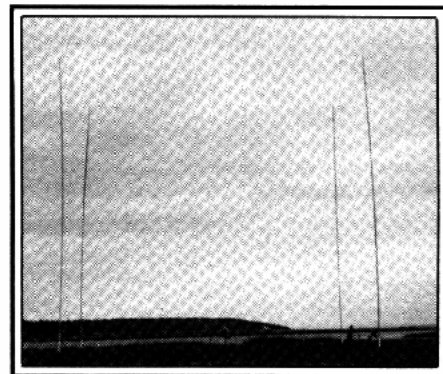




Paul, K1XM, and his XYL Charlotte, KQ1F, helped staff this year's HC8A effort, third in the world in Multi-Single.



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.

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.

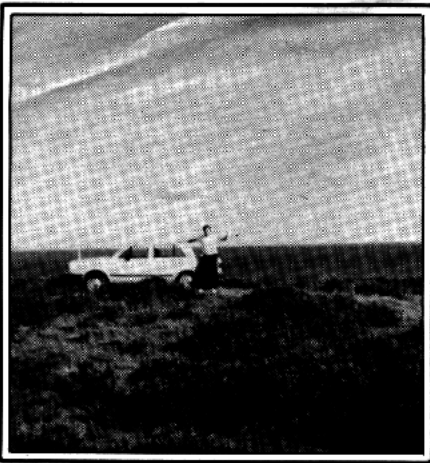
It was actually possible to put that kind of a super-station together; the band was really open at that time; all that DX really was available. In recent years several super-stations have met the same fate—K2GL, W2PV, and W6AM to mention a few. We might all do well to reflect on what those guys really meant to us as DX contesters. "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.

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** 3039 Campbell Place, Davis, CA 95616



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 4X6F at 424 K. The list of QRPers 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 QRPers 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
5T5XX	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	K3RV/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	W2YV	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	K0FF	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
UP2BJK/UF	339,158	WB0VZ	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	K4JPD	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 QRPp

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

VS6D0 (Opr. Akito Nagi, JA5DQH)

Donor: Japan CQ Magazine

Japan

Toshirou Ogino, J1QPU

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

P4BR (Opr. Bob Allphin, 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 Keskiäho, OH8PF

Donor: Southern New England DX Club

Australia—14 MHz

K. E. Hamlen, 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 Susen, 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 DXPEDITIONS

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 Kreskiäho, OH8PF

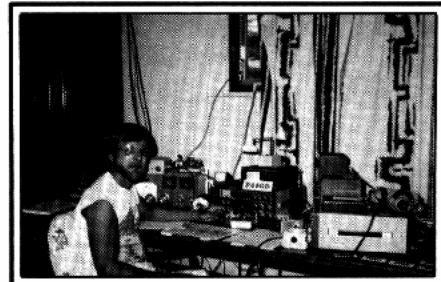
Donor: Yuri Blarovich, VE3BMV

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 Allphin, 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 UB5JG, 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 K3RV/4 (259 K) in a tight battle with K1ZX/4 (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 contesters 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 Vanderventer 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 XYs 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 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
RJ2FR	217/12/39	615/22/67	1079/27/78	1277/29/75	1059/26/74	414/18/41
P40GD	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	1100/32/80	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	61/9/18	288/16/46	925/20/56	916/31/71	1338/29/73	481/17/55
5T5XX	66/9/18	328/15/44	1067/20/70	556/23/66	770/25/77	313/19/58
ZB2X	201/14/47	463/17/62	722/23/68	858/29/77	1027/24/69	236/19/63

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
K1ZM	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	264/19/60	24/12/29

WORLD TOP MULTI-OPERATOR SINGLE TRANSMITTER

Station	160	80	40	20	15	10
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	1566/38/99	1441/29/94	311/15/25
HCBA	91/8/15	409/20/49	736/24/57	1138/33/84	917/26/68	334/17/30
LZ7A	236/13/50	626/23/80	1155/32/97	1227/36/103	436/32/101	76/19/52
UJ2PWA	518/18/59	1047/26/86	512/35/102	902/35/92	411/35/103	100/24/66
EA3VY	195/14/34	576/19/72	1072/31/93	1195/33/88	565/27/80	105/22/53

USA TOP MULTI-OPERATOR SINGLE TRANSMITTER

Station	160	80	40	20	15	10
N4WW	61/17/58	338/23/80	597/35/102	729/35/105	548/28/95	50/19/39
W5WVU	47/16/43	300/28/80	742/36/103	456/34/105	442/29/99	45/16/35
N2RS	56/15/45	286/26/87	487/36/101	755/37/120	286/25/89	43/16/35
K3KG/4	45/15/37	169/22/73	581/37/117	847/38/112	231/29/90	52/17/38
K4JPD	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

WORLD TOP MULTI-OPERATOR MULTI-TRANSMITTER

Station	160	80	40	20	15	10
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	1829/25/80	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 MULTI-OPERATOR MULTI-TRANSMITTER

Station	160	80	40	20	15	10
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? . . . *K9CVB*. 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*. I 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 *F05BI* . . . *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 . . . *P14RTZ*. 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 . . . *K5IID* (*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 first 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 contesters 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 auro-
ra 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 . . . *E11DH*. Nice to work *HS0A* for a new zone for my *WAZ* on 160 . . . *HB9AMO*. A real experience to work USA by auro-
ra 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/5B4*. Lost a few JAs while assisting a passing motorist . . . *IK5AFR*. Your contests are fascinating world feasts without political borders . . . *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 keys! *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/Pfalz	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
Gauche Amigos CW (GACW)	735,714
Tallinn Radio Club	452,157
Venezuelan DX Club	384,223
PZK	96,993
Krakowski Klub Krotkofalocow	92,266

