

KP4D sent us this photo of the antenna layout at NP4A 300 feet above sea level at the top of a copper mine. What a ground!

1980 CQ World Wide DX C.W. Contest Results

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

The Promise of 1981

It is 2 a.m. Sunday morning. The contest has been going on now for 34 hours. But our hero, who has faithfully stuck out all 34 hours, feels that he just must keep combing those bands. As he tunes across 40M c.w., the eyebrows start getting that heavy feeling. Oh, to just have a little sleep. But no—the contest, the contest. . . . All of a sudden, the saving thought hits him. Coffee! Coffee will keep him awake during these late hours so he can snag those juicy 40M and 80M Asian multipliers. His bleary eyes shift now to the area down from the operating table where the six or seven empty coffee cups litter his dupe sheets. But then, alas, the ears ring alive with the sweet sound of Morse Code. What's this—an HS4! For-

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get the coffee; never mind the sleep. The adrenalin flows freely into our hero. Now he is alert and wide awake, poised and ready to make the contact. More c.w. rings through the air. Oh, no—a false alarm. It is just an HL4, and already on the dupe sheet, too. Son of a gun! Our hero hurries back to the tuning. Like the certainty of death and taxes, the eyelids soon begin to droop again, and droop some more . . . and some more. And then, our hero is fast asleep.

The hours slip away in sweet slumber. Gone are the JA runs of early dawn; gone is the world high record our hero aspired to; gone is the glitter of a trophy; gone, even, is the certificate for regional winner. Yet, like the true contester he is, our hero will console himself. "Wait till next year." And now, next year is just a few weeks away. And so, we make this promise to all the faithful contesters out there. A guaranteed bonanza of juicy DX packed r.f. spectra for a full 48 hours of contesting joy. Just to whet your interest, here's all the 1980 contest results to give you something to shoot for.

1980 All Band Highlights

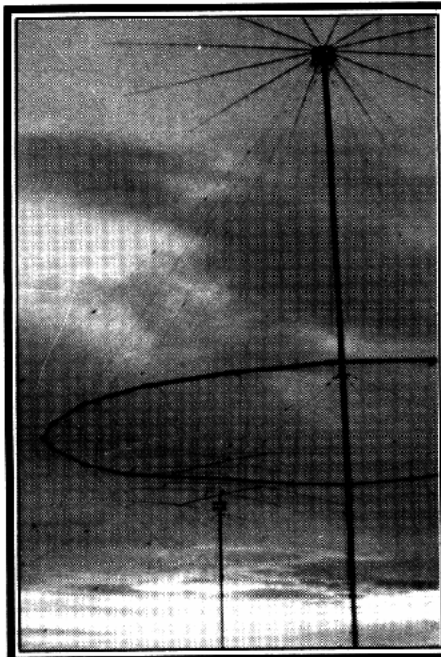
It was another year for outstanding all time records (25 in all). Gone is the old Single Operator All Band World High record of 5.1M set by OH2BH from CT3 land in 1978. The new king of the World (and South America, too) in c.w. is Dick Norton, N6AA, from his borrowed 9Y4VT location, with a whopping 6.1M. Dick's score was more than 2M points above the fine effort of the nearest competitor, Jorge, LU8DQ, who finished at 4.0M. The difference was those low bands, where Dick really cleaned up.

Stateside, John Dorr, K1AR, has set a new Single Op/All Band USA standard at 2.8M, breaking his own last year's record by 200,000 points. He was followed closely by Eastern rivals K1KI and N2LT in a closed pack grouping that put three W's in the top 10 in the World for the second straight time.

The Northern Lithuanian Contest Group sent a group down to Soviet Georgia two weeks early with an eye on the 1979 Asian Multi-Single record set by



The Northern Lithuania Contest Group's Multi-Single entry, RG6G, was manned by this exuberant bunch of guys. What a location, as evidenced in the background.



N7DF used this 80/160 discage to sport a fine 80/160 meter signal. The 15/20 meter beams are shown in the background.

RF6F. But, at 9.7M, the RG6 group walked away with a new World High Multi-Single mark, besting NP4A's old standard, and almost doubling the next highest score this year. Our log checker claims their log is "incredibly clean," a real credit to them. Rival UK9AAN finished second. Our thanks to Bill, EA9EO, and the rest of the EA9EU gang for their fine 5.0M third-place effort, a new African Multi-Single record.

It was N4AR again stateside in the multi-single category at 3.3M. Just 10,000 points behind was the W4NL entry from the Lamb clan.

The NP4A crew converted to multi-multi for this year's test, and managed a 1980 World High, and a new North American record of 17.6M. They were followed by 6Y5YL at 11M. Meanwhile, the guys at N2AA tightened their hold on the State-side multi-multi plateau with a new 9.1M USA record. They were followed by K2UA at 8.1M.

1980 Single Band Highlights

The single band assault this year seems to have centered on 20 meters, where nothing short of incredible performances were achieved. VP2KAA, manned by Paul Newberry, N4PN, set a new World and North American All Time High Single Band record at 1.244M. Fellow SE DX Club member K4BAI, operating at PJ2CC, was just 35,000 points behind, as he set a new South American mark. Likewise, N7UA posted a new USA high on 20 meters at 626K, just absolutely crushing the old '78 record of W6VPH. In fact, Bob's score is almost 200K higher than any other W has ever achieved single band in the C.W. Contest.

On 10 meters KG6DX established a new Oceania record at 802K on the way to 1980 World High. He was followed by VP2KAE. W0ZV captured USA 10 meter honors with a fine 340K effort.

HD0E's fantastic 1.15M 15 meter score retires LU8DQ's old South America and World High 21 MHz records. He was trailed closely by Val, N4RJ, at VP2KAC with a 1.075M, who took over the North American 21 MHz all time high. Our congratulations to W1RM, who topped the field of W's on 15 for the second year in a row.

The ever-tough low bands were somewhat lean this year. Yet Chuck, K0RF, managed a fine 291K on 40 meters to clinch both USA and World High. Meanwhile, on 80 meters, Bob, WB2SJK, operating at WB2FZO, set a new USA 80 meter record at 139K to take both World and USA High. DJ2BW finished second at 108K, followed closely by four other Europeans clustered about 100K.

Amid the static crashes and other QRM, 160 managed to provide OK3KFF over 15K worth of credit as he grabbed World High. Perennial 160 meter State-side fan W8LRL posted a fine 5600 points to top the field in W land.

Frank Bogataj, YU3BC, set a new all time QRP high on c.w. at 702K, followed closely by UB5CI at 670K. In W land, W0KEA managed 269K—and remember, that's with just 5 watts.

Other High Points

Other c.w. records set this year include: Single-Op, All Band, Oceania—KH6BZF (operated by K7TI); Single-Op, All Band, Europe—EA2IA; Multi-Single, Europe—UK2PCR; Multi-Multi, Europe—SK2KW; Asian 28 MHz—4X4UH; Asian 21 MHz—JH3LPT; European 21 MHz—I4IND; Oceania 14 MHz—K2LE/DU2; and Asian 1.8 MHz—4X4NJ (who beats his own '74 previous record). Congratulations to all of you on outstanding efforts. Oh, one last comment on the results. Of course it's the Frankford Radio Club once more in the club category with 141M. Congratulations, guys.

Talking Turkey

This year has been particularly taxing* to those of us on the WW Contest Committee. Some of the scores were, as we have just reported, nothing short of fantastic. But, such fantastic efforts create a fantastic work load for our 12 volunteers who man the Committee. What a thankless job it is to put in so many midnight hours on the logs only to hear constant behind the scenes bickering at conventions, club meetings, 80 meter ragchews, and the like, comments about our integrity and ability to check the logs.

We feel that our past WW Contest record shows that few manage to pull the wool over our eyes. Unlike some contests, we can cite many examples where major submittals have been carefully screened, and consequently, disqualified. In fact, few top scores escape without some kind of score reduction.

What is upsetting to us, then, is that even though there are major disqualifications, some guys just refuse to clean up their act. Let us just review what the worst offenses are.

First, there are duplicate contact problems. We are weary of receiving major entries with unremoved duplicates in the logs. Our worst offenders seem to be in South and Central America, where we keep hearing "But we didn't know." Well, that excuse is wearing thin. An entrant has only one log to check. We have thousands of them, and we don't intend to dupe check thousands of contacts in thousands of entries. No one is an exception, no matter how exceptional their score.

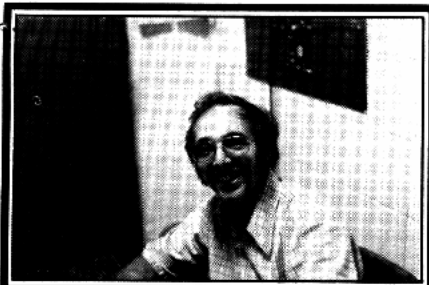
Second, there is sloppiness. Sloppiness in copying calls, in adhering to the Multi-Single time rule, in checking the log and scoring, etc. On being disqualified, several fellows have indignantly claimed to us that they check their logs thoroughly and that's the best they can do. Yet in one disqualification we found almost 3 percent duplicates listed twice on the cross-check sheet.

Third, there is out and out cheating, a willful violation of the rules. This includes padding the logs, changing calls when they would otherwise show up as dupes, purposely leaving in a certain number of dupes, logging lots of stations you are not sure you worked, using the 2 meter net but claiming single-op status, and, last but not least, operating outside of your licensing provisions and acting like there is nothing at all wrong with it.

Make no mistake about it, operating outside of the terms of your license is not legal even when you are using the call and station of one who holds a higher class of license.

Our Point

We would like to make two points on the above issues. First, one of the problems we have in policing the contest is in



This year's 10 meter Single Band winner—
KG6DX.



Here's the tired crew of JA3YQD in their
club shack after the Contest.



VP2KAA, the new all-time C.W. Single
Band champion, operated by Paul, N4PN.

C.W. TROPHY WINNERS AND DONORS

SINGLE OPERATOR, ALL BAND

World

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

World—QRPP

Frank Bogataj, YU3BC
Donor: Gene Walsh, N2AA

U.S.A.

Thomas W. Frenaye, K1KI
Donor: Frankford Radio Club

Canada

Reginald Brearley, VE2AYU
Donor: Canadian DX Association

Carib./C.A.

Luis P. Caamano, HI8LC
Donor: Jim Neiger, N6TJ

Europe

Inaki A. Goni, EA2IA
Donor: W3AU Operators

Africa

Steve Bauer, DJ1US/ST3
Donor: Gordon Marshall, W6RR

Asia

Bruno Bienenfeld, AA6AD/4X4
Donor: Japan CQ Magazine

Japan

Motoaki Saito, JH1EDB
Donor: Palm Garden Contest Club

Oceania

KH6BZF (Opr. Alistair Cooper, K7TI)
Donor: Maui Amateur Radio Club

SINGLE OPERATOR, SINGLE BAND

World (14 MHz)

Paul Newberry, Jr., VP2KAA
Donor: W2JT Memorial (No. Jersey DX
Assoc.)

World—3.5 MHz

WB2FZO (Opr. Robert J. Shohet, WB2SJG)
Donor: Fred Capossela, K6SSS

U.S.A.—14 MHz

Robert P. March, N7UA
Donor: No. Illinois DX Association

Canada—21 MHz

Jim Roberts, VE3EDC
Donor: Canadian Amateur Radio Federation

Carib./C.A.—3.5 MHz

HI8JAG (Opr. HI8XPT)
Donor: DX Club of Puerto Rico

Europe—14 MHz

Karl Malmi, OH5XT
Donor: G2LB Memorial (From Friends)

South America—14 MHz

PJ2CC (Opr. John T. Laney, III, K4BAI)
Donor: Rafael Ponce de Leon, CX3BR

MULTI-OPERATOR SINGLE TRANSMITTER

World

**RG6G (Oprs. UP2BAR, UP2BBC, UP2BFE,
UP2BIG, UP2PAJ, UQ2ON, UP2-038-849,
UP2-038-51)**

Donor: Anthony Susen, W3AOH

U.S.A.

