



Paul, K1XM, and his XYL Charlotte, KQ1F, helped staff this year's HC8A effort, third in the world in Multi-Single.

1986 CQ World-Wide DX Contest CW Results

BY LARRY BROCKMAN*, N6AR/4, AND BOB COX**, K3EST

Suppose you could experience the DX Contester's dream. What would it be? Possibly you would like to win the contest from some far-off place, or perhaps field the ultimate super-station in the USA, one where you could work everything on the first call. Many have had one of these dreams. Buzz Reeves, K2GL, not only had the second dream, but he lived it. Buzz put together a super-station whose N2AA operating team utilized it to the fullest in becoming the perennial Multi-Multi winner for the USA. A look at this year's results is a case in point—67 countries on 160; 95 on 80; well over 100 on 40, 20, and 15; and almost 50 on a quiet 10 meters. Not bad for one weekend. Close to 6 band DXCC in 2 days!

But it's the experience on the air with N2AA that convinces one of the real mysticism of K2GL's station. For example, as you tune across the band you're likely to hear a zone 23 station give N2AA an answer to a QRZ, helpless to get in on a piece of that action yourself. Or, how about the long string of answers they would get on a dead or dying band? Then there's the stuff you can't even hear that they

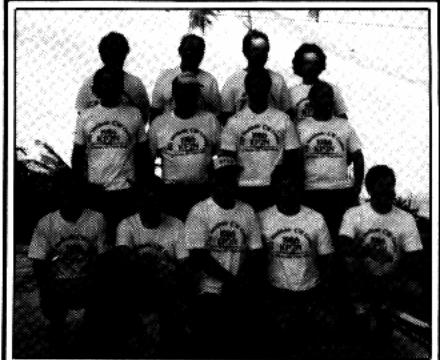
are working. In the end we all shake our heads in amazement at the final score as well.

There's a video tape that tells the story of K2GL's station. It's a real eye-opener, too. An arsenal of big antenna arrays are being built and erected right before your eyes, not to mention the battery of gear and the intensity of the operation that follows. Of course, the commitment it takes to field such a station is incredible—the work, the pain, the time, the space, the expense of it all. Not many could afford to do it, but Buzz could and did. Yet if money were the answer, that would be one thing. But money is not the answer. There's something intangible in what it takes to put a super-station together and keep it together for any length of time. Those who have tried it know what we mean. Just think about the problems in keeping your own station in top condition—the wind, rain, snow, cold, heat, normal wear and tear, the unexpected. Just one rotor can be an incredible thing to keep running, with some subtle problem areas to solve. Multiply your maintenance by 10 or more, and it's clear what kind of a challenge it is to keep a super-station running. Not to mention the challenge of keeping a top-notch operating team motivated year after year.

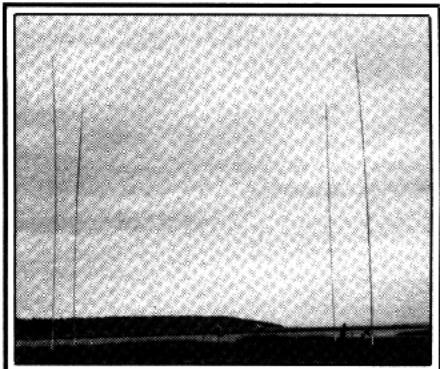
It is with regret that we report that K2GL died this year, and his super-station passes on along with him. For most of us K2GL served as an example of how some things could be done.

* 12041 Walker Pond Rd., Winter Garden, FL 32787

** 3039 Campbell Place, Davis, CA 95616



Here's the team at world high Multi-Multi KP2N. Top row, from left, N7BG, W6MSG, KA6S, WB6NRO; second row, K5VT, W6OUL, KC7V, AA6AA; and bottom row, WA2UZA, N6DX, W7CB, N6ZV, N6VI.



W1KM used this four-element phased array of verticals on 80 meters to amass 524 QSOs while winning the All Band Single Op category for the USA.

It was actually possible to put that kind of a super-station together; the band was really open at that time; all that DX really was available. In recent years several super-stations have met the same fate—K2GL, W2PV, and W6AM to mention a few. We might all do well to reflect on what those guys really meant to us as DX contestants. "Nothing," you might say. Well, "nothing" is not an honest answer. If you were active at all in the past 10 years, you know that even if you never met any of those three guys, they affected you. And not just the "Yeah, I remember all the times I had to wait for those bruisers in the pile-up" type of effect either. Those super-stations and the operators who manned them provided us all with some real inspiration and drive. They gave us some good, old-fashioned determination, a goal to strive for; they built confidence that it could be done because someone else had done it. To many their example also provided training for all of us in technique. Lastly, their big signals were like magnets that attracted DX, DX that we would otherwise not have worked because they wouldn't even have known the band was open. Yes, Buzz Reeves, K2GL, will be missed.

The All Band Results

Despite generally poor conditions and low sunspots, the 1986 CW Contest produced some truly amazing scores around the world.



QRP enthusiast CX8DT set up portable 100 feet above the Atlantic Ocean at Punta Negra, Uruguay.

Dick Norton, N6AA, set a new world and South American continental record at 9Y4VT with a fantastic 8.2 million points. Dick amassed over 5000 QSOs, 146 zones, and 396 countries in besting his own 1983 World record mark from the same location by 1 M points. But alas, we are saddened to report the passing of Cyril Balwah, 9Y4VT, Dick's host, and an end to an era of contest records at 9Y4VT. Dick had lots of competition. Finishing second with a new North American record was Chip, K7JA, at Pedro, NP4A's super-station with a fine 7.04 M. Then in third and fourth place were a pair of visiting operators in PJ land. Dean Fredriksen, W8ZF at PJ2FR, and John Corvelli, W2GD at P40GD, finished in that order. Not far behind in fifth place was Jim Neiger, N6TJ, with 6.8 M at D44BC. Jim returned for the second year in a row, this time setting a new African continental record. Jorma, OH2KI, took top honors for Europe as ZB2X, with a fine 3.8 M points, enough for a new European continental mark and tenth in the World.

Things were tough in 1986 Stateside, with absolutely no records set in any category of the contest. Yet Greg, W1KM, broke 3 M in capturing USA Single Operator all band high for the USA. Greg's 80 meter effort is absolutely incredible for an all band entry, with 524 QSOs on that band, and that proved to be the real difference. He was followed by Scot, K0DQ, guest operator at W3GRF, and a string of W1, 2, and 3 stations. Yes, the northeast swept all ten top spots in the USA this year.

This year's Multi-Operator efforts had the interesting distinction of not setting any records in the contest. Yet the Multi-Single category continues to enjoy enthusiastic participation and growth. Worldwide, it was the teams at KP4BZ (7.9 M), VP9AD (7.8 M), and HC8A (4.6 M) in that order for a Western Hemispheric sweep of the top three spots. Europeans LZ7A, UZ2FWA, and EA3VY took the second three slots in that order, and all were closely packed at about the 4.5 M mark. In the USA, Austin Regal's N4WW team won with an impressive 4.2 M effort, 700K above the pack, led by W5WMU and N3RS at 3.6 M and 3.4 M, respectively.

The boys at KP2N sent us photos of the panoramic view from their Virgin Island location, but we couldn't figure out how to do it justice in the magazine. The unobstructed shot they had helped them scoop up the world high Multi-Multi honors with a fine 17.5 M, just shy of the

North American record. The teams at EA9CE (16.5 M) and J6DX (14.7 M) finished second and third, welcome multipliers for us all.

As mentioned in our introduction, the top USA spotlight went to N2AA (at the K2GL super-station) for the last time due to Buzz's death. That's twice in a row for N2AA. Congratulations on the fine 7.6 M effort, guys. In second place was Frank Donovan's W3LPL team. Following our two year rule, that makes W3LPL the trophy winner. Well, it is the rule, I guess. The guys at NR5M finished third with a fine 5.5 M despite the significant disadvantage in location.

In the QRP category, a tough game in any year, but even tougher in the sunspot minimum, it was Stancho, LZ1BB, who walked away with a great 868 K effort, almost double the runner-up 4X6IF at 424 K. The list of QRP-ers submitting entries continues to grow longer and longer, indicating that the real thrill of the contest is the skill and challenge of it all. Congratulations to all the hard-working QRP-ers for a job well done.

This year's combined SSB/CW all band winner was Olli Rissanen, OH0XX, who posted an impressive 12 M points from FY5YE. Olli also contributed to the CW mode winning Finlandia Contest Team, which sent representatives to 4 continents and amassed over 21 M points. Four of the entrants (EA9AM, PT7BZ, FY5YE, and ZB2X) finished in the top 10 worldwide. Let's see some more competition in the team arena in future years. It's a good way to drum up some friendly rivalry, and team contesting does not affect the club competition, which is separate.

Speaking of the club competition, the Frankford Radio Club recaptured its top USA spot from the Yankee Clipper Contest Club this year with an impressive 120 M points compared to 95 M points for the Clipper Club. In third place was the Southern California Contest Club, narrowly edging out the Potomac Valley Radio Club by .5 M out of 50 M. In the DX Club competition the Rhein/Ruhr DX Club narrowly edged out the Bavarian Contest Club at the 25 M level for first place. The Northern Lithuania Contest Club (21 M) bested rival Lithuanian Contest Club (17 M) for third place. Just a note on club scoring. It is important that your club name appear on the log submission. It is not sufficient that the list of entries sent by the club show all the calls and scores. That's the most common reason most club scores are lower than club officials feel they should be. We've had some complaints on this, but the only way we can be sure an entrant means for his score to be counted for a club is by looking at the actual log. This year, for example, one club claimed credit for HS0A, but the HS0A log clearly specified a club on it different than the other club's list. So the logs themselves will be the final guide.

Single Band Categories

The lower bands continued to dominate the competition in this year of the sunspot low. Although no 160 M records were set this year, the low band enjoyed new levels of activity from around the world. The Europeans led by HB9AMO (87 K), IO2UIY (82 K), and SP3BQD (70 K) ran away with the top 3 worldwide spots. In the USA, W1CF challenged K5UR's 2-year-old record with a fine 43 K, but failed to top it. The defender, K5UR, finished second, complaining that the lack of a JA opening kept him from achieving a repeat of his record.

TOP SCORES

	WORLD Single Op All Band	USA Single Op All Band
9Y4VT	8,191,246	W1KM 3,029,832
NP4A	7,040,400	W3GRF 2,933,507
PJ2FR	7,028,688	K1ZM 2,779,014
P40GD	6,991,947	K1EA 2,631,084
D44BC	6,815,001	K5ZD/1 2,469,159
EA9AM	6,367,956	N2LT 2,446,688
FY5YE	5,836,215	K1TO 2,311,680
PT7BZ	5,242,977	K1CC 2,253,421
ZT5XX	3,929,844	W3BGN 2,209,006
ZB2XX	3,796,480	K3WW 2,166,300

	Single Op Single Band 28 MHz	Single Op Single Band 28 MHz
4M7A	312,092	N6BFM/4 11,600
LU4FDM	120,528	KB3A 6,644
LU1DCB	105,225	WA3CGE 6,380
VK6HD	80,448	AC8W 5,700
VK6SM	74,472	KD1U/4 4,059
LU5UL	66,990	WA6FGV 4,068

	21 MHz	21 MHz
PY5CA	1,102,486	K3RVI/4 258,888
CX7BY	747,604	K1ZX/4 238,518
ZS6BCR	673,068	WB4TDH 197,714
UB5IJG	447,984	K5GO 192,584
LU1AF/D	338,520	N4BP 134,244
YW5X	290,996	K5TSQ 126,120

	14 MHz	14 MHz
P40N	1,477,905	W2YY 573,990
KP4FI	1,218,928	K2VV 534,576
YW1A	829,280	K1RU 468,402
CX5AO	828,933	K2RD 394,236
DK3GI	822,024	WB8JBM 337,220
HK1HHX	772,376	N5CR 327,740

	7 MHz	7 MHz
UP3BA/UF	696,134	N6QR 336,980
I4IND	553,632	W7EJ 270,592
I5MPN	496,546	AA4LU 269,800
CX8BBH	448,723	W6YA 263,451
4N1C	395,388	K0RF 263,296
LZ1KDP	368,368	W6PU 208,611

	3.8 MHz	3.8 MHz
P40R	576,725	W1FV 195,804
EA8RCT	441,350	W6RJ 106,600
UP2BVK/UF	339,158	W8UVZ 34,700
CT5AT	295,464	K9DX/6 34,650
SP3GEM	266,376	WE5P 32,908
YX3A	205,300	W3QM 25,382

	1.8 MHz	1.8 MHz
HB9AMO	87,204	W1CF 43,460
IO2UIY	82,377	K5UR 28,815
SP3BQD	70,468	N4IN 22,200
DK8NG	69,012	K4TEA 18,870
OZ1LO	63,770	W0ZV 13,330
UL7MAN	52,938	WB3AVN 10,915

	Multi-Op Single Transmitter	Multi-Op Single Transmitter
KP4BZ	7,922,868	N4WW 4,176,612
VP9AD	7,830,495	W5WMU 3,589,872
HC8A	4,641,780	N3RS 3,434,920
LZ7A	4,532,352	K3KG 3,308,125
UZ2FWA	4,436,100	K4JPW 2,814,714
EA3VY	4,417,268	K3OO 2,582,118

	Multi-Op Multi-Transmitter	Multi-Op Multi-Transmitter
KP2N	17,480,855	N2AA 7,558,965
EA9CE	16,497,312	W3LPL 7,016,880
J6DX	14,710,800	NR5M 5,542,537
VP2MU	10,725,081	N4ZC 4,164,714
UP9A	8,208,608	W3GM 3,862,982
N2AA	7,558,965	NF2L 3,752,720

CW TROPHY WINNERS AND DONORS

SINGLE OPERATOR, ALL BAND World

9Y4VT (Opr. Dick Norton, N6AA)
Donor: W2AB Memorial (Albert Kahn, K4FW)

World QRP
Stanco Stanchev, LZ1BB
Donor: Gene Walsh, N2AA

World—Most Contacts (5108)

P40GD (Opr. John M. Crovelli, W2GD)
Donor: KV4AA Memorial (14270 kHz Group)

USA

Gregory M. Cronin, W1KM
Donor: Frankford Radio Club

Canada

James William Roberts, VE3IY
Donor: Canadian DX Association

Caribbean/Central America

NP4A (Opr. Chip Margelli, K7JA)
Donor: Peter Monroe, WB1DQC

Europe

ZB2X (Opr. Jorma Saloranta, OH2KI)
Donor: Edward Bissell, W3AU

Africa

D44BC (Opr. James B. Neiger, N6TJ)
Donor: Gordon Marshall, W6RR

Asia

VS6DO (Opr. Akito Nagi, JA5DQH)
Donor: Japan CQ Magazine

Japan

Toshiro Ogino, JI1QPU

Donor: Japan Crazy Contesters Club

Oceania

Philip David, YB0ARA

Donor: Maui Amateur Radio Club

South America

PJ2FR: (Opr. Richard J. Smith, N6KT)
Donor: YV5AAZ Memorial (Venezuela DX Club)

SINGLE OPERATOR, SINGLE BAND

World (14 MHz)

P40N (Opr. Paul Newberry, N4PN)
Donor: W2JT Memorial (NJ DX Association)

World—21 MHz

PY5CA (Opr. Jim Hoffman, K5FA)
Donor: South Jersey DX Assn. (N2CW Memorial)

World—3.5 MHz

P40R (Opr. Bob Alphin, K4UEE)
Donor: Fred Caposella, K6SSS

World—1.8 MHz

Pierre Petry, HB9AMO
Donor: KP4ES Memorial (Chip Margelli, K7JA)

USA (14 MHz)

David J. Horbachuk, W2YV

Donor: Northern Illinois DX Association

Canada (14 MHz)

Ron Vander Kraats, VE3AT

Donor: Canadian Amateur Radio Federation

Caribbean/Central America (3.5 MHz)

Luis Caamano, HI8LC

Donor: DX Club of Puerto Rico

Europe (14 MHz)

Jukka Keskiaho, OH8PF

Donor: Southern New England DX Club

Australia—14 MHz

K. E. Hamion, VK4TT

Donor: Jay Carr, W6FAY

Japan—21 MHz

Yoshihito Takahashi, JA1YYE

Donor: DX Family Foundation

MULTI-OPERATOR

SINGLE TRANSMITTER

World

KP4BZ (Opr. KP4BZ, NP4Z, WP4I, WP4D, WP4K)

Donor: Anthony Suse, W3AOH

USA

N4WW (Opr. N4WW, K0LUZ, KU4J, WY4A)

Donor: Doug Zwiebel, KR2Q

Europe

LZ7A (Opr. LZ2PO, LZ2HE, LZ2DF, LZ2CC, LZ2-E-44)

Donor: K3AO Memorial (Friends of K3AO)

MULTI-OPERATOR

MULTI-TRANSMITTER

World

KP2N (Opr. KP2N, AA6AA, K5HK, K5VT, KA6S, KC7V, N6DX, N6VI, N6ZV, N7BG, W6MSG, W6OUL, W7CB, WB6NRO, WT6T)

Donor: Hazard Reeves, K2GL

USA

W3LPL (Opr. AI3M, K3DI, K3RA, KT3Y, N8II, W3XY, WB3JRU, WD4AXM)

Donor: Jim Rafferty, N6RJ

Europe

UP9A (Opr. UP2BAW, UP2BCO, UP2BCT, UP2BCW, UP2BIG, UP2BUJ, UP2BIL, UP2BN, UP2BNZ, UP2BRF, UP2CY, UP2PAJ, UP2QA, UP3BF)

Donor: OH DX Ring

CONTEST EXPEDITIONS

World Single Operator

EA9AM (Opr. Martti Laine, OH2BH)

Donor: Yankee Clipper Contest Club

World Multi-Operator

J6DX (Opr. K6GXO, N9AG, NC8G, W8ILC, W8OK, W8PR, WB8ENR, WD8IXE)

Donor: Bill Schneider, K2TT

SPECIAL SINGLE OPERATOR

COMBINED SSB/CW

World—All Band

FY5YE (Opr. Olli Rissanen, OH0XX)

Donor: John Knight, W6YY

World—Single Band

Jukka Keskiaho, OH8PF

Donor: Yuri Blanarovich, VE3BMV

CLUB

World—SSB/CW

Frankford Radio Club

Donor: CQ Magazine



John, W2GD, managed to make more contacts, 5106 in all, than anyone else this year, but that was only good enough for third in the world in the all band category at P40GD.

