22	55
9,744	105	19	39

IRELAND	1,785,550	2559	90	245
E19CB	1,136,762	1726	84	242

LICHTENSTEIN	134,520	458	46	106
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LUXEMBOURG	2,389,965	2981	108	303
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NORWAY	998,292	1487	80	196
76,500	386	31	71	

POLAND	640,233	1025	93	226
531,658	852	93	230	
152,880	460	60	135	
135,420	818	36	112	
86,436	686	31	95	
84,694	417	26	68	
56,296	319	36	88	
46,052	325	33	83	
38,556	292	24	84	
17,220	110	32	50	
589	11	9	10	

ROMANIA	35,145	259	28	71
30,338	333	14	63	
2,108	69	9	22	
2,077	56	7	24	
600	22	7	13	

SICILY	217,764	621	59	148
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SWEDEN	210,239	634	45	104
29,970	131	45	90	

YUGOSLAVIA	2,591,979	2108	136	397
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EUROPEAN USSR

KARELIA	136,119	719	34	123
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BYELO RUSSIA	426,390	1126	61	172
306,220	789	66	176	
300,604	850	63	160	
2				