**N4AR (Oprs. N4AR, N4KG, WN4KKN,
W8KIC, N1GL)**

Donor: Doug Zwiebel, WB2VYA

MULTI-OPERATOR, MULTI-TRANSMITTER

World

**NP4A (Oprs. NP4A, K1UA, K1ZM, K2DM,
W2RQ, W2SQ, N2NT, K3UA, W4OO,
N4TO, KP4O, KP4EHP, K5ZD, W0UN)**

Donor: Hazard Reeves, K2GL

U.S.A.

**K2UA (Oprs. K2UA, KA3BKR, K2BU, N3RS,
N3AD, N3RP, WA2HGM)**

Donor: Rush Drake, W7RM

CONTEST EXPEDITIONS

World—Single Operator

Jim Neiger, 8P6J
Donor: Yankee Clipper Contest Club

World—Multi-Operator

**6Y5YL (Oprs. N2ME, N2MM, N2RM, K5VW,
W5XU)**
Donor: Bill Schneider, K2TT

SPECIAL SINGLE OPERATOR—ALL BAND

Combined Phone/CW

Fernando M. Fernandez Martin, EA8AK
Donor: John Knight, W6Y9

CLUB TROPHIES

World—Phone/CW

Frankford Radio Club, 141,011,858
Donor: CQ Magazine

Most Improved—Phone/CW

Williamette Valley DX Club, 16,219,520
Donor: Southeastern DX Club

proving that cheating occurred. We depend on your *written* complaints and evidence to act in many of these cases. No amount of letters to the NCJ, letters to friends in high places, talk in the halls of conventions, or telephone calls will do any good at all. If you have a beef, or if you know of a problem, then write to us and provide us with any backup or evidence that you can.

Our second point on cheating is this. We depend on the honor of all those who enter the contest to keep the contest enjoyable and meaningful for the rest of us. That is why we require that you sign the declaration on the summary sheet. Those who violate the rules and who falsely sign that declaration are cheapening the contest for the rest of us. Now, we call on anyone who has something on his conscience to do an honorable thing—to come forward and own up to a past mistake.

Third World Operation

Third world participation in our contest can always be improved. If you enjoy DX-ing and contesting, why not do something to help us improve that participation. Many of you are active DXers with frequent contact with hams in Africa, Asia, and South America who could really enhance the contest by their participation. Do us a favor—talk up the contest to these hams. Do one other thing—send them some log forms and information on the rules either direct or via their managers. The next time you are in the heat of the contest competition, you will be glad you did.

Our Thanks

Our thanks, as always, to all of you who entered the contest. Of course, a special thanks to our Contest Chairman, W1WY, and our CQ WW Contest Committee members. This year we are honored to announce the appointment of new members Don McClenon, N4IN, and John Dorr, K1AR. They fill slots vacated by W3ZZ and W3GRF. Our regulars include N2AA, K2SS, WB2VYA, VE3BMV, K9DX, N6VV, K6NA, N6SV, N6CW, AD6C, and W7EJ. Again, thanks for a job well done.

And now for the 1981 CQ WW Phone Test. Good luck to all!

73, Larry, N6AR, and Bob, K3EST

U.S.A. Club Scores

Frankford Radio Club	141,011,858
Yankee Clipper Contest Club	74,039,048
Potomac Valley Radio Club	66,896,290
Northern California DX Club	33,959,484
Mad River Radio Club	31,383,815
Murphy's Marauders	22,032,683
Southern California DX Club	21,057,362
Northern California Contest Club	20,492,105
San Diego DX Club	17,215,176
North Texas Contest Club	16,466,705
Williamette Valley DX Club	16,219,520
Southeastern DX Club	13,647,252
Ill-Wind Contesters	13,317,568
Southern New England DX Assn.	10,718,937
Western Washington DX Club	10,539,157
Texas DX Society	10,375,981
Central Virginia Contest Club	9,634,725
Michigan DX Association	9,235,130
North Florida DX Association	8,993,400
Northern Illinois DX Association	7,773,885
Indy DXers	7,660,966
Eastern Iowa DX Association	7,435,392
Southern California Contest Club	6,541,678
Wireless Institute of the Northeast	5,047,726
Greater Milwaukee DX Association	5,043,808
Northern Ohio DX Association	4,518,939
Long Island DX Association	4,181,152
Mississippi Valley DX & Contest Club	3,636,627
Rubber Circle Contest Club	3,544,813
Central Arizona DX Association	3,429,573
Milford Amateur Radio Club	3,054,920
Kansas City DX Club	2,951,522
Northern Ohio Amateur Radio Association	2,592,071
Fort Wayne Radio Club	2,495,116
DX Association of Connecticut	2,209,721
Rochester DX Association	2,204,208
Lynchburg Amateur Radio Club	2,105,771
Albuquerque DX Association	2,095,614

Gloucester County Amateur Radio Club	2,054,359
Neenah-Menasha Amateur Radio Club	1,935,456
Colorado Contest Conspiracy	1,791,776
Flyweight DX Group	1,570,186
Sheyboyan County DX Association	1,418,532
Alamo DX Amigos	1,339,032
Point Radio Operating Society	1,000,985
Red Stick DX Association	840,493
Vulcan DX Club	812,348
Eastern Michigan Amateur Radio Assn.	742,392
Kansas DX Association	709,413
Poughkeepsie Amateur Radio Club	390,380
Cuyahoga Falls Amateur Radio Club	217,324
Great South Bay Amateur Radio Society	132,006
San Angelo Amateur Radio Club	115,184
Overlook Mountain Amateur Radio Club	21,962


DX Club Scores

Voroshilovgrad Radio Club	26,803,274
Northern Lithuanian DX Group	20,442,741
Lithuanian Contest Group	19,367,931
Kaunas Polytechnic Institute	17,027,604
Rhein-Ruhr DX Association	15,494,779
South German DX Group	13,839,269
Ontario Contest Club	10,998,800
Chelyabinsk Radio Club	9,169,521
Fraser Valley DX Club	8,281,373
Grupo Argentina de CW	6,890,478
Alaska DX Group	5,491,424
Radio Club der DDR	5,278,232
Tallinn Radio Club	4,535,027
DX Club of Saar-Pfalz	4,172,505
The Bullmertz	2,653,589
Halifax Radio Club	1,844,607
Moscow Radio Club	373,738
Leningrad Radio Club	313,051
Minsk Radio Club	195,412

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U.S.A. QRM

Sure was an awesome signal on ten from HZ1HZ . . . W7IR. The high yagi was plagued with rain static much of the contest . . . N7UA. Operating hint to newcomers—three hours of TV football will hurt your score! . . . K8NZ. Thanks, CQ, for another great one. My vote for best operator goes to 9Y4VT . . . K8GL. Lost amp early and had to finish barefoot. Had so much fun fighting the big guns, think I'll try it again next year . . . KB8EC. Conditions were so good I accidentally worked a VP2 while loading into a piece of unterminated coax! . . . WB8JBM/WB8DQP. Early in the test I had to scale the tower to fix both the coax and the rotator . . . AI9J. Fun-fun-fun! . . . KA9CQM. Ten was simply packed with wall-to-wall signals . . . W9HPG. Snagged RG6G in the Novice band on ten . . . WD9EJE. Biggest thrill? My gear held together! . . . K9QVB. I hear too much 2-meter spotting going on by so-called single-ops . . . KB9E. Please, only repeat when requested . . . K0LUZ. My first CQ WW; what a thrill hearing so many rare ones over all the bands . . . WA2CNF/0. 160 meter rig blew up after working 9Y4VT . . . K2FL. Slickest operator was LU8DQ running a string . . . K2BK. Something should be done about all those needless CQ's . . . W3TV. So much for 599 as a useful signal report . . . W4VQ. Heavy participation on 20 meters by the Russians saved the contest for me . . . W4AAV. Had trouble the second nite when the band (160 meters) opened for Europe. Had such pileups calling me when I called QRZ, you would have thought I was rare DX . . . W4PZV. The new doubled up log sheets are for the birds . . . W5OSJ. Wish some of the DX stations would ID more often. It would save time and confusion . . . AD6D. Finally worked zone 23 on 40 meters after 24 years . . . WB6JMS (*me too—ed.*)

DX QRM

Bye bye 40 meter balun—Hello Murphy . . . VE3KKB. First try at multi-op CW. Will do better next year . . . VE3MFA. Slowed down due to Montezuma's revenge . . . TG9NX. A big snowstorm increased the s.w.r. up to 2.5:1; 20 meters was below normal conditions . . . F3TV. No troubles with the rig, only 20 man hours on repairs. Will divide it in half next year . . . OK1KRG. See you next year with a better score . . . TF3IRA. The "Other score": 540 cigarettes, 23 beers, 1/2 liter cognac, 1/2 liter whiskey, 15 liters milk, and 2 liters champagne . . . EA3AKD. Our first con-

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	91/6/9	420/18/53	846/22/62	1046/28/71	1089/28/67	1013/27/67
LU80Q	2/2/2	29/15/16	301/24/44	799/31/68	1118/28/65	1295/29/69
HK3AXT		191/10/17	103/14/34	864/28/72	927/26/57	1506/28/67
8P6J	4/2/4	156/9/18	444/16/42	1018/25/53	1245/27/68	1276/25/55
EA2IA		416/13/44	580/19/53	415/28/70	840/29/70	796/27/64
KH6BZF	1/1/1	274/14/17	515/18/18	706/27/54	750/26/57	1135/22/34
AA6AD/4X	1/1/1	281/13/41	566/14/43	630/29/67	501/24/56	703/27/69
K1AR	14/8/11	195/20/54	441/29/69	373/28/65	464/26/77	499/28/75
K1KI	4/3/4	154/20/56	322/24/69	530/32/79	340/26/80	485/29/79
N2LT	4/3/4	91/17/40	329/24/63	486/27/69	465/29/69	730/25/66

WORLD TOP MULTI-OPERATOR SINGLE TRANSMITTER

RG6G	117/9/31	566/22/68	1161/32/87	1122/36/96	1254/35/100	1138/30/80
UK9AAN	58/7/23	187/24/59	479/31/78	1483/32/92	958/35/98	706/31/94
EA9EU	42/6/20	318/14/43	789/16/55	959/28/72	801/28/73	975/24/68
UK2PCR	105/6/32	241/18/63	227/24/80	983/33/84	751/31/86	714/33/90
DL8AA	31/8/31	270/14/54	686/22/68	719/31/78	1033/27/67	723/30/74
UK2PAP	66/6/29	463/17/59	159/19/63	1019/31/82	800/27/80	652/30/87

WORLD TOP MULTI-OPERATOR MULTI-TRANSMITTER

NP4A	506/15/39	953/23/75	1927/28/83	2345/37/101	2730/35/106	2385/33/83
6Y5YL	115/6/9	694/17/43	1358/23/66	2425/35/96	2300/29/82	2442/31/79
N2AA	39/8/15	291/26/63	876/32/87	1289/39/123	1225/33/101	972/33/97
K2UA	46/10/20	334/25/63	1010/35/103	998/35/105	1060/35/105	883/33/98
SK2KW		469/18/57	720/24/73	1995/36/100	1919/34/87	1194/33/82
K1ZZ	30/7/12	294/25/71	791/34/92	1082/37/111	985/31/97	983/29/97

