



House location of CY0SAB on Sable Island.

1985 CQ WORLD-WIDE DX CONTEST C.W. RESULTS

BY BOB COX*, K3EST/6, AND LARRY BROCKMAN**, N6AR/4

"I had never operated in a DX contest before last weekend. Several sources indicated that it might be a good way to pick up some new countries and have some fun, and since I had just added a second monoband vertical on 7 MHz making a phased pair, I decided to give the CQ WW DX Contest a shot on the CW weekend. It was amazing how much fun I had, and I worked a lot more QSO's and new countries than I thought I would with QRM and high-powered stations everywhere. I guess at any level it is a thrill to work new ones!" We think Dave, KA1KFC, sums up the enthusiasm and excitement we all feel by entering the CQ WW. At first, getting into the big contest sounds intimidating, but once you get your feet wet, you find that yes, you can work just about anyone with 100 watts and a dipole.

All Band

The top scores in the world reflect the enthusiasm shown above. Not only are they all seasoned contesters still excited about the fun and competition, but their

scores indicate that they worked just about all the 100 watters who called them.

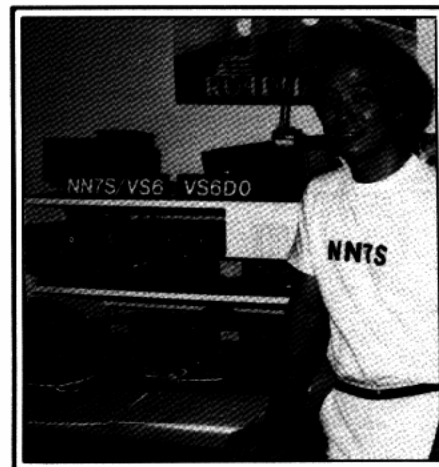
A quick glance at the Top Scores box and you will see that 1985 was a little different than competitions of the past. The top five single operator all band stations finished within about 300 K of one another. This result was not left to chance; the operators had all agreed to operate from different regions that would be competitive for top world honors. When the ions finally settled down, Richard Norton, N6AA, operating at EA9IE, had topped the pack of 9Y4VT (Op. OH2BH), PJ2FR (Op. W8ZF), CN8ES (Op. OH2MM), and D44BC (Op. N6TJ). In the USA, John Dorr, K1AR, decided to do it the hard way by setting a new US record at the bottom of the sunspot cycle. In second place was W1KM, who would have pushed John for first place if his 40 meter antenna had not broken. A special mention should be made of the top US non-east-coast score: Gary, WA6VEF (at AI6V), topped all scores west of Pennsylvania. In the QRPp category, YU3BC edged out SP3KEY to become the world QRP champion.

Low Bands

The action on 7 MHz was so good that K1MM and YZ9A on opposite sides of the Atlantic both commented that the band



John at the key of A25/G3HCT.



JA5DQH, NN7S gave everyone VS6.

was open 21 hours a day! At least 150 countries were available on 7 MHz, including choice catches such as BY, HS, XU, ZD9, ZC4, and 3A, to name a few. Top world honors go to KP4FI, followed closely by XE2FU (KZ5M op.) and YZ9A (YU3EY), all with over 2000 QSO's. In the US the race was a photofinish with K1OX (KC1F op.) topping K1MM for a new US record. On 3.5 MHz the well-recognized signature of EA2IA set a new European record on the way to the world high score. In the US, W1FV not only set a new 3.5 MHz US record, but also worked more countries than any submitted log (85) in his winning effort over the second-place score of N4RJ. On top band YV3AGT keyed his way to a new world record over HB9AMO. Both stations should be congratulated for confronting totally different band openings to finish at the top. In the US, K5UR not only won but beat KV4FZ's 1976 North American record. If you check out the 160 scores in the results you will see that 71 countries were worked by LZ2CJ and over 90 appeared in the logs received.