On 80 meters new world and four new continental marks were set as Bob Alphin, K4UEE, operating P40R, demolished the old 1983 record of 333 K set by VP2KAC. Bob's 577 K included almost 1700 QSOs, 25 zones, and 90 countries. Number 2 was EA8RCT at 441 K (a new African continental record); number 3 was UP2BJK/UF at 339 K (a new Asian continental record); and number 4 was CT5AT at 295 K (a new European record). Eighty was open an incredible 15 or 16 hours a day, providing fertile ground for such blockbuster scores.

In the States, W1FV took the top spot on 80 for the second year in a row with 196 K, just shy of his own record from the year before. He was followed by Bob, W6RJ, at 107 K. For anyone who has ever operated 80 meters from California, that's an unbelievable score!

Meanwhile, the 7 MHz band continued to provide the 20+ hours of opening reported in 1985. Making the most of it was UP3BA/UF, who set a new Asian continental record with 715 K points, topping his own 1984 standard of 574 K points. A pair of Italians battled it out for second place, with the winner I4IND, followed closely by I5MPN.

Forty meters represented the only area the West Coast dominated in the USA competition for 1986. Five of the top 6 slots went to stations in Colorado or west, with Adam, N6QR, grabbing the prize with a fine 337 K. Jim, W7EJ, was second with 270 K, followed by AA4LU, W6YA, K0RF, and W6PU. A special congratulations to N6QR and W6YA, both of whom broke 100 countries on 40 meters from W6 land, a monumental task, indeed.

Paul Newberry, N4PN, operating at P40N, beat the old world high 14 MHz mark of VP2KAA with a fantastic 1.48 M for a new record worldwide and in South America, and the highest single band score ever achieved on CW in the contest. KP4FI finished second at 1.28 M, just under the old record, followed by YW1A and CX5AO. DK3GI's 822 K was good enough for tops ever from Europe (as he bested his own old 1985 record), and he finished 4th worldwide.

USA high 14 MHz went to W2YV (operated by KQ2M) with 574 K, with John, K2VV, close behind at 534 K. John managed to hold on to his old record by a hair. Third and fourth place also went to the northeast, K1RU and K2RD in that order.

The charm that seems to smile on the CQ WW Phone Contest propagation for the high bands just didn't stick around for late November. Hence, our high band scores suffered the same this year as they did in 1985, with no new records anywhere. In fact "southern expo-

sure" dominated the world competition this year with all six of the high scores on 10 and 15 meters located in either South America, southern Africa, or Australia (with one exception). On 15 meters Jim Hoffman, guest operating at PY5CA, broke 1 M to capture world high at 1.1 M. He was trailed by CX7BY (750 K) and ZS6BCR (673 K). The lone exception to the dominance of the "southern exposure" was UB5IJG, whose 448 K put him fourth in the world on 15 meters. On 10 meters 4M7A managed a cool 312 K, amazing considering conditions, and almost three times the nearest competition from LU4FDM with 120 K and LU1DCB with 105 K. Two VK6's battled it out for 4th place, with VK6HD narrowly besting VK6SM.

The USA troops were led on 15 meters by K3RV4 (259 K) in a tight battle with K1ZX4 (238 K). On 10 meters N6BFM/4 led the pack with 11.6 K, but that was nearly double KB3A's second-place score of 6.6 K. Yes, it definitely helped to be further south on 10 and 15 this year.

The combined SSB/CW single band winner this year was Jukka, OH8PF, who topped 2 M on 20 meters on combined modes. Congratulations, Jukka, and from a tough location in the sunspot minimum, too.

Some Special Comments

The variability of conditions from one location to the other bears some special comment this year, especially since it's the bottom of the sunspot cycle. One of the reasons we started our "zone winners" table a few years ago was to give recognition to those who have a QTH disadvantage. Note that activity in zones 3 and 4 is just as high as ever, but the scores are way down compared to those posted from zone 5. Also, the faithful in zones 1 and 2, and those in the northern Arctic regions of Europe, are suffering during the sunspot minimum. Our thanks to those who have continued to brave the bottom of the cycle with lots of activity. Our

new cycle is on its way, and 1987 should show some slight signs of improvement.

As indicated in last month's phone results, the Contest Committee has put together a data base of active stations in the contest. In CW we are concentrating on 40 meters. The calls of all stations worked by a number of key entrants have been entered into the computer. This does take some time, but it is proving to be well worth it. For example, we have found that there is a predictable level of performance by most of the top entrants in terms of the percentage of "unique" calls in their logs. "Unique" calls are those which don't appear in any of the other logs contributing to the data base. Presumably the percentage of unique calls will be bounded for a large enough data base. Large percentages indicate possible call copying problems. Indeed, the percentages of unique calls for top operators appear to be consistent even for multi-multi entrants, who work many more stations than the average entrant. If an entrant shows an unusually large percentage of "unique" calls, then his log gets some special attention. Specifically, it is examined for "busted" calls. Our point is that contestants usually enjoy the heat of the competition and the high rates that come with it. But rate is not the distinguishing characteristic of the best operators. The really top operators must sustain a high rate without errors and without duplication. Now the committee believes it has found a way to screen logs to identify possible accuracy problems for further study—the database check mentioned above.

If you are concerned about your performance in accuracy, we have a suggestion for you. Try tape-recording your contest, or at least part of it. Then go back after the contest and re-log the contest without referring to the original log. A comparison of the two logs will provide some real insight. If your percentage of error runs in excess of a couple of percent, you have a problem that needs attention. The

best operators aren't just fast; they are both fast and accurate.

We would like to remind all of you about several areas where some additional cooperation is in order. Please use duplicate checking sheets and include them with your entry. You should be aware of the fact that we penalize at the rate of 10 contacts for every duplicate we find in the log. Second, please pay attention to the mailing deadlines and the address for posting your entries. Some of you are still sending your logs to the old Vandeventer address. CQ has not been there for years, and those logs will be returned to you. If you elect to send your log directly to one of the Directors, please make sure you send it to the right Director. Use the addresses given at the beginning of these results. For the 1987 contest N6AR will be handling the SSB Contest, while K3EST will handle the CW Contest. If you send a log directly to a Director, do not send it Certified or Registered. That usually results in a special trip to the post office, and our XYLs don't appreciate that at all. A simple self-addressed postcard enclosed with the log is a better way to go. The logs sent to CQ headquarters are held unopened until a quantity arrive, and then are sent in bulk to the Director. Consequently, we rarely get those self-addressed postcards out until we do our sorting and mailing to the committee members.

Parting Comments

Our hard-working committee—Frank, W1WY; John, K1AR; Dave, K2SS; John, K2VV; Doug, KR2Q; Gene, N2AA; Ed, N3ED; Fred, AD6C; Glenn, K6NA; Rick, N6ND; John, KE7V; and Mike, W9RE wish to extend to each and every one of you a special invitation to participate in the 1987 CQ WW DX Contest. As you read these pages, the Phone Contest will be just days away. Have fun!

73, Larry, N6AR, and Bob, K3EST

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
9Y4VT	310/17/51	563/21/69	1114/25/72	1137/32/80	1395/30/81	580/21/43
NP4A	340/18/53	487/26/77	959/28/72	1104/32/88	1310/27/86	417/24/69
PJ2FR	217/12/39	615/22/67	1079/27/78	1277/29/75	1059/26/74	414/18/41
P48GD	263/13/27	719/20/63	1031/22/69	1270/23/65	1025/24/74	800/17/42
D44BC	200/13/44	583/19/61	980/22/65	1100/32/70	1230/25/72	395/19/57
EA9AM	260/13/45	666/20/63	936/20/68	1184/28/80	1067/26/79	224/12/38
FY5YE	125/11/31	473/17/54	510/24/63	882/23/73	1386/23/79	675/22/70
PT7BZ	61/9/15	288/16/46	925/20/56	916/31/71	1338/29/73	481/17/55
5T5XX	66/9/13	328/15/44	1067/20/70	556/23/66	710/25/77	313/19/58
ZB2X	201/14/47	463/17/62	722/23/68	858/29/77	1027/24/69	236/19/63

WORLD TOP MULTI-OPERATOR SINGLE TRANSMITTER

KP4BZ	164/11/34	603/19/68	1597/29/78	1648/32/93	1322/26/92	305/22/61
VP9AD	110/9/22	850/20/77	1622/31/101	1566/33/99	1441/29/94	31/15/25
HGBA	91/8/15	409/20/49	736/24/57	1138/33/84	971/26/68	334/17/30
L27A	236/13/50	626/23/80	1155/32/97	1227/36/103	436/32/101	76/19/52
U22FWA	518/18/59	1047/26/86	512/35/102	902/35/92	411/35/103	100/24/66
EA3VY	195/14/54	578/19/72	1072/31/93	1195/33/88	565/27/80	105/22/53

WORLD TOP MULTI-OPERATOR MULTI-TRANSMITTER

KP2N	478/16/50	1206/25/89	2447/33/103	2843/38/118	2340/28/93	840/22/62
EA9CE	551/13/51	1310/17/73	1629/25/80	2649/38/111	2137/32/91	570/22/71
J6DX	612/19/57	1215/18/64	2229/29/91	2692/31/96	2121/23/83	1439/21/66
VP2MU	333/13/37	1522/22/90	1214/22/77	2412/34/97	1327/26/79	827/17/55
UP9A	982/21/74	1264/30/93	1502/36/119	1833/36/106	718/33/111	200/22/54
N2AA	181/20/67	544/28/95	861/38/118	1358/37/127	592/28/103	101/19/43

USA TOP SINGLE OPERATOR—ALL BAND

Station	160	80	40	20	15	10
W1KM	45/13/35	524/23/76	365/31/81	761/30/95	336/24/76	18/10/13
W3GRF	28/10/21	222/20/75	585/35/98	742/32/93	341/23/79	43/12/25
K12M	85/15/48	287/24/77	380/28/80	739/34/91	324/22/67	29/13/22
K1EA	81/15/41	213/21/66	307/32/84	794/34/93	366/22/71	36/14/23
K5ZD/1	71/14/37	220/22/74	360/31/84	753/32/95	237/21/66	35/10/23
N2LT	40/13/30	132/17/55	437/35/96	776/31/89	315/23/65	33/12/21
K1TO	56/13/36	198/18/68	192/28/77	956/29/98	241/23/62	25/11/17
K1CC	47/12/30	192/20/63	344/30/86	699/30/77	358/21/63	35/11/20
W3BGN	63/16/39	194/21/62	264/27/75	720/31/81	326/22/68	40/14/26
K3WW	31/12/22	262/23/78	407/30/76	677/26/73	264/19/80	24/12/29

USA TOP MULTI-OPERATOR SINGLE TRANSMITTER

N4WW	61/17/58	338/23/80	597/35/102	729/35/105	548/28/95	50/19/39
W5WMU	47/16/43	300/28/80	742/36/103	456/34/105	442/29/99	45/16/35
N3RS	58/15/45	286/26/87	487/36/101	755/37/120	286/25/89	43/16/35
K3KG/4	45/15/37	169/22/73	561/37/117	847/38/112	231/29/90	52/17/38
K4JP	50/16/38	71/21/56	811/34/91	665/34/92	480/27/79	42/16/30
K4VX/8	48/18/37	148/27/70	233/35/93	841/36/103	186/26/82	51/17/35

USA TOP MULTI-OPERATOR MULTI-TRANSMITTER

N2AA	181/20/67	544/28/95	861/38/118	1358/37/127	592/28/103	101/19/43
W3LPL	126/18/60	671/27/91	962/37/104	1100/36/115	531/29/103	104/19/53
NR5M	84/20/45	325/26/80	863/34/101	1033/34/108	643/30/100	102/18/41
N4ZC	68/16/41	321/23/74	681/36/107	700/32/90	585/27/87	82/19/42
W3GM	87/17/54	350/23/84	351/35/90	822/37/109	402/27/94	98/19/42
NF2L	122/16/56	270/22/80	440/35/94	808/35/100	438/27/91	65/16/35

USA QRM

Blew up two receivers, two amps, and one antenna switch, cut one ops leg, propagation was awful, but this contest is the best of the best. Always fun whatever happens . . . NR5M. Power failure, high winds, cold weather, low power, low antennas, plus good food, good conditions, and good friends = Fun Contest . . . NG6W. Working 24 countries on 160 from Florida! . . . K8UNP/4. Incredible absorption made our antennas work like underground dipoles; only the determination of the operators made this difference . . . K7LXC. My two-element quad became a one-element quad halfway through the contest . . . W7HS. I found a black hole—over my house . . . KT7G. A real thrill working my son, K8GL, on 5 bands at VP2MU . . . WA8IGG. Due to an injury, couldn't write my log, so I taped the contest and then transcribed it 3 weeks later when I could write . . . W8VSK. Where were the JA's? . . . K9QVB. Where were the sunspots? . . . NJ9Z. Took time out from the contest to get married this weekend, but worked a few QSOs anyway . . . K9BG. All the hot summer's antenna work paid off . . . W0JLC. The holiday weekend kills me . . . KM0L. Lost 4 hours to snow static . . . K0RF. Learned a lot; I'll be out for blood next year—QRP all the way . . . WB1ESN. First QRP Contest. How to be humble . . . WB6JMS.

Working 5T5XX in a huge pileup . . . KA1SR/QRP. 32 countries with 2.9 watts on 80 . . . AA2U. Power failed at 1140Z Saturday. Murphy has found my new QTH . . . K1DG. Forty and 80 just don't cut it from western Pennsylvania . . . K3TUP (opr. K3UA). Couldn't believe how 80 meters opened up . . . WA2CNF. 33 countries on 160 with under a hundred watts for an ex-W6 is like dying and going to heaven . . . N6AR/4. First entry. Not much of a score but lots of fun . . . KR1B. Great fun with only a multiband dipole . . . W1WAI. Sunspots wanted . . . K2UR. Missed my 80 meter record of last year by just over 1000 points . . . W1FV. Only CQ on 40 meters was answered by FO5BI . . . W2DW. I found out you need great stamina and sharp hearing to make it through in one piece . . . NT2S. Sat back, relaxed, and worked only what sounded interesting . . . K4PI. A ground plane on the East Coast is just like a tribander at 60 ft. in the Midwest . . . W9LT/4. Quite a difference compared to being at HH2VP. Still a lot of fun . . . N4XR. Worked an HZ first call in a pileup even though I forgot to turn on the amplifier or retune the transmitter . . . K4BAM. If the "tuner uppers" ever got tuned up, it would help a lot . . . W4BAA. Worked ZB2X for country number 100 on "top band"—makes 6 band DXCC . . . W8CNL/4. Worked 2 BY's for a new country . . . N6OM. D44BC standing out among the crowd with a big signal and answering the first time . . . K6ZUR. Thanks to all the Soviet and African stations that showed up on 40 meters . . . K5MK. No JA opening really hurt the score on 160 . . . K5UR.

DX QRM

Being called by HS0A on 80 meters! . . . 8P9AG. First contest in our new clubhouse . . . PI4RTZ. High winds both days—couldn't always rotate antennas . . . XE2SI. This contest was a kind of a Dutch meeting (20 PA's) . . . PA6DX. Aurora really affected conditions a couple of hours into the contest . . . NL7G. Many of the old timers came back to the University to operate in the contest . . . JA2YKA. Mountains to the west blocked the Pacific. Thanks to VP2MAI, VP2MIX, and VP2MO for their efforts in trying to move it . . . VP2MU. This is my first year of taking part in your contest . . . VU2UR. What happened to the 20 dB power factor you are supposed to have with a BY prefix—not one USA station . . . K51ID (BY1QH opr.). Had two power failures but worked a few new ones anyway . . . YB3ATB. Though visually disabled, I enjoyed participating in the contest . . . VU2TTC. I guess the 1825 to 1830 window has gone by the boards . . . VE7BS. Why is it so lonely up here when there is actually propagation on 10? . . . YC6LD. Is this the sunspot null? . . . ZS6BCR. Keep up the great magazine; it makes magic reading . . . VK3NI. Next year I return to my home call, CT1ADP . . . CT3ET. Tough on 10—did not work or hear local zones 30, 31, or 32 . . . VK6HD. My first DX on 3.5 MHz—F5IN . . . VE3OMU. My last contest from the Philippines; next year I'll be on from AH2 . . . KD6TB/DU2.

Difficult to find Europeans when I'm only running barefoot on 7 MHz . . . YC4FRX. 80 meters is a tough band to operate when the closest station is 1500 miles away . . . KG6DX. Won't be so intimidated by 20 meters the next time . . . VE7GFA. 28 MHz made up for the disappointing conditions on 160 . . . VE3IY. Island power shut down Sunday. 500 feet of drop cords got me back on the air using resort's standby power . . . W7TB (ZK1TB opr.). Always noisy in Hong Kong—too many lights . . . JA5DQH (VS6DO opr.). What would contestants do if the Finns and the Americans didn't go on contest expeditions? . . . VE3XN. Thanks for the contest . . . UA9LDF. Hope to meet you next year . . . UA9CBO. Had to take a rest period for 14 hours—AC power problems . . . UP3BA/UF. Very poor conditions . . . UC2AA. Good conditions on 3.5 MHz . . .