USA TOP SINGLE OPERATOR—ALL BAND

Station	160	80	40	20	15	10
K1AR	14/8/11	195/20/54	441/29/69	373/28/65	464/26/77	499/28/75
K1KI	4/3/4	154/20/56	322/24/69	530/32/79	340/26/80	485/29/79
N2LT	4/3/4	91/17/40	329/24/63	486/27/69	465/29/69	730/25/66
K9DX	15/7/9	68/17/40	291/24/61	552/33/83	570/29/86	347/27/67
W1KM	4/4/3	115/20/50	401/23/68	427/28/70	358/25/65	499/27/69
W3GRF	2/2/1	112/16/47	348/23/59	308/30/77	477/27/70	532/30/74
K5GA	16/6/10	83/16/31	298/25/66	388/33/83	384/28/73	605/28/66
K1VTM	9/6/8	187/19/49	405/21/56	384/27/58	468/24/73	364/27/62
W2REH	8/6/7	76/15/42	255/24/59	348/31/80	383/33/82	487/33/88
W2VJN	6/5/4	53/16/36	354/23/67	465/27/72	300/28/84	425/24/69

USA TOP MULTI-OPERATOR SINGLE TRANSMITTER

N4AR	13/6/12	81/23/56	316/30/81	453/34/95	474/31/93	661/30/85
W4NL	17/8/15	53/19/42	317/26/70	679/32/89	570/31/84	556/31/76
W3BGN	14/7/12	102/22/54	324/31/78	519/34/80	408/31/88	630/32/85
N1TZ	13/7/11	79/18/47	166/23/64	736/34/94	542/28/85	396/28/75
K1RU	7/3/6	96/18/46	192/20/59	587/32/81	493/24/73	584/24/74
W7XR	15/10/10	65/16/20	319/21/40	631/32/88	527/29/74	340/30/57

USA TOP MULTI-OPERATOR MULTI-TRANSMITTER

N2AA	39/8/15	291/26/63	876/32/87	1289/39/123	1225/33/101	972/33/97
K2UA	46/10/20	334/25/63	1010/35/103	998/35/105	1060/35/105	883/33/98
K1ZZ	30/7/12	294/25/71	791/34/92	1082/37/111	985/31/97	983/29/97
K8LX	37/8/14	194/27/60	681/36/86	1485/36/103	1039/32/87	910/31/85
N9MM	63/8/18	144/23/52	658/34/87	1133/38/110	979/36/106	968/32/90
W3PL	48/6/16	189/25/62	759/33/92	916/37/104	931/33/100	841/32/90

WORLD TOP 10 QRPP

(5w input)

1. YU3BC 702,765
2. UB5CI 669,768
3. W0KEA 268,576
4. SM5CTT 254,150
5. OK1DKW 222,660
6. AJ7S 203,001
7. HP1XAT 198,951
8. N2GC 152,358
9. WA6POC 125,218
10. W9PNE 109,611

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.

C.W. RESULTS SINGLE OPERATOR NORTH AMERICA UNITED STATES

K1AR	A 2,830,730	1986	139	351
K1KI	2,675,843	1835	134	367
W1KM	2,373,904	1804	127	325
K1VTM	2,294,480	1817	124	306
	(Opr. K1JX)			
N1AC	1,398,720	1263	102	274
AA2Z/1	1,387,424	1262	99	283
W1FH	1,216,438	1203	98	255
W1FJ	855,138	829	104	255
WB1ANT	812,970	1054	76	194
W1BIH	715,931	665	106	273
W1PH	696,570	785	91	219
W1GG	669,300	785	92	208
WA1TF	534,041	959	68	143
AB1U	410,664	520	83	201
AK1A	397,222	590	68	170
K1WJL	336,908	482	73	174
K1RX	327,590	497	70	165
K1WJ	317,292	417	87	187
K1XB	262,010	476	61	129
W1KV	211,992	345	66	153
AK1B	198,198	388	56	126
AG1C	177,912	372	56	112
K1RQ	160,632	573	27	70
W1CNU	149,328	290	56	127
K1YRP	141,864	279	58	126
KA1DS	119,016	251	54	120
W1HX	118,496	228	59	125
N1QY	112,763	227	51	130
W1WY	104,253	222	58	119
WA1CCR	70,328	167	50	99

WB1DFV	65,415	176	52	95
N1AU	39,550	122	37	76
N1XX	38,024	133	29	69
K1VKO	24,000	113	31	44
K1UJ	25,534	104	22	60
W1HUE	20,793	94	28	59
WA2AHP/1	18,837	84	33	58
AD1C	10,902	63	30	49
W1UR	8,424	50	33	39
W1OPJ	8,800	62	16	33
W1PLJ	6,912	53	14	34
K1TN	293,009	895	31	82
WA1FCN	146,880	491	29	73
KA1CFQ	50,718	221	23	56
KA1CFQ	21,750	129	18	40
KA1CLV/BS	13,500	81	17	41
W1RM	417,340	1026	35	105
K1MM	178,866	556	32	82
	(Opr. WD90BA)			
WB1HIH	103,596	416	24	65
W1PM	13,192	71	21	47
WA1KSF	7,155	57	12	33
W1YV	273,668	768	32	92
WB1HJF	28,835	145	22	51
K1WB	98,553	400	25	66
AB1A	89,094	324	25	68
W1RR	65,487	284	21	62
AA1K	3,751	57	8	23
W1BB	1,512	26	6	15
W1JZ	725	27	4	10
N2LT	A 2,646,956	2078	125	311
W2REH	2,280,500	1557	142	358
W2VJN	2,099,202	1603	121	332
W2YV	1,800,395	1553	103	294
AE2A	1,786,275	1451	119	306
W2IB	1,731,024	1403	120	312
K2SX	1,636,244	1346	115	313
N1T7/2	1,286,477	1212	107	266
W2YC	1,085,803	1026	105	268
K2NJ	835,164	884	94	239
W2TZ	682,335	819	89	206
KF20	443,001	517	86	221

N2UN	428,242	550	82	195
N2MR	427,720	521	88	208
W2GD	372,768	500	79	185
W2FTY	321,600	429	83	185
K2OIL	314,140	494	61	165
W2AYJ	223,510	376	64	142
WA2DPJ	217,512	351	63	165
K2CX	208,488	328	79	159
W2IY	189,740	269	80	166
WA2ORX	142,690	280	60	130
W2FUI	122,413	256	58	105
K2YGM	116,892	225	66	125
WA2LJM	113,373	255	45	108
W2MT	101,120	228	51	109
K2BSM	81,205	188	48	101
N2CQ	67,397	190	32	89
W2DW	42,480	130	42	78
W2PHT	36,855	128	38	67
W2HPV	25,714	103	22	64
W2XL	20,336	89	31	51
WA2EYA	20,335	96	30	53
N2BFC	18,445	92	33	52
K2SPO	13,464	67	17	51
W1GD/2	8,352	50	28	44
WB2MCB	3,404	33	18	28
N2FI	198	6	5	6
N2Z	218,652	651	31	83
AC2U	111,524	392	29	69
K2MFEY	97,300	336	27	73
K2WZ	31,262	144	23	54
KA2EAO	27,782	161	15	37
KA2DNS	9,100	61	15	37
W2TE	9,100	61	15	37
W2WT	313,625	852	32	93
W2HFF	221,320	695	29	81
K2KW	160,341	555	25	72
N2DT	103,244	368	28	78
K2MN	74,060	246	24	68
N2KW	56,406	197	28	74
WA2IFS	43,334	166	24	