Station Operators

Multi-Operator Single Transmitter

A16V & W6SZN. A66D & N1EE. N6AUV. W6NWS. AK1L & KA1X. BY1PK: & Tung 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/SB4:** DF4ZL, DF6ZH, DL1RK. **DF0BB:** DJ0ND, DL6MAO, DL1MAJ. **DF0RN:** DF3FX, DL3YCP, DJ1GJ & DJ0IP, DL5MAE. **DJ0EK:** DK0BI, DJ0EA, DL8GAR, DF8UG, DL1GS. **DL0MM:** DL4FJ, DJ7IK. **DK0BI:** DJ3WM, DJ3XD, DJ7MG, DK1GF, DK1II, DL5OAP. **DL7ON & DL7SI. DL8NBJ & DL4NAC. DL8DK:** DL1FBQ, DL8FBP, DJ0GN, DL2ZAE. **EA3VY:** EA3's AIR, AVV, DXD, FER, FHC, KV, LL. **EA6URP:** EA6GD, EA6E. **F5IN & F6ARC. F6BEE. F6EID & F6GNC. F6EMT. F6ENO & F6DKV. F6G0E & F6OF. F5WB. F6DZS, F51AU. F6KPO:** F6DZD, F6IFI, F6ETI. **FH/W6KG:** W6KG, W6OL. **GB4DX:** G4's DRS, EOF, GIR, JGL, G5LP. **G0AAA:** G3SXW, G3TXF, G3VVQ. **HA1KRR:** HA1's ZZ, DRR, XO, XU, ZN. **HG1ZV. HA3KMR:** Kiss, Jrau, Horrath, Kiss, Kunkli. **HA3KHL:** Kaiser, Majer, Many, Pasztor, Vass, Turjancki. **HA3KNA:** HA3's OV, OJ, NS, NU. **HA5KAG:** HA5's ABC, OG, DE, AEX. **A5KFL:** Gabor, Laszlo, Zoltan, Pal, Zoltan, Jozsef. **HA6KNC:** HA6's OI, OA, NG, OO, IOB. **H89AJ:** HB9's DL, UH, AQF, BWN, CCT, XJJ, CJR, COB, COC, CTU, CZF, DEO. **H89Z:** HB9CSA, HR9RE. **HC8A:** K1XM, KQ1F, KD2E. **HG1S:** Gelber, Muller, Finta, Pozsgaj, Pittmann, Nimeth. **HG1Z:** HA1's XY, ZE, XR, RS, RT, DRD. **HG5A:** 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, Bocsi, Dienes, Vingender, Peto, Suszter. **HG7B:** HA2EE0, HA5's WA, PP, DW, HA6DU, HA7's UL, JAO, UC, UO. **HABIE. HG9R:** HA9's OA, PP, RP, RU, RX, SU. **HS8A:** DL7MAE, G4UAV, HS1AMH, JA0JCJ, K2BA, ON5OS. **IK2BHX & I2VXJ, IK2EGL, IK2GSN. JA1YAG:** JH0SPE, JN1BAD, JP1NWZ, JR4EJW, JR4EAR. **JA1YCL:** JK1SST, JL1LNC, JL1QOC, JN1GPR, JO1GAD, JS1AFY. **JA1YFG:** JN1I2K, JO1RUR, JP1OGL. **JA1YWX:** JG6MII, JF2IWL, JG11MM, JH5DX0, JH7PKU, JH0USD, JI2GUT, JI1HJR, JU2DIM, JM1CAX, JM1LPL, JM1MCF, JN3PYQ, JO1BMV, JR4NIV. **JA1YXP:** JH9CAU, JH0RRR, JI2DLF, JN1OTG, JO1JOY, JR4HCY, JR0ALC, JR0GUM, JA3YBF: JA9UXW, JG6BXX, JF4BME, JG3LZG, JH9GRM, JH9UHF, JI2ICA, JI3JKS, JN1APL, JO1IAP, JR4AGT, JR4IZK. **JA5YJ:** JF4BNH, JI3LJU. **JAS7YI:** JA6PI, JG5MQV, JF6AEC, JF6CIC, JF6DEA, JF6E0Z, JF6MND, JF6PPO, JG6CVD, JG6EAP, JG6GZC, JN1LLA, JR6GKT, JR6QFV, T. Higashi, Y. Moriyama, T. Nagasaki. **JA7YAA:** JE7HLZ, JE7QCQ, JG3JRM, JH0MRP, JH0ORW, JN1UYN, JR7PGL, JR8BMM. **JA8YFB:** JE7JNB, JE7MOY, JFTAAD, JF7GOK, JF7LEI, JF7TDN, JH0QNT, JN1RON, JO1NBV, JR7GYC, JR7JLU, JR7JLU, JR7JOF, JR7RLB, JR7WFH, JR0NB. **JAS7YB:** JH8PNE, JO1DFG, JR8D0B. **JAS7YV:** JA9YWD, JA9XZD, JH9AEV, JH9ETC, JH9KZQ. **JE1YRD:** JAE4XF, JE1JKL, JH1DTC, JI2KVV, JR2SCJ, JR4WKV, KBHVT. **JH7YJF:** JA7DWU, JA7RHJ, JA7SN, JR7XKN. **K1AR & Packet. K1IU & KA1GOW. K1KI & Packet. K1RD & KB1W. KB1KE, WA1ZAM, WB1EVL, NB1Y.**

K1SA & KY1K, K1MZB. K3KG & K4BAI, K4FJ, W4NL. K300 & K3NZ, K3ZUF. K4JPD & N4ZZ. KAVX/# & AH2U, K9BGL, K9FD, K9ZO, KM9P, NS0Z. K5KG/LU: K5KG, K5TU. **K5RR & K5KJ, K5KN, N5TP, NR5K, W5AH, W5JYF, W5SK, K6HII & K6AUC. K7LXC & K7HBN, K7WA, KR7G, VQ9GB. K8AZ & K8NZ, K08M, K8MR, N8ATR, W8SKL, W8KIC. KA1KPH & KM1P, NC1B. K83MM & N3ARK, K3IE, WB3LFZ. K80M & ABW, K0PFC, K0RWL, K0UAA, K0VBU, K80U, K00IW, NT0P. KC5DX & WDSJ. K03H & Net. K40M & Net. KJ4NS & AA4SB, NU40. KM1C & W1PH, W8B8TH, KB1T. KP4BZ & NP4Z, W4FC, W4FD, W4FK. KY3M & W3LR. KZ2S & KA2AEV. LX9BV: LX1WW, LX1JP. **LZ1KEZ:** Iwan, Encro, Kolvo. **LZ1KRC:** Mitko, Club. **LZ1KRP:** Ilija, Mitko. **LZ1KRC:** Victor, Asen, George. **LZ1KVZ:** Goshu, Todor. **LZ2KRU:** Ivelin, Wasil. Iiko. **LZ2KYA:** Willa, Dilian, Emil. **LZ7A:** LZ2's PO, HE, DF, CC, -E-44. **N1AU & NB1H, K1FWE, N3BB/5 & WN4KN, N3BNA & N3DTM, ND3Y. N3RS & K3JJG, KM3T. N4EJW & N4EJ, N4WW & K0LUZ, KU4J, WY4A. N6AW & N6AV, W6KP, K7EG. N6ND & KZ6E, N6CW, W6UQF, W6GN. N6IW & Guido, K1MZB, K1SA, KN1M, KY1K. OH1AF:** OH1's EH, JS, KA, NOA, -100. **OH1VR & OH1NR, OH2BUQ. OH9AB:** OH9NV, OH9SS. **OH0AM:** OH2's BA7, B0S, BMD, BVI, BNN, VY, OH1JT, OH6UM. **OK1KCF:** OK1KZ, Pavel. **OK1KHK:** Club. **OK1KLV:** OK1DVE, Club. **OK1KQJ:** OK1's BY, AYP, IMP, DXS, DC, DLE, AZG. **OK1KSO:** OK1's AEZ, CF, WT, AAU, All, JJB. **OK1DAZ:** OK1DDG, Club. **OK1OPT:** Club. **OK2KDS:** OK2UF, Club. **OK2KMS:** OK2's JS, FD, PZV, PTW. **OK2KPS:** Club. **OK2OSN:** OK2BFN, Club. **OK3KAG:** Club. **OK3KGO:** OK3CLL, OK3ZCD, OK3-2351. **OK3RJB:** OK3's CDD, COR, CSQ, CSB, CKW, TRJ, CPG, TCL. **OK3RKA:** OK3TDP, OK3CPC. **OK5R:** OK1's ADM, ADS, ALW, AWZ, DIM, RI. **OK5SSM:** OK1's AYE, FRI, DRI. **OZ4HAM:** OZ1BJF, OZ1FYW, OZ2JZ. **P4G4Z:** PA3AFH, PA3BTH, PA05PI, PA0WRS. **SK5EU:** SM5ODD, Club. **SK5SM:** SM5's NZY, PHU, IXE, CAK, SM6MYF, SM6KNE, SM7PMY. **SK6RR:** SM6CVT, SA8LBR. **SK6TW:** SM6's AOU, CKU, CPY, DER, DOI, DQO. **SL0CB:** SM3LGO, SM7ORL, SM5LRM. **SPIPER:** SP1's CU, MHZ, NQF. **SP3KRF:** Club. **SM3PKK:** SP3's MIZ, MIW, RAZ, LWP, DAH. **SP5PBE:** SP5's ANJ, ELA, FKW, GIO, JTF, JTM. **SP6PDT:** SP6's RCU, OUG, IKS, OJE. **SP8PLU:** Club. **SP9ZAS:** Piotrowski, Zawislak. **U3KM:** UV3ACX, UA3-170-481, UA3-170-793. **U3TT:** Club. **UB30ZZ:** Alex, Oleg, Staw. **UB4CXU:** UB5's CBU, CDX, ITK. **UB4CYT:** RB5CB, RB5CO, RB5CW, UB5CCN. **UB4DXX:** UB5DCW, Club. **UB4EWG:** Alex, Serge, Serge. **UB4EXU:** UB5's EJB, EOD, 060-1894. **UB4EY:** RB5ECV, RB5EEU, UB5EFV, UB5EPU, UB5EQU. **UB4FWC:** Club. **UB4GWC:** George, Vasily, Victor. **UB4IWN:** UB4IRI, UB4ITR, UT5SI. **UB4IWI:** UB4IUK, UB5I0V, UB5IQW. **UB4IWR:** Club. **UB4IKZ:** RB4IDY, UB5INO, UY5EG, UB5-073-3867. **UB4IYK:** Gerg, Serg, Vlad. **UB4LZA:** UB4LEP, UB5LEE, UY5DV. **UB4MWA:** UB5's MDA, MMR, MOJ. **UB4MWU:** UB4MWU, UB5MBM. **UB4MZK:** UB4MVE, UB5MHO, UB5MJS. **UB4OWY:** Club. **UB4SUV:** RB2SB, RB5SJ, UB5SDE. **UB4VVA:** Club. **UB4WZA:** UB5's WBY, WCX, 068-453. **UB4XW:** 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. **UC1VWD:** Igor, Ivan, **UC1VWF:** UC2's WBI, WBP, XW, AI. **UC1VXD:** UC2's WCC, WCP, 006-43. **UL8CWW:** Alex, Serv, Serv. **UL8GWW:** RL7GH, RL7GN, UL7GBN, UL7GDU,**