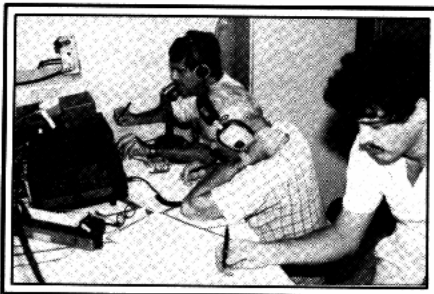
High Bands

YX5A led all stations on the "work-horse" band, 20 meters. His 1 meg-plus score topped DK3GI to become the world

*3039 Campbell Place, Davis, CA 95616
**12041 Walker Pond Rd., Winter Garden, FL 32787



The V2A crew. Front, left to right, W8PR, K6GXO, NC8Q, W8OK. Back, left to right, W8RKL, W8ILC, N9AG, WB9CIF, W8WPV, NY5Q.



HS0A—the only Zone 26.

14 MHz champion. In the US, K2VV just edged out K3RV/4 to set a new US record. On 15 meters CX5AO was the world top score beating out CE3DNP. CX5AO led all single band entrants with 1.3 meg points and almost 3,000 QSO's. In the US, K1RM took top honors over K5GO. Ten meters? Hmm, well, we can remember it, can't we. Remember when 100 contacts on 10 were just a matter of putting in the time? Now the spectrum has been turned upside down with 160 producing much more than 10. The world top score was ZS6P with 288 QSO's. Both ZS6P and runner-up I2ARC had 59 countries. In the US, WA3CGE headed a field of four entrants.

Multi-Operator

Our hats are respectfully off for anyone putting on an expedition for the contest. But if we could take off two hats, we would do so for the hard work and planning shown by multi-expeditions.

V3A, V2A, RF3V, UP7A, ZS3/W6QL, CY0SAB, 8P9AG, and DF8ZH/CT3 all deserve our special thanks. A special mention should be made of RF3V, the world top multi-multi; they carried the whole

station of UP1BZZ in trucks, railroad cars, etc., down to UF6. This year the multi-single category competition between V3A and KP4BZ produced some real fireworks. After the dust settled, V3A emerged as the world champion. In the US, K1KI and their multi-lingual crew finished ahead of N3ED for top honors. In the multi-multi category RF3V finished ahead of EA9CE for the world top score, while in the USA the boys at Tuxedo Park, N2AA, put it all together again to beat W3LPL for the U.S. Championship.

New Records

To summarize the new records that were set in the 1985 CQ CW, a new world record on 1.8 MHz was set by YV3AGT, almost doubling the existing record. The continent to be on for setting new records was Europe: HB9AMO (1.8), EA2IA (3.5), YZ9A (7), and DK3GI (14) all set new European records. New continental records were also set by K5UR (1.8), KH6CC (1.8), KH6MD (14), and YV3AGT (1.8). In the US, K5UR (1.8), W1FV (3.5), K1OX (7), and



The flying Finns heading out for better propagation: 9Y4VT (OH2BH), CN8ES (OH2MM), and C53AA (OH2BBM).