WAS1GD	96,418	351	27	70	N7UA	14	626,400	1634	34	101	ADQF	60,000	173	38	82	ST. KITTS					JA7BAL	49,250	149	54	71	
W5GO	17,458	73	25	61	W7MB	156,633	491	31	78	KB9LY/G	56,544	169	45	69	VP2KAE	28	602,336	2151	31	81	JH1PCN	47,844	155	44	64	
W5FO	14	316,607	849	36	101	W7KKA	26,800	137	19	46	WQ1YR	54,692	178	38	75	VP2KAC	21	1,075,407	2955	38	105	JH4DRB	47,068	203	31	51
W5VQ	243,672	591	37	106	W7XAA	9,333	54	16	35	KQAP	37,855	125	46	67	JA2JZ	42,675	164	38	53							
N5AU	209,608	546	37	96	K7UR	7	143,565	585	28	57	W6EKS	36,297	117	38	71	JA1KNZ	37,887	183	26	47						
K5KG	209,300	577	36	94	W7DAZ	104,976	458	26	55	W2ACNF/G	27,864	140	33	53	JA9SOT	35,400	124	39	63							
W5WU	7	224,950	712	32	78	K7XK	7,150	54	20	35	W6H8H	20,774	88	36	58	JA3JF	32,731	163	34	37						
W5UN	223,648	672	34	82	W7CW	3.5	18,422	127	24	37	W6JISW	6,160	50	17	27	JA1YHA	25,134	151	30	29						
KM5X	71,500	336	22	53	N7EA	9,890	90	17	26	W6WZ	28	340,664	910	35	93	JA4BFL	22,890	109	30	45						
W5ASOG	5,376	45	16	32	W7ATG	1.8	1,088	85	9	26	W6YK	291,648	890	32	80	JA3BAG	22,200	106	22	52						
K5BZU	1,740	29	10	19	W7XZ	901	36	9	8	K6QHA	106,784	391	29	65	JH7RZV	16,704	121	20	28							
K5UR	1.8	3,503	78	10	21	K8NZ	A	1,990,170	1528	132	323	N6BFP	101,840	374	28	67	JR1TNE	13,680	82	20	30					
N6RO	A	2,069,885	1655	143	296	A8DP	1,718,496	1459	121	287	W6MHH	21	149,884	517	31	75	JK1TLP	9,350	74	26	24					
N6TR	1,509,228	1448	123	248	K8GL	1,632,120	1309	125	310	K6RF	7	291,188	893	34	81	JH3DXT	9,216	66	20	28						
N6AR	1,499,366	1244	136	286	W8UA	1,060,230	1038	111	243	K6KR	105,200	466	26	54	JH3DGT	6,072	49	20	24							
K6NA	1,390,532	1299	125	249	K8BEC	548,760	725	84	185	ACQS	12,190	87	19	34	JF1LKM	5,976	83	12	12							
N6GG	832,206	934	105	213	W8JBM	502,902	642	85	193	K6CS	3.5	1,474	37	9	13	JR1BRE	5,328	48	19	18						
N6AN	580,085	774	96	169	K8SS	484,720	596	90	202	(Opr. W8BDOP)	1,152	60	8	10	JA9PBZ	5,178	92	17	17							
K6HII	547,800	863	81	139	K8MR	418,424	550	88	183	W8QMM	396	24	6	6	JA9ZG/1	1,853	38	9	8							
N2Y0/6	543,345	703	98	169	W8OBP	353,209	480	85	178	W8QFB	260	20	5	5	JG3GYK	799	18	8	9							
W6OKK	511,020	705	90	165	W8VJU	299,484	466	80	156	ALASKA					JAGAHU	28	330,645	1119	33	72						
K5B0	470,943	813	78	135	N8BJJ	253,449	389	81	162	AL7H	A	1,706,406	2542	94	168	JA1KSO	321,856	1037	32	75						
K5VNJ/6	451,955	637	99	160	A8AS	252,824	416	73	142	AL7R	A	1,258,719	2149	85	146	J1PGW	240,488	901	31	61						
N6CW	449,500	525	100	210	W8GOC	230,144	346	76	172	AL7Z	595,332	1169	77	130	JG1NBD	234,623	808	30	71							
W6NKR	401,580	463	97	179	K8QDL	197,964	317	74	160	AL7A	370,634	808	81	106	JAG80	219,852	818	29	64							
N6HR	332,871	512	87	144	N8BC	173,184	322	55	137	AL7X	18,100	362	25	25	JA1RWI	173,656	623	34	64							
W6VG	304,995	448	89	146	K8PUJ	137,004	254	62	141	AL7B	243,212	1154	25	57	JA6GJL	163,540	677	26	59							
KR60	296,515	706	63	92	K8WVW	129,117	227	82	134	BAHAMAS					JA8TRT	156,060	613	26	64							
K6JCV	296,055	499	80	135	W8UPH	125,244	299	45	102	N4MO/G6A	A	159,856	716	35	68	JJ1NUB	149,466	597	29	58						
K6DR	274,050	466	81	129	W8MOV	88,059	171	66	131	C6ADV	1.8	260	26	3	JH9FUW	140,698	481	31	72							
W6DU	240,240	493	61	104	N8TN	83,693	239	42	85	BARBADOS					JF2VYD	126,585	466	31	66							
N6EA	230,838	355	90	147	K8EF	75,665	153	64	121	8P5J	A	3,344,024	4143	104	240	JA1ZF	123,046	450	29	65						
W6WB	216,177	340	96	147	W8YGR	75,359	155	64	115	8P6M	14	202,500	955	25	65	JA3E0C	122,892	556	23	54						
K6DDO	214,123	460	60	109	K8VCV	38,364	149	32	60	BELIZE					JA2E0X	109,109	507	26	51							
A8DD	204,360	375	79	116	W8DTG	13,950	68	29	46	VP1UR	A	719,901	1664	66	123	JA2IU	108,016	451	29	57						
W6AELJ	196,749	381	69	120	K8IPG	14	8	4	3	VP1UR	1.8	260	26	3	JH3FYR	104,104	413	29	62							
W6ISQ	191,165	251	75	146	W8WPC	28	284,708	899	30	79	EC9AQ	21	39,976	180	21	55	JR1MST	89,829	390	26	55					
W6JMS	186,136	340	85	127	KBCX	256,500	814	30	78	8P5J	A	3,344,024	4143	104	240	JA1DFO	86,160	374	27	53						
W6OUL	170,751	362	67	108	W8JUV	246,340	746	31	82	8P6M	14	202,500	955	25	65	JH7UJU	84,786	390	26	52						
W6BYH	148,720	302	68	106	W8TNO	175,329	495	32	89	VP1UR	1.8	260	26	3	JA1AFF	82,240	446	22	42							
W6AKT	134,071	390	67	112	W8TWA	160,341	572	27	70	VP1UR	A	719,901	1664	66	123	JA1GFG	80,560	371	26	50						
N6NF	121,396	248	68	110	N8JW	21	374,346	1021	31	95	VP1UR	1.8	260	26	3	JH1BCY	68,292	289	25	59						
W6AM	115,089	340	63	106	K8IP	74,865	252	29	76	CANADA					JH2EUW/1	53,386	343	23	43							
N6UW	73,743	199	64	77	W8QWI	14	80,955	268	31	74	VE1AIH	A	721,258	930	93	721	JA1OP	34,476	235	18	34					
A6AEE	70,583	216	56	73	N8XE	21,284	111	21	47	VE1AJU	117,670	337	73	145	JR3SPV	32,011	208	19	35							
N6KW	69,036	188	49	83	W8BCRY	5,320	50	14	24	VE1ANJ	87,024	468	20	54	JA7AZJ	28,130	156	16	34							
W6EWG	65,100	202	54	70	K8NA	7	126,198	400	31	83	VE1AYU	A	829,500	1134	92	208	JA3BRB	20,664	130	26	30					
AC6H	45,327	224	40	47	W8ZF	109,440	325	32	86	VE1AZV	433,350	599	79	69	JABERG	18,348	143	17	27							
W6DVO	42,636	154	38	64	K8CX	3.5	23,590	127	21	49	VE2AW	28	124,416	2550	27	61	JABGR	13,680	108	17	28					
W6ZJA	42,240	170	42	54	W8LU	9,620	74	16	36	VE2CW	3.5	24,150	273	18	20	JJ1OSP	11,026	102	15	22						
W6SAB	41,280	130	44	32	K8TL	7,526	50	18	35	VE2FV	A	530,915	926	85	168	J1ACJ	9,798	78	17	29						
K6X0	24,128	141	32	32	W8RL	1.8	5,600	71	12	23	VE2GW	28	124,416	2550	27	61	JABSV	399	19	4	3					
W6BZE	19,275	96	28	44	K8HF	84	15	3	4	VE2HU	3.5	24,150	273	18	20	JA1DCL	117	5	4	5						
W6DNN	14,526	100	32	22	K8X0	A	2,533,335	1843	137	346	VE3AD	21	87,024	468	20	54	JH3LPT	21	463,430	1301	33	89				
W6ERS	13,904	60	44	40	A1SJ	1,558,800	1257	132	301	VE3AE	3.5	360	20	4	5	JA9YBA	389,259	1138	32	85						
K6SSS	9,900	47	36	39	W8LT	1,011,318	997	111	252	VE3B	A	829,500	1134	92	208	JZ8JZ	338,694	1014	32	82						
W6JUFY	3,729	41	15	18	W8OP	824,230	977	89	206	VE3D	28	124,416	2550	27	61	J1AYU	281,380	875	31	79						
N6JW	3,564	44	16	20	W8NA	542,920	676	86	194	VE3E	3.5	24,150	273	18	20	JA2HO	265,928	952	30	74						
K6JMG	2,856	35	16	16	K9GL	435,998	564	90	187	VE3F	28	124,416	2550	27	61	JH3CXL	256,928	784	30	82						
W6DLE	2,130	25	12	18	K9TA	414,960	517	93	192	VE3G	28	124,416	2550	27	61	JF1GKF	227,154	766	30	82						
K6ZL	25	224,964	707	30	78	N9A	291,580	428	72	167	VE3H	28	124,416	2550	27	61	JA7BJ	177,358	447	60	72					
W6BSHL	120,790	461	30	64	K9ST	257,316	374	79	167	VE3I	28	124,416	2550	27	61	JA1SJV	174,048	634	33	79						
W6ZJUC	31,680	154	24	48	W9DEE	188,552	340	63	133	VE3J	28	124,416	2550	27	61	JA2NPS	157,612	629	28	63						
W6BFI	20,398	129	20	42	K9IW	187,543	305	79	144	VE3K	28	124,416	2550	27	61	JA6YCU	146,172	651	25	53						
K6EWL	21	312,420	910	32	91	W9RW	179,655	331	71	125	VE3L	28	124,416	2550	27	61	JZ2KM	122,475	556	23	52					
W6GIOM	256,256	879	29	75	N9AW	113,876	226	71	132	VE3M	28	124,416	2550	27	61	JA1AEW	111,766	417	29	65						
N6NI	240,484	720	32	86	W9SV	111,254	241	54	105	VE3N	28	124,416	2550	27												

TOP SCORES

WORLD

Single Op All Band	
9Y4VT	6,116,945
LU8DQ	4,031,394
HK3AXT	3,738,623
8P6J	3,344,024
EA2IA	2,931,510
KH6BZF	2,916,010
AA6AD/4X	2,904,825
K1AR	2,830,730
K1KI	2,675,843
N2LT	2,646,956

Single Op Single Band 28 MHz

KG6DX	801,876
VP2KAE	602,336
LU6EF	595,395
KH6XX	570,650
4X4UH	554,645
OK1ALW	545,874

21 MHz

HD0E	1,146,471
VP2KAC	1,075,407
KV4FZ	771,162
I4IND	701,960
ZV3CFD	701,298
4Z4NUT	519,831

14 MHz

VP2KAA	1,244,782
PJ2CC	1,209,022
N7UA	626,400
OH5XT	583,205
UB5EJK	555,204
K2LE/DU2	521,031

7 MHz

K0RF	291,180
UA1DZ	281,568
W5WMU	224,950
W5UN	223,648
CX8BBH	182,286
A16V	165,390

3.5 MHz

WB2FZO	139,390
DJ2BW	107,706
UA9TS	107,456
YU1BAU	101,989
UB5JIM	100,985
LZ2PP	98,260

1.8 MHz

OK3KFF	15,216
DJ4AX	14,904
UC2ACA	14,620
KH6CC	13,920
OK3CXF	12,144
SP5IXI	10,881

Multi-Op

Single Transmitter	
RG6G	9,720,528
UK9AAN	6,343,208
EA9EU	5,077,696
UK2PCR	4,256,620
DL0AA	4,209,408
UK2PAP	3,878,958

Multi-Op

Multi-Transmitter	
NP4A	17,627,820
6Y5YL	11,603,808
N2AA	9,071,199
K2UA	8,154,075
SK2KW	7,772,128
K1ZZ	7,758,438

USA

Single Op All Band	
K1AR	2,830,730
K1KI	2,675,843
N2LT	2,646,956
K9DX	2,533,335
W1KM	2,373,904
W3GRF	2,342,016
K5GA	2,341,740
K1VTM	2,294,480
W2REH	2,280,500
W2VJN	2,099,202

Single-Op Single Band 28 MHz

W0ZV	340,864
K3TW	315,900
K1TN	293,009
W0YK	291,648
W8WPC	284,708
W5JW	263,780

21 MHz

W1RM	417,340
N4WW	403,742
N8JW	374,346
K5MR	361,500
N2WT	313,625
K6EWL	312,420

14 MHz

N7UA	626,400
W5FO	316,607
N4CT	259,548
N4TZ	247,368
W5VQ	243,672
N4RG	226,653

7 MHz

K0RF	291,180
W5WMU	224,950
W5UN	223,648
A16V	165,390
K7UR	143,565
K8NA	126,198

3.5 MHz

WB2FZO	139,390
W3MFW	68,773
W1RR	65,487
K3TG	31,042
K8CX	23,590
W6MUR	22,410

1.8 MHz

W8LRL	5,600
N4IN	4,896
AE6U	4,872
K6SE	4,200
AA1K	3,751
K5UR	3,500

Multi-Op

Single Transmitter	
N4AR	3,324,672
W4NL	3,310,590
W3BGN	3,214,862
N1TZ	2,862,980
K1RU	2,593,940
W7XR	2,308,789

Multi-Op

Multi-Transmitter	
N2AA	9,071,199
K2UA	8,154,075
K1ZZ	7,758,438
K8LX	7,601,825
N9MM	7,082,824
W3LPL	6,777,568

New and unique Lightning Protection

... an industry first



Experience of more than 30 years in Amateur Radio, in part as Sales Manager of a major amateur radio manufacturer, has given me a unique opportunity to evaluate most radio equipment, and to gain an insight into the needs of the amateur, and the professional communicator.

The first project demanding our attention is in a critical but unserved area—that of providing specially designed field-serviceable lightning surge protectors for solid state communications equipment.

Don Tyrrell WBAD

▲ Don Tyrrell, Transi-Trap Protector and Arc-Plug.

ALPHA DELTA COMMUNICATIONS introduces

TRANSI-TRAP SURGE PROTECTORS

with the exclusive, field-replaceable Arc-Plug™ Cartridge

Solid state communications equipment is far more sensitive to the effects of lightning-induced transients than tube equipment, making conventional protection techniques ineffectual. Considering the high cost of solid state equipment, a better type of protection is now necessary.

Although a lightning-induced transient is very short (about 250 μ sec wide) it can do enormous damage to semiconductors, even if not caused by a near hit. Even a distant storm front, out of the operator's sight, sends enough energy to ruin solid state components, leaving no external sign of damage (especially to front-end PIN diodes).