UL7-018-99. **U040WR:** Igor, Oleg, Serge. **UP1BWW:** UP2's BAS, BKW, BLA, BMW, PAX, PX, 038-892, 038-1268. **UP1BFX:** UP2BAI, UP2-03801142. **UP1BYC:** Andrius, Vita. **UP1BYK:** UP2BJV, UP2-038-1091. **UP1BZA:** UP2's, BHN, BIM, BLR, BNY, OX, -038-1732. **UP1BZM:** UP2-038-1744, UP2-038-1787. **UP1BZO:** RP2BHI, RP2BIT, UC2AIP, UP2BFN, UP2BMT, UP2BDF, UP2-038-8346, UP2-038-1751. **UP1BZQ:** UP2BAT, UP2BQF, UP2-038-1682. **U01GWB:** UR2R02, U02-037-233. **U01GWE:** Club. **U01GWW:** RQ2GG, UQ2's GAG, GLK, -037-83, 037-116. **U01GWX:** George, Vladimir. **U01GXY:** UQ2LL, UQ2-037-374. **UR1RWX:** UR2's RJ, RDJ, RHF, RL, RMA, 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. **UT4UWL:** Club. **UT4UXW:** UL7LEN, UT4UZ, UT5UGR, UY5JW. **UZ1AWO:** UA1AIL, UA1-169-880, UA1-169-2412. **UZ1AWX:** Club. **UZ1OWJ:** UA10AA, UA1-113-31, UA1-113-490. **UZ1OWZ:** Club. **UZ1TWB:** UA1TAE, UA1-144-380, UA1-144-386. **UZ1ZZZ:** UA1's ZA, ZEO, 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 AQW, AQX, DHW, -170-79, UB5-067-866. **UZ3DXW:** UA3's DDB, DFO, -142-1944, -142-1945, -142-1949. **UZ3DWM:** UA3QLJ, UA3OPA, UA3-121-3104. **UZ3QYA:** Alex, Alex, Serge. **UZ3TYE:** Club. **UZ3XWA:** UA3-127-56, UA3-127-95, U18-047-012. **UZ4AWT:** Eugene, Nick, Vladimir. **UZ4CYL:** UA4CCG, UW4CO, UW4CT. **UZ4FWO:** RA4FBG, UA4FAO, UA4-148-677, UA4-148-669, UA4-148-679. **UZ4HWS:** Al, Ven, Vasily. **UZ4WVB:** 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:** RA6LYA, UA6LMW, UV6LX. **UZ6YWB:** Club. **UZ9AYA:** UA9's AM, AO, OG, UMBMR, 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. **UZ9SWM:** UA9's SA, SBO, SDR, SEX, SJZ, SJY. **UZ9SWY:** RA9SVT, UA9's SHO, SIF, SGW, TS, Igor, Serge. **UZ9UWK:** RA9UNK, UA9UEG, UA9UTG. **UZ9XWA:** UA9XDG, UA9-090-200, UA9-090-745. **UA9XXM:** UA9XF, UW9XA, UA9-090-744. **UZ8AXX:** Club. **UZ8JWA:** UA8's JAB, JB, JO. **UZ8OWA:** UA8's QAS, QDL, QEW. **UZ8SWA:** UA8-124's -143, -237, -576. **UZ8UWE:** UA8's HA8VF, UW8UO. **UZ8ZWO:** UA8's ZBP, ZCJ, ZDD.