UW3AA. Worked in class C power, 2.25 watts . . . UA1ANP. Worked only a few hours because I operated at U3KM . . . UV3ACX. Sorry, but I was very busy . . . UA1OT. Glad to take part in the contest . . . UQ2GGP. New location, new antennas, new power amp, FB conditions on 160 and 80, wonderful PJ2FR operation . . . UP3BO. Last dipole installed just 5 hours before the contest and had infinite SWR; had to operate in the contest without a linear—never again . . . UP2PAQ. Sorry, but aurora hurt conditions to the USA . . . UP2BZ.

A new world opened up to me on 40 meters with a rotatable antenna just put up a week before the contest . . . UB5WE. This is our first entry into a CW contest ever; those contest-minded and skilled CQ WW operators were a joy for us newcomers . . . OZ1FYM. First heard "22," then "MM," then 9N1MM for the first time on 40 meters . . . HB9BOU. I hope that the 40 meter quad will stay in the air long enough so that I can enter another CQ contest . . . G4NCY. Biggest thrill was BY0AA coming back to a CQ call . . . G3LNS. Roll on cycle 22 . . . EI1DH. Nice to work HS0A for a new zone for my WAZ on 160 . . . HB9AMO. A real experience to work USA by aurora on 15 and 10 meters . . . SM5AOE. Age 19 and I'm becoming too old for operating the entire 48 hours . . . DL6FBL. Part of the bandswitch on the amp broke. To switch to 80 and 160 we had to go in with the needle-nose pliers . . . HC8A. It was so cold at night we couldn't pound on the paddle . . . JA1YWX. We used the big 5-element Yagi on 14 MHz for the first time and it helped us greatly to get new Caribbean multipliers . . . JA7YAA. We could hear the stations in the Caribbean, but couldn't work them . . . JA9YAV. We suffered from snow static noise (S9 + 20 dB) for 20 hours or more . . . JH7YJF.

Two-element 40 meter Yagi broke in a windstorm two days before the contest . . . K5KG/LU. Biggest problem was operators falling asleep on the key . . . VE1CIT. Biggest thrill was the first hour of sleep after the contest . . . VE3WAA. Had a lot of fun despite the S9+ noise; just wish we heard more DX . . . XE2NQ. First multi-op experience; we got the know how now . . . ZY4OD. It was our honeymoon for me and my wife; after 3 weeks and 19000 QSOs she still loves me . . . DF4ZL/B54. Lost a few JAs while assisting a passing motorist . . . IK5AFR. Your contests are fascinating world feasts without political boarders . . . IO0KHP. The CQ WW CW is the funniest game of the year . . . IOUZF. My first contest on 160 meters single op. What fun being called by 5T5 and ZB2!! . . . I2UIY. First CQ WW Contest after 9 years; how nice that all the bands were open at some time or another . . . OH2BDP. The 48 hours is too much for my strength (62 years old) . . . OH3NM. Two QSOs with a question mark—not sure the reports were for me . . . OH5MX (*It's good to see others with a "definite maybe" QSO—ed.*). I joined the test only to pick up a few new countries . . . OH2BNS. I didn't hear any JA stations on 80 meters . . . OH2BCI. Conditions were down from SSB part. Winds were up and knocked off half of my first director on Saturday night . . . OH1ZAA.

I wonder what the power limit is in some countries . . . OH3RF. The color TV next door and my fatigue allowed me only about 6.5 hours in the contest—looking for a remote QTH . . . OK1HBT. CW is a great joy . . . SP9PRH. This is my 28th CQ WW CW . . . YU7SF. I had TVI problems during the best contest time . . . YU2TW. I heard VP2MU calling like in a dream, but when I turned the antenna, nothing! . . . SV1RP. Unbelievable! I got one report of 579 out of 57 QSOs on 160 meters with a maximum of 100 watts . . . SV0AA. My swan song from ZC4; back to a humble G4 next year . . . ZC4CZ. Thank you for the competition. The first major contest the club has entered . . . ZC4EPI/ZC4AP. Fifteen was so bad I ran outside to see if a moose had eaten my antenna . . . KL7UR. A lot of fellows missed a good multiplier when I couldn't break their memory keyers! N4RP/C6A. Imagine my surprise when that chirpy European on 40 turned to be 9N1MM . . . NP4A (opr. K7JA).

OK, enough fooling around. Next year I'm going to get serious . . . PJ2FR (opr. W8ZF). BY4AA, VS6DO, HS0A on 2 bands, all called me! . . . ZP5XDW. Our last WW from Venezuela . . . 4M4A (opr. K3UOC). Bad conditions, but a nice contest . . . LU5UL. Best operator was D44BC . . . LU2DGZ. My first CW Contest; thanks to everyone who worked me at 12 wpm . . . CE3BFZ. His Majesty, CQ WW DX Contest, seems to be the contest that shows who is who! We love it . . . UZ9AYA. Three-element 80 meter beam was wrecked with a wild wind . . . UZ0AXX. It was hard work this year . . . OK7AA. Had to QRT at 1930Z Sunday due to video interference . . . GB4DX. Really appreciated the low-band openings . . . F5IN. Good conditions on 80; great opening on 10 . . . DL7ON. Sixth straight year in the Channel Islands for the WW CW. Tremendous fun. See you next year . . . GJ0AAA. Spent over an hour calling PJ7A and 9M2MM. In the end they gave me a call when I had a pileup! . . . LX9BV. Our best score, and on the sunspot minimum. Wow! . . . EA3VY. Worked every QSO—took a week off work to recover . . . G4ELZ/QRP. Biggest thrill was worked JA's on 40 meters . . . DL9YX/QRP. My neighbor loved it. I worked QRP and there was no TVI . . . SM0DJZ. Little score, Big Big Fun . . . CX8DT. A big battle with QRP . . . G3LHJ.

U.S.A. CLUB SCORES

Frankford Radio Club	120,387,511
Yankee Clipper Contest Club	95,170,987
Southern California Contest Club	50,472,160
Potomac Valley Radio Club	50,145,348
Dixie DXers	45,006,050
Northern California Contest Club	40,310,657
Northern Texas Contest Club	33,013,007
Mad River Radio Club	23,991,050
Over the Hill Club	18,205,059
San Diego DX Club	14,164,402
Texas DX Society	12,896,700
Central Florida DX Association	11,452,535
Orange County DX and Contest Group	10,788,482
Williamette Valley DX Club	10,634,354
Southeastern DX Club	9,907,855
Society of Midwest Contesters	8,316,767
South Florida DX Association	7,813,564
Kansas City DX Club	6,494,168
Carolina DX Association	6,176,541
Western Washington DX Club	5,776,352
Rubber Circle Contest Club	5,108,701
Hoosier Contest Club	4,766,623
Northern Ohio DX Association	4,611,459
Grand Mesa Contesters	3,758,052
Greater Milwaukee DX Association	3,387,299
Southern California DX Club	3,320,494
Central Arizona DX Association	3,221,155
Northern Florida DX Association	2,887,314
The Other Club	2,872,984
Albany Amateur Radio Club	2,312,691
Mississippi Valley DX and Contest Club	2,233,502
Northern California DX Club	1,955,157
Eastern Iowa DX Association	1,501,122
Boiled Owls of New York	1,427,342
Northern Illinois DX Association	1,012,447
Long Island DX Association	828,705
Salt Lake City DX Association	722,174
Delta DX Association	626,817
South Jersey Radio Association	539,462
Contest Association of South Texas	515,313
Redwood Empire DX Association	493,686
Rochester DX Association	486,460
Woodbridge Wireless Association	465,481
Florida West Coast DX Ring	445,010
West Jersey DX Group	434,470
Utica Amateur Radio Club	403,821
Arrowhead Amateur Radio Club	382,492

Northern New Mexico Amateur Radio Club	333,193
Alamo DX Amigos	283,724
Eastern Michigan Amateur Radio Club	206,635
Murphy's Marauders	184,365
West Texas DX Association	184,011
Central Virginia Contest Club	143,368
Rip Van Winkle Amateur Radio Society	116,190
Rockford (IL) Amateur Radio Association	87,819
Inland Empire DX Association	80,148
Central California DX Club	75,505
Western Pennsylvania DX Association	50,714
Madison DX Association	18,788

DX CLUB SCORES

Rhein Ruhr DX Association	25,866,042
Bavarian Contest Club	24,844,798
Northern Lithuanian Contest Group	21,308,595
Lithuanian Contest Group	12,137,163
Uruguay DX Club	12,008,789
Kaunas Polytechnic Institute	9,576,245
South German DX Group	8,530,344
Riga Radio Club	8,308,116
Radio Club of the GDR	7,831,676
Radio Amateur Society of Thailand	5,468,537
YU DX Club	4,602,878
DX Club of Saar/Pfälz	4,081,185
Communications Ham Club	3,688,357
Kumamoto University Ham Club	3,657,233
SP DX Club	3,460,581
Osaka Communications Electronics ARC	3,136,600
Lvov Radio Club	2,817,624
Alaska DX Association	2,380,197
Mid 80's Contest Association	2,200,722
The Bullmertz	1,693,226
Kiev Central Club	1,518,573
ARBA	1,426,335
Chiba University Amateur Radio Club	1,184,248
Shanghai Amateur Radio Society	1,147,506
Minsk Amateur Radio Club	1,146,059
Voroshilovgrad Radio Club	988,758
Hokaido University Amateur Radio Club	890,309
Gaucho Amigos CW (GACW)	735,714
Tallinn Radio Club	452,157
Venezuelen DX Club	384,223
PZK	96,993
Krakowski Klub Krotkofalocow	92,266

Station Operators

Multi-Operator Single Transmitter

A16 & W6SZN: AG6D & N1EE, N6AJV, W6NWS. **AK1L & KA1X:** BY1PK: & Tang Xiao-Yong, Yan Pi-Dong, Yuan-Bo, Wang Guo-Xiang, Gong Ke-Lu. **BY4AA:** Xuru, Zhou Yu-Hong, Hu Song-Qing, Gao Min, Gu Humin. **DF4ZL/B6B4:** DF4ZL, DF6ZH, DL1RK. **DF9B8:** DJ8ND, DL6MAO, DL1MAJ. **DF9RN:** DF3EX, DL3CJ, DJ1QJ & DJ1JP. **DJ8EK:** DK8C1, DJ8EA, DL8GAR, DF8UG, DL1GS. **DK8MM:** DL4FJ, DJ7KZ. **DK8OI:** DJ3WM, DJ3XD, DJ7MG, DK1GF, DK1II, DL5OAP, DL7ON & DL7SI. **DL8NBJ:** DL4NAC. **DL8DK:** DL1FBQ, DL8FBP, DJ0GN, DL2ZAE. **EA3VY:** EA3's AIR, AVV, DDX, FER, FHC, KV, LL. **EAGURP:** EA6DO, EA6EJ, F5IN & F6ARC, F6EEB, F6EMD & F6GNC, F6EMT. **F6ENO & F6DKV:** F6NOE & F6QF, F5WB, F6DZS, FI1AUB. **FF6KPO:** F6DZL, FG1FI, FGETI, FH/W6KG: WSKG, W6QL. **GB4DX:** G4's DRS, EOF, GIR, JGL, G5LP. **GIJAAA:** G3SXW, G3TXF, G3WVQ. **HA1KRR:** HA1's ZZ, DRR, XU, XU, ZN, HG1ZV. **HA3KNA:** Kiss, Jrau, Horrath, Kiss, Kunkli. **HA3KHL:** Kaiser, Majer, Many, Pasztor, Vass, Turjanski. **HA3KNA:** HA3's OV, NS, NU. **HA5KAG:** HA5's ABC, OG, CE, AEX. **A5KFL:** Gabor, László, Zoltán, Pal, Zoltán, József. **HA6KNC:** HA6's OI, OA, NG, OO, IOB. **HB9AJ:** HB9's DL, UH, AQF, BWN, CCT, XJJ, CJR, COB, COC, CTU, CZF, DEO. **HB9CNS:** HB9CSKA, HB9RE. **HC8BA:** K1XKM, KQ1F, KO2HE. **HB1S:** Gelber, Müller, Pötzsgai, Pittmann, Nimeth. **HB1Z:** HA1's XY, ZE, XR, RS, RT, DRD. **HB65A:** HA5's WE, QF, UA, LN, OM, MK, ML, FM, HA7's RY, SU, HA8RG. **HG6N:** HA6's ND, NY, ON, OO, NF, NN, YG. **HG6V:** Simon, Boci, Dienes, Vingerden, Peto, Szuszter. **HG7B:** HA2EEO, HA5's WA, PP, DW, HA6DU, HA7's UL, JAQ, UG, UO, HA8IE. **HG8R:** HA9's DA, PP, RP, RU, RX, SU.

HS8A: DL7MAE, G4UAV, HS1AMH, JA0JCJ, K2BA, ON5OS. **IK2BHX & I2VXJ:** IK2EGL, IK2GSN. **JAI1YAG:** JH0SPE, JN1BAD, JP1NW7, JR4EW, JR4EAR, JA1YCL: JK1SS, JL1NC, JL1QC, JN1GP, JP1GAD, JA1SAY, JA1AFY, JA1YFQ: JN1LK, J01RUP, JP1OLG, JA1YWX: JE6JWW, JA1JW, JA1YJN, JA1YXP: JH9CAU, JH0RRR, J2DLF, JN1OTG, J01JOY, JR4HCV, JR8ALC, JR8GUM. **JA3YBF:** JA9UXW, JE6JXW, JF4BME, JG3LZG, JH9CRM, JH9JFH, JJ2ICA, JJ3KGS, JN1APL, J01AP, JR4AGT, JR4IZK. **JA4YJA:** JF4BNH, JJ3LJU. **JA5YAI:** JA6PPI, JE6MQW, JF6AEC, JF6CIC, JF6DEA, JF6EOZ, JF6MND, JF6PP, JG6CDV, JG6EAP, JG6ZTC, JN1LLA, JR6GKT, JR6QFV. **T. Higashi:** Y. Moriyama, T. Nagasaki. **JA7YAA:** JE7HZL, JE7QCO, JG3JRM, JH0MRP, JH0RW, JN1UYN, JR7PGL, JR8BMW. **JA8YJB:** JA7JB, JE7M0Y, JF7AAD, JF7GQK, JF7LEI, JF7TDN, JH0QNT, JN1RON, J01NBV, JR7GYC, JR7JLU, JR7IVU, JR7OFJ, JR7RLB, JR7WFH, JR8NUB. **JA8YBY:** JHBPNE, J01DFG, JR8DQB. **JA9YAV:** JA9VMD, JA9XZD, JH9AEV, JH9ETC, JH9KZQ. **JA1YRD:** JA2EZD, JA4XHF, JE1JKL, JH1DTC, JI2KVM, JR2SCJ, JR4WKV, KBHVT. **JH7YJF:** JA7DWU, JA7RHJ, JA7SN, JR7XKN.

K1AR: & Packet. **K1IU & KA1GOW:** K1KI & Packet. **K1RD & KB1W:** KB1KE, WA1ZAM, WB1EYL, NB1Y.

K1SA & KY1K: K1MZB, **K3KB & K4BAI:** K4FJ, W4NL. **K300 & K3NZ:** K3ZUF. **K4JPD & N4ZZ:** KAVX/B & AH2U, KB8GL, K9FD, K9Z0, KM9P, NS9Z. **K5KG/LU:** K5KG, K5TU. **K5RR & K5KJ:** KC5NK, N5TP, NR5K, WS4H, WD5JYF, WD5K, KGHH & K6AC, K7LXC & K7HBN, K7WA, KR7G, VO96B, K8AZ & K8NZ, KQ8M, K8MR, N8ATR, W8HSK, WB8KIC, KA1KPH & KM1P, NC1B, K83MM & N3ARK, K3IE, WB3LFZ. **KB8G & AB0W:** K8FPC, K8RWL, KB8UA, KB8VU, KB8U, K8W, NT8P, KC5DX & WD5J, KD3H & Nef, KD4OM & M. **KJ4NS & A4AB5:** NU4D. **KM1C & W1PH:** WB8BTH, KB1T, KP4BZ & NP4Z, WP4C, WP4D, WP4K. **KY3M & W3LR:** K2ZS & KA2AEV. **LX9BV:** LX1WW, LX1JP. **LZ1KEZ:** Iwan, Encro, Kolvo. **LZ1KKR:** Mitko, Club. **LZ1KP:** Iila, Mitko. **LZ1KRC:** Victor, Asen, George. **LZ1KZ:** Gosho, Todor. **LZ2KRU:** Ivelin, Wasil, Ilko. **LZ2KWA:** Will, Dilian, Emil. **LZ7:** LZ7's PO, HE, DF, CC, -E-44. **N1AU & NB1H:** K1FWF. **N3BB/5 & WN4KKN:** N3BNA & N3DTM, ND3Y. **N3RS & K3JJG:** KM3T. **N4EJW & N4EJV:** N4WW & K0LUZ, KU4J, WY4A. **N6AW & N6AV:** W6KPF, K7EG. **N6ND & K26E:** N6CW, W6UOF, WU6N. **NG1W & Guido:** K1MZB, K1SA, KN1M, KY1K. **OH1AH:** OH1's EH, JS, KA, NOA, -100. **OH1VR & OH1NR:** OH2BUQ. **OH9AB:** OH9NN, OH9SS. **OH4AM:** OH2's BAZ, BOS, BMD, BVI, BNN, VY, OH1JT, OH6UM. **OK1KK:** OK1Pav, Club. **OK1KKH:** Club. **OK1KLV:** Club. **OK1KDQ:** OK1's BY, AYP, IMP, DKS, DC, DLE, AZG. **OK1KS0:** OK1's AEZ, CF, WT, AAU, AII, JJB. **OK1DAZ:** OK1DG, Club. **OK1OPT:** Club. **OK2KDS:** OK2UF, Club. **OK2KMS:** OK2's JS, FD, PZV, PTW. **OK2KPS:** Club. **OK2SN:** OK2BN, Club.