The problem with a standard "lightning arrester" is that it doesn't fire until a fast-rising lightning pulse has reached about 3000 volts or more. When it does fire, a fairly high 30 to 80 volts still exists across the arc, enough to damage semiconductors.

The unique AlphaDelta Transi-Trap Protection System solves these problems and more! Two models are available which can be used together to form a complete protection system. One is a high voltage type to protect linears; the other is a low-level model that fires at the proper transient voltage level to protect solid state receivers and transceivers. Both offer super-fast response time (100 nanoseconds) and very low voltage across arc.

Unique Field Service Flexibility—these protectors feature field-replaceable Arc-Plug cartridges which utilize a rugged ceramic, hermetically sealed gas-filled element. They can fire many hundreds of times, but replacement, when necessary, is much less expensive than discarding the entire protector. Ideal for remote site or maritime use.

Unique State-of-the-Art Design—including mini-inductance brass circuitry, brass hardware, and an Arc-Plug cartridge with no lead wires. A complete rf and pulse test program is employed using a special multi-kV transient generator designed by John Tyrrell, WB8ZPF.

Unique Isolated Ground System—provides direct earth ground for the arc, but prevents arc coupling to the equipment chassis through connector shields. This is the only system providing maximum protection from the closer near-misses.

Unique Design maintains Receiver Front-End performance—unlike certain other designs, Transi-Trap protectors have no effect on receiver intermod, crossmod, or intercept point.

Models available:



Transi-Trap Model R-T Low Level Protector—for use with solid state receivers, transceivers or transmitters running up to 200 watts at 50 ohms (hf to uhf) . . . **\$29.95** ea., plus \$4.00 shipping and handling



Transi-Trap Model HV High Voltage Protector—for use with linear amplifiers running up to 2 kW at 50 ohms (hf to uhf) . . . **\$32.95** ea., plus \$4.00 shipping and handling

(can be used in addition to Model R-T to form a system)

Replacement Arc-Plug Cartridge

for Model R-T **\$9.95** ea., plus \$2.00 shipping and handling
for Model HV **\$12.95** ea., plus \$2.00 shipping and handling

Ohio residents add Sales Tax to prices.

Master Card, Visa, checks accepted. Order by phone or mail.

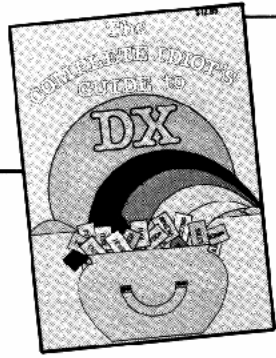
AlphaDelta Transi-Trap Protection Systems are designed to reduce the hazards of lightning-induced surges. These devices, however, will not prevent fire or damage caused by a direct stroke to antenna or other structure.

ALPHA DELTA COMMUNICATIONS

116A North Main Street, Centerville Ohio 45459 • 513/435-4772



OH5RZ	40,406	220	31	58	F9BB	127,264	325	49	115	DJ2BW	3.5	107,706	721	20	67	Y31ZF	56,240	445	18	56	ITALY						
OH1PY	26,688	100	36	60	F8DNR	123,782	404	45	114	DJ4AX	1.8	14,904	319	9	37	Y51ZE	13,984	208	12	42	1E1S	A	821,795	1421	74	195	
OH3FW	26,688	115	39	60	F8TO	61,333	369	20	54	DJ6TK		1,968	86	3	21	Y22DK	3.5	1,650	66	4	21	17PXV		253,575	527	62	163
OH6DO	20,370	140	20	77	F8EPO	14,886	137	16	43							Y23JA		396	16	4	16	11Z0D		10,542	97	18	24
OH8LB	13,392	73	38	55	F8FJE	40,533	312	18	41	GERMANY (GDR)					14IND	21	701,980	1980	35	106							
OH1FM	11,136	62	27	37	F8VJ	988	33	6	20	Y24UK	A	1,849,528	2072	102	274	12UBI		162,540	805	24	90						
OH1RZ	6,738	75	19	38	GERMANY (FRG)					ZB2EO	A	358,540	886	58	139	11ZEU	14	166,914	866	27	72						
OH1MQ	3,510	47	17	28	DK3BJ	A	1,890,737	2027	105	268	GREECE					12RVW		74,550	541	20	55						
OH2BN	1,980	29	17	27	DL7AV	**	1,730,712	1612	125	319	SV8AT	A	296,475	1046	48	129	12VXJ	7	102,102	746	17	61					
OH2FS	28	230,256	758	30	DK6NG	**	1,539,792	1530	117	327	SV8AU	A	182,257	770	46	105	ITU GENEVA										
OH1KA	**	150,390	792	24	DJ2TI	**	1,150,424	1481	106	268	SV8AA	3.5	5,904	109	7	34	4U1TU	A	177,057	563	50	141					
OH3NE	**	91,419	497	28	DJ6BW	**	528,896	1023	74	182	GUERNSEY					(Opr. W3ICM)											
OH6RC	**	82,836	490	28	DJ6QT	**	409,860	773	65	188	HUNGARY					NETHERLANDS											
OH1ZE	**	47,996	327	17	DL7BQ	**	399,364	777	72	166	HA1ZG	A	434,741	839	67	172	PA8TAU	A	786,885	1258	84	201					
OH2AR	**	36,856	213	20	DL3LU	**	384,846	639	77	217	HA3HZ	**	266,070	680	59	151	PA8DIN	**	223,440	443	70	175					
OH1PH	**	15,300	141	13	DL4FF	**	368,186	620	79	210	HA9RH	**	155,220	494	49	107	PA8UV	**	205,232	490	62	140					
OH2BAH	**	2,624	32	11	DK3OJ	**	367,148	620	82	181	HA5BA	**	145,728	502	43	141	PA8GT	**	169,164	375	67	155					
OH2BSJ	21	146,529	695	22	DL7CF	**	339,900	665	65	155	HA5KF	**	140,868	414	52	130	PA8SKP	**	150,591	340	61	152					
OH6E1	**	132,540	735	24	DF9S1	**	214,570	637	63	152	HA8DU	**	65,520	223	50	94	PA3AIC	21	52,182	279	22	56					
OH1DL	**	124,740	610	24	DJ1YH	**	201,132	475	71	151	HA5DY	**	28,728	170	34	50	PI1PT	3.5	11,579	162	10	41					
OH2CZ	**	110,577	540	28	DJ0IV	**	196,075	508	42	111	HA5DU	**	28,728	170	34	50	PA8INA	1.8	864	36	5	19					
OH6DH	**	81,168	503	21	DJ8WO	**	166,375	516	50	125	HA9RU	28	426,684	1358	35	89	NORTHERN IRELAND										
OH1EB	**	59,664	310	25	DJ2JO	**	160,244	407	57	137	HA3GJ	**	71,064	448	25	59	GI3SXG	A	126,000	463	40	104					
OH5WH	**	42,276	277	21	DL3WD	**	149,836	420	60	128	HA4XC	**	66,669	461	19	52	GI4KHZ	**	115,200	478	44	136					
OH6LK	**	32,171	242	16	DL9EY	**	85,527	275	39	90	HA4XW	**	65,175	391	22	57	NORWAY										
OH5SS	**	23,085	184	16	DF3ON	**	54,051	221	47	82	HA3GQ	**	3,000	62	7	13	LA6ZW	A	603,670	880	88	247					
OH2BMH	**	22,419	104	24	DF2RQ	**	41,055	126	53	66	HA8ND/P	14	219,685	1040	28	79	LA9HW	**	352,600	1164	44	171					
OH1KO	**	22,243	242	15	DF5JH	**	36,855	179	41	78	HA7TM	**	29,370	320	20	35	LABUX	**	58,104	249	34	74					
OH2BEN	**	19,500	135	18	DL1YA	**	36,640	218	24	56	HA1SN	**	15,861	127	13	38	LBBCA	**	52,920	191	49	86					
OH1BK	**	18,648	231	14	DJ3LD	**	31,373	125	44	93	HA5FE	**	10,988	157	20	21	LAGLX	**	22,515	153	33	95					
OH8RV	**	17,136	167	17	DJ2YE	**	24,957	253	12	47	HA4YG	**	10,816	99	17	47	LAGXO	**	15,702	155	27	55					
OH2BUU	**	13,640	151	16	DJ3XD	**	16,957	132	12	47	HA5OV	7	101,270	678	24	71	LAG6Z	**	5,940	61	23	35					
OH6OU	**	13,332	187	12	DK9BR	**	14,456	104	24	28	HA80Z	**	49,628	417	18	58	LA7SI	28	35,428	259	17	51					
OH2BTX	**	3,003	55	13	DK8AX	**	13,446	96	28	55	HA8KQX	**	48,944	427	20	56	LA7VK	**	132	8	3	3					
OH3BI	**	2,492	78	8	DJ2UU	**	9,240	78	20	40	HA3PT	**	23,548	257	17	42	LA1VL	14	16,200	184	15	35					
OH5PK	**	1,875	55	7	DL1AM	**	9,240	78	20	40	HA80T	**	20,060	197	17	42	LA7XB	**	4,680	67	11	29					
OH8TU	**	1,815	55	8	DL4LF	**	8,111	748	30	69	HA80T	3.5	14,357	746	19	56	LA7JD	7	39,480	340	15	41					
OH1CH	**	1,624	46	8	DK11I	28	181,170	748	30	69	HA5JK	**	14,357	746	19	56	LA4YW	**	19,057	275	13	46					
OH7XU	**	924	18	10	DF5MD	**	104,550	565	24	61	HA80T	**	14,357	746	19	56	LA5HE	**	15,939	133	16	47					
OH2BWM	**	120	15	5	DL6PE	**	100,303	421	26	63	HA80T	**	14,357	746	19	56	POLAND										
OH5XT	14	583,205	2021	35	DJ5GG	**	66,220	305	25	61	HA80T	**	14,357	746	19	56	SP2FAP	A	1,035,360	1246	107	307					
OH6UM	**	477,978	1492	34	DK8KC	**	33,768	244	17	39	HA80T	**	14,357	746	19	56	SR9HWN	**	367,290	864	84	167					
OH6GO	**	375,998	1484	30	DK2BJ/a	**	10,659	132	11	22	HA80T	**	14,357	746	19	56	SP8HRA/9	**	358,261	750	73	166					
OH1CQ	**	73,048	433	26	DL8IH	**	6,357	91	17	22	HA80T	**	14,357	746	19	56	SR3HLM	**	303,846	508	78	191					
OH6MM	**	32,190	195	20	DK9MB	**	3,055	36	12	35	HA80T	**	14,357	746	19	56	SR9PRD	**	295,416	684	65	199					
OH2BCD	**	6,324	114	10	DL1NE	**	2,680	50	8	12	HA80T	**	14,357	746	19	56	SR6EQ/9	**	271,410	763	50	155					
OH6DC	7	11,232	150	13	DL1JC	**	1,224	35	6	6	HA80T	**	14,357	746	19	56	SP4JSR	**	256,740	574	89	151					
OH2SX	**	9,828	147	13	DL1RB	21	48,067	281	20	51	HA80T	**	14,357	746	19	56	SR9AKD	**	247,104	496	70	146					
OH2BCI	3.5	21,700	191	16	DL8BU	**	21,045	153	20	49	HA80T	**	14,357	746	19	56											
OH3TY	**	2,030	34	7	DL7X1	**	14,749	131	15	34	HA80T	**	14,357	746	19	56											
OH2BUT	**	1,740	61	5	DL6BAU	**	6,055	67	15	30	HA80T	**	14,357	746	19	56											
OH1MA	1.8	2,784	93	6	DJ5OK	**	5,461	66	11	32	HA80T	**	14,357	746	19	56											
F6DKV	A	147,201	525	45	DF2OF	**	5,460	93	13	35	HA80T	**	14,357	746	19	56											
F6EOV	**	127,581	424	41	DK8BI	14	47,820	485	16	40	HA80T	**	14,357	746	19	56											
					DJ9MH	7	92,480	604	19	61	HA80T	**	14,357	746	19	56											
					DL7YS	**	4,428	75	11	30	HA80T	**	14,357	746	19	56											