TOP SCORES

WORLD		USA	
Single Operator All Band		Single Operator All Band	
EA9IE	5,731,360	K1AR	3,397,905
9Y4VT	5,676,536	W1KM	2,713,558
PJ2FR	5,434,550	N2LT	2,703,206
CN8ES	5,422,763	W3GRF	2,634,252
D44BC	5,418,018	N4WW	2,482,248
YV5TK	4,839,410	K3TUP	2,323,376
4V2C	4,281,212	K3ZO	2,157,396
LU8DQ	3,989,814	W3BGN	2,090,889
C53AA	3,447,396	K1EA	2,002,184
K1AR	3,397,905	W2REH	2,000,432
Single Op Single Band 28 MHz		Single Op Single Band 28 MHz	
ZS6P	65,680	WA3CGE	2822
I2ARC	27,600	NU4Y	1764
ZS6TUK	6,510	KQ1V	588
EA7BU	5,106	K4DDB	576
YU3ER	4,032		
WA3CGE	2,822		
21 MHz		21 MHz	
CX5AO	1,300,025	K1RM	275,100
CE3DNP	752,496	K5GO	216,500
LU4FDM	561,200	W8UA	170,640
A25/G3HCT	329,360	W6YA	162,946
ZM8OY	314,880	W4NL	162,162
I5MPN	307,195	N4BP	130,758
14 MHz		14 MHz	
YX5A	1,065,860	K2VV	655,046
DK3GI	776,860	K3RV/4	634,293
5H3BH	760,784	K2SX	480,340
OH80S	664,116	K1BW	462,594
K2VV	655,046	N5CR	453,870
K3RV/4	634,293	KY2P	402,996
7 MHz		7 MHz	
KP4FI	696,864	K1OX	439,632
XE2FU	665,728	K1MM	437,112
YZ9A	637,144	N6QR	366,000
YT3M	472,102	W7EJ	301,645
K1OX	439,632	KA5W	281,936
K1MM	437,112	N6NI	258,825
3.5 MHz		3.5 MHz	
EA2IA	258,408	W1FV	197,120
4N1A	200,655	N4RJ	122,451
W1FV	197,120	W6RJ	103,224
VE2HQ	176,180	K8GL	81,911
VG3BMV	172,805	K9RX	58,696
IO3JSS	167,664	K2RR	54,570
1.8 MHz		1.8 MHz	
YV3AGT	147,588	K5UR	47,005
HB9AMO	95,201	AA1K/3	24,120
LZ2CJ	81,900	N4PN	21,608
UA9KAA	65,046	N9MM	19,966
G4OBK	63,411	N4SU	15,840
RA9AKM	63,291	N0XA	15,504
Multi-Op Single Transmitter		Multi-Op Single Transmitter	
V3A	5,068,554	K1KI	3,477,100
KP4BZ	4,992,390	N3ED	2,905,875
LZ2KTS	4,252,248	N2RM	2,893,366
KH6XX	4,212,528	K4VX/0	2,716,780
UZ9AYA	3,881,148	K3OO	2,530,456
OK5R	3,865,496	KM1C	2,251,770
Multi-Op Multi-Transmitter		Multi-Op Multi-Transmitter	
RF3V	12,666,192	N2AA	8,770,631
EA9CE	9,374,244	W3LPL	7,011,840
N2AA	8,770,631	N5AU	5,374,392
V2A	7,463,449	K2TR	4,853,520
W3LPL	7,011,840	K1RX	4,348,222
UP7A	6,882,560	N3RS	4,030,565

CW TROPHY WINNERS AND DONORS

SINGLE OPERATOR, ALL BAND World

EA9IE (Opr. Richard Norton, N6AA)

Donor: W2AB Memorial

World QRPP

Franc Bogataj, YU3BC

Donor: Gene Walsh, N2AA

World—Most QSO's

4V2C (Opr. John Laney, K4BAI)

Donor: KV4AA Memorial (14,270 KHz Group)

USA

John Dorr, K1AR

Donor: Frankford Radio Club

Canada

David William Dudley, VG3BVD

Donor: Canadian DX Association

Carib./C.A.

Lorne Sydney Libin Karsh, XE1VV

Donor: Peter Munroe, WB1DCC

Europe

Saulius Zainerauskas, UP2BIM

Donor: Edward Bissell, W3AU

Africa

CN8ES (Opr. Vilho Hillesmaa, OH2MM)

Donor: Gordon Marshall, W6RR

Asia

RF0FWW (Opr. Alex Tejmurasov, UF6FFF)

Donor: Japan CQ Magazine

Japan

Toshiro Ogino, JI1QPU

Donor: Japan Crazy Contesters Club

Oceania

Satoshi Nakamura, NH6J/KH0

Donor: Maui Amateur Radio Club

South America

9Y4VT (Opr. Marti Laine, OH2BH)

Donor: Venezuela DX Club—YV5AAZ Memorial

SINGLE OPERATOR, SINGLE BAND

World (21 MHz)

Ariel Vazquez, CX5AO

Donor: North Jersey DX Assn.—W2JT Memorial

World—3.5 MHz

Ignacio Alcorta, EA2IA

Donor: Fred Capossela, K6SSS

World—1.8 MHz

Peter Steelheart Rotter, YV3AGT

Donor: Chip Margelli, K7JA—KP4ES Memorial

USA (14 MHz)

John Yodis, K2VV

Donor: No. Illinois DX Association

Canada (14 MHz)

John Sluyster, VE6OU/3

Donor: Canadian Amateur Radio Federation

Caribbean/Central America (7 MHz)