OK3KAG: Club. **OK3K6Q:** OK3CLL, OK3ZCD, OK3-2351. **OK3RJB:** OK3's, COD, COR, CSQ, CSB, CKW, TRJ, CPG, TCL. **OK3KA:** OK3TDP, OK3CPc. **OK5R:** OK1's ADM, ADS, ALW, AWZ, DIM, RI. **OK5SSM:** OK1's AYE, FRI, DRI. **OK4HAM:** ZB1BF, OZ1FYW, OZ2JZ. **PI46AZ:** PA3AFH, PA3BTH, PA8SOL, PA8WRS. **SK5EU:** SM5ODQ, Club. **SK5SM:** SM5's NZY, PHU, IXE, CAK, SM6MYF, SM6KNE, SM7PMY. **SK6RR:** SM6CVT, SM6LR. **SK6TW:** SM6's AOU, CKU, CPY, DER, DOI, DQO. **SLBCB:** SM3LGO, SM7ORL, SM5LRL. **SP1PEA:** SP1's CU, MHZ, NOF. **SP3KRF:** Club. **SM3PKK:** SP3's MIZ, MIW, RAZ, LWV, DPH, DAH. **SP5PBE:** SM5's ANJ, ELA, FKW, GIQ, JTF, JTM. **SP6PDT:** SP6's RCU, OUG, IKS, OJE, SP8PLU: Club. **SP9ZAS:** Piotrowski, Zawisla. **U3KM:** UV3ACX, UA3-170-481, UA3-170-793. **U3T:** Club. **UB3OZZ:** Alex, Oleg, Slaw. **UB4CXU:** UB5's CBU, CDX, ITK. **UB4CYT:** RB5CB, RB5CC, RB5CW, UB5CCN. **UB4DX:** UB5DCW, Club. **UB4EWG:** Alex, Serge, Serge. **UB4EXU:** UB5's EJB, E00, 060-1894. **UB4EVJ:** RB5ECV, R85EEU, UB5EFW, UB5EPW, UB5EDX. **UB4FWC:** Club. **UB4GWC:** George, Vasily, Victor. **UB4IWN:** UB4IRI, UB4ITR, UT5SI. **UB4IW:** UB4IUK, UB5IOV, UB5IQW. **UB4IWR:** Club. **UB4IXZ:** RB4IDY, UB5INO, UYSEG, UB5-073-3867. **UB4IYK:** Gerg, Serg, Vlad. **UB4LZA:** UB4LEP, UB5LEE, UY5DV. **UB4MWA:** UB5's MDA, MMR, MOJ. **UB4MWU:** UB4MWU, UB5MBM. **UB4MZK:** UB4MVE, UB5MHO, UB5MJS. **UB4QWV:** Club. **UB4SWB:** R82SB, RB5SJ, UB5SD. **UB4VWA:** Club. **UB4WZA:** UB5's WBV, WCX, 068-453. **UB4XWB:** UT5QG, UB5-062's -56, -240, -647.

UC1AWB: UC2AAX, UC2ADX, UC2-188-188. **UC2-188-190:** UC1AWC: Club. **UC1AWZ:** RC2AP, UC2-188's -40, -73, -123, -148. **UC1WWD:** Igor, Ivan, UC1WWF: UC2's WBI, WBP, XW, AI. **UC1WXD:** UC2's WCC, WCP, 006-43. **UL8BCWW:** Alex, Serv, Serv. **UL8BWW:** RL7GH, RL7GN, UL7GBN, UL7GDJ.

UL7-018-99. UO40WR: Igor, Oleg, Serge. **UP1BWW:** UP2's BAS, BKW, BLA, BMW, PAX, PX, 038-892, 038-1268. **UP1BXF:** UP2BAI, UP2-03801142. **UP1BYC:** Andrius, Vita. **UP1BYK:** UP2BJV, UP2-038-1091. **UP1BZA:** UP2's, BHN, BIM, BLR, BNY, ON, -038-1732. **UP1BZM:** UP2-038-1744, UP2-038-1787. **UP1BZQ:** RP2BH, RP2BIT, UC2AIP, UP2BFN, UP2BPM, UP2BOF, UP2-038-6346, UP2-038-1751. **UP1BZU:** UP2BAT, UP2BCF, UP2-038-1682. **UO1GWB:** UR2RDZ, UO2-037-233. **UO1GWE:** Club. **UO1GWW:** RQ2GG, UO2's GAG, GLK, 037-83, 037-116. **UO1GWX:** George, Vladimir. **UO1GXY:** UO2LL, UO2-037-374. **UR1RWX:** UR2's RJ, RDO, RHF, RL, RNA, RRR, -083-165, -083-167. **UR1RXL:** UR2's ED, HY, RW. **UR1RXX:** Club. **UR1RYY:** UR2's RAT, RDO, RE RMR. **UT4IWB:** RT5JA, UB5-067-2492, UT5-187-054. **UT4IWL:** Club. **UT4UXW:** UL7LEN, UT4UZ, UT5UGR, UY5JW. **UZ1AWO:** UA1AIL, UA1-169-880, UA1-169-2412. **UZ1AWJ:** Club. **UZ1OWJ:** UA1DAA, UA1-113-31, UA1-113-490. **UZ1OWZ:** Club. **UZ1TWB:** UA1TAE, UA1-144-380, UA1-144-386. **UZ1ZZZ:** UA1's ZA, ZE, ZX, UW1ZM, UA1-143-3, UA1-143-5.

UZ2FWA: RA2FA, UA2's FF, FJ, FM, FX. **UZ2FWN:** UA2FBC, UA2-125-902, UA2-125-908. **UZ3AXX:** RA3DUU, UA3's AOW, AOX, DHW, -170-79, UB5-067-866. **UZ3DXW:** UA3's DDB, DFO, -142-1944, -142-1945, -142-1949. **UZ3OWM:** UA3OLJ, UA3OPA, UA3-121-3104. **UZ3QYA:** Alex, Alex, Serge. **UZ3TYE:** Club. **UZ3XWA:** UA3-127-56, UA3LJ-127-56, UJ8-047-012. **UZ4AWT:** Eugene, Nick, Vladimir. **UZ4CYL:** UA4CCG, UW4CO, UW4CT. **UZ4FWO:** RA4FBG, UA4FAO, UA4-148-677, UA4-148-669, UA4-148-679. **UZ4HW:** Al, Ven, Vasily. **UZ4WWB:** Club. **U4WWO:** UA4-095's -682, -684, -685. **UZ4YWW:** UA4's YBN, YDZ, -097-33, -097-403. **UZ6LWZ:** RA6LRT, UA6-150-1104, UA6-150-1336. **UZ6LXX:** RA6LVA, UA6LMW, UV6LX. **UZ6YW:** Club. **UZ9AYA:** UA9's AM, AO, OG, UM8MR, UL7LT, UW9's AG, AN, AR, UA9-165-983. **UZ9CYP:** UA9's CUA, -154-2105, -054-2106. **UZ9JWF:** RA9's JB, JG, UA9's JEO, JCU, -162-180. **UZ9SWW:** UA9's SA, SBD, SDR, SEX, SJZ, SJY. **UZ9SMY:** RA9SVT, UA9's SHO, SIF, SGW, TS, Igor, Serge. **UZ9UWK:** RAGUNK, UA9UEG, UA9UTG. **UZ9XWA:** UA9XDG, UA9-090-200, UA9-090-745. **UZ9XXM:** UA9XF, UW9XA, UA9-090-744. **UZ9XXX:** Club. **UZ9JWA:** UA9's JAB, JB, JO. **UZ9QWA:** UA9's QAS, QDL, QDQ. **UZ9SWA:** UA9-124's -143, -237, -576. **UZ9UWE:** UA9US, HA9VF, UW9UQ. **UZ9ZWD:** UA9's ZBP, ZCJ, ZD0.

VE1CIT & VE1BIG: VE1BII, VE2LJ & VE1BHA, VE2BTW. **VE3RFX:** VE3DAP, VE3INO. **VE3WAA:** VE3DTR, VE3IN, VE3IUE, VE3LFA, VE3OED, VE3OYE, VE3PTC, VE3PJC. **V02WL:** K3TM, NB30. **V05X:** KG6NP, KK6X, WW6F. **V9PAB:** N3RD, W3XJ. **VU2TEC:** VU2FOY, VU2HRN, VU2MVX, VU2TER. **W1BK & N1BH:** W2AT: K2GHV, Net. **W2U1 & N3KR:** W3GG & K3RT, W3NX & K8NA. **W4FX & W2GX:** K4JX, N4Z, W4JZ. **W5ASP & N5EA:** W5VHA, W5VWN. **W5WMU & K5GA:** K5LWQ, N5AN, N5IVF. **W6BIP & WA6AUE:** W8BIMZ: N8BQJ, WB8MMU. **WB8JGU & K2BY:** N8ABD, N8DCJ, W8CZN, W8ABIN, W8ABX, W8ADXG. **W8XK & K9MAT:** WA4Q0W & WA4Q0W. **WA7NN & W60AT:** WB8NAA, K3ZD, WB8NAA. **W8V5B & N6NW:** N7AHHN. **W8R6R & AKGT:** N8BL, K16EZ, NP4WL. **XE2NO & A5AB:** K5TA, Y44ZL & Y33VL, Y41RM, Y66GL, Y66IL, Y26WL, Y42ZB & Y42WB. **Y45ZM & Y45YM:** Y45WM. **YT3M:** YU3's ZV, EW, ZO, GO, RJ, IX, YT3: YU3's BO, EW, HR, EIJ, YU2YW. **YU1ATA:** YU1ZC, YU1TT, YU4BAB: YU4RS's -1600, -1555, -1570. **YU4C8C:** YU4GB, Club. **YU5GBC:** YU5's GB, UC, JA, Kire, Kriste, Toni. **YU1XA:** YU1XA, Club. **ZY4OD:** PY1DF, PY1URQ, PY4DD, PY4OB, PY4WG. **4N1F:** YU1FO, YU1HA, YU1GO, YU1EG. **4N2M:** YU2WM, YU2RO, YU2SVA, YU2ECO. **4N4T:** Trikulja, Blagic, Cehic.

Station Operators

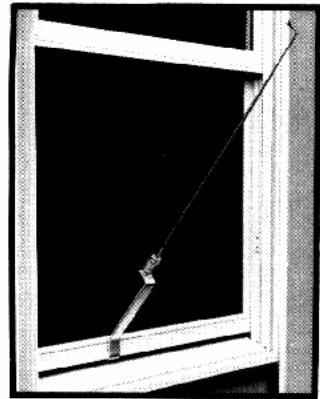
Multi-Operator Multi-Transmitter

DK3BU: DF3QC, DJ1FC, DJ4AX, DJ4PT, DJ9IE, DK2YI, DK4TP, DL9GS. **DLKFK:** DF3LP, DF3LZ, DF6LH, DJ2BV, DJ3UL, DJ4FZ, DJ5AV, DJ5AZ, DJ6TK, DJ7SW, DK9AV, DL2LAK, DL2ZT, DL3HAA, DL4BAN, DL5LC, DL7OY, DL8PY, DL8VR. **EA9EC:** EA5BRA, EA7ALG, EA7CFW, EA7DS, EA7TH, EA7TL, EA9ED, EA9EU, EA9GK. **J6DX:** K6GG, N9AG, NC8Q, W8ILC, W8OK, W8PR, WB8ENR, WD8IXE. **JAY2KA:** JA4UDP, JA5SSY, JA9XXS, JE2JCV, JE2SRB, JE2VBW, JE2YVM, JE7BZ, JF2DQJ, JF2UTL, JG2AGD, JG2BVO, JG2MTC, JG2VTD, JH2OXC, JH4VBO, JI1NPL, JI2UHH, JI2WYI, JI1BTC, JJ1MVV, JJ2FAU, JJ2NJF, JK2CZL, JR7OMD, K. Saito. **JAY3YC:** JE3MAS, JE6LPM, JG3BPG, JG3CPF, JG3HLV, JG3MRT, JG3WON, JI3ERV, JK3HYA, JR3WLA, JR4IMK, JR4PMX, JR5ARO, JR6WNW. **JAY9BVA:** JA9BEX, JA9LNJ, JA9NFO, JA9OTX, JA9WUJ, JA9VDA, JH9KIF, JH9VSJ, JH9CAZ, JH7UJR, JJ3URK, JA9-10148. **KP2N & A6AAA:** K5KH, K5VT, KA6S, K7V, N6DX, N6VI, N6V2, N7BG, W6MSG, W60UL, W7CB, WB6NRO, WT6T. **K8BS & AD8P:** KU8E, WB8FN, WA6GDX, WA8SAE, WM4T. **LZ1KRB:** LZ1OD, LZ1XS, LZ1ZL, LZ1ZM, LZ1M-280, LZ1M-290, LZ1M-310, Vasil Camilarov, Stoyche Ganevsky. **N2AA & K2GL:** K2NG, K2SS, K2T, K2TW, K2UR, K3EST, K5NA, K6C2X, KR2Q, KU2M, KU2Q, KT3M, KY2P, N2WT, NT2X, WB2MAE, WB2BHC, WB2KMY. **N4ZC & K2ZD:** PA3ABA, N9CC, W4NUS, WD4BTF, WA8MAZ, N6TU & A66T, K46LAF, N6ITV, N6RZ, W6NV, WA6OCV, WB6SHD. **NF2L & AG2S:** K2YY, K3JLT, N3RG, WA2HGM, WB2YOF. **NL7G & KL7P:** KL7V, KL7U, NL7GP, WL7E. **NR5M & K2TN:** K5GN, K5EV, K5IV, KG5U, KN5H, N5RP, NM5M, NT5D, N5ZI, W9AGH, WB5N, WM5K, WISPK. **OK7AA:** OK3CAP, OK3CBU, OK3CEI, OK3CEM, OK3CLA, OK3COW, OK3CUM, OK3EA, OK3JW, OK3LU, OK3LZ, OK3TJ, OK3WM, OK3YEC, OK3YX, OK3ZAF. **P46DX:** PA8CLN, PA8COR, PA8ERA, PA8JMH, PA8VAI, PA8VAS, PA8BFM, PA8BUD, PA30CF, PA3CEE, PA3CEF, PA3CTM, PA3CWM, PA3DEM, PA3DFT, PA3DKC, PA3DMH, PA3DQW, PA3DWD. **P14RTZ:** PA3ACA, PA3ALP, PA3BBL, PA3BF8, PA3BWD, PA3CAL, PA3ELX, PE1ALC, P00MCL. **UP9A:** UP2BAW, UP2BCO, UP2BCT, UP2BCW, UP2BIP, UP2BJ, UP2BL, UP2BN, UP2BNZ, UP2BRF, UP2CY, UP2PAJ, UP2PA, UP3BF. **VP2MU:** K3GL, KD2SX, KA2CW, N2MG, VP2MAI, VP2MIX, W3LPL & A13M, K3DI, K3RA, K73Y, N8II, W3XY, WB3JRU, WD4AXM. **XE28I & A66RX:** A66R, A66E, K6JYO, KV60, N6ADI, N6CCE, N6DLU, N6GU, N6GW, N6NU, W2KVA, W6HAL. **4U1HTU:** DF3CB, DF4RD, DJ1US, DL6RAI. **8P9AG:** K6ZM, K4UVT.

SINGLE OP ZONE WINNERS

Zone	Call	Score	Zone	Call	Score
1	KL7RA	296,868	21	UF6FFF	3,068,568
2	VO2AC	40,326	22	9N1MM	839,105
3	N6RO	2,142,918	23	OK1XC/JT	256,370
4	W9RE	2,113,370	24	VS6DO	2,063,338
5	W1KM	3,029,832	25	JI1QPU	1,287,069
6	XF0L	549,822	26	No Entry	
7	TE4T	808,500	27	NY6M/KH2	971,919
8	NP4A	7,040,400	28	YB0ARA	1,664,208
9	9Y4VT	8,191,246	29	VK8AV	192,468
10	OA4ZV	1,447,040	30	VK2BQQ	505,377
11	PT7BZ	5,242,977	31	AH6AZ	1,025,759
12	3G1B	280,044	32	VK9NL	1,124,161
13	CX5AO	828,933	33	EA9AM	6,367,956
14	ZB2X	3,796,480	34	No Entry	
15	OK3CSC	2,214,216	35	D44BC	6,815,001
16	UW3AA	1,390,260	36	TR8JLD	1,974,548
17	UH8DC	1,308,200	37	No Entry	
18	UA0ABL	373,404	38	ZS6BSZ	903,681
19	UW0LT	695,611	39	No Entry	
20	ZC4CZ	1,000,160	40	UV1OO	616,764

PORTABLE ANTENNA



MODEL AP-10

Designed for
APARTMENTS
MOTELS
VACATIONS

PRICE

\$55.25

Add \$3.00
Shipping and Handling

Quick Simple Installation. Operates on 2, 6, 10, 15, 20, 30 and 40 meters. All coils supplied. Only 22-1/2 inches long. Weighs less than 2 lbs. Supplied with 10 ft. RG 58 coax and counter poise. Whip extends to 57 inches. Handles up to 300 watts.

VSWR—1.1:1 when tuned

Write for more details and other B&W products

ALL OUR PRODUCTS MADE IN USA

BARKER & WILLIAMSON
Quality Communication Products Since 1932
At your Distributors write or call
10 Canal Street, Bristol PA 19007
(215) 788-5581

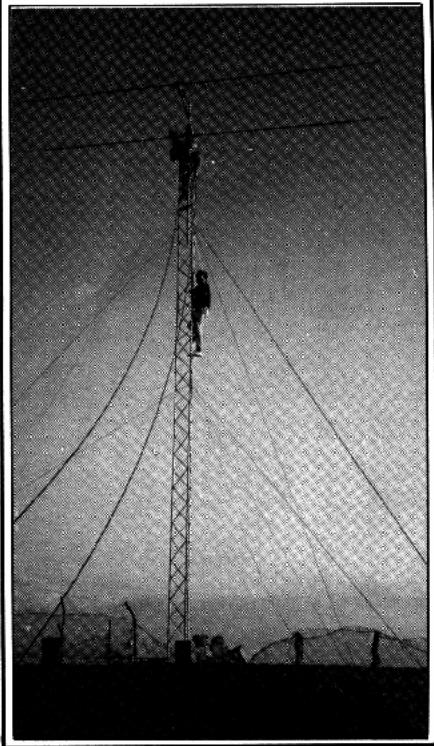
Please send all reader inquiries directly.