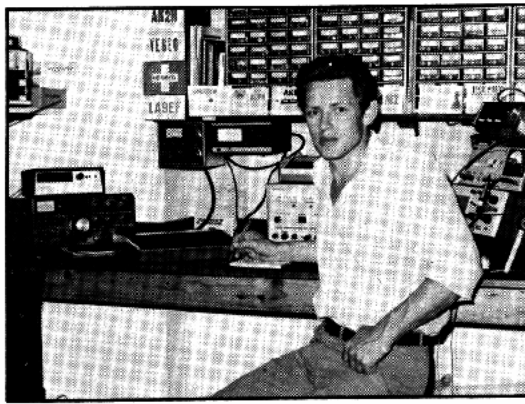


THE COMPLETE IDIOT'S GUIDE TO DX

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 P.O. Box 2115 • San Leandro, CA 94577
 •(415) 352-5420•

SP3DAH	233 247 624 58 145	SCOTLAND		YU2CBM	7 87,950 529 22 63	UA3EAT	91,770 438 19 35	UB5UCF	33,516 230 19 44
SH6EY	195,271 598 61 140			YU3TFM	50,160 279 22 58	UA3EAL	40,740 304 18 57	UB5QEO	14,840 151 13 22
SP8ARY	216,399 605 41 112	GM3YOR	3.5 55,738 646 11 47	YU7SF	23,298 228 22 60	UA3EAL	29,190 184 24 46	UB5SHAC	7,514 81 11 23
SP2JCK	174,811 459 70 161			YU1BAU	101,989 769 19 60	UA3FLR	14,868 252 19 40	UB5QFS	3,102 53 8 14
SP5HHV	166,408 278 86 152			YU5RU	85,624 698 17 60	UW4CI	11,546 180 13 33	UB5LEA	96 4 4 4
SR6DMJ	132,288 412 56 136	EA2IA	A 2,931,510 3047 116 301	YU4EBL	74,314 635 16 57	UA4CAU	5,460 72 11 28	UB5L5M	21 117,500 585 26 68
SP98BH	106,904 393 43 118	EA7XO	449,190 1002 52 155	YU4VBR	55,584 322 15 57	UA4DZ	281,568 1262 28 84	UB5LIA	57,968 299 21 75
SP9CVY	96,660 346 42 93	EA7ATE	297,976 1003 25 111	YU3MY	34,465 505 12 49	UA3AGL	61,500 500 21 61	UB5QAP	64,264 424 19 49
SR8ARU	86,856 315 45 109	EA2DT	227,054 578 57 157			UA3DNL	25,278 288 14 52	UT5BXC	38,430 246 20 50
SR3CH	55,216 310 33 103	EA1JQ	191,930 560 50 120	YU10VK	221,522 411 11 40	UA1TUA	6,437 132 16 25	UB5UCO	5,628 60 14 32
SP5HTV	51,207 205 36 61	EA2KEJ	70,434 247 40 92	YU3FV	24 3 3 3	UA1TJA	6,080 144 7 31	UB5IJK	14 555,204 1734 39 117
SP9DTH	49,923 248 38 91	EA3WL	67,500 265 43 92	YU10VX	24 3 3 3	UA1TJA	3,060 48 9 31	UT5DOL	173,907 722 30 83
SR9ZD	38,860 202 31 75	EA1FF	52,726 304 22 60	YU3TBG	9,660 219 9 33	UA1NBD	3,071 77 2 25	UT5SWW	162,015 803 29 76
SP5CJQ	37,890 229 21 76	EA1FM	48,000 190 36 84			UA3LBE	2,052 44 6 30	UB5LCK	133,464 833 26 57
SP5KTR	29,575 193 21 70	EA3CRU	45,780 243 37 62			UA3SHV	86,268 658 22 62	UB5BZ	56,445 476 22 49
SP2EAD	21,627 119 32 57	EA2CR	36,600 199 28 72			UA30M3	41,817 555 10 43	UB5KAY	52,083 370 23 58
SP9AFA	20,972 84 28 70	EA7AIN	33,642 153 42 84			UA3DCY	38,430 466 12 51	UB5STAM	30,681 282 18 45
SP9EQS	20,882 125 36 72	EA3GF	16,544 133 29 48			UA3XBY	8,268 111 11 41	UT5PKI	27,392 245 19 45
SR8FER	19,980 90 39 72	EA2OP	12,325 112 25 60			UA6YAC	6,270 187 7 26	UB5SGE	25,193 177 17 42
SR4LDT	15,616 249 11 55	EA3IH	10,944 108 13 35			UA4QM	1,911 79 6 15	UB5B5G	12,835 210 14 34
SR5ES	14,060 64 40 55	EA20P	8,400 60 7 18					UB5KAF	12,788 216 10 36
SP6AJI	7,980 132 13 22	EA30H	5,616 73 11 27					UB5WCV	9,696 172 12 36
SP9HWS	6,664 66 18 31	EA2GJ	3,746 310 17 37					UB5NAQ	3,069 82 8 25
SR6AY	5,016 34 24 33	EA5BRG	23,296 194 15 41					UB5UCR	7 163,115 827 22 73
SR7CKP	4,743 110 9 22	EA1QJ	5,481 81 10 19					UY5XK	32,760 357 14 56
SP5KGS	3,762 42 14 19	EA1SI	5,481 81 10 19					UB5HCU	19,034 179 13 49
SR5LM	3,360 42 15 20	EA2HW	3.5 14,124 227 8 36					UB5FBV	17,380 271 10 45
SR6AML	2,345 60 3 32	EA2OP	1.8 7,448 174 8 30					UB5EEP	12,896 182 10 40
SP9EVP	28 178,815 817 27 64							UB5JIM	3.5 100,985 706 26 69
SR6GF	96,672 377 27 69							UB5IDS	54,609 328 18 43
SP5AD	74,404 340 27 62							UB5ZAL	53,592 543 19 58
SR9CAV	71,294 308 28 58							UB5OAX	41,535 505 13 52
SP5ACN	47,817 192 30 69							UB5NCV	26,042 449 11 47
SP4EDQ	26,643 134 25 58							UB5RS	14,790 239 12 47
SP5AFL	12,095 122 14 27							UB5NDD	12,012 276 6 33
SP2AYC	7,391 176 18 14							UB5FDR	3,549 159 5 16
SR3CMX	6,095 92 10 23							UB5WAX	2,808 105 5 21
SP8EDP/4	2,898 26 15 27							UB5WF	1.8 7,740 200 7 29
SP2KAZ	1,080 45 9 15							UB5JKQ	5,238 177 7 20
SP8DUL	21 132,916 681 28 73							UB5DBE	2,610 110 5 20
SP2BRZ	129,383 512 28 81							UB5YE	1,380 67 5 15
SP6ANY	92,736 479 23 62								
SP9BCH	82,110 408 23 62								
SP5BR	69,222 351 23 60								
SP3HYK	45,628 290 19 49								
SR3QEE	32,604 240 17 40								
SR4INT	26,784 177 19 43								
SR8BSQ	17,280 143 14 34								
SP6BYR	3,465 63 10 11								
SP8BAC	2,728 50 11 11								
SR3BYZ	2,261 44 7 12								
SP2AVE	14 82,325 513 25 64								
SR6PLC	74,970 458 25 77								
SP6HTQ	52,155 355 25 70								
SP6ATG	46,060 359 20 50								
SR9BRP	34,773 315 19 48								
SR5JJK	11,152 151 20 21								
SR8MJ	8,510 97 15 31								
SP5FLB	5,852 75 14 30								
SR8BAB	3,552 53 12 20								
SP5EMK	3,390 60 8 22								
SR1XG	2,730 54 8 31								
SP2GUB	795 19 9 6								
SP4EEZ	7 21,600 253 14 45								
SR6UK	21,112 160 11 45								
SR5JTR	16,128 134 15 49								
SR9EM	15,372 161 13 48								
SR9PT	14,823 162 14 47								
SP5LGO	10,339 160 11 38								
SR9LAS	4,725 133 7 28								
SP3LWP	3,360 57 11 24								
SP3BLT	56 4 4 4								
SP2FWC	3.5 42,768 413 18 54								
SP5LJK	11,856 293 6 33								
SP5KGT	10,881 238 9 30								
SR9BDQ	5,967 50 18 33								
SR9B3R	5,109 105 7 32								
SR4AAZ	3,052 96 5 23								
SR3DAA	1,606 75 4 18								
SP9JZT	1,254 69 5 15								
SP4FG	252 20 4 10								
SP5IKI	1.8 10,881 271 7 32								
SP3FLR	8,256 270 5 27								
SR9DH	7,622 200 7 30								
SR1ADM	3,192 140 3 21								
SR9GDB	1,170 31 3 10								
SR9EPY	85 60 3 12								
SP9JRA	630 44 3 2								
		ROMANIA							
Y06HG	A 176,272 487 57 127								
Y06VZ	115,018 468 41 90								
Y03RF	31,184 78 46 60								
Y06KA	20,025 148 25 50								
Y03BYF	16,796 131 36 40								
Y06KA	11,775 175 24 51								
Y08KOA	11,648 143 24 40								
Y06EZ	9,050 166 14 36								
Y02BEO	6,024 102 12 29								
Y08RL	2,025 41 17 20								
Y08AJJ	21 85,140 525 30 56								
Y06KEC	78,909 480 19 66								
Y08AP	37,122 269 19 50								
Y08DD	20,708 170 17 45								
Y03BEJ/9	7 115,784 886 29 53								
Y08KOG	17,020 249 11 35								
Y03CDN	3,990 81 15 23								
Y06KAF	2,964 109 6 20								
Y08ZF	2,584 48 9 28								
Y06AYB	2,112 90 9 13								
Y06ADW	1,204 39 9 25								
Y08BAM	3.5 67,166 815 21 50								
Y08PB	13,545 330 13 30								
Y05BEU	6,528 198 12 20								
Y04BUA	2,420 106 10 12								
Y08BDV	1,940 100 5 15								
Y08DDQ	1,536 70 6 18								
Y06KED	976 64 6 10								
Y05TA	80 11 3 5								
		SWITZERLAND							
		H89APJ	A 108,706 450 43 70						
		H89AIJ	95,496 238 61 122						
		H89KC	94,500 296 48 92						
		H89QA	4,250 63 14 36						
		H89BDW	4,148 84 5 17						
		H89DX	14,322 69 26 67						
		H89BJJ	3.5 23,103 382 11 40						
		WALES							
		GW3NYY	7 94,247 788 16 63						
		YUGOSLAVIA							
		YU3VM	A 28,416 175 32 64						
		YU7ORQ	26,280 148 35 85						
		YU7NZR	14,212 68 34 42						
		YU7OCV	28 454,209 1317 33 96						
		YU2CRS	207,708 752 33 81						
		YU3TVI	156,240 641 28 62						
		YU7NOG	105,468 485 27 67						
		YU3BU	98,320 503 24 56						
		YU2CQ	84,350 495 21 49						
		YU1OVU	42,315 271 22 43						</



Hans, ZS6BSZ, has only been licensed one year, but he was a very welcome addition to the Contest.