VE1CIT & VE1BIG: VE1BII, VE2LI & VE1BHA, VE2BTW. **VE3RF:** VE3DAP, VE3INO. **VE3WAA:** VE3DTR, VE3IIN, VE3LJE, VE3LFA, VE3EOD, VE3OEF, VE3OEV, VE3PCT, VE3PJC. **VO2WL:** K3TM, NB3O. **VPSX:** K6ANP, KX6K, WW6F. **VP9AD:** N3RD, W3XJ. **VU2TEC:** VU2FOY, VU2HRN, VU2MVX, VU2TER. **W1BK & N1BHI:** W2JT: K2GHV, Net. **W2UI & N3KR:** W3GG & K3RT, W3NX & K8NA. **W4FX & W2CW:** KJ4X, N4S2, W4JZ. **W5ASP & N5EA:** W5VAH, W5VWN. **W5WMM & K5GA:** K5LZO, N5AN, N5IVF. **W6BIP & WA6AUE:** **W8IMZ:** N8BJO, W8BMRJ. **W8JGU & KZBY:** N8ABD, N8DCJ, W8CZN, W8BBN, W8DXB, W8DXG. **W8XK & K8MAT:** W4AQDQ & W44QMQ. **W7A7NI & W6DAT:** **WB0NAA/YN:** K3ZO, WB0NAA. **WK5V & N6NWX:** N7AHN. **W86R & AK6T:** N86L, K16EZ, NP4VI. **XE2NO & AA6B:** K5TA. **Y4AZL & Y33VL:** Y41RM, Y66GL, Y66LI, Y26WL. **Y4ZZB & Y42WB:** **Y45ZM & Y45YM:** Y45WM. **YT3M:** YU3's ZV, EW, ZD, GO, RJ, IX. **YT3T:** YU3's BQ, EW, HR, EU, YU2YW. **YU1ATA:** YU1ZC, YU1TT. **YU4BAB:** YU4RS's -1600, -1555, -1570. **YU4CBC:** YU4GB, Club. **YU56BC:** YU5's GB, UC, JA, Kire, Kriste, Toni. **Y2IU:** YU1XA, Club. **ZY40D:** PY1DF, PY1UR, PY40D, PY40D, PY4WG. **4N1F:** YU1FQ, YU1HA, YU1GO, YU1EFG. **4N2M:** YU2WM, YU2RO, YU2SVA, YU2ECO. **4N4T:** Trkulja, Blagic, Cehic.

Station Operators

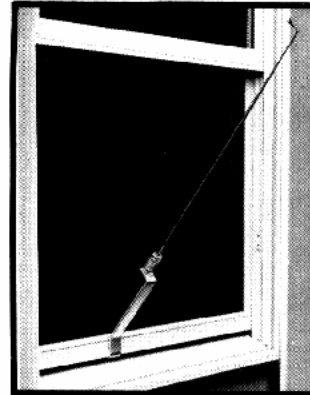
Multi-Operator Multi-Transmitter

DK3BJ: DF30C, DJ1FC, DJ4AX, DJ4PT, DJ9IE, DK2Y1, DK4TP, DL9GS. **DL0KF:** DF3LP, DF3LZ, DF6LH, DJ2BV, DJ3UL, DJ4FZ, DJ5AV, DJ5AZ, DJ6TK, DJ7SW, DK9AV, DL2LAK, DL2ZT, DL3HAA, DL4BAN, DL5LC, DL7OY, DL8PY, DL8VR. **EA9CE:** EA5BRA, EA7ALG, EA7CFW, EA7DS, EA7TH, EA7TL, EA9ED, EA9EU, EA9KG. **J6DX:** K6GXO, N9AG, NC8Q, W8ILC, W8OK, W8PR, W8BENR, W8BIXE. **JA2YKA:** JA4UDP, JA9SSY, JA9XKS, JE2JCV, JE2SRB, JE2VMB, JE2VYM. **JE7BZ, JF2DQJ, JF2UTL, JG2AGD, JG2BND, JG2MTC, JG2VTD, JH2QXG, JH4VBO, JH1NPL, JI2UHH, JI2WYI, JJ1BTC, JJ1MVV, JJ2FAU, JJ2JNF, JK2CZL, JR70MD, K. Saito. JA3YKC:** JE3MAS, JE6LPM, JG3BJG, JG3CPC, JG3HLV, JG3MRT, JG3WON, JI3ERV, JK3HYA, JR3WLA, JR4IMK, JR4PMX, JR5ARD, JR6NWN. **JA9YBA:** JA9BEX, JA9LJ, JA9FO, JA9OTX, JA9OWJ, JA9YDA, JH9KIF, JH9VSH, JH0CAZ, JH7UJR, JJ3URK, JA9-10148. **KP2N & AA6AA:** K5HK, K5VT, KA6S, KC7V, N6DX, N6VI, N6ZV, N7BG, W6MSG, W6OUL, W7CB, W8BGR, W7GT. **KS8S & ADBP:** KJ8E, W8FN, WA6GX, WA8SAE, WM4T. **LZ1KRB:** LZ1QD, LZ1XS, LZ1ZL, LZ1ZM, LZ1M-280, LZ1M-290, LZ1M-310, Vasil Kamilarov, Stoycho Ganevsky. **N2AA & K2GL:** K2NG, K2SS, K2TT, K2TW, K2UR, K3EST, K5NA, KQ2X, KR2Q, KU2M, KU2Q, K3M, KY2P, N2WT, NT2X, W2BMAE, W2BHC, W2KMY, N4ZC & K25D, PA3ABA, N9CC, W4NUS, W4D4TF, W8MAZ, N6TU & AA6T, KA6LA, N6ITV, N6RZ, W6NV, WA6OCV, W8B5HD. **NF2L & AG2S:** K2YY, K3JLT, N3RG, WA2HGM, W82YOF. **NL7G & KL7PJ:** KL7Y, KL7U, NL7GP, WL7E. **NR5M & K2TNO:** K5GN, K5EIV, K6SU, KN5H, N5RP, NM5M, NT5D, NZ5I, W9AGH, W85N, WM5K, W15P. **OK7AA:** OK3CAP, OK3CBU, OK3CEI, OK3CEM, OK3CLA, OK3COW, OK3CUM, OK3EA, OK3JW, OK3LU, OK3LZ, OK3TJ, OK3WM, OK3YEC, OK3YX, OK3ZAF. **PA6DX:** PA0BCL, PA0COR, PA0ERA, PA0JMH, PA0VAL, PA3BAS, PA3BFM, PA3BUD, PA3OCF, PA3CEE, PA3CEF, PA3CTM, PA3CWM, PA3DEM, PA3DFT, PA3DKC, PA3DMH, PA3DOW, PA3DWD. **PI4RT:** PA3ACA, PA3ALP, PA3BBL, PA3BFB, PA3BWD, PA3CAL, PA3ELX, PE1ALC, PD8MCL. **UP9A:** UP2BAW, UP2BCO, UP2BCT, UP2BCW, UP2BIG, UP2BJJ, UP2BIL, UP2BN, UP2BNZ, UP2BRF, UP2CY, UP2PAJ, UP2PA, UP2BF. **VP2MU:** K8GL, KQ2SX, KA2CII, N2MG, VP2MAI, VP2MIX. **W3LPL & AI3M:** K3DI, K3RA, KT3Y, N8II, W3XY, W83JRU, W44XM. **XE2SI & AA6RX:** AB6R, AE6E, K6JYO, KV6O, N6ADI, N6DCE, N6DLU, N6GU, N6IW, N6NU, W2KYA, W6HAL, WA6OTU. **4U11TU:** 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	J11QPU	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