ATTENTION HAMS!
UNIVERSAL
ALUMINUM
GREAT TOWERS!

UNIVERSAL
TOWERS

Universal Manufacturing Co.
12357 E. 8 Mile Rd. Warren, Mich.
48089 (313) 774-4140

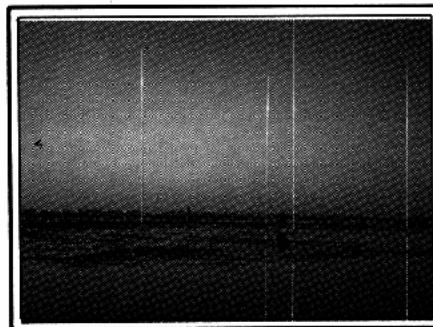
CIRCLE 115 ON READER SERVICE CARD



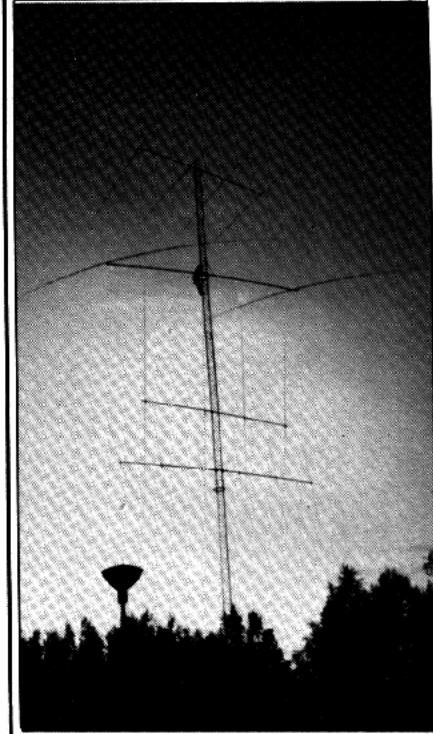
Jorma, OH2KI, shows us how ZB2X managed to be the success it was (number 1 Single Op All Band Europe). Here Jorma is shown scaling the tower just six hours before the contest.



IO2UIY, shown here hard at work, finished second this year on 160, making an incredible 800 contacts.



FV6NDX uses this four-element phased array positioned in a salted lake in southern France. (Photo courtesy of Jackie, F6BBJ)



OH2PF won the combined SSB/CW single band trophy this year using this super array of antennas. Jukka says he's an acrobat on the tower, and we believe it.

WORLD TOP 10 QRPP

(5w input)
All Band

1. LZ1BB	868,137
2. 4X6IF	424,928
3. UB5IJA	350,880
4. G4ELZ	244,860
5. RB5IJ	227,981
6. OK3CGP	227,539
7. DL9YX	186,780
8. K1CGJ	167,562
9. G3KDB	155,112
10. DL8CM	151,341

Team Contesting

1. Team Finlandia (EA9AM by OH2BH, PT7BZ by OH2MM, FY5YE by OH2BBM, ZB2X by OH2KI and XF0L by OH2BQL)	21,693,423
---	------------

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

CW RESULTS SINGLE OPERATOR NORTH AMERICA

UNITED STATES

W1FJ	"	866,013	776	97	284	K2OF	"	190,390	190	67	123	N2MR	"	91,390	190	67	123	N3AZ	"	1,967,471	1491	124	343	WA1AK/3	"	1,917,448	1614	111	301	KBC8/3	"	1,917,448	1614	111	301	N2AD	"	1,854,855	1528	113	310	N3AD	"	1,590	246	1292	120	321	N3NA	"	917,280	950	104	260	N3CXV	"	799,686	790	101	253	W3UM	"	714,058	705	108	253	K3VW	"	644,206	613	106	277	K3WJV	"	581,231	681	88	213	W3OY	"	536,400	654	85	215	K3IPK	"	322,252	467	67	77	N3UJ	"	291,500	396	80	185	W3AZ	"	221,308	307	76	168	KW3F	"	199,184	300	74	162	K3GN	"	164,589	252	77	172	AA4S	"	80,850	188	59	115	N3HW	"	80,136	190	54	105	N3HW	"	79,872	183	48	108	AAB3	"	78,752	173	63	121	W4WQK	"	73,220	171	63	116	K4CI	"	109,025	235	55	120	W4AKE	"	108,238	222	56	125	K4GKD	"	102,235	227	53	108	N4LQ	"	122,790	322	78	177	W4YE	"	192,907	323	53	156	N4TG	"	172,235	266	81	164	N4XM	"	167,456	264	83	164	N4XR	"	167,440	270	74	186	N4CB	"	154,650	345	83	184	W4BTZ	"	158,970	276	60	150	W4FDT	"	149,017	274	74	135	K4PFB	"	139,531	246	66	151	K4PFD	"	135,200	255	65	135	K4BAM	"	131,700	258	55	130	N4MM	"	122,808	217	63	141	W4AM	"	92,880	196	56	115	N4MM	"	85,956	198	56	118	W4FR	"	83,721	201	61	116	K4LQ	"	87,321	201	61	116	W4WQK	"	83,025	201	61	116	K4VDE	"	33,087	103	42	81	K4PR	"	74,900	194	61	114	W4ETM/4	"	20,056	84	34	58	W4GOT	"	64,080	161	47	97	N4LJS	"	46,011	125	58	89	W4JRS	"	45,743	125	58	91	WA4VDE	"	33,087	103	42	81	K4GETM/4	"	20,056	84	34	58	N7NA/4	"	7,755	53	20	35	N3RR	"	172,596	525	28	86	W4GTS	"	7,020	50	23	37	KK3O/4	"	1,258	50	20	17	N6BFM/4	28	11,600	92	18	40	KD1U/4	"	4,059	39	16	25	K3RV/4	21	258,888	649	31	107
------	---	---------	-----	----	-----	------	---	---------	-----	----	-----	------	---	--------	-----	----	-----	------	---	-----------	------	-----	-----	---------	---	-----------	------	-----	-----	--------	---	-----------	------	-----	-----	------	---	-----------	------	-----	-----	------	---	-------	-----	------	-----	-----	------	---	---------	-----	-----	-----	-------	---	---------	-----	-----	-----	------	---	---------	-----	-----	-----	------	---	---------	-----	-----	-----	-------	---	---------	-----	----	-----	------	---	---------	-----	----	-----	-------	---	---------	-----	----	----	------	---	---------	-----	----	-----	------	---	---------	-----	----	-----	------	---	---------	-----	----	-----	------	---	---------	-----	----	-----	------	---	--------	-----	----	-----	------	---	--------	-----	----	-----	------	---	--------	-----	----	-----	------	---	--------	-----	----	-----	-------	---	--------	-----	----	-----	------	---	---------	-----	----	-----	-------	---	---------	-----	----	-----	-------	---	---------	-----	----	-----	------	---	---------	-----	----	-----	------	---	---------	-----	----	-----	------	---	---------	-----	----	-----	------	---	---------	-----	----	-----	------	---	---------	-----	----	-----	------	---	---------	-----	----	-----	-------	---	---------	-----	----	-----	-------	---	---------	-----	----	-----	-------	---	---------	-----	----	-----	-------	---	---------	-----	----	-----	-------	---	---------	-----	----	-----	------	---	---------	-----	----	-----	------	---	--------	-----	----	-----	------	---	--------	-----	----	-----	------	---	--------	-----	----	-----	------	---	--------	-----	----	-----	-------	---	--------	-----	----	-----	-------	---	--------	-----	----	----	------	---	--------	-----	----	-----	---------	---	--------	----	----	----	-------	---	--------	-----	----	----	-------	---	--------	-----	----	----	-------	---	--------	-----	----	----	--------	---	--------	-----	----	----	----------	---	--------	----	----	----	--------	---	-------	----	----	----	------	---	---------	-----	----	----	-------	---	-------	----	----	----	--------	---	-------	----	----	----	---------	----	--------	----	----	----	--------	---	-------	----	----	----	--------	----	---------	-----	----	-----

		ZAMBIA																					
WB4TDH	"	238,518	666	28	98	AA4M/S	21	43,416	231	25	42	KA9OKH	"	647,472	733	108	221	VE5AD	A	9,360	150	17	13
N4BP	"	197,714	567	29	92	W6BSY	"	27,302	132	25	48	KV9S	"	564,140	637	101	234	VE5APN	A	30,328	210	26	42
K4TKM	"	134,244	471	28	74	W6QHS	14	243,810	655	36	93	K9CAN	"	545,896	549	104	258	VE6DZ	"	25,542	178	33	33
W4XJ	14	119,560	345	28	94	WC6I	"	152,853	492	34	81	W9OP	"	288,511	409	82	181	VE7CXM	A	17,316	95	35	39
N4VZ	"	322,308	884	34	92	N6GG	"	121,844	587	36	97	K9UIY	"	278,748	407	76	185	VE7CXR	14	40,426	541	14	20
WC4E	"	298,080	744	35	109	WA6TLA	"	64,500	224	30	70	N9ER	"	158,232	263	76	152	VE7AV	"	2,516	30	15	19
N4MO	"	147,516	449	28	86	W6DH	"	52,400	185	32	68	W6DN	"	156,750	289	68	141	W7DRA					
AA4LU	7	269,800	660	37	105	W6VG	"	12,032	65	24	40	K9MMS	"	112,307	251	43	120	VE7ET	3.5	1,010	50	5	5
WA4CTA	"	141,379	375	34	99	N6QR	7	336,980	864	37	103	W9NA	"	109,536	241	52	111	VE7BS	1.8	4,607	136	9	8
W5VUX/4	"	28,044	120	25	57	W6YA	"	263,451	655	37	100	W9KTP	"	99,912	217	61	123	Z92EZ	A	643,746	1161	53	133
W4KMS	"	2,691	30	13	24	W6PU	"	208,611	656	34	83	W9HE	"	68,242	168	44	105	ZIMBABWE					
W4MGX	3.5	10,584	72	16	40	K5KT/6	"	85,749	302	30	71	K9DFK	"	35,754	114	36	82	Z23JO	7	5,061	81	8	13
N4IN	1.8	22,200	118	17	58	N6OC	"	46,041	160	33	70	W9CXR	"	34,596	111	51	73	TE4T	A	808,500	1552	77	168
K4TEA	"	18,870	102	18	56	N6VR	"	40,050	157	33	57	KK9JA	"	30,300	109	31	69	(Opn. TI4SU)					
W4BAA	"	9,686	68	15	43	N7CW/6	"	35,108	98	37	94	N9JZ	"	20,330	87	43	64	T120Y	"	124,960	533	48	62
W8CNL/4	"	9,240	70	15	40	W6RJ	3.5	105,600	399	32	68	K9UON	"	18,720	88	27	51	COSTA RICA					
N4SU	"	8,748	66	16	38	K9DX/6	"	34,650	199	22	41	W9TNZ	"	14,352	67	23	55	ZC4CZ	A	1,000,160	1155	79	225
N4KE	"	3,780	33	13	32	K6XT	"	14,592	94	19	38	N9GL	"	11,550	66	26	49	HONG KONG					
K4XO	"	448	12	4	12	W6EGE	1.8	1,950	42	10	16	W9LNQ	"	10,448	60	21	48	VS6DO	A	2,063,338	2422	140	288
						N6PE	"	425	14	8	9	K9IFO	"	9,591	57	22	47	INDIA					
K5KLA	A	693,720	571	115	254							K9IMX	"	1,131	25	16	13	VU2TTC	A	254,025	465	80	145
K45W	"	568,416	556	116	256	K5MM/7	A	1,177,586	1213	112	227	K9QVB	21	76,255	272	23	78	VU2LAM	"	150,052	356	57	106
N5RM	"	556,556	564	111	253	KY7M	"	743,422	870	114	223	W9YXS	"	72,653	242	25	82	(Opn. UB1GM)					
N5JB	"	423,489	499	106	207	K57T	"	168,844	365	66	125	W9WAQ	"	39,560	158	23	69	VU2UR	21	33,768	200	24	48
N5AW	"	342,392	390	101	236	K9FX/7	"	145,926	270	73	125	W9SC	"	38,340	155	22	68	VU2RJA	"	3,503	42	13	18
K5LP	"	338,670	403	102	216	NN7L	"	141,192	325	59	100	W9BJKI	14	299,720	829	32	95	ISRAEL					
N5AR	"	267,698	386	99	175	W7IT	"	128,947	271	65	104	N9AW	"	87,575	276	31	82	J73D	1.8	3,074	51	8	21
N5UA	"	135,568	227	86	143	W7HS	"	114,072	218	78	116	W9GIL	"	77,110	247	29	81	DOMINICAN REPUBLIC					
A19X/5	"	126,801	226	81	138	K7ABV	"	88,677	203	60	107	N9RD	"	57,909	220	27	70	HIBJR	A	1,788,917	2585	87	212
N15M	"	114,268	223	75	121	WA7HHX	"	82,885	218	56	81	N9AEJ	"	53,037	222	21	62	(Opn. HI3JEI)					
W5OB	"	109,282	202	67	135	N07M	"	58,424	159	57	77	K9WYI	"	8,526	57	19	39	CO2JA	7	13,494	158	14	25
WASHOD	"	95,760	183	60	130	N7T	"	57,456	164	52	81	K9BG	"	5,712	47	16	35	DOMINICA					
W6LW	"	83,636	147	103	103	KX7J	"	50,094	139	55	83	N4RBR/9	7	41,877	154	28	71	JAMAICA					
W5JC	"	59,565	145	67	98	W7QN	"	50,050	150	56	74	K9EL	"	40,339	136	33	74	KG4XO	1.8	39,702	497	11	28
K7TD	"	30,912	100	38	74	N7HJM	"	37,835	124	46	69	W9MAG	"	29,568	114	32	65	HONDURAS					
W5HRF	"	29,440	98	47	68	W8ATKJ	"	36,270	119	48	69	KS90	"	28,336	124	27	61	HR1AT	14	25,122	224	18	35
W6EJT	"	18,693	88	26	46	W7MCU	"	19,968	218	43	61	W9RN	3.5	22,572	119	19	57	JAMAICA					
K5DB	"	18,288	88	26	46	W7IEU	"	16,632	90	27	39	K9EU	"	14,760	80	19	53	6Y5J	A	2,007,616	2868	89	215
K5LM	"	15,023	69	29	54	W7GUR	"	15,975	78	32	43	W9YYG	1.8	2,754	40	11	23	(Opn. K6RR)					
W5BSSD	"	12,118	65	32	51	K47FF	"	11,730	73	34	55	W9BLC	A	1,572,559	1043	149	382	MEXICO					
N5HB	"	11,392	63	25	39	N7EPD	"	5,550	47	27	23	W9KEA	"	585,648	631	118	218	XFBM	A	549,822	1438	70	112
W5KP	"	6,283	82	28	33	K7UU	"	5,406	40	26	27	KJ0H	"	381,234	453	99	214	(Opn. XE10H)					
N5EPA	"	6,213	40	26	31	K7EFB	"	4,455	41	26	29	NQ8I	"	169,510	277	73	157	HR1AT	14	25,122	224	18	35
W5EIJ	"	1,922	25	11	20	W7TVL	"	798	14	10	11	K9RWW	"	160,860	298	75	135	JAMAICA					
NN5E	28	3,333	46	12	21	K7JB	"	735	14	10	11	K0SCM	"	120,640	272	52	108	6Y5J	A	2,007,616	2868	89	215
K5GO	21	192,584	513	33	100	W7VH	"	130	7	5	5	K9IYF	"	120,080	232	65	125	(Opn. K6RR)					
K5TSQ	"	126,120	370	29	91	K7QQ	28	2,484	62	13	23	KM0R	"	73,272	163	62	110	MEXICO					
W5VX	"	125,114	365	30	91	W7RFA	"	1,182	28	10	13	W9BCFZ	"	72,224	180	50	98	XFBM	A	549,822	1438	70	112
K5BDX	"	30,189	127	24	63	W8FDQ	21	70,380	256	30	72	W9VX	"	67,450	180	49	93	(Opn. XE10H)					
N5CR	14	327,740	813	35	105	N7RT	"	61,886	229	25	72	KC0FJ	"	61,056	163	61	83	YN3EO	A	574,253	1875	44	107
W5F0	"	234,060	601	37	104	K7EC	"	30,260	167	30	48	NS0B	"	56,100	132	64	101	(Opn. Y25DE)					
W5B0S	"	118,364	327	35	92	N7R0	"	25,500	156	20	40	K9RWW	"	31,115	95	51	76	PANAMA					
WF5FE	"	50,495	194	28	68	K7TG	"	23,850	164	17	33	W9UY	21	45,810	214	25	55	HP1AC	A	425,035	869	57	112
W5KCR	"	20,148	100	21	52	N7TT	"	6,006	58	15	27	W9BZV	1.8	13,330	101	19	43	PUERTO RICO					
N5K5	"	2,888	30	13	25	K7UR	"	19,350	93	26	49	N0XA	"	7,580	66	18	36	AF4A	A	7,040,400	4617	155	445
K5UR	1.8	28,476	139	22	62	W7AYY	"	14,224	96	22	34	W9BQL	"	6,336	50	17	27	KP4FI	14	1,218,928	3273	36	112
N5JJ	"	7,920	57	15	40	K7XX	"	13,650	72	36	93	K9RF	7	263,296	671	36	100	ST. KITTS					
N6RO	A	2,142,918	1794	134	289	K47T	3.5	16,974	160	18	28	W9WU	3.5	19,110	111	20	50	ST. MAARTEN					
K6NA	"	1,684,469	1280	146	321	W7TI	"	6,006	58	15	27	W9AYU	A	584,835	804	83	224	PJ7A	A	3,729,490	3214	112	349
W6MKB	"	953,200	853	133	267	W7KKR	"	3,296	53	14	18	W9BQL	"	35,508	100	38	94						