Val, N4RJ, who finished second on 15 meters at VP2KAC.

K6FO	205,574	345	81	137
AJ6V	125,976	265	70	104
W6FOF	123,120	227	73	117
N6ST	50,526	166	54	72
W7XR	2,308,789	1892	138	289
WB7FDQ	1,020,765	1445	80	175
ADBJ	2,239,296	1803	125	311
K8RT	1,506,432	1362	106	278
W8FN	598,800	705	95	205
W8SDL	525,800	676	88	187
K8BA	280,188	560	58	123
K8BCVW	3,397	110	20	23
K8GS	385,840	526	81	184
N8NO	2,204,298	1705	135	318
K8RWL	1,246,366	1233	112	250

ALASKA				
NL7M	1,309,563	2316	78	149
CANADA				
VE3KKB	1,580,082	1785	101	256
VE1DXA	1,538,500	1854	99	241
VE3UOT	855,627	1023	98	225
VE7ZZZ	761,315	1476	84	131
VE3MFA	524,734	829	85	174

GUATEMALA				
TG9NX	2,686,270	3797	97	217
MEXICO				
XE2MX	1,511,190	2452	95	175
SABLE ISLAND				
VE1AI/1	2,016,315	2465	94	239

AFRICA				
CEUTA				
EA9EU	5,077,696	3884	116	326

ASIA				
ISRAEL				
W6KG/4X4	1,333,990	1558	75	220

JAPAN				
J4ZYK	2,233,035	1700	149	310
J44YF	898,398	1275	94	160
J43YD	539,988	907	85	119
J47YD	291,584	786	63	65
J41YCL	109,098	332	44	70

SAUDI ARABIA				
HZ1AB	235,488	707	41	91

ASIATIC U.S.S.R.				
ARMENIA				
R66B	9,720,528	5358	164	462
UK6GAA	126,776	439	35	71

ASIATIC RUSSIA				
UK9AAN	6,343,208	3871	160	444
UK0QAA	1,555,520	2210	110	210
UK9FER	1,577,367	1940	80	217
UK0FAA	973,269	1428	106	191
UK0ZAB	910,035	1505	76	167
UK9SBB	872,480	1194	72	194
UK9AAC	407,230	743	53	158
UK9SBI	385,920	745	53	148
UK9XAN	318,144	671	54	138
UK0ZAH	101,270	481	36	59
UK0UAA	73,200	552	21	40
UK9FEN	48,195	227	15	70
UK9CCR	27,246	334	20	35
UK0SAK	6,380	123	14	15
UK0KAF	2,100	30	12	18
UK0KAH	555	15	10	12

GEORGIA				
UK6FAA	252,150	738	37	86
UK6FAB	3,564	18	4	14
KAZAKH				
UK7BAL	1,364,742	1958	74	180
UK7GAA	1,149,640	1539	104	224
UK7LAF	1,077,500	1515	62	188
UK7CAC	4,641	31	21	30

EUROPE				
BELGIUM				
ON6VM	991,146	1562	79	212
BULGARIA				
LZ1KSN	1,323,980	1633	107	279
LZ1KPM	791,666	1492	80	197
LZ2KKZ	375,144	821	68	164
LZ2KHH	81,528	424	34	138
LZ1KKA	39,931	301	20	53
LZ2KKK	2,204	63	6	13

CZECHOSLOVAKIA				
OK1KRG	2,484,674	2322	128	359
OK3VSV	1,007,169	1403	98	241
OK1KCU	900,389	1575	80	213
OK1KRU	619,633	1214	77	210
OK3KKE	611,523	1019	82	215
OK1KUR	600,936	1072	77	217
OK2KPS	446,152	828	68	189
OK1KVR	429,034	1003	66	176
OK3RXA	345,824	1025	53	157
OK1KPA	309,009	766	64	155
OK2BWH	242,397	690	56	151
OK3RJB	222,133	630	58	133
OK3RMW	176,516	602	54	132
OK3KTD	173,160	540	54	131
OK1KZD	149,640	486	48	126
OK1KZQ	134,940	382	50	123
OK1KYS	107,146	274	55	114
OK2PBG	71,640	275	31	89
OK1KTW	43,152	226	31	62
OK1KPZ	32,226	162	32	50
OK3KGQ	11,954	219	10	33
OK3KEU	3,045	49	12	17
OK1KCF	1,062	23	8	10
OK2KNN	1,102	25	8	11
OK2KYD	700	27	9	19

DENMARK				
OZ1E0C	592,200	1187	75	207
OZ5EDR	442,657	903	65	164
ENGLAND				
GB2WW	2,462,757	2665	107	300
G3GJL	788,162	1372	69	185
FINLAND				
OH1HS	14,036	102	22	36
OH5PW	5,635	70	13	36
FRANCE				
F3TV	3,272,697	3122	119	358
F6KMG	913,807	1481	80	203

GERMANY (GDR)				
Y23DL	1,363,639	1736	95	258
Y63ZM	1,353,024	2086	89	235
Y35ZM	970,272	1306	79	209
Y55ZA	230,318	633	57	152
Y47ZF	55,890	198	41	94
Y41ZF	35,300	134	39	61

GERMANY (FRG)				
DL9AA	4,209,408	3462	132	372
DK0TU	2,803,107	2710	115	334
DL8CM	1,731,828	1967	96	293
DK0IG	590,730	1132	78	213
DL0ER	90,504	417	39	69

HUNGARY				
HG6V	2,579,196	2694	119	325
HA0KLE	1,775,360	2152	111	269
HA5KFL	1,473,472	1925	99	269
HA5KKG/7	1,267,864	1969	93	241
HG8U	1,212,090	1222	92	236
HA1KZZ	847,176	1479	72	194
HA1KSA	845,305	1476	77	216
HA3KNA	811,850	1225	86	239
HA2KZR	770,310	1423	81	189
HA8KAZ	734,892	1392	71	211
HA4KYH	668,664	1160	81	217
HA9BYK	495,378	966	63	171
HA3HKC	445,446	1104	66	160
HA1KSG	330,330	778	61	181
HA8BKE	245,100	818	54	136
HA0KHW	162,288	498	53	131
HA5KDP/8	147,678	497	51	112
HA2KMR	135,048	604	43	93
HA5KHT	43,680	285	28	63
HA2KMG	18,286	181	21	61
HA1KZU	12,960	100	23	25

ICELAND				
TF3IRA	2,169,760	3004	85	231
NETHERLANDS				
PA0GN	1,003,165	1467	82	231
NORWAY				
LA1H	1,545,984	1735	97	255
POLAND				
SP2KGR	795,227	1305	88	223
SP7KTE	679,428	1103	91	233
SP7KMX	324,870	818	72	166

ROMANIA				
Y08KAN/P	213,426	632	60	153
SPAIN				
EA3AKD	2,136,744	2835	100	254
SWEDEN				
SM5AOE	2,070,120	2258	106	284
SK6AW	1,086,824	1742	82	210

SWITZERLAND				
HB9AYZ/P	105,704	380	45	101
WALES				
GW4BRS	777,510	1398	73	192
YUGOSLAVIA				
YU1EFG	212,056	813	30	104

EUROPEAN U.S.S.R.				
BELO-RUSSIA				
UK2WAF	1,447,312	1803	89	283
UK20AA	695,009	1385	78	223
UK20AR	555,135	1426	85	170
UK2AAX	61,180	390	31	64
UK2AAP	9,492	148	13	29
ESTONIA				
UK2RDX	2,057,790	2094	118	360

EUROPEAN RUSSIA				
U4W	3,080,850	2808	125	345
UK1AAA	2,574,273	2433	114	333
UK4FAY	2,320,552	2639	113	308
UK3AAC	2,171,813	2238	102	342
UK4PNZ	1,550,156	1724	103	301
UK6LEW	1,441,683	2143	94	275
UK4WAB	1,190,668	1600	100	294
UK3ABF	901,466	1508	95	239
UK3DAU	848,540	1307	81	238
UK3SAB	804,747	1189	87	234
UK3DCF	588,882	1139	75	219
UK3WAB	567,028	1024	81	227
UK3WAA	378,378	968	70	264
UK3AAR	349,790	989	45	145
UK4CAA	224,790	527	67	187
UK3ABO	223,668	598	58	170
UK4HAW	221,247	621	72	211
UK1AAF	167,244	692	48	106
UK1TAR	45,630	213	31	59
UK6UAA	32,134	401	35	61
UK30BV	19,440	199	12	33
UK3KAM	17,775	158	19	60
UK10AB	11,166	98	17	30
UK6PAG	9,394	102	11	14
UK1AAN	2,304	66	8	28

LATVIA				
UK20AI	309,447	717	64	155
UK2GAE	23,574	241	56	121
LITHUANIA				
UK2PCR	4,256,620	3021	145	435
UK2PAP	3,878,958	3159	130	400
UK2BBB	2,874,456	2670	124	357
UK2BAG	722,178	1232	84	234
UK2BCC	616,679	1242	69	190
UK2PAT	585,792	1094	71	217
UK2BBF	232,344	604	59	157
UK2BBX	188,188	690	42	112
UK2BCG	170,016	621	44	110
UK2PRC	155,664	520	49	135
UK2PAM	31,860	312	18	72

UKRAINE				
R5M	3,151,212	3275	125	371
UK5MAF	2,858,284	2674	126	368
UK5MAG	2,179,948	2348	121	345
UK5QBE	1,853,688	1953	108	313
UK5IBM	1,524,960	1672	129	351
UK5WAA	1,509,000	1868	94	281
UK5MCO	567,798	1240	62	169
UK5IBV	511,056	1126	71	202
UK5MBF	424,344	908	63	171
UK5UDX	383,306	880	67	195
UK5MAB	327,933	822	67	182
UK5MCP	204,675	546	59	160
UK5EAE	203,000	618	44	159
UK5UBF	118,080	483	43	137
UK5MDI	98,604	494	33	97
UK5NAA	92,160	496	31	97
UK5LAN	72,627	339	30	99
UK5UBB	561	13	6	11

SOUTH AMERICA				
ARGENTINA				
LU10Z	2,075,736	2249	102	210
BRAZIL				
ZV1AFX	416,481	841	56	

K1ZZ	7,758,438	4165	163	480
K8LX	7,601,825	4346	170	435
R9MM	7,082,824	3945	171	461
W3LPL	6,777,568	3724	168	464
K3WW	6,751,080	3711	171	459
W3FA	6,183,996	3354	173	464
W3MM	6,174,784	3451	164	452
K9XR	5,666,584	3281	167	449
W3GM	5,013,557	3126	123	435
K2VJ	4,386,514	3059	133	373
K4PQL	4,271,696	2579	162	410
K6XT	3,311,425	2578	143	300
W6NV	3,280,901	2358	147	334
K6RU	2,587,200	2029	143	297
K3IU	1,860,445	1554	120	295
K2TD	919,989	907	103	254
W3NX	814,880	819	107	245
WA6GFY	601,020	784	101	169
N4KE	130,284	210	89	142

JAMAICA				
6Y5YL	11,603,808	9334	141	375
PUERTO RICO				
NP4A	17,627,820	10846	171	487

AFRICA				
KENYA				
5Z4MM	5,005,306	3610	140	327

ASIA				
JAPAN				
JA3YKC	4,604,620	3425	152	315
JA3YBF	4,561,554	3330	149	329
JA2YEF	2,563,518	2634	119	220
JA7YAA	2,269,163	2124	130	247
JH1YDT	1,606,080	1784	112	208
JA4Y00	531,000	806	84	152
JA1YXP	311,600	652	70	94