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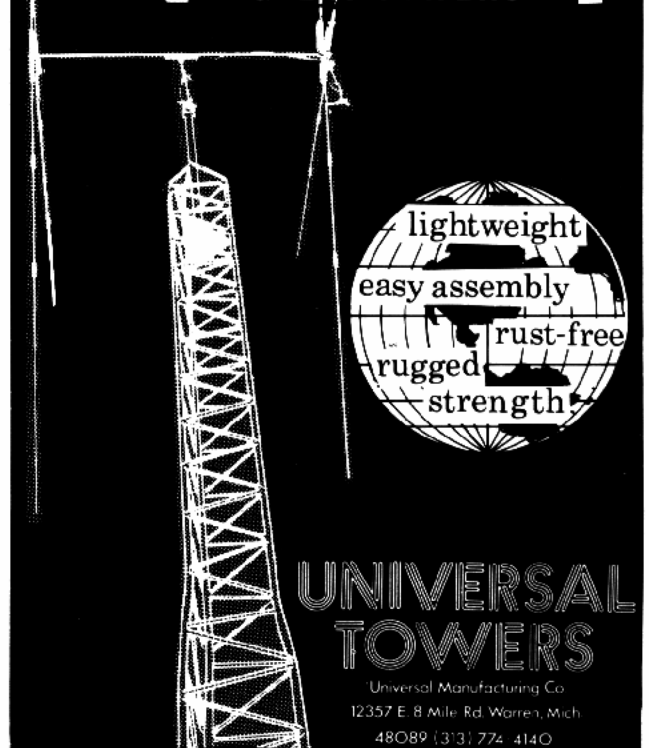
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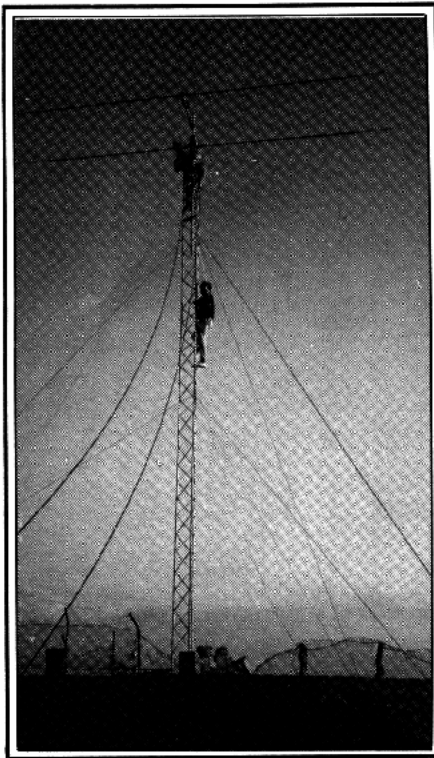


light weight
easy assembly
rust-free
rugged
strength

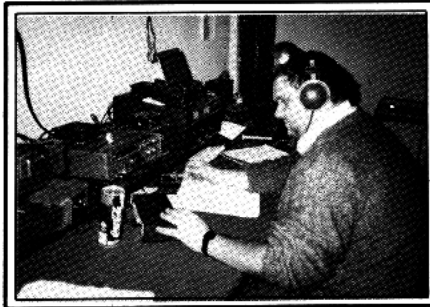
UNIVERSAL TOWERS

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

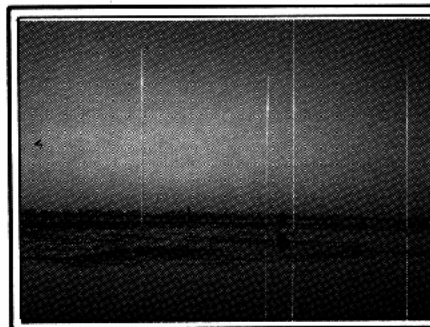
CIRCLE 115 ON READER SERVICE CARD



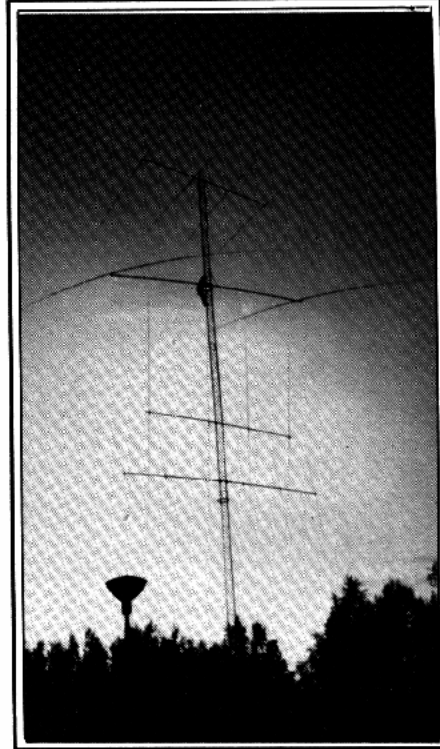
Jorma, OH2KI, shows us how ZB2X managed to be the success it was (number 1 Single Op All Band Europe). Here Jorma is shown scaling the tower just six hours before the contest.



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)



OH8PF 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

W1KM	A	3,029,832	2049	131	376
K12M		2,779,014	1842	136	385
K1EA		2,631,084	1797	138	378
K5ZD/1		2,469,159	1676	130	379
K1T0		2,311,680	1668	122	358
K1CC		2,253,421	1675	124	339
K1CF		1,600,131	1217	127	334
K1XA		1,455,220	1284	106	280
K1DG		1,322,558	1027	122	335
W1BIH		881,995	754	121	300

W1FJ		866,013	776	97	284
AK1A		788,522	750	102	271
K1VR		633,065	702	97	232
W1WAI		517,390	608	82	228
KG1D		484,036	588	81	212
KA1DWX		417,984	454	100	236
K1YR		306,000	444	67	183
WA2CNF	/1	269,598	394	79	183
A13E/1		214,020	319	75	171
W1CWU		183,736	300	75	163
W1IHN		179,630	267	80	173
K1RX		105,600	229	51	114
WB1CNM		89,199	151	58	129
KR1B		81,310	174	51	122
N1DC		29,682	119	34	63
K21M		27,216	96	43	69
W1OPJ		7,168	50	17	39
W1PLJ		5,685	44	13	33
K1XF		2,040	24	14	20
WA1FCN	21	49,384	201	20	66
K1EFI		35,460	142	21	69
W1WEF/M		1,424	36	6	10