JR2CFD	..	25,632	140	28	44	JABQNJ	14	70,300	282	30	65	UP3B0/U	21	211,120	815	22	69	OK1DKW	..	306,504	805	63	195	OK3CSQ	..	3,740	57	1	33						
JA2BJC	..	22,100	117	24	44	JABQMV	7	60,816	278	31	53	UP2BBM	..	262,056	554	72	172	DL6BNB	..	3,616	112	5	27	DL1EW	..	3,335	119	5	24						
JH2XMO	..	19,647	132	21	38	JAAKAZ	..	22,440	104	31	54	/UF	14	213,850	819	25	66	OK2EC	..	232,596	443	76	176	OK1CZD/P	..	768	33	4	20						
JA2EC	..	15,768	110	22	32	JAAUOI	..	1,853	41	10	7	UP3BA/U	7	695,134	1875	32	92	OK1KB	..	152,262	340	58	140	OK2CD	..	2,550	116	5	20						
JA2KPV	..	13,515	105	19	32	JABDAI	3.5	14,518	114	23	38	UP2BJK	..	138,866	311	56	127	OK1IEP	..	129,960	340	56	134	OK1MNI	..	2,378	84	5	24						
JR2ASX	..	5,880	58	17	25							UP6VBC	3.5	339,158	1194	25	76	OK1MKU	..	122,304	422	51	141	OK1AJ	..	1,392	59	4	20						
JE2LQX	7	18,626	109	24	43	JY9RL	A	257,244	468	52	142	UP2BNA	1.8	46,195	425	7	34	OK2PO	..	107,670	365	43	142	OK1HCG	..	1,104	45	4	20						
JA2EJI	..	3,051	45	14	13	JY5DP	14	8,976	93	10	23	/UF	"	13,913	161	6	25	OK3CGI	..	106,032	527	54	134	OK1KZD/P	..	720	43	3	17						
JG3CCN	A	296,616	555	83	121							UL7TCU	A	264,492	564	67	119	OK2ABU	..	95,640	302	46	111	OK1MSB	..	420	30	2	13						
JG3NPK	..	32,936	124	39	53	HLSAP	A	14,396	93	25	36	UL7CEP	..	48,375	185	39	86	OK3CEL	..	95,524	477	39	104	OL5BOP	..	378	27	2	12						
JH3JYS	..	26,600	117	49	51	JT5AA	14	5,440	100	11	18	RL7LC	..	6,680	75	11	29	OK3FON	..	76,288	203	41	108	OL9COW	..	374	36	3	14						
JR3EX	..	21,670	106	40	54							RL7JA	21	46,498	272	19	48	OK1MZO	..	75,900	377	34	116	OL5VGP	..	294	29	2	12						
JA3UWB	..	20,331	101	38	43							UL7BBW	..	35,504	216	13	33	OK2BTP	..	55,224	291	32	86	OK3YFM	..	154	14	3	8						
JH3TXP	..	19,125	101	29	46							UL7BY	14	243,400	828	29	71	OK2BSG	..	52,537	174	42	65	DENMARK											
JA3ARM	..	16,660	115	31	37							UL7EDR	..	86,100	393	24	58	OK3MB	..	51,570	213	43	92	0Z7YY	A	1,219,056	1511	111	325						
JG3EDH	..	4,116	13	14	14							UL7FCI	..	75,860	442	13	47	OK1FTW	..	51,546	148	57	85	0Z8CT	..	258,216	820	49	154						
J13BFC	28	1,408	22	10	12							UL7CA	..	33,065	149	30	55	OK1ALQ	..	50,020	206	43	122	0Z1FA0	..	191,505	438	65	190						
JA3OJL	21	103,700	448	30	55							UL7JW	7	156,768	702	29	67	OK1DXW	..	40,400	234	32	93	0Z10PW	..	40,320	165	39	89						
JR3NZC	..	84,992	378	29	54	9N1MM	A	839,105	1321	78	179	(Opn. K3TW)					OK2BTP	..	55,224	291	32	86	0Z5WQ	..	20,868	140	21	53							
JK3GAD	..	22,243	148	22	37							UL7BN	..	10,222	90	14	24	OK2BZC	..	38,870	266	30	100	0Z1NF	..	16,147	152	17	50						
JR3WXA	..	16,359	112	20	37							UL7GE	..	2,640	53	4	18	OK3CWF	..	35,052	381	22	70	0Z4DG	..	16,048	140	21	47						
JR3YYJ	..	11,016	81	22	29							UL7BB	3.5	88,728	523	17	57	OK1DZJ	..	29,767	109	42	61	0Z4OC	..	8,034	57	29	49						
J13KDH	..	7,920	65	17	28							UL7QA	..	44,573	353	12	41	OK3THM	..	29,000	103	41	59	0Z9MM	..	7,480	97	19	36						
JA3YDS	14	44,622	232	26	48							RL7ABK	..	5,616	85	7	17	OK1DVK	..	28,574	121	39	118	0Z2RH	..	5,014	40	16	30						
JAD3M	..	22,348	111	28	46							UL7MAN	1.8	52,938	393	10	41	OK1FC	..	24,948	171	48	51	0Z1DKG	..	960	38	4	20						
JH3DEJ	..	234	8	7	6							OK2BCI	..	24,514	82	44	75	OK2BZC	..	20,856	89	36	52	0Z10C	..	5,379	88	10	23						
J13XZA	7	34,190	205	25	40							OK3CMZ	..	20,273	83	38	59	OK1ATX	..	15,745	96	24	41	0Z1L	7	101,985	281	57	138						
J43BRB	..	5,964	50	17	25							OK3KJJ	..	14,694	147	13	43	OK1ADU	..	14,564	144	22	45	0Z7BG	..	18,018	135	17	60						
J13OIP	..	2,496	41	14	10							OK1DGN	..	14,272	195	32	32	OK3ZAB	..	13,580	120	23	34	0Z1FTE	3.5	43,334	270	23	71						
JH3BGB	3.5	39,960	204	28	46							OK1DZL	..	12,642	258	9	40	OK3TUM	..	10,998	59	31	47	0Z3ON	..	32,955	417	13	52						
J43BCT	14	1,040	24	9	11							OK2KHD	..	10,200	217	13	37	OK3KNU	..	8,694	111	20	43	0Z2E	..	16,112	101	15	61						
JH3CYZ	1.8	1,378	32	10	16							OK3CTX	..	6,384	105	15	41	OK1AEH	..	1,836	49	8	28	0Z1L	..	200,152	694	55	142						
J41VR	A	275,761	401	103	154							OK3ZWX	..	5,841	37	25	34	OK2BZC	..	115,364	294	63	128	G3MXJ	A	1,641,150	1624	123	327						
JH4YB	..	252,805	469	86	131							OK1DIS	..	5,661	104	14	37	OK4BOK	..	1,521,674	1540	114	337	0Z1LDFC	..	258,216	820	49	154						
J44ESR	..	195,000	383	88	114							OK3CEG	..	4,452	40	23	30	G3UFY	..	755,425	1275	78	257	0Z1LWD	..	5,379	88	10	23						
JR4VGD	..	42,069	147	49	62							OK1ADU	..	2,852	40	12	19	G3NKS	..	344,148	802	60	181	0Z1L	..	40,320	165	39	89						
J44FMS	..	27,690	138	36	42							OK3CSQ	..	2,442	20	17	20	G3ESF	..	298,410	695	61	184	0Z1L	..	20,868	140	21	47						
J44ATV	..	11,020	66	21	37							OK1TAX	..	2,211	42	13	26	G3GHS	..	200,152	694	55	142	0Z1L	..	5,379	88	10	23						
JRA1SK	..	7,809	58	25	32							OK1AJ	..	1,836	49	8	28	G3BWR	..	150,522	1540	114	337	0Z1L	..	20,868	140	21	47						
J44VVM	21	56,560	252	29	51							OK1AJN	..	2,700	38	12	24	G3BZP	..	105,696	392	93	110	0Z1L	..	10,379	141	17	60						
J44DNQ/4	..	12,744	90	21	33							OK1AJC	..	2,700	38	12	24	G3ZFE	..	105,696	392	93	110	0Z1L	..	10,379	141	17	60						
J44FWM	14	143,162	530	30	64							OK1BZC	..	2,700	38	12	24	G3PFL	..	94,608	517	44	100	0Z1L	..	32,088	417	13	52						
J44IF	7	49,432	243	25	49							OK1BZD	..	2,626	243	34	42	G3NVS	..	78,225	359	41	108	0Z1L	..	20,868	140	21	47						
J44QZB	..	2,368	64	19	21							OK1BZG	..	2,626	243	34	42	G3GVS	..	57,000	197	39	86	0Z1L	..	6,476	120	24	47						
J44QZH	..	2,368	49	25	34							OK1BZI	..	2,300	217	13	37	G3AEV	28	3,150	34	15	27	FAROE ISLANDS											
J44QZK	..	1,682	34	6	41							OK1BZJ	..	18,972	73	42	61	0Y2J	A	776,533	1892	73	210	FEDERAL REP. OF GERMANY											
J44QZK	..	1,682	34	6	41							OK1BZL	..	18,700	190	15	53	0E5KE	A	431,576	547	73	219	0E3RE	..	158,790	370	48	189	0E3DSA	3.5	128,650	1072	17	66
J44QZK	..	1,682	34	6	41							OK1BZM	..	21,100	217	13	37	OK1MNV	..	19,580	177	15	28	0E1L	..	205,288	635	31	103	0E1L	..	18,700	190	15	53
J44QZK	..	1,682	34	6	41							OK1MOW	..	18,992	431	24	72	OK2PAU	..	15,394	212	11													

DL1HBT	..	35,695	158	34	87	F6DYX	..	126,270	525	47	106	Y23ZF	..	11,760	108	18	42	PA3CWL	..	175,908	609	56	158	Y03AAQ	..	66,967	228	50	117		
DJ0CP	..	35,315	164	30	73	F5EAH	..	117,390	510	32	98	Y27GL	..	6,650	80	10	25	PA3XC	..	125,952	394	49	115	Y02GZ	..	61,352	283	31	95		
DJ0KE	..	33,756	196	30	86	F01LCY	..	105,264	312	47	106	Y66YF	..	5,425	80	10	21	PA0GT	..	104,705	240	54	151	Y06EZ	..	60,114	369	20	109		
DJ9TQ	..	33,561	106	41	74	F98B	..	100,812	272	51	135	Y21FL	..	3,605	67	9	26	PA0UV	..	97,446	343	45	104	Y07BGA	..	20,330	88	39	56		
DL2AW	..	31,863	112	44	85	F6LJA	..	87,373	300	47	96	Y23JN	..	1,344	30	9	16	PA3ACC	..	11,673	150	29	66	Y02BEA	..	15,275	105	23	42		
DJ2UU	..	29,960	186	31	76	F6GYU	..	51,212	330	31	93	Y23BF	..	1,248	18	10	16	PA3BNH	..	5,313	100	25	55	Y06BOT	..	8,215	125	20	43		
DF3ON	..	27,548	177	28	78	F6CXL	..	23,987	190	19	69	Y24UA	..	798	31	6	15	PA3AMA	..	5,866	125	23	50	Y07DEO	..	4,576	40	19	33		
DJ9MH	..	25,397	159	31	78	F01JDG	..	5,355	85	17	46	Y23CJ	..	648	26	5	4	PA3DKX	14	29,749	192	18	53	Y08CEZ	21	10,320	99	19	41		
DL2HL	..	15,170	100	27	55	F6CCJ	..	3,434	50	10	24	Y92ZL	..	594	27	7	11	PA0PLN	..	6,630	90	13	26	Y05ALI	14	10,863	100	13	38		
DL4YAO	..	8,450	121	12	38	F01LBG	..	494	15	7	12	Y35SA	..	110	11	3	7	PA3BNT	3.5	12,000	137	14	46	Y09AHX	..	10,065	147	13	42		
DL4NEV	..	7,897	90	17	36	F6EPQ	21	27,719	238	21	38	Y26SO	7	18,410	207	16	54	GI4BBV	7	43,946	331	18	68	Y08DHH	7	45,755	426	17	64		
DL8IG	..	7,600	65	20	30	F9DK	14	39,424	311	21	43	Y31PA	..	5,822	128	9	22	LA9VDA	A	38,412	220	40	92	Y09YE	..	31,284	330	15	51		
DL7YS	..	4,720	61	20	39	FV6NDX	7	214,760	983	30	88	Y32EE	..	3,815	59	10	25	LA2HFA	..	11,700	101	23	55	Y08CDQ	..	30,240	299	17	55		
DL8AK	..	1,290	23	13	17	F2VQ	..	(Opn. F6BBJ)	2	2,975	80	8	27	Y37XO	..	2,975	80	8	27	LA8BBH	..	7,038	120	11	35	Y04BBH	..	7,038	120	11	35
DJ7CY	..	384	8	8	9	F3JL	3.5	51,353	559	12	44	Y25SSA/A	..	2,448	52	7	27	Y06AAD	..	1,593	31	8	19	Y02DFA	3.5	6,355	200	7	24		
DL4NAC	..	323	9	8	9	F6ENV	..	17,212	196	15	57	Y24DG	..	1,710	37	9	29	Y08BDA	..	5,960	131	8	40	Y06BTY	..	224	28	3	5		
DJ7XG	28	3,950	36	13	37	F6EPQ	1.8	3,604	97	5	29	Y24OL	..	1,540	51	6	21	LA8CJ	..	4,902	40	19	24	Y06AD	..	1,593	31	8	19		
DJ17U	..	2,139	30	10	21	F3AT	..	1,953	54	5	26	Y36VM	..	1,280	28	9	23	LA2OG	..	847	27	4	7	Y02DFA	3.5	6,355	200	7	24		
DK4JN	21	103,168	413	28	96	F2VQ	..	1,850	69	4	21	Y21CL	..	378	26	6	8	LA7MFA	14	50,224	335	24	62	SCOTLAND	..	140,139	469	48	159		
DL1RB	..	69,722	316	26	81	F8TQ	..	665	35	2	17	Y33UB	..	266	9	6	8	LA7HCA	..	5,053	72	12	19	GM4MFL	..	70,325	325	42	103		
DK3GI	14	822,024	2006	39	129	F8TQ	..	665	35	2	17	Y49ZL	..	15	3	2	3	LA8XM	7	66,056	718	22	70	GM4SRO	..	26,598	171	22	56		
DJ8FR	..	153,341	670	29	84	F8TQ	..	149,547	320	68	169	Y53YN/P	..	141,600	568	45	132	LA8WG	..	13,113	236	11	36	GM3ITN	1.8	10,260	127	11	46		
DL0LR	..	74,700	423	25	55	Y24UK	A	2,459,772	2691	116	338	Y78UL	..	402,840	907	61	209	Y06AD	..	1,593	31	8	19	SP9DW	A	268,814	701	66	167		
DL3ZB	..	71,712	432	24	59	Y78UL	..	402,840	907	61	209	Y44UI	..	191,490	566	52	143	Y08CFS	..	2,137,959	2540	110	307	SP3HC	..	182,320	597	52	160		
DL8NU	..	51,704	267	25	67	Y39SH	..	183,150	633	66	143	Y22DKJ	..	10,725	125	14	45	SP9DBA	..	148,452	540	55	123	SP9HWN	..	136,151	450	48	123		
DJ0YI	..	24,885	200	17	46	Y53XN/P	..	183,048	704	51	123	Y22DKJ	..	86,040	304	53	127	SP9BEJ	..	114,973	363	44	131	SP9AKD	..	112,077	411	47	142		
DL9MBZ	..	19,888	231	12	32	Y54UE	..	180,804	657	41	142	Y25FF/A	..	81,585	310	47	100	SP9ALI	..	111,132	402	51	145	SP9LPR	..	111,132	402	51	145		
DF4QW	..	10,725	125	14	45	Y55AV	..	149,547	320	68	169	Y28XL/A	..	141,600	568	45	132	SP9BBH	..	107,070	381	41	125	SP9CBP	..	511,791	835	89	264		
DL1JC	..	3,164	46	11	17	Y56VM	..	81,400	307	41	107	Y55J	..	71,568	276	39	103	PA0TJ	..	310,942	701	74	200	SP9DBA	..	75,012	321	39	102		
DJ5AV	..	414	13	7	11	Y56VM	..	71,568	276	39	103	Y55TJ	..	310,942	701	74	200	SP9DPV	..	75,120	272	36	104	SP9AG	..	75,120	272	36	104		
DL2HBX	7	124,875	643	30	95	Y56VM	..	125,640	455	52	128	Y53ED	..	68,400	205	44	107	SP9KU	..	149,039	539	51	136	SP9KU	..	29,186	215	25	73		
DL6SN	..	47,190	200	29	76	Y39UL	..	106,080	503	45	111	Y22DKJ	..	62,016	214	40	96	SP9EDS	..	4,202	21	21	62	Y07CFC	..	91,350	279	50	100		
DL3NCI	..	23,904	174	18	65	Y53XN/P	..	81,613	313	51	80	Y22DKJ	..	71,568	276	39	103	SP9LPR	..	111,132	402	51	145	SP9CF	..	511,791	835	89	264		
DL1MCD	..	15,960	250	13	43	Y53XN/P	..	81,613	313	51	80	Y22DKJ	..	68,400	205	44	107	SP9BBH	..	262,010	742	55	142	SP9CJ	..	165,615	419	53	130		
DL2ZA	..	1,830	57	7	23	Y36YM	..	81,585	310	47	100	Y28XL/A	..	81,400	307	41	107	SP9CJ	..	165,615	419	53	130	SP9CJ	..	165,615	419	53	130		
DJ5KX	3.5	1,824	62	6	26	Y36YM	..	71,568	276	39	103	Y55J	..	310,942	701	74	200	SP9CJ	..	165,615	419	53	130	SP9CJ	..	165,615	419	53	130		
DJ5JH	3.5	52,955	395	19	70	Y55J	..	71,568	276	39	103	Y55TJ	..	310,942	701	74	200	SP9CJ	..	165,615	419	53	130	SP9CJ	..	165,615	419	53	130		
DL3HAH	..	44,631	461	15	66	Y53ED	..	68,400	205	44	107	Y23CM	..	63,036	218	36	117	SP9KU	..	122,112	347	47	145	SP9CJ	..	165,615	419	53	130		
DL3DD	..	13,949	251	9	44	Y53ED	..	68,400	205	44	107	Y23CM	..	63,036	218	36	117	SP9KU	..	122,112	347	47	145	SP9CJ	..	165,615	419	53	130		
DK3FD	..	12,374	245	11	35	Y53ED	..	63,036	218	36	117	Y22WF	..	57,344	286	38	90	SP9KU	..	44,782	128	28	73	SP9CJ	..	165,615	419	53	130		
DF30L	..	10,432	97	13	51	Y24YK	..	60,840	231	44	112	Y24YK	..	60,840	231	44	112	SP9KU	..	44,782	128	28	73	SP9CJ	..	165,615	419	53	130		
DJ56G	..	5,980	83	12	40	Y51XH	..	59,220	275	41	100	Y25XG/A	..	59,220	275	41	100	SP9KU	..	44,782	128	28	73	SP9CJ	..	165,615	419	53	130		
DJ3TF	..	5,356	64	14	38	Y25XG/A	..	57,921	190	41	88	Y24HA	..	64,713	407	36	75	SP9KU	..	44,782	128	28	73	SP9CJ	..	165,615	419	53	130		
DK8NG	1.8	69,012	626	16	65	Y24HA	..	57,078	266	34	92	Y24HA	..	57,344	286	38	90	SP9KU	..	44,782	128	28	73	SP9CJ	..	44,782	128	28	73		
DF2UU	..	23,817	409	10	41	Y48YN	..	52,650	198	39	96	Y24HA	..	51,660	206	30	93	SP9KU	..	44,782	128	28	73</td								