Ivan Belvis Irizarry, KP4FI

Donor: DX Club of Puerto Rico

Europe (14 MHz)

Roland Mensch, DK3GI

Donor: Southern New England DX Club

Australia—14 MHz

Ditmar Kiesewetter, VK2APK

Donor: Jay Carr, W6FAY

Japan—21 MHz

Yoshifumi Kotaki, JI1CBF

Donor: DX Family Foundation

MULTI-OPERATOR

SINGLE TRANSMITTER

World

V3A (K0RWL, W3UM, W6OUL, and W0JLC)

Donor: Anthony Susen, W3AOH

U.S.A.

K1KI (K1KI, K1TO, and W1OD)

Donor: Douglas Zwiebel, KR2Q

MULTI-OPERATOR

MULTI-TRANSMITTER

World

RF3V (UP2BBF, UP2BCO, UP2BCT, UP2BCV, UP2BCW, UP2BEL, UP2BFE, UP2BFN, UP2BGF, UP2BJK, UP2BM, UP2BNC, UP2BNO, UP2BNI, UP2BMQ, UP2BOA, UP2BOC, UP2BOQ, UP2BOS, UP2BW, UP2NK, UP2DM, UP2OO, UP2OU, UP2QA, UP3BA, UP3BB, UP3BO, UP3BQ, UP3BP, UP3BU, UP3BX, RP2BIH, RP2BGK, UP2-038-346)

Donor: Hazard Reeves, K2GL

U.S.A.

N2AA (K2BQ, K2GL, K2NG, K2SS, K2TT, K2TW, K2UR, K3EST, K5NA, KA2MXO, KC2X, KR2J, KR2Q, KU2M, KU2Q, N2WT, WB2BHC)

Donor: James Rafferty, N6RJ

Europe

UP7A (UP2BAW, UP2BIG, UP2BIL, UP2BN, UP2BZ, UP2CY, UP2PAJ, UA3-132-071, UM8-036-145, UA3-142-303, UA4-094-440)

Donor: OH-DX-Ring—OH2AM

CONTEST EXPEDITIONS

World Single Operator

D44BC (Opr. Jim Neiger, N6TJ)

Donor: Yankee Clipper Contest Club

World Multi-Operator

V2A (K6GXO, N9AG, NC8Q, NY5Q, V2ACW, W8ILC, W8OK, W8PR, WB9ICF)

Donor: Bill Schneider, K2TT

SPECIAL SINGLE OPERATOR COMBINED SSB/CW

World—All Band

Lothar Wilke, Y24UK

Donor: John Knight, W6YY

World—Single Band

Tine Brajnik, YZ9A

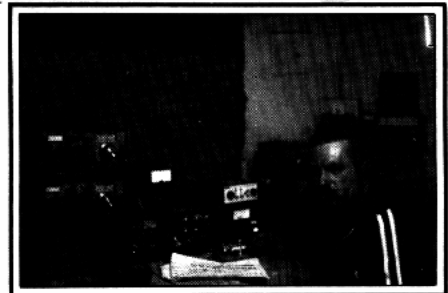
Donor: Yuri Blarovich, VE3BMV

CLUB

World—SSB/CW

Frankford Radio Club (98,873,103)

Donor: CQ Magazine



YV3AGT set new world 160 record. Must use pyramid power!

station of R.A.S.T. and the only HS station on the air, was on all bands except 160. We are sure that we can speak for all amateurs when we say thanks for putting such a rare country on the air. Also thanks to CY0SAB, who braved the winds and desolation of "the graveyard of the Atlantic" to put Sable Island on the air.

Finally, this year first-class Russian amateurs might get permission to operate between 3650-3800 kHz on SSB. This should make contacts easier for everyone.