K1RU	14	468,402	1142	37	104
W1YN		49,725	200	20	65
W1XN		12,932	74	17	44
W1END		3,360	35	12	33
K1ZZ	7	135,001	385	31	96
K8PO/1		85,878	260	30	87
W1FV	3.5	195,804	616	23	88
W1CF	1.8	43,460	234	19	63
					(Opr. WA2SPL)
N2LT	A	2,446,688	1733	131	356
N2MM		1,671,705	1342	125	310
W2WJN		1,511,619	1143	130	331
K2LE		1,313,722	1078	116	317
N2RM		877,914	1011	85	217
K2NJ		521,640	648	79	201
N2UN		399,645	464	89	232
K2FL		338,436	405	96	220
KA2ZPD		258,318	388	82	172
K2OIL		257,740	367	65	198
KQ2K		224,924	284	81	196
WA2ASQ		204,288	328	72	156
W2NS		195,432	338	50	154
W2FTY		185,861	306	71	150
K2JLA		185,502	273	79	179
K2BK		130,170	228	62	135
W2TZ		125,672	250	61	123
W2KHQ		108,744	202	65	132
N2AIF		105,271	198	63	136
KY2D		98,326	175	63	148
KU2C		97,440	310	47	95
N2AIR		92,630	208	45	112
N2MR		91,390	190	67	123
K2OF		90,139	213	51	112
NA2D		88,136	188	56	128
KW2J		69,776	166	62	116
NQ2D		67,116	144	56	148
W2WD		57,670	153	48	98
W2CGE		54,720	88	54	106
W2FOI		53,579	147	38	93
K2PF		41,952	112	46	92
W2PHT		41,500	128	43	90
W2GKZ		36,708	107	43	82
W2FR		33,048	94	52	84
W2KTF		22,673	104	24	55
WA2VYA		22,624	87	36	65
KT2D		18,662	75	31	55
WB2HJW		10,934	54	30	47
K2HVN/M		6,726	41	20	39
NR2I		247	10	5	8
KE2N	28	1,300	24	10	16
K2SG	21	113,420	369	24	83
K2UR		112,597	355	23	86
KA2HMS		46,191	191	20	69
K2MFY		34,263	155	21	60

W2YV	14	573,990	1245	38	121
					(Opr. KQ2M)
K2VV		534,576	1236	35	113
K2RD		394,236	948	33	108
K2WK		306,636	755	34	104
NG2X		116,164	373	29	84
W2AYJ		55,900	175	25	75
K2UU	7	102,544	307	32	84
NT2S		16,200	103	17	43
KB2HZ	3.5	22,338	118	19	54
W2HG		20,350	107	19	55
K2LP		4,250	8	4	7
NA2M	1.8	2,640	40	11	19
N2KA		198	8	4	7
W3GRF	A	2,933,507	1961	132	391
					(Opr. KQ0Q)
W3BGN		2,209,006	1587	131	351
K3WW		2,166,300	1665	122	328
K3TUP		2,103,150	1413	135	390
					(Opr. K3UA)
K3LR		2,007,208	1378	141	370
AA1K/3		1,967,471	1491	124	343
KC8C/3		1,917,448	1614	111	301
N3AD		1,854,855	1529	113	310
K3NA		1,590,246	1292	120	321
N3CXV		917,280	950	104	260
K3VW		799,686	790	101	253
W3UM		714,058	705	108	253
K3WJV		644,206	613	106	277
W3VO		581,231	681	88	213
K3IPK		536,400	654	85	215
W3UJ		322,252	467	67	171
W3AZ		291,500	396	80	185
W3AF		221,308	307	76	168
W3GN		199,184	300	74	162
W3EVW		164,589	252	77	172
N3E0F		80,850	188	59	115
N3HW		80,136	190	54	105
AA3B		79,872	183	48	108
W3CV		78,752	173	63	121
W3QIR		60,024	136	50	124
W3HXI		28,728	123	35	49
W3EAN		23,318	114	24	63
W3YFV		18,130	75	35	63
W3HVM		13,705	68	28	49
KB3A	28	6,544	86	13	31
WA3CGE		6,380	57	13	31
W3TB	21	8,640	73	17	37
K3RR	14	253,750	694	30	95
N3RR		172,596	525	28	86
K3BSY		125,430	372	31	82
N3DOI		7,122	19	8	14
WB3J/3	7	154,014	411	35	98
W3QM	3.5	25,382	130	20	54

K3LZ		24,893	128	19	54
K4JLD/3		7,436	55	16	36
WB3AVN	1.8	10,915	77	16	43
N6AR/4	A	1,985,760	1381	139	365
WX4G		1,982,464	1370	143	369
W4RX		1,878,566	1479	139	352
N04I		1,640,672	1232	138	334
W3VT/4		1,616,220	1163	130	362
N4XG		1,498,791	1085	130	349
K4PQ		1,434,420	1226	115	308
KE9A/4		877,735	892	107	242
W3YY/4		622,755	714	100	215
K4AMC		574,182	592	100	243
K4PI		554,414	506	115	283
W9LT/4		364,785	459	79	214
AB4H		349,758	425	98	208
W1UA/4		316,470	427	97	177
K4PB		312,602	394	91	207
K2PEQ/4		281,162	352	96	206
K4OD		254,079	357	76	183
K4CEB		234,650	345	83	164
K4LQ		227,970	322	78	177
W4YE		192,907	323	53	156
N4TG		172,235	266	81	164
N4XM		167,486	264	83	164
N4XR		167,440	270	74	186
K4GD		158,970	276	60	150
W4BTZ		149,017	274	74	135
W24F		139,531	246	66	151
K4FPF		135,200	255	65	135
K4BAM		131,700	258	55	130
N4MM		122,808	217	63	141
K4FCI		109,025	235	55	120
WB4AKE		108,238	222	56	125
KN4B		102,235	227	53	108
AA4S		98,235	202	62	123
WB4GNT		96,576	198	69	123
KV4AM		92,880	196	56	116
W4BFR		85,956	198	56	118
W4WKQ		83,721	201	61	116
K4PR		74,900	194	61	114
WS4G		69,888	161	61	107
WB4FOT		64,080	161	47	97
W4YN		52,736	150	44	84
N4LJS		46,011	125	58	89
KB4JS		45,743	125	58	91
WA4VDE		33,877	103	42	81
K6ETM/4		20,056	84	34	58
N7A/4		7,755	53	20	35
W4GTS		7,020	50	23	37
KK3Q/4		1,258	60	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