HB9DX	"	15,732	70	25	67	UA1AFM	"	134,588	593	39	139	KARELIA	"	42,875	204	32	93	N5CT	/KH6	7	136,604	881	20	32
HB9AGH	7	41,606	291	17	54	UA6YAH	"	100,893	359	47	122	RA1NA	3.5	63,648	683	15	63	UB4IM	"	41,128	263	26	80	
HB9AJU	"	32,040	231	18	54	UV6AY	"	97,300	443	36	103	UAVCS	"	38,794	211	31	70	UB5IPH	"	41,128	263	26	80	
HB9BOU	"	26,700	276	16	44	RA4HW	"	92,340	683	42	120	UNSET	"	38,622	201	35	88	UB5WDD	"	34,875	201	34	91	
HB9AMO	1.8	87,204	748	16	62	UA6GPU	"	91,632	563	35	103	UAVBN	"	32,786	228	25	72	UB5VBN	"	32,786	228	25	72	
WALES						UA4CH	"	85,228	389	46	103	UAVCF	"	25,830	123	34	71	RB5MP	"	25,602	186	29	73	
GW3JI	A	219,596	651	48	158	UA4ANZ	"	66,435	351	32	97	UAVCT	"	219,875	201	34	91	YC6LD	28	22,776	150	20	32	
GW4RHW	"	101,836	317	35	135	UA6GLG	"	52,055	250	40	105	UAVCM	"	24,096	161	30	66	YC8VCE	21	233,280	892	32	58	
GW3KYA	21	23,816	340	12	40	UA4GO	"	49,500	215	37	93	UAVCN	"	19,412	146	26	66	YB0ZAA	"	114,226	478	26	56	
YUGOSLAVIA						UA4ANZ	"	48,863	249	40	91	UAVCP	"	19,332	101	31	77	YB2FEA	"	85,272	323	27	61	
YU3AI	A	1,638,887	1959	80	321	UA4ANZ	"	44,034	294	36	87	UAVCR	"	18,887	117	28	73	YC4GAP	"	82,480	354	28	52	
YU3EA	"	1,308,801	1419	123	358	UA4ANZ	"	43,149	323	25	66	UAVCS	"	18,160	110	23	57	YC3HCM	"	50,172	460	31	80	
YT20	"	909,924	1199	101	261	UA4ANZ	"	41,325	213	27	68	UAVCT	"	15,337	259	8	41	YB3EP	14	460	23	8	12	
(Op. YU20B)						UA4ANZ	"	39,440	305	22	58	UAVCV	"	14,181	91	31	56	YC4FRX	7	9,386	87	17	21	
YU3MA	"	752,246	1110	97	244	UA4ANZ	"	32,640	372	18	50	UAVCW	"	13,896	145	19	54	INDONESIA						
YU7BW	"	387,236	819	66	198	UA4ANZ	"	28,391	175	29	60	UAVCX	"	128,544	631	28	75	YB0TK	"	804,479	1120	91	156	
YT7KW	"	282,500	655	65	185	UA4ANZ	"	25,410	160	34	72	UAVCY	"	86,229	326	37	90	YB3ATB	"	278,265	491	72	123	
YU7SF	"	261,426	670	63	170	UA4ANZ	"	23,358	125	29	73	UAVCZ	"	67,932	312	27	84	YC6LD	28	22,776	150	20	32	
YU7MGU	"	55,200	213	49	101	UA4ANZ	"	20,007	125	25	56	UAVD	"	54,365	315	26	79	YC8VCE	21	233,280	892	32	58	
YT7ORQ	"	49,446	227	41	93	UA4ANZ	"	19,200	110	28	56	UAVD	"	345	22	4	11	YB0ZAA	"	114,226	478	26	56	
YU7NH	"	47,238	202	35	101	UA4ANZ	"	16,463	103	27	74	UAVD	"	345	22	4	11	MINAMI TORISHIMA						
YU4TR	"	36,058	203	40	81	UA4ANZ	"	13,356	118	26	58	UAVD	"	345	22	4	11	7J1ACH	A	424,159	948	72	79	
YU7NH	"	13,797	134	20	53	UA4ANZ	"	12,510	93	30	60	UAVD	"	345	22	4	11	NEW ZEALAND						
YU3ER	28	16,590	105	23	56	UA4CJF	"	11,583	109	23	58	UAVD	"	345	22	4	11	ZL2SQ	A	470,400	1089	60	87	
YU3BO	21	266,000	855	36	104	UA4CGW	"	11,573	113	20	51	UAVD	"	345	22	4	11	ZL1AIZ	"	145,965	281	76	109	
4N4A	"	189,428	568	34	108	UA4CJF	"	10,812	111	21	47	UAVD	"	345	22	4	11	ZL1ANJ	"	11,022	112	17	16	
4N3E	"	157,316	485	33	101	UA4CDY	"	9,776	132	16	36	UAVD	"	345	22	4	11	ZL1BEK	14	99,947	390	27	62	
YU2AYZ	"	116,640	513	26	82	UA4CDY	"	6,700	48	25	42	UAVD	"	345	22	4	11	ZL3AGI	"	21,456	140	21	27	
YU2FB	"	35,673	194	27	64	UA4CDY	"	6,148	66	15	38	UAVD	"	345	22	4	11	NORFOLK ISLAND						
YT3AA	14	644,171	1767	39	116	UA4CDY	"	5,940	76	17	37	UAVD	"	345	22	4	11	VK9NL	A	1,124,161	1704	93	136	
4N2E	"	553,536	1619	36	120	UA4CDY	"	5,940	76	17	37	UAVD	"	345	22	4	11	OGASAWARA ISLAND						
YT3L	"	526,864	1529	37	112	UA4CDY	"	5,940	76	17	37	UAVD	"	345	22	4	11	JA4BXS	/JD1	A	67,584	502	42	54
4N7N	"	313,398	1123	36	102	UA4CDY	"	5,940	76	17	37	UAVD	"	345	22	4	11	PHILIPPINES						
YU2ACF	"	75,952	423	26	75	UA3WU	"	23,600	175	17	42	UAVD	"	345	22	4	11	K4YT						
4N1C	7	395,388	1993	29	97	UA3YAO	"	15,424	136	18	46	UAVD	"	345	22	4	11	KD6TB						
YU7GMN	"	150,529	217	27	82	UA4WDU	"	11,040	138	14	46	UAVD	"	345	22	4	11	/DU1	A	71,148	180	59	88	
4N7ZZ	"	58,218	364	23	70	UA4WDU	"	8,700	106	15	35	UAVD	"	345	22	4	11	/DU2	14	80,700	369	26	49	
YU3QI	"	41,990	211	21	74	UA4WDU	"	8,240	118	16	24	UAVD	"	345	22	4	11	W3JEH						
YU7XX	"	33,345	265	19	54	UA4WDU	"	2,940	37	10	18	UAVD	"	345	22	4	11	/DU7	"	675	43	9	6	
YU7FN	3.5	31,125	309	15	45	UA4WDU	"	1,048	299	51	38	UAVD	"	345	22	4	11	SAIPAN						
YU3WZ	"	23,814	502	11	38	UA4WDU	"	35,309	350	15	52	UAVD	"	345	22	4	11	VK9NL	A	1,124,161	1704	93	136	
YU2UX	"	7,600	187	7	33	UA4WDU	"	30,552	262	16	60	UAVD	"	345	22	4	11	JA4BXS	/JD1	A	67,584	502	42	54
YU3MM	1.8	39,329	483	13	54	UA4WDU	"	18,250	182	18	65	UAVD	"	345	22	4	11	SOUTHERN COOK ISLANDS						
YU2TW	"	34,472	422	12	50	UA4WDU	"	16,593	150	51	38	UAVD	"	345	22	4	11	ZK1TB	A	340,168	608	82	120	
U.S.S.R.						UA4WDU	"	15,364	131	27	71	UAVD	"	345	22	4	11	ARGENTINA						
(EUROPEAN)						UA4WDU	"	14,320	881	21	67	UAVD	"	345	22	4	11	LU1EWL	A	341,982	742	53	99	
BYELO-RUSSIA						UA4WDU	"	13,343	881	21	67	UAVD	"	345	22	4	11	LU1HUC	"	91,728	291	47	65	
UC2OT	A	189,196	489	70	163	UA4WDU	"	12,120	141	15	44	UAVD	"	345	22	4	11	LU7JI	"	54,912	192	61	82	
UC2AIU	"	180,385	532	55	160	UA4WDU	"	10,519	79	17	50	UAVD	"	345	22	4	11	LU4FDM	28	120,528	508	21	60	
UC2ACZ	"	134,321	378	61	158	UA4WDU	"	6,426	121	11	31	UAVD	"	345	22	4	11	LU1DCB	"	105,225	589	20	41	
UC2ADM	"	93,922	211	43	99	UA4WDU	"	14,671	247	24	56	UAVD	"	345	22	4	11	LU5UL	"	66,990	546	16	26	
RC2AR	"	77,715	347	42	115	UA4WDU	"	36,725	407	11	54	UAVD	"	345	22	4	11	LU2DGZ	"	45,429	386	20	37	
UC2SKC	21	62,424	285	26	82	UA4WDU	"	36,160	453	12	52	UAVD	"	345	22	4	11	LU1AFD	21	338,520	938	29	95	
UC2AA	14	374,688	1624	34	110	UA4WDU	"	14,734	213	7	41	UAVD	"	345	22	4	11	LU2	1.8	4,440	78	8	12	
UC2WA0	7	16,794	266	9	45	UA4WDU	"	14,352	242	9	39	UAVD	"	345	22	4	11	BRAZIL						
UC2CAS	"	8,379	192	9	42	UA4WDU	"	11,880	154	10	45	UAVD	"	345	22	4	11	PT7BZ	A	5,242,977	4009	122	317	
UC2WOB	"	24,360	371	10	46	UA4WDU	"	11,248	125	8	29	UAVD	"	345	22	4	11							

COLOMBIA												WA4QOV	441,159	547	95 212	UZ9SWY	2,458,950	1843 135 372	HA6KNG	652,430	1198	78 187	LATVIA
HK1AMW	A	1,404,004	1740	86	201	W400	345,900	425	96 204	UZ9SWW	2,143,944	1930 104 292	HA5KFL	421,398	1117	68 178	UO1GWW	2,522,205	2393 149 446				
KH3MAE/7	7/28	1,798	23	13	16	WS4E	226,848	311	84 188	UZBAXX	1,937,925	1753 137 298	HA5KAG	388,397	985	66 161	UQ1GWE	259,168	753 55 169				
HK1HHX	14	772,376	1997	35	96	HKHLB/4	213,300	500	82 158	UZBWA	798,000	1365	84 152	HA3KHL	11,984	115	17 39	UQ1GWB	78,658	409 39 95			
EASTER ISLAND												HS4AA	3,589,872	2032 159 465	ITALY		IK2BH	1,565,196	2096 119 309	LITHUANIA			
CE8ZIG	7	47,532	312	18	33	WA4CTC	150,347	273	65 128	UZ9XXM	644,354	1113 51 163	JERSEY ISLAND		UP1BZA	2,882,683	2586 155 464						
ECUADOR												N6ND	2,376,696	1654 151 365	UZ9CYP	627,396	993	56 175	UP1BWW	2,449,501	2374 149 454		
HC1BI	A	92,807	233	56	87	6N6AW	1,880,555	1435 147 310	UZ9XWA	533,952	931	51 155	UO1BZO	1,439,258	1893 117 361								
HC7SK	3.5	113,152	556	18	50	A16V	1,793,176	1432 140 311	UZ0ZWD	3,190	73	11 11	UP1BYC	385,866	665 77 214								
FRENCH GUYANA												AG6D	913,297	1093 116 203	UZ0ZWD	3,190	73	11 11	UP1BZQ	271,062	924 44 154		
FY5YE	A	5,836,215	4051	120	369	W6BIP	763,752	770	115 248	UZ9KA	521,163	1144 89 148	UO1BYK	188,384	537 59 165								
NETHERLANDS ANTILLES												W6AOT	38,198	95 60 82	UL8GWW	1,954,368	2336 93 258	UP1BZM	24,252	120 40 89			
PJ2FR	A	7,028,688	4661	134	374	W6NNV	17,460	74	33 57	UL8CWW	1,488,277	1686 94 249	UP1BXF	22,466	205 19 75								
(Opn. W8ZF)												W6KWX	47,854	138 60 82	MOLDAVIA								
P48GD	"	6,991,947	5108	119	340	K7LXC	811,521	868	115 218	UZ9SWA	250,740	825 46 94	UO4OWR	155,595	741 55 110								
(Opn. W2GD)												W6UW	266,936	405 86 158	UKRAINE								
P48IN	14	1,477,905	3138	37	122	K6HIIH	222,605	397	85 126	UZ9UW	186,500	1120 104 292	UB4WZA	1,700,040	2031 117 348								
(Opn. N4PN)												W6LEN	131,688	275 75 102	UB4CYT	1,385,511	1942 105 316						
P48IR	3.5	576,725	1682	25	90	K4VX/B	2,466,540	1507 159 420	UZ9XWA	521,163	1144 89 148	UT4UXW	1,375,538	2286 106 312									
(Opn. K4UEE)												KB6G	1,118,894	886 130 328	UB4DXX	974,409	1496 98 281						
PARAGUAY												W8XK	465,450	523 104 217	UB4SWB	937,730	1405 91 304						
BERMUDA												W6KWX	888,576	1250 96 288	UB4EWG	888,576	1250 96 288						
ZP5XDW	A	2,014,200	2265	92	208	VP9AD	7,830,495	5618 137 418	EUROPE		SP5PBE	2,045,799	1989 120 321	UB4OWV	739,772	1341 89 264							
ZP5LOY	21	50,784	372	16	30	W6NNV	17,460	74	33 57	SP1PEA	441,742	1004 67 211	UB4IXZ	729,664	1171 105 311								
ZP5JAL	14	34,357	248	15	32	W6UW	266,936	405 86 158	SP6PD	234,739	835 50 141	UB4CXU	590,150	1257 75 215									
PERU												W6LEN	131,688	275 75 102	SP8PLU	144,088	377 50 116						
OA4ZYV	A	1,447,040	1825	85	187	K7LXC	811,521	868	115 218	SP3PKK	64,636	336 40 103	UB4DXX	463,218	920 71 198								
TRINIDAD & TOBAGO											W6KWX	888,576	1250 96 288	UB4EWG	427,728	854 75 191							
SY4YT	A	8,191,246	5099	146	396	VP9AD	7,830,495	5618 137 418	K6TURP	519,777	1292 50 219	SP3KRF	1,768	42 12 22	UB4OWV	739,772	1341 89 264						
(Opn. N6AA)												W6UW	266,936	405 86 158	UB4IXZ	729,664	1171 105 311						
URUGUAY												W6LEN	131,688	275 75 102	UB4CXU	590,150	1257 75 215						
CX9AK	28	5,225	96	9	10	W6UW	266,936	405 86 158	K6TURP	519,777	1292 50 219	SP9ZAS	2,108	44 8 9	UB4DXX	463,218	920 71 198						
CX7BY	21	747,604	1772	34	109	W6LEN	131,688	275 75 102	SP3KRF	1,768	42 12 22	UB4EWG	888,576	1250 96 288									
CX5AD	14	828,933	1914	38	109	W6UW	266,936	405 86 158	SP3KRF	1,768	42 12 22	UB4OWV	739,772	1341 89 264									
CX8BBH	7	448,723	1375	31	82	W6LEN	131,688	275 75 102	SP3KRF	1,768	42 12 22	UB4IXZ	729,664	1171 105 311									
VENEZUELA												W6UW	266,936	405 86 158	UB4CXU	590,150	1257 75 215						
TURKS AND CAICOS												W6LEN	131,688	275 75 102	SP9ZAS	2,108	44 8 9	UB4DXX	463,218	920 71 198			
4M4A	A	2,795,538	3175	90	208	VP5X	2,364,880	3177 91 235	CANADA		OK5R	4,222,434	3171 161 481	SP9ZAS	2,108	44 8 9	UB4EWG	888,576	1250 96 288				
4M7A	28	312,092	1297	23	59	W6UW	266,936	405 86 158	OK1KS0	2,529,360	2202 135 405	OK5R	4,222,434	3171 161 481	UB4OWV	739,772	1341 89 264						
YW1X	21	290,996	1066	24	68	W6LEN	131,688	275 75 102	OK2KMI	2,058,680	1811 139 381	OK5R	4,222,434	3171 161 481	UB4IXZ	729,664	1171 105 311						
YW1A	14	829,280	1963	37	105	W6LEN	131,688	275 75 102	OK3KAG	1,842,630	2185 121 389	OK5R	4,222,434	3171 161 481	UB4CXU	590,150	1257 75 215						
YX3A	3.5	205,300	695	23	67	W6LEN	131,688	275 75 102	OK1OAZ	1,687,944	2351 109 315	OK5R	4,222,434	3171 161 481	SP9ZAS	2,108	44 8 9	UB4DXX	463,218	920 71 198			
YV5IWT	..	62,593	402	14	39	W6LEN	131,688	275 75 102	OK3KRB	1,614,892	1749 121 366	OK5R	4,222,434	3171 161 481	UB4EWG	888,576	1250 96 288						
YV1OB	1.8	17,115	165	13	22	W6LEN	131,688	275 75 102	OK2KNS	1,331,424	1605 106 326	OK5R	4,222,434	3171 161 481	UB4OWV	739,772	1341 89 264						
MULTI-OPERATOR SINGLE TRANSMITTER												W6LEN	131,688	275 75 102	UB4IXZ	729,664	1171 105 311						
NORTH AMERICA												W6LEN	131,688	275 75 102	UB4CXU	590,150	1257 75 215						
UNITED STATES												W6LEN	131,688	275 75 102	SP9ZAS	2,108	44 8 9	UB4DXX	463,218	920 71 198			
K1AR	1,821,261	1196	141	392	W6LEN	131,688	275 75 102	OK1KS0	2,529,360	2202 135 405	OK1KS0	910,912	1730 115 229	UB4EWG	888,576	1250 96 288							
K1RC	1,658,300	1315	120	330	W6LEN	131,688	275 75 102	OK2KMI	2,058,680	1811 139 381	OK1KS0	880,320	1421 104 289	UB4OWV	739,772	1341 89 264							
KM1C	1,637,715	1139	130	375	W6LEN	131,688	275 75 102	OK3KAG	1,842,630	2185 121 389	OK1KS0	778,078	1335 98 275	UB4IXZ	729,664	1171 105 311							
K1IU	1,577,840	1136	130	325	W6LEN	131,688	275 75 102	OK1OAZ	1,687,944	2351 109 315	OK1KS0	479,712	995 152 229	UB4CXU	590,150	1257 75 215							
N1AU	1,460,767	1177	107	320	W6LEN	131,688	275 75 102	OK2KNS	1,021,112	1288 109 327	OK1KS0	7,875	153 12 33	SP9ZAS	2,108	44 8 9	UB4DXX	463,218	920 71 198				
W1PH	456,015	537	83	220	W6LEN	131,688	275 75 102	OK3KRB	1,620,720	1099 103 306	OK1KS0	381	20 6 13	UB4EWG	888,576	1250 96 288							
K1KL	429,248	499	84	220	W6LEN	131,688	275 75 102	OK1OJ	751,716	1010 74 240	OK1KS0	918	47 5 13	UB4OWV	739,772	1341 89 264							
W1BK	36,180	109	48	87	W6LEN	131,688	275 75 102	DLBOK	276,100	723 184	OK1KS0	918	47 5 13	UB4IXZ	729,664	1171 105 311							
K2ZS	1,354,640	1136	104	306	W6LEN	131,688	275 75 102	DLBOK	276,100	723 184	OK1KS0	918	47 5 13	UB4CXU	590,150	1257 75 215							
K2TD	423,400	492	83	209	W6LEN	131,688	275 75 102	DLBOK	276,100	723 184	OK1KS0	918	47 5 13	SP9ZAS	2,108	44 8 9	UB4DXX	463,218	920				