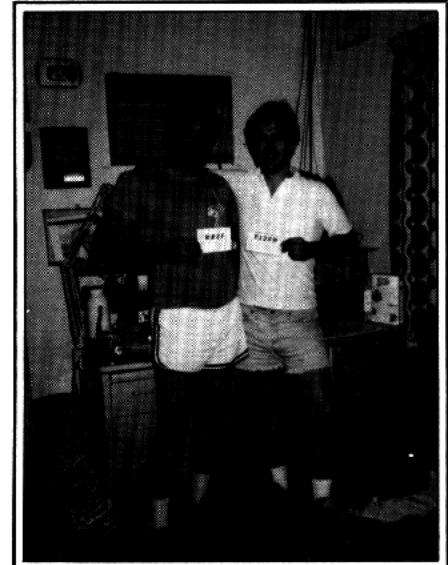
Remember, if you are missing a certificate for the last few years, K1AR is handling certificates for the CQ Contest Committee. John's address is 2 Baldwin Street, Windham, NH 03087, USA.

Hard Work

Finally, thanks to the members of the CQ Contest Committee whose hard work and expertise allow for a high standard of reporting. A special thanks to John, K9DX/6; Rick, N6ND; Dave, K2SS; John, K1AR; Ed, N3ED; Fred, AD6C; Jan, N6AW; Glenn, K6NA; Jim, W7EJ; John, KE7V; Gene, N2AA; John, K2VV; Doug, KR2Q; and to our fearless leader, W1WY.

Congratulations to all the entrants and winners.

73, Bob, K3EST/6, and Larry, N6AR/4



W8ZF, holding PJ2FR's card, finished #3 in the world.

K2VV (14) all set new all-time CW records, and as mentioned above, K1AR set an all-time single operator all band US record.

Some Notes

As mentioned last month, this year marked the first time that the People's

Republic of China entered a CQ world-wide contest. BY4AA, BY8AA, BY5RA, and BY1PK all submitted logs. All together they handed out 4869 QSO's! Congratulations to these club stations and to the interest they have shown.

In another note, HS0A, the official club

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
EA9IE	143/11/41	595/16/60	1115/19/66	1084/29/67	1220/24/71	95/14/34
9Y4VT	209/14/23	336/19/48	1504/26/65	1345/30/72	1233/24/68	19/9/14
PJ2FR	167/11/22	490/19/52	1025/25/74	1325/30/82	1008/24/79	56/14/19
CN8ES	125/10/36	428/15/56	1213/20/68	910/27/70	1319/21/72	108/14/34
D44BC	154/12/28	466/17/49	880/21/58	1201/29/66	1634/25/77	58/12/20
YV5TK	123/14/33	506/21/62	1131/27/76	1043/33/73	610/29/75	31/10/13
4V2C	360/9/23	504/17/48	1485/28/73	1207/28/64	1211/21/57	7/4/5
LU8DO	2/2/2	66/17/27	411/28/57	1143/35/87	1229/32/99	181/20/49
C53AA	111/9/22	396/17/46	627/23/52	662/25/62	1087/25/71	69/13/23
NH6J/KH0	66/8/7	401/18/22	755/24/41	1179/27/63	1201/30/52	119/5/5

USA TOP SINGLE OPERATOR—ALL BAND

Station	160	80	40	20	15	10
K1AR	63/11/32	329/19/69	607/30/89	967/33/97	428/23/72	4/4/4
W1KM	59/13/31	536/19/69	210/26/74	786/30/79	443/25/80	6/4/4
K1EA	44/10/23	158/18/49	295/28/74	655/31/85	455/24/75	10/5/6
N2LT	26/9/14	207/18/51	498/32/85	858/34/87	479/22/84	8/5/5
W2REH	13/7/10	189/18/56	210/30/77	1036/35/90	163/24/77	0/0/0
W3GRF	20/7/15	126/16/63	600/33/89	912/30/95	389/20/69	6/4/3
K3TUP	51/13/28	263/23/69	238/32/76	853/32/83	255/26/79	7/7/5
K3ZO	31/11/21	255/26/71	354/30/74	801/33/82	256/24/63	7/4/5
W3BGN	66/12/32	130/19/53	320/28/79	841/31/76	333/21/64	8/3/5
N4WW	37/12/25	135/21/59	692/30/80	680/32/86	327/28/83	11/8/6