EUROPE				
CZECHOSLOVAKIA				
OK1KSO	2,374,190	2124	121	334
OK3KAG	1,855,350	2020	113	337

FAEROS ISLANDS				
OY6FRA	1,873,508	3606	91	273
FINLAND				
OH3AA	7,330,832	5933	148	418
OH1AA	6,771,114	4965	146	421

GERMANY (FRG)				
DL8KF	3,980,106	3932	126	340

GERMANY (GDR)				
Y80A	3,532,326	4597	113	321

HUNGARY				
HAGKX	225,090	567	64	141

LUXEMBOURG				
DF4KA/LX	714,816	1473	72	200

POLAND				
SR6PAZ	1,070,880	1631	94	251

SWEDEN				
SK2KW	7,772,128	6297	145	399

YUGOSLAVIA				
Y27Z	3,063,592	3623	108	314
YU4FRS	3,014,892	2535	126	312
YU7AJD	643,070	1287	65	202

QRPP					
YU3BC	A	702,765	996	85	230
UB5CI	"	669,768	1053	83	261
W0KEA	"	268,576	439	79	139
SM5CTT	"	254,150	588	61	160
OK1DKW	"	222,660	561	57	163
AJ7S	"	203,001	457	64	93
HP1XAT	"	198,951	650	55	86
N2GC	"	152,358	284	61	140
W6GPOC	"	125,218	324	52	85
W9PNE	"	109,611	245	62	109
JA1KFX	"	68,365	214	41	72
YD5AVN/3	"	65,758	269	41	113
K7HBN	"	27,482	147	29	40
K1EEF	"	27,232	110	25	67
W9JUV	"	23,838	98	33	54
F9YZ	"	20,424	188	18	19

JA0JKD	"	15,872	92	22	35
W0RSP	"	15,080	78	24	41
EABEY	"	11,067	76	16	35
WB2IVX	"	7,936	76	24	38
SM4AJV	"	6,615	88	16	47
W2JEK	"	270	10	7	8
SP3LPR	"	210	15	4	0
W5VGX	28	88,536	371	24	60
K6ZXE	"	34,164	169	25	48
N1BEY	"	29,796	138	22	56
Y22ZL	"	7,812	78	13	23
UA9SHE	"	7,084	66	13	27
OK2BNG	"	6,237	79	13	20
K6SMH	"	4,872	61	14	15
UB5VAA	"	4,125	73	11	22
OZ8E	"	4,011	82	8	13
KA1CFZ	"	3,120	44	10	20
OK1HCH	"	1,764	40	7	7
SM7CZC	"	924	43	3	19
UR2TGB	"	320	11	6	10
IAKRF	21	54,112	289	20	56
WB4BBH	"	35,113	171	22	51
SM6A00	"	33,960	247	16	44
JM1UHW	"	11,352	101	19	24
K6EIL/7	"	6,426	69	15	19
OH6CS	"	5,617	104	9	32
KAGLKO/SF	"	4,393	68	11	12
IQSKK	"	2,944	70	8	24
Y22PM	"	2,499	63	5	12
G3CWL	"	1,702	56	6	17
OH2BUZ	"	1,092	46	6	15
DK5RY	"	960	32	6	9
JA0BOB	"	459	17	5	4
JA3NMV	"	252	7	6	6
JA9XBW	"	130	6	5	5
N3UN	14	39,259	165	25	58
OK2BMA	"	33,728	298	17	51
UA3AMB	"	21,888	225	16	41
UP2BB	"	17,820	132	17	58
E17H	"	16,740	255	13	32
OZ9MM	"	3,162	87	8	23
W8EAO	"	1,378	26	10	16
Y26E1/P	7	2,976	92	6	26
UB5AAL	3.5	9,061	172	9	32
UR2CW	"	6,930	133	9	33
Y27EO	"	5,400	146	6	30
OK3KXX	"	608	39	4	12
Y27HH	"	342	21	4	14
UA9SHU	"	152	8	3	5
UO50DB	1.8	5,684	191	5	23
EZ9QAA	"	4,608	76	8	16
UB5UGF	"	4,587	135	6	27
UR2RFK	"	3,699	129	5	22
UL7CBM	"	3,420	61	6	13
UR2RAL	"	1,156	64	4	14
UB5ABZ	"	870	52	4	11
OL5AYF	"	576	43	3	13
E26PAZ	"	126	14	3	6
OK3CVA	"	120	20	3	7

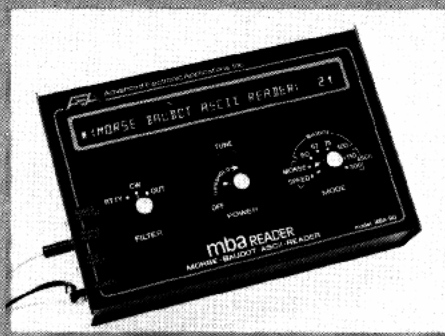
CHECK LOGS

Our deepest thanks to the following stations who sent in check logs:

DJ7FT/P, EA5CQ, EZ2BAE, G3FXA, G4DSE, HA2MD, HA4XW, HA7PF, HA8KCU, HA0KLL, JA8CJY, JE2NCQ, KA5CWE, KA6IYE, KL7FDQ/7, LA1YZ, LA2AV, LA2EG, LA2KD, LA4XX, LA8CJ, LA8LA, LA8UL, LA8XM, LB1GB, LU7FBS, LZ1CW, LZ1RU, LZ1IA, LZ2CC, LZ2KEF, LZ7A, OH1EH, OH1PS, OH1XX, OH1TM, OH5LJ, OH6GD, OH6NH, OH6XX, OH2BBM/OH0, OK1AMS, OK1MNV, OK1OFK, OK1TA, OK1TJ, OK1XC/P, OK1XJ, OK2BBJ, OK2BOB, OK2BUY, OK3CGI, OK3CO, OK3TAY, OL3AXN/P, OZ7KV, OZ9PP, PA3ADI, PA3AFF, PA3AMA, PA0AWJ, PA0INE, PA0PLM, PA0RRS, PA0VDV, PA0VAD, PA0WLN, P11PT, PY1AZY, PY1BHB, PY2BTR, PY2CPU, PY2CRM, PY2FNE, PY3YZ, PY3ZT, PY5MR, RL7GDN, SM2COR, SM4ASI, SM5ALJ, SM5APS, SM5BDV, SM5BFJ, SM5BGB/EA, SM5CFC, SM5ENP, SM5KMU, SM5RH, SM6BZE, SM7ITN, SM0VWH, SP1CTN, SP1DPA, SP2BLC, SP2DGB, SP2HMT, SP2RS, SP2ZT, SP3GCT, SP3IOE, SP5BLI, SP5BPL, SP5DWE, SP5DZT, SP5ENA, SP5IXI, SP5KVH, SP5LGP, SP6ANY, SP6BLS, SP6HRK, SP6JIR, SP7DCI, SP8BVO, SP8JUA, SP8JMA, SP9KMM, SP9LIZ, SR3AJ, SR3BPU, SR3CB, SR4IQG, SR8GC, UA10AI, UA10BO, UA10EW, UA1ZBP, UA3AB1, UA3ACD, UA3AGC, UA3AEX, UA3AMR, UA3BC, UA3DAL, UA3DAT, UA3DCZ, UA3DFV, UA3DGI, UA3DIN, UA3DHW, UA3DL, UA3DLD, UA3DLG, UA3DNV, UA3PRT, UA3EAL, UA3ET, UA3IDT, UA3LAB, UA3LAR, UA3LCC, UA3PBY, UA3PEZ, UA3PGN, UA3PHA, UA3QLC, UA3RFV, UA3TCF, UA3TDK, UA3UAA, UA3VEZ, UA3VFI, UA3XBB, UA4AA, UA4ACA, UA4HFG, UA4HLX, UA4MX, UA4NEP, UA4QK, UA4YB, UA6ADY, UA6AKB, UA6AKO, UA6AQJ, UA6ARP, UA6EAE, UA6HBS, UA9CES, UA9FDL, UA9HBO, UA9LAS, UA9LBQ, UA9MAC, UA9NW, UA9OBG, UA9OCG, UA9OS, UA9SDL, UA9SGW, UA9UAR, UA9VOZ, UA9WDM, UA9YFG, UA0JDX, UA0KBC, UA0LJ, UA0NH, UA0QCA, UA0OMB, UA0SKF, UA0ZCY, UB5AFC, UB5ABY, UB5ECH, UB5EF, UB5EU, UB5FDG, UB5HAF, UB5IDL, UB5LAL, UB5LCA, UB5LDP, UB5MDP, UB5OBU, UB5QEB, UB5SBR, UB5UBU, UB5UCE, UB5VCZ, UB5WCW, UB5WDD, UB5ZBG, UC2ACO, UC2CFA, UC2LBE, UC2OBA, UC2SLL, UF6BN, UF6FEQ, UK2AAM, UK2BAB, UK3DBW, UK3QAE, UK3QAX, UK3RAB, UK4NBM, UK5FAD, UK5JAH, UK5VAA, UK5ZAC, UK6LAZ, UK7GL, UK9CCE, UK9OAW, UK9SBD, UK9UAO, UK0ABB, UK0LAA, UK0SBB, UL7AAS, UL7EAH, UL7GAA, UM8MCF, UO5ODN, UP2BGR, UP2BV, UP2CV, UQ2GBR, UQ2GEI, UT5BN, UT5CF, UT5LN, UV3GZ, UV0BB, UW3TR, UW6CV, UW9PT, UY5YB, W4KO, W6QNM, WB5OPH, Y21CF, Y21DH, Y21FA, Y21UD, Y22CF, Y22EO/A, Y22JD, Y22NF, Y22ML, Y22WK, Y22YF, Y23BF, Y23GB/A, Y23OH/A, Y23VB, Y23ZF, Y23ZJ, Y24GE, Y24GF/A, Y24ZH, Y25TO, Y26IL, Y26MH, Y26XM, Y27DL, Y27HL, Y27IL, Y32PE, Y35XA, Y37XJ, Y38RO, Y39ZA, Y41ZM, Y42ZB, Y43YO, Y45SA, Y47AA, Y47VF, Y48ZF, Y53XM, Y53ZA, Y54XA, Y54ZA, Y55YL, Y75OL, Y75YL, YC2CAZ, Y04-17867/Br., YU1PC, YU7ADA.

Disqualifications:
 UV9AH: Unverifiable contacts and duplicates
 W3RJ: Unverifiable contacts and broken calls
 4N3P: Excessive duplicate contacts.

MBA READER™ A NAME YOU SHOULD KNOW



What does MBA mean? It stands for Morse-Baudot and ASCII. What does the MBA Reader do? The RO model (reader only) uses a 32 character alphanumeric vacuum fluorescent display and takes cw or tty audio from a receiver or tape recorder and visually presents it on the display.

The copy moves from right to left across the screen, much like the Times Square reader board. Is the AEA model MBA Reader different from other readers? It certainly is! It is the first to give the user 32 characters of copy (without a CRT), up to five words at one time. It can copy cw up to 99 wpm and Baudot at 60-67-75 and 100 wpm. Speeds in the ASCII mode are 110 and hand typed 300 baud. The expanded display allows easy copy even during high speed reception.

The AEA model MBA has an exclusive automatic speed tracking feature. If you are copying a signal at 3-5 wpm and tune to a new signal at 90 wpm, the MBA catches the increased speed without loss of copy.

The MBA Reader allows a visual display of your fist and improves your code proficiency. It is compact in size, and has an easily read vacuum fluorescent display.

The Reader operates from an external 12 VDC source. This allows for portable/mobile or fixed operation.

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Advanced Electronic Applications, Inc.
 P.O. Box 2160, Lynnwood, WA 98036 Call 206/775-7373

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