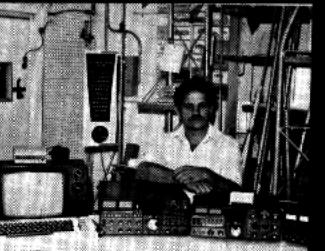
ASIA		SMBDJZ	111,936	362	51	141	UB4ET	672	28	8	13
JAPAN		YU3MJ	105,984	406	41	97	R85GD	21	40,232	206	24
K3WS		K3WS	93,366	211	58	113	UR2CR	"	13,167	139	16
JA2YKA		JA2YKA	3,174,688	2545	145	319	U85WAB	"	3,296	31	17
JASYBA		JASYBA	3,036,563	2521	148	291	RBSSEG	"	2,414	48	7
JA2YKC		JA2YKC	2,458,746	2094	135	279	N05W	"	1,248	20	10
EUROPE		PA2REH	68,412	410	34	109	SP8MMK	"	828	18	8
BULGARIA		N1AFC	67,983	191	39	90	OH3GD	14	112,991	661	26
LZ1KRB		UA6ALV	64,372	254	41	113	UAB5MM	"	102,557	496	28
CZECHOSLOVAKIA		KH6CP/1	61,650	179	42	95	LZ1OB	"	69,384	469	22
OK1DKR		WB6JMS	58,930	170	58	84	UB5FDM	"	60,442	413	24
ED8BIE		JATAS	55,200	188	57	63	JAD2N	"	33,968	179	25
Y21XC		Y21XC	44,831	196	36	91	N6TO	"	12,712	111	20
PA8PUPR		PA8PUPR	43,056	241	27	65	W8VSK	"	12,667	177	12
CX8DT		CX8DT	37,072	137	45	67	UT5VAK	"	11,720	108	10
W1SOX		W1SOX	36,330	126	35	70	GM4HOF	"	7,040	162	7
GB8WKS		GB8WKS	36,288	215	29	83	SP5CJO	7	19,430	223	13
Y23UA		Y23UA	32,242	202	28	66	RBSLVV	"	17,766	223	15
Y06HQ		Y06HQ	30,903	278	18	51	Z1TA	"	7,350	151	12
Y22PM		Y22PM	30,184	279	20	68	Y24KG	"	5,934	83	11
KA1SR		KA1SR	29,325	123	27	58	Y23TL	"	5,148	131	5
WB1ESN		WB1ESN	28,808	113	34	70	Y81LM	"	4,536	108	8
KG4GID		KG4GID	25,410	96	37	68	YU1LM	"	1,200	25	9
JA1XDA		JA1XDA	24,380	180	23	83	YU3DFL	"	924	34	7
PA8ADT		PA8ADT	23,870	135	24	53	Y01LDY	"	60	4	3
EA1KC		EA1KC	19,923	147	23	64	UQ2PM	3.5	27,240	405	11
UA8SG		UA8SG	19,264	160	20	44	OK1DNR	"	21,888	340	12
W8KR/8		W8KR/8	19,228	82	37	55	OK3CUG	"	21,392	336	11
DL6SF		DL6SF	18,963	163	22	41	HABIO	"	16,400	306	8
DZ1JVN		DZ1JVN	18,306	205	16	65	YT3RM	"	12,870	100	5
EA3FQV		EA3FQV	17,940	123	30	62	G3VMY	"	11,997	256	7
NU4B		NU4B	15,560	74	33	57	Y24SB	"	9,798	202	8
O3IA1/1		O3IA1/1	16,254	121	19	44	SP9GKM	"	6,630	184	6
Y26JD		Y26JD	16,120	235	15	47	OK3YDX	"	5,538	138	6
Y24TG		Y24TG	15,252	117	25	57	OK1DNR	"	5,434	139	6
OK2PAW		OK2PAW	13,776	131	21	63	AA2U	"	4,257	44	11
FB1LMS		FB1LMS	9,280	98	17	47	Y23TI	"	4,059	124	4
OK2KHF		OK2KHF	9,018	166	11	43	Y25XA	"	3,485	80	7
Y22AN		Y22AN	8,910	19	36	36	OK1DLY	"	3,381	148	4
DZ1BB		DZ1BB	8,795	76	12	43	Y22AN	"	2,968	107	4
4X6IF		4X6IF	7,668	68	20	36	OK3GZ	"	2,460	70	7
U85IJA		U85IJA	7,668	68	20	36	Y26VG	"	2,257	53	7
G4ELZ		G4ELZ	6,630	73	15	50	Z203H	"	1,875	48	4
RB5JJ		RB5JJ	6,628	49	29	39	Y26EH	"	1,000	37	7
WA9FWO/5		WA9FWO/5	5,980	40	15	31	JA1KFX	"	817	27	9
Y05BCX		Y05BCX	5,940	97	11	44	G3ICH	"	420	17	5
DL9YX		DL9YX	5,850	127	9	36	Y24HG	"	392	28	3
K1CGP		K1CGP	3,182	44	16	27	Y37XJ	1.8	13,552	307	7
G3KDB		G3KDB	2,175	30	5	19	OK1MP	"	7,000	121	8
DL8CM		DL8CM	450	12	6	9	Y37XJ	"	3,360	140	5
WR4K		WR4K	325	32	3	2	OK3CVI	"	684	37	3
DL4FN		DL4FN	126,716	339	44	114	OL4BOR	"	234	18	2
YV2BE		YV2BE	114,062	368	39	68	Y24ZF	"	153	20	2
LZ1ZH		LZ1ZH	1,104	35	8	15	SP8BVJ	"	153	20	2

Our thanks go to the following stations who sent in check logs:
 EA1SK, DF4EG, DK5OS, DL3NCI, DL6HCC, DL6RAI, EA1AU5, EA1BVW/EAB,
 EA1CSB, EA8ZS, F11ATR, G3ICH, G4FDC, G15PT, HA3PT, HA7KLG, HA7KNT,
 HA8RJ, HA8XH, HA8NAE, HA9DD, K4FW, K6FM, K7QO, K8CL, K6VL, K08M,
 LA1B, LA2EG, LA5PE, LA6XI, LA8CE, LA8XM, LA9ABA, LA90I, LA9XG, LA9ZV,
 LZ1IA, LZ1KC, LZ1KKH, LZ1KSD, LZ1MC, LZ1OX, LZ2AG, LZ2CF,
 LZ2KD, LZ2SB, LZ6CW, N5TV, N7JB, NP4A, OH1XX, OH2BAH, OH2FQ, OH2NL,
 OH3TO, OH5FA, OH5OT, OH5RZ, OH6AA, OH6MH, OH6RC, OH6VR, OH6XA,
 OH6ZB, OH7NDX, OH8NKQ, OK1AYU, OK1DMP, OK1DWJ, OK1KIX, OK1KTA,
 OK1US, OK2PGG, OK2PLH, OK3CR, OK3CD, OK3CDG, OK3CDT, OK3CDU, OZ1BUR,
 OZ1CMC, OZ1EUO, OZ1HRS, OZ1PP, OZ1JLX, OZ1JMM, OZ1JRN, OZ1PP, OZ2E,
 OZ2JI, OZ2PZ, OZ2BD, PA3AAV, PA3AF, PA3DUA, PA8LKR, PI4GAZ,
 PY1OL, PY2DP, PY2FK, PY2NLP, PY3CJ, PY6ZB, RA1QAZ, RA1QE,
 RA3EA, RA3EF, RA3NB, RA3RN, RA4NBG, RA8JB, RA8SS, RB5CB, RB5CY,
 RB5DZ, RB5LZ, RB5NT, RB5UU, RB5UX, RL3PYL, RT4UA, RV6AA,
 RV6AM, RV6AZ, RV9UV, RW6AA, RW3DM, RZ2AM, RZ3DZ, SK7UL, SM5AHX,
 SM5CEU, SM5FU, SM5FUG, SM5ICV, SM5MLE, SM6AHS, SM6BWQ, SM6BZE,
 SM6CDN, SM6CMR, SM6LJ, SM6OE, SM6OEF, SM6REA, SM7ZCZ, SM7KWE,
 SM7OLE, SM7RWE, SM8OFJ, SM8CMH, SM8CSX, SP1AE, SP2BPK, SP2BL,
 SP2BME, SP2BML, SP2DKI, SP2FAB, SP2GL, SP2GOH, SP2GU, SP2IU,
 SP2HGG, SP2PKM, SP2US, SP3BYZ, SP3CDO, SP3DAH, SP3PM, SP3ZAC/3,
 SP4ETQ, SP4NKV, SP5CCC, SP5CWQ, SP5IPI, SP5PB, SP6CES, SP6FER,
 SP6HTX, SP6KSD, SP6PKD, SP6BAG, SP6BHJ, SP6BSC, SP8JMA, SP8SIP,
 SP8ZH, SP9PDF, SP9ZFC, SP9JPA, SP9PDF, U3ADD, UA10AM, UA10FT,
 UA10BQ, UA10CC, UA3AJ, UA3ACJ, UA3AGW, UA3DAU, UA3DEV, UA3DL,
 UA3DMY, UA3DTT, UA3EC, UA3ET, UA3IA, UA3IDT, UA3LC, UA3MD,
 UA3MDY, UA3T, UA3V, UA3W, UA3Y, UA3Z, UA3AA, UA3NE, UA3P, UA3PDW,
 UA3PU, UA3UK, UA3RAO, UA3RCG, UA3RFZ, UA3RO, UA3TM, UA3TV, UA3VG, UA4CJO, UA4HFK,
 UA4HLX, UA4HML, UA4NBH, UA4NZ, UA4WAP, UA4WH, UA4YAO, UA4YQ,
 UA4YZ, UA6ADN, UA6HNU, UA6HOF, UA6HU, UA6LFQ, UA6LON, UA6PCH,
 UA6YBV, UA6YCI, UA9AKW, UA9CES, UA9FZ, UA9JEL, UA9MDV, UA9OJ,
 UA9XAA, UA9YC, UA9AB, UA0DA, UA0FFU, UA0JDD, UA0KAV, UA0KDB,
 UA0KLL, UA0SGN, UA9WB, UA9ZX, UB1ZR, UB3W, UB3WW, UB4FJ,
 UB4UDN, UB5AGL, UB5AP, UB5EN, UB5EV, UB5II, UB5IMZ, UB5KCA,
 UB5KCT, UB5KU, UB5LAI, UB5LK, UB5MEC, UB5MQS, UB5QH, UB5QJA,
 UB5QK, UB5VAA, UB5VBI, UB5WEU, UB5ZBG, UB5ZY, UC2AIH, UC2IA,
 UC2IDG, UC2ODW, UC2SD, UF6V, UJ8F, UL7Z, UL7PE, UL7PFE, UL7PH,
 UL8GBV, UM8MGM, UM8MTF, UM8MY, UD4OZZ, UD5ODA, UP2BGP, UP3BI,
 UG1GWY, UG1XX, UG2GWC, UG2GEQ, UG2GU, UG2LW, UG2LY,
 UG2GM, UR2GRN, UT4UB, UT4UH, UT5B, UT5JBG, UT5UCK, UT5UFI, UT5UJL,
 UV3DAY, UV3HD, UW3AQ, UW3EG, UW3PN, UW3ZV, UW4CN, UW6AA, UW6HO,
 UW6HS, UW9CS, UW8CN, UY5GG, UY5MG, UY7AW, UZ1AWT, UZ1LWF, UZ4LWV,
 UZ4PZA, UZ6AXF, UZ6EWA, UZ6EW, UZ6LXK, UZ6LZ, UZ9C2A, UZ9WD,
 UZ9XI, UZ9XX, UZ0UWC, UZ0UWC, VE3PEX, VE7ACM, VK4UR, W3HYO,
 W9YDP, W9QW, Y21AE, Y21DG/A, Y21UC/A, Y21UD, Y21XH/A, Y22J/D, Y22TD,
 Y22TO, Y22YJ, T23CO, Y23EL, Y23OD, Y23R8, Y23VH, Y24CG, Y24EA, Y24GE,
 Y24LN/A, Y24LJ, Y24WJ/A, Y24XD, Y25BE, Y25PN, Y26BN, Y26D, Y26GN,
 Y26H, Y26L, Y27VH, Y27YH, Y28HL, Y28TO, Y31YF, Y32PT, Y32OH, Y33UB,
 Y35VG, Y35WF, Y38YE, Y39X, Y41CH, Y43KL, Y46TO, Y46XF, Y49MH, Y51YJ,
 Y52ZE, Y53VL, Y54ZA, Y56YF, Y56ZN, Y57ZL, Y61XM, Y62OH, Y64ZL, Y71VG,
 Y75YL, Y02KCB, Y02KYI, Y05TA, Y06DF, YU3RU, YU7DR, YV5ANT, ZL1BSG,
 ZL2BDC, ZY6BG, ZZ2P54, 4N2D, JGLAD/9Y.

Disqualifications: None



Rob, WA3QLS



Paul, WA3QXP

71 Meadow Road, New Castle, Del. 19720 302-328-7728

Factory Authorized Dealer!

9-5 Daily, 9-8 Friday, 9-3 Saturday

AEA • ALINCO • AMERITRON • CUSHCRAFT • ICOM
 • KANTRONICS • KENWOOD • MOSLEY • SANTEC

• TELEX HY-GAIN • TENTEC • YAESU • AND MORE!



Say You Saw It In CQ

800-441-7008

New Equipment Order & Pricing

Prices are subject to change without notice or obligation. Products are not sold for evaluation.

NO Sales Tax in Delaware! one mile off I-95
 SERVICE, USED GEAR INFO: 302-328-7728

Please send all reader inquiries directly.

October 1987 • CQ • 31