WORLD TOP MULTI-OPERATOR SINGLE TRANSMITTER

Station	160	80	40	20	15	10
V3A	186/13/37	718/27/71	1185/35/88	1180/30/86	1082/27/75	13/9/13
KP4BZ	113/6/15	479/20/50	1362/28/79	1461/31/83	1197/24/85	13/8/13
LZ2KTS	231/17/58	586/26/79	1051/31/94	1183/35/94	317/35/103	41/11/33
KH6XX	112/12/14	364/20/22	1390/32/68	898/34/63	1145/30/59	10/9/9
UJ9AVA	85/10/42	529/22/72	878/31/91	855/35/97	397/27/74	1/1/1
OK5R	171/12/51	807/17/74	939/36/106	827/35/104	402/32/76	32/9/32

USA TOP MULTI-OPERATOR SINGLE TRANSMITTER

Station	160	80	40	20	15	10
K1KI	45/11/27	177/21/70	547/33/100	1071/36/111	324/24/94	16/9/14
N3ED	34/13/33	190/20/75	597/34/105	765/35/114	178/27/91	13/9/11
N2RM	33/9/22	131/18/62	455/34/99	890/36/115	358/27/97	12/6/12
K4VX/8	34/14/31	202/26/70	458/35/94	948/33/100	215/27/85	9/7/8
K300	49/16/35	134/22/72	460/34/105	758/34/100	217/27/80	8/5/6
KM1C	22/9/19	105/18/58	450/32/88	751/32/92	324/25/89	4/4/4

WORLD TOP MULTI-OPERATOR MULTI-TRANSMITTER

Station	160	80	40	20	15	10
RF3V	750/18/58	1306/22/84	2309/33/106	1408/35/107	1292/34/102	74/15/29
EA9CE	322/9/47	920/18/66	1589/23/78	1670/28/79	1434/30/84	130/13/42
N2AA	187/19/59	439/20/84	1465/36/123	1713/37/122	718/28/104	55/9/18
V2A	678/14/43	686/23/55	1643/34/91	1785/29/81	1394/26/81	23/8/12
W3LPL	120/16/51	340/23/75	1115/36/115	1419/37/117	731/29/110	31/12/19
UPTA	929/20/70	1081/23/68	1740/34/109	1480/34/95	785/36/100	24/5/14

USA TOP MULTI-OPERATOR MULTI-TRANSMITTER

Station	160	80	40	20	15	10
N2AA	187/19/59	439/20/84	1465/36/123	1713/37/122	718/28/104	55/9/18
W3LPL	120/16/51	340/23/75	1115/36/115	1419/37/117	731/29/110	31/12/19
N5AU	122/18/37	384/26/78	1064/36/104	937/37/107	523/30/94	52/15/22
K2TR	140/16/46	250/24/77	855/34/95	1259/34/104	458/26/87	26/11/13
K1RX	78/13/35	417/17/76	446/27/79	1379/35/109	575/26/95	9/6/5
N3RS	12/7/8	361/21/75	779/35/110	883/37/110	467/27/99	16/8/14

USA QRM

Western PA is NOT the East Coast! ... *K5ZD* (*Opr. K3TUP*). Told my wife she would have to drive herself to hospital if her "labor" started! ... *NG2X*. Cracking VS6DO pile on 15 meters long path! ... *KN2Q*. Five new countries in a row on 40 meters ... *WA2CNF*. Nice to have China competing; the west coast needs a few more multipliers ... *N6IC*. Murphy never fails to come through; lost beam rotator about 2 hours before end ... *W6NKR*. VS6DO was 20 over 9 on 15 meter long path at 10:30 in the morning ... *N4KE*. A cut finger plus a straight key equals rotten fist; apologies to all ... *KF4CI*. Kudos to the great ears that heard my QRP ... *K7SS*. First contest QRP. JA stations and V13KS long path! ... *W4OEL*.

"Hydraulic Balun" plus bad WX equals low score! ... *KT1O*. 160 was superb; 10 weren't! ... *KA1DWX*. 40 was open to Europe, all except 1400-1700Z! ... *K1MM*. Felt like the Maytag Repairman going single band 28 MHz! ... *KQ1V*. Working zones 21, 24, 27, 28 in 20 minutes when 15 meters opened long path ... *K1RM*. BY4AA answering my CQ on 20 meters! ... *KY2P*. Checked 28 MHz often—no joy! ... *KD8WX3*. Nice to work YO4KRX for number 181 on 160 meters! ... *AA1K/3*. Can hardly wait for next sunspot minimum! ... *K1AR*. HS0A on 20 meters over Europe at 0930Z ... *K3ZO*.