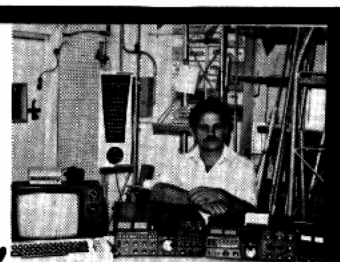
JR2CFD	25,632	140	28	44	JABQNJ	14	70,300	282	30	55	UP38Q/UF	21	211,120	815	22	69	OK1DKW	306,504	805	63	195	OK3CSQ	3,740	57	11	33	
JA2BJC	22,100	117	24	44	JABUMV	7	60,816	278	31	53	UP2BBM						OK3PQ	262,056	554	72	172	OL6BNB	3,616	112	5	27	
JH2XMO	19,647	132	21	38	JA0KAZ	**	22,440	104	31	54	/UF	14	213,850	819	25	66	OK2EC	232,596	443	76	176	OK3TEW	3,355	119	5	24	
JA2EC	15,768	110	22	32	JA0UOI	**	1,853	41	10	7	UP3BA/UF	7	695,134	1875	32	92	OK1BB	152,262	340	58	140	OL9CSN	2,550	116	5	20	
JA2KPV	13,515	105	19	32	JABDAI	3.5	14,518	114	23	38	UP2BJK						OK1EP	138,866	311	56	127	OK1MNI	2,378	84	5	24	
JR2ASX	5,880	58	17	25							/UF	3.5	339,158	1194	25	76	OK1MKU	129,960	340	56	134	OL6BNW	2,079	76	5	22	
JE2LDX	18,626	109	24	43							UF6VBC	1.8	45,195	425	7	34	OK3IF	123,543	386	40	119	OK1AJJ	1,392	59	4	20	
JG2LGM	3,051	45	14	13							UP2BNA						OK2PO	122,304	422	51	141	OL8CSO	1,248	23	9	17	
JA2IVK	7,144	86	16	22							/UF	**	13,913	161	6	25	OK3CGI	107,670	365	43	142	OK1HCG	1,104	45	4	20	
JA2EJ	2,666	34	12	19													OK2ABU	106,032	527	54	134	OK1KZD/P	768	33	4	20	
JF3CCN	296,616	555	83	121													OK3CDZ	96,640	302	46	114	OK1MSB	720	43	3	17	
JG3NKP	32,936	124	39	53													OK3CEL	95,524	477	39	104	OL5BOP	420	30	2	13	
JH3JYS	26,600	117	49	51													OK3FON	93,279	262	54	123	OK1JK	378	27	1	12	
JR3XEX	21,670	106	40	54													OK2AG	76,288	203	41	108	OL9COW	374	36	3	14	
JA3UWB	20,331	101	38	43													OK1MZO	75,900	377	34	116	OL5VGP	294	29	2	12	
JH3TXP	19,125	101	29	46													OK1MHI	73,216	339	33	110	OK3YFM	154	14	3	8	
JA3ARM	16,660	115	31	37													OK2BTP	55,224	291	32	86						
JG3EHD	4,116	53	14	14													OK2BSG	52,537	174	42	65						
J13BFC	1,408	22	10	12													OK3MR	51,570	213	43	92						
JA3QJL	103,700	448	30	55													OK1FTW	51,546	148	57	85						
JR3NZC	84,992	378	29	54													OK1ALQ	50,020	206	43	122						
JK3GAD	22,243	148	22	37													OK1DXW	40,400	234	32	93						
JR3WXA	16,359	112	20	37													OK2OVZ	39,006	197	21	45						
JR3YYJ	11,016	81	22	29													OK2BCZ	38,870	266	30	100						
J13KDH	7,920	65	17	28													OK3CWF	35,052	381	22	70						
JA3YDS	44,622	232	26	48													OK1DZJ	29,767	109	42	61						
JA3DM	22,348	111	28	46													OK3THM	29,000	103	41	59						
JH3DEJ	234	8	7	6													OK1DVK	28,574	121	39	118						
J13XZ	34,190	205	20	40													OK1FCA	24,948	171	48	51						
JA3BRB	5,964	50	17	25													OK2BCI	24,514	82	44	75						
J13OIP	2,496	41	14	10													OK1ATX	20,556	89	36	52						
JH3BBB	39,960	204	28	46													OK3CMZ	20,273	83	38	59						
JA3BCT	1,040	24	9	11													OK1AWC	15,745	96	26	41						
JH3CYZ	1,378	32	10	16													OK3KJJ	14,694	147	13	43						
JR4IVR	275,761	401	103	154													OK1DGN	14,564	144	22	45						
JH4UYB	252,805	469	86	131													OK3ZAB	14,272	195	32	32						
JA4ESR	195,000	383	85	114													OK3TRJ	13,857	56	41	52						
JR4VGD	42,069	147	49	62													OK1DZL	13,680	121	23	34						
JA4FMS	27,690	138	36	42													OK3TUM	12,642	258	9	40						
JA4ATV	11,020	66	21	37													OK2KHD	10,998	59	31	47						
JR4ISK	7,809	58	25	32													OK2KNJ	8,694	111	20	43						
JE4VVM	56,560	252	29	51													OK3CTX	6,384	105	15	41						
JE4DNQ/4	12,744	90	21	33													OK3ZWX	5,841	37	25	34						
JA4FWM	143,162	530	30	64													OK1DIS	5,661	104	14	37						
JH4IFF	49,432	243	25	49													OK3CEG	4,452	40	23	30						
JA4QZH	2,368	64	16	21													OK1ADU	2,852	40	12	19						
JA4YPE	266	14	6	8													OK3CSQ	2,442	20	17	20						
JA5AF	17,925	101	31	44													OK1AEH	2,211	42	13	28						
JR5JAQ	7,098	66	18	24													OK1AIA	1,836	49	8	28						
JA5FDJ	26,064	149	27	45													OK1XW	28	10,106	96	18	44					
JA5JG	6,750	53	19	26													OK1AJN	2,700	38	12	24						
JA5JCV	92,365	395	27	64													OK3IR	21	37,980	185	28	62					
JA5IU	4,360	51	18	22													OK2QX	13,266	94	20	47						
JH6TYD	97,756	279	65	82													OK2BHQ	11,438	100	15	28						
JE6UVJ	41,292	149	53	58													OK1AIR	6,380	70	16	28						
JA6AKV	31,212	122	45	63													OK2BHV	14	280,028	1061	34	137					
JF6KAC	22,113	94	39	52													OK2PFO	114,885	520	31	84						
JF6JQM	21,538	95	38	51													OK1FV	97,236	403	31	80						
JA6RHH	7,434	49	25	34													OK2BGR	88,992	431	24	72						
JA6BWH	1,260	24	12	9													OK2BNX	84,048	377	31	71						
JR6IQI	4,810	59	15	22													OK1AYO	35,535	260	20	49						
JH6WHN	680	15	8	9													OK1MNV	21,100	217	13	37						
JE6JRY	100,293	364	31	70													OK2PAU	19,580	177	15	28						
JA6YCU	24,034	151	25	36													OK3CAB	15,394	212	11	32						
JA6YCL	40,080	187	27	53													OK3CAE	15,150	180	14	36						
JA6BXA	7	100,266	368	34	58												OK3CPY	6,776	109	13	31						
JA6MNV	69,600	303	29	58													OK1DXK	4,826	63	12	26						
J16DMN	1,245	31	8	7													OK1MIZ	2,100	78	8	13						
JA6GGD	98	8	4	3													OK1XM	175	9	4	3						
JH7LVK	592,140	793	107	177													OK1MNV	57,133	378	21	76						
JA7KM	67,488	191	65	83													OK1MAW	54,600	323	28	77						
JA7BE	29,952	111	44	60													OK2PCF	40,000	335	18	62						
JA7JHT	22,734	99	41	48													OK3CAL	26,569	197	13	50						
JA7PCH	17,028	100	31	35													OK1FBH	14,272	149	16	48						