The use of computer logging is nice, but the rule still applies: "Garbage in, garbage out" ... *W7FGT*. Thanks to Jim at D44BC for the rare DXpedition he made ... *KA7FEF*. A thrill to work two BY's and 37 zones on 40 ... *N7RT*. Lots of fun on 80 with just 2 phased wire verticals—cheap and easy! ... *K8GL*. Finally worked a JA on 160 from Michigan ... *WB0VZ*. Using only 100 watts on 80 was a challenge ... *K9UIY*. Opening day of Wisconsin's deer-hunting season cut into my contest time ... *W9WAQ*. Eighty was never better in the Midwest ... *KM0L*; *W0WP*. Had fun, but using a vertical made me vow to have the tower up next time ... *K0RW*.

This was our first try at multi-multi on CW. Not a bad score for the first time ... *KS8S*. A very low-budget multi-multi ... *K1RX*. Last CQ WW from my suburban 1 acre QTH in Crownsville, MD. See you in November from the new 10 acre QTH in Glenwood, MD ... *W3LPL*. Still a long way to go, but we're making good progress ... *N3RS*. Sunday A.M. the 20 meter op remarked the rotor was behaving badly—turned out that the tower had fallen over ... *N6TU*. Wish I'd worked the two BY's heard on 40 meters ... *K1KI*. 40 meters was wild ... *N3ED*. Sunspot minimum and my best score ever ... *K300*. 20 new countries on CW ... *W14R*. Cndx on 40 and 20 meters to Europe were real tough Friday night ... *K5KJ*. 80 meters was really hot for us ... *W6BIP*. BY1PK on 40 was nice ... *K4VX/0*.

DX QRM

Had a terrific preline into USAVE on Sunday morning about 0300 until after sunrise (160 meters—ed) ... *G4OBK*. Amazed to work not one, but two JT stations an hour before the end of 160 meters ... *G3XTT*. Greatest surprise was contacting USA stations at 1800 GMT on 7 MHz ... *G3ESF*. Next year we will be on from club station OY6FRA ... *OY7ML*. Good condx on 40 meters. Will be back with a better antenna ... *TF3CW*. Had to try it on single band this year ... *F3JL*. Only operated 30 hours. Getting too old, I guess. But nice propagation on 3.5 MHz ... *SM2EKM*. It was a thrill to work all those W's on 80 meters during the whole night ... *HB9CWA*. Tremendous QRN on first night on 160 meters; 30 dB over S9. It was very calm the second night ... *CT1AOZ*. It is not impossible to work 3.5 MHz barefoot; even HS0A called me! ... *OZ1FTE*. We made such big antennas for the contest; maybe we win this time ... *JA3YBF*. 73's to the Contest Committee ... *UP1BWW*. My first CQ WW Contest ... *UR2RCJ*. Three new countries on 1.8 MHz and 7 MHz ... *UR2RHF*. Beautiful contest. I have 7 new countries ... *RR2RR*. My best record in Contest, 107 QSO's in an hour ... *RR2RW*. It's impossible to operate without antennas! ... *UP2PAQ*.

Lots of QRM ... *CT1YH* (*ex. CR7LU*). I'm very happy. My TRX (homemade 10W) is very good for CQ WW DX Contest ... *SP4GFG*. Dis is mai ferst contest—veri fain—TNX OM ... *IK3FHL*. I am very happy for this contest that is my first serious contest on CW ... *I5MPN*. Being called by VS6DO (long path) while running WIK QSO's ... *I1KN* (*Opr. W3US*). Very nice competition! I work my new one for my 5BDXCC and CQ DX Award CW. Problems of TVI have limited my operation ... *I2KYV*. First apparition of Marconi Memorial was beautiful on top band. Hope to be present on next year. TNX ... *IY4FGM* (*Opr. I4IKW*). Time of working about 21 hours. (Old man needs his sleep, Hi!) ... *OE3RE*. We didn't score much this time. We're young and unexperienced. You will hear from us again! ... *OH6LI*. It was nice to work two almost inaudible stations (U3A and YX5A). Both were new DXCC countries to me ... *OH8LP*. Power 20 W after power supplies breakdown ... *OH2BKF*. SWR greater than 3 (water in cable) ... *OH3NM*.

The heavy autumn winds damaged the rotating system. During the first 24 hours I could beam only the Northern Hemisphere. Sunday the tower got stuck to 285° ... *OH8OS* (*Opr. OH6UM*). FB to get some new countries ... *OH2BYS*. 40 meters incredible! ... *YU3EA*. Interruptions caused because of TVI. Next year will be operating from Zimbabwe again ... *YU3CB*. First time on CQ WW single operator. This is the best contest ... *IO3FIY*. I am glad for this contest. Also got a few new countries—XE, HS, A25 ... *SP4EEZ*. Many thanks for most of all attractive contest ... *SP5JTR*. So many stations using high power, when good

propagation on low bands and giving big QRM, HRD good DX but not QSO's. Hi! ... *SP3HLM*. Fine contest, as usual ... *OK1ABP*. Thank you for QSO's everybody! See again soon! ... *HA4XX*. Big pile-up for *BY8AA*! Nice test! ... *IK2DVG*. I missed hearing the big signal from *W6AM* ... *OH1JT*.

Best propagation in several years ... *AL7CQ*. Wish I could have known 40 was going to be so good; would have tried for a world class score ... *KL7RA*. This contest was just as much fun as the first, which was in 1947 ... *N4RP/C6A*. Working 180 stations in 1 hour ... *VP2MEV*. First "XQ" prefix in the World-Wide DX Contest ... *XQ1ADG*. Excellent cndx on 160 meters ... *HK1AMW*. Biggest thrill: making new friends and running into old ones on the air. Biggest disappointment: all the multipliers I could hear on 160 meters who couldn't hear my 100 watts ... *PJ2FR*. This is my first World-Wide Contest ... *OA4ZV*. Hard to believe, the band was open almost all the weekend ... *CX5AO*. Big thrill—*VS6DO* on 80! ... *YU5TK*. *VS6DO* called me in the last minutes to give me two new multipliers ... *YX5A*.

The patience shown my QRP sigs a credit to all ops. Thank you ... *G4MQC*. First ever QRP CW test. (Not the last!) No Sunday log due to toothache ... *G4KIU*. Hard job to take part with 2 watts between the big guns! Anyway, a few new ones ... *OK1DKR*. Problems with 3.5 MHz dipole, SWR depended on rain ... *DF8ZH/CT3*. Greetings from the Graveyard of the Atlantic ... *CY0SAB*. Can't wait for the WPX Contest with this rare prefix ... *DX2F*. Beautiful 80, 40, and 160. Ten poor! ... *V3A*. All very happy with JA ... *VE2UMS*. We were on display at the National Museum of Science and Technology in Ottawa ... *VE3JW*. Always a lesson in propagation. Why do the stations who sign their call after each QSO seem to win every year? ... *VG3IY*. Everyone got our call mixed up ... *ZS3W6QL*. Working Europe and Africa on low frequencies was different than we are used to when operating at home from West Coast ... *8P9AG*.

Was called twice by *XU1SS*! ... *AH8A* (Opr. *W6OSP*). My 15-year-old xcvr still works ... *VK2BQQ*. Operated at Hobbies Exhibition, but a band playing nearby QRM'd everyone ... *VK5GZ/p*. Worked my first 9Y station in 33 years! ... *VK6AJ*. How does one work through the European barrier on 160 meters to be heard at *C53AA*? ... *VK6HD*. Is there really a zone 8 and 9? ... *NY6M/KH2*. *HZ1HZ* and *4Z4OZ* called me simultaneously; that's a heckuva lot of ZZZZ's. Sending ID after every

QSO sure cuts down on dupes ... *KH6MD* (Opr. *N6HR*). Got two new ones on 160 meters ... *KH6CC*. Stations should try long path on 80 meters; it's open ... *YB0ARA*. As in previous years, no USA on 14 and 21 MHz ... *YB3ATB* (