ASIA		EUROPE		CHECK LOGS	
JAPAN		BULGARIA		Our thanks go to the following stations who sent in check logs:	
JAZYKA	3,174,688	2545	145 319	DA1SK	DF0EG, DK50S, DL3NCI, DL6HCC, DL6RAI, EA1AUS, EA1BVV/EA8,
JASYBA	3,036,563	2521	148 291	EAT1CSB	EABZS, F11ATR, G31CH, G4FDC, G1STK, HA3PT, HA7KLG, HA7KNT,
JAZYKC	2,458,746	2094	135 279	HABRJ	HABXX, HA8NAE, HK3DDD, K4FW, K6FM, K7QQ, K8CL, KE6VL, K08M,
				LA1B	LA2EG, LA5PE, LA6XI, LA8CE, LA8XM, LA9ABA, LA9OI, LA9XG, LA9ZV,
				LZ1IA	LZ1KCC, LZ1KHK, LZ1KHS, LZ1KSD, LZ1MJC, LZ1MJC, LZ2AG, LZ2CF,
				LZ2KD	LZ2SB, LZ2GW, N5TV, N7JR, N7JA, OH1XX, OH2BAH, OH2FO, OH2NL,
				OH3TO	OH5FA, OH5DT, OH5RH, OH6AA, OH6MH, OH6RC, OH6VR, OH6KA,
				OH6ZH	OH7NDX, OH8NKO, OK1AYU, OK1DMP, OK1DQJ, OK1KIX, OK1KTA,
				OK1US	OK2P6G, OK2PLH, OK3CIR, OK3CGT, OK3CQD, OZ1ABA/A, OZ1BUR,
				OZ1CMC	OZ1EUV, OZ1HRS, OZ1IPP, OZ1JLX, OZ1JMM, OZ1JNR, OZ1PP, OZ2E,
				PY2JL	OZ4RS, OZ5PA, OZ5JD, PASAAV, PASAFF, PA3DUA, PA8LKR, PA4GZ,
				PY10L	PY2PK, PY2NZP, PY3CJI, PY6BZ, RA1AI, RA10AZ, RA10E,
				RA3EA	RA3EF, RA3NB, RA3RM, RA4NBG, RA0JB, RA0SS, RB5CB, RB5CY,
				RB5JJ	RB5LTZ, RB5NT, RB5UU, RB5UX, RD6DAA, RL8PYL, RT4UA, RV6AA,
				RV6AM	RV6AZ, RV9UV, RW6AA, RW3DM, RZ3AM, RZ3DZ, SK7UL, SM5AHX,
				SM5CEU	SM5FUA, SM5FUG, SM5ICV, SM5MLE, SM6AHS, SM6BWO, SM6BZE,
				SM6CDN	SM6CMR, SM6LJP, SM6OEF, SM6OLL, SM6REA, SM7CZC, SM7KWE,
				SM7OEL	SM7RWE, SM8BFJ, SM8CMH, SM8CSX, SP1AEN, SP2BK, SP2BLC,
				SP2BME	SP2BMJ, SP2DKI, SP2FAV, SP2GBL, SP2GOH, SP2GUU, SP2IU,
				SP2HGG	SP2PMK, SP2US, SP3BYZ, SP3CQ, SP3DAH, SP3MY, SP3ZAC/3,
				SP4ETD	SP4NKV, SP5CCO, SP5CQW, SP5ILO, SP5PB, SP6CES, SP6FER,
				SP6HTX	SP6KSO, SP6PKQ, SP6AG, SP6BJH, SP6GSC, SP8JMA, SP8SIP,
				SP8ZHY	SP9PDF, SP9CZ, SP9JPA, SP9PF, U3ADD, U410AM, U410FT,
				UA10BQ	UA10CC, UA3AAJ, UA3ACJ, UA3AGW, UA3DAU, UA3DEV, UA3DL,
				UA3DMY	UA3DIT, UA3EJC, UA3ECC, UA3ET, UA3IAA, UA3IJD, UA3LCC,
				UA3MED	UA3NCJ, UA3NEM, UA3PB, UA3PDW, UA3PP, UA3QJ, UA3RAO,
				UA3RCG	UA3RFZ, UA3RFE, UA3TBZ, UA3TFV, UA3VGV, UA40JU, UA4HFK,
				UA4HLX	UA4HML, UA4NBH, UA4NZ, UA4WAP, UA4WH, UA4YAQ, UA4YQ,
				UA4YZ	UA6ADN, UA6HNU, UA6HFZ, UA6HU, UA6LFO, UA6LON, UA6PCH,
				UA6YBU	UA6YCI, UA9AKW, UA9CES, UA9FZ, UA9JEL, UA9MDV, UA9OJ,
				UA9XAA	UA9YU, UA0AAB, UA0DA, UA0FFU, UA0JDD, UA0KAV, UA0KDB,
				UA0KLL	UA0SGN, UA0WZ, UA0ZX, U81RR, U831WA, U83JWW, U84JFJ,
				UB4UDN	UB5AGL, UB5AJP, UB5ENC, UB5EUV, UB5II, UB5IMU, UB5KCA,
				UB5KCT	UB5KJ, UB5LAL, UB5LKY, UB5MEC, UB5MQS, UB5OHU, UB5QJA,
				UB5QVE	UB5VAA, UB5VBI, UB5WEU, UB5ZBG, UB5ZY, UC2AII, UC2IA,
				UC2IDG	UC2OD, UC2SD, UF6VB, UJ6JF, UL7J, UL7PEI, UL7PFE, UL7PH,
				UL8GBV	UM8MGM, UM8MTF, UM8MY, U04OZZ, U050DA, UP2BGP, UP3BI,
				UQ1GWW	UQ1GXV, UQ2GCV, UQ2GEO, UQ2GHJ, UQ2GIU, UQ2GLW, UQ2GLY,
				UQ2GMR	UR2RGN, UTAUB, UTAUH, UT5BP, UT5JBG, UT5UCJ, UT5UFI, UT5UI,
				UV3DAV	UV3HD, UW3QA, UW3EG, UW3PN, UW3ZV, UW4CN, UW6AA, UW6HO,
				UW6HS	UW9CS, UW9CN, UY5GG, UZ1AWT, UZ1LWF, UZ1FWE, UZ1LWV,
				UZ4PZA	UZ6AXF, UZ6EWA, UZ6EWF, UZ6XLM, UZ6LZL, UZ9CZA, UZ9DWO,
				UZ9OXI	UZ9XXG, UZ00WB, UZ0UWC, V5PEX, VE7ACM, VK4UR, W3HVQ,
				W9YDP	WQ5W, Y21AE, Y21DG/A, Y21UC/A, Y21UD, Y21XH/A, Y22JD, Y22TD,
				Y22TO	Y22YJ, Y23CO, Y23EL, Y23QD, Y23RB, Y23VH, Y24CG, Y24EA, Y24GE,
				Y24LN/A	Y24LO, Y24W/A, Y24XD, Y25BE, Y25PA, Y26BN, Y26DO, Y26GN,
				Y26IH	Y26IL, Y27VH, Y27YH, Y28HL, Y28TO, Y31YF, Y32PT, Y32OH, Y33UB,
				Y35VG	Y35WF, Y38YH, Y39XC, Y41MH, Y43KL, Y46TO, Y46XF, Y49MH, Y51YJ,
				Y52ZE	Y53VL, Y54ZA, Y56YF, Y56ZN, Y57ZL, Y61XM, Y62QH, Y64ZL, Y71YV,
				Y75YL	Y02KCB, Y02KY, Y05TA, Y06DDF, YU3RU, YU7DR, YV5ANT, ZL1BSG,
				ZL2BDC	ZY6BG, ZZZ-0548, 4N2D, J6LAD/9Y.
				Disqualifications: None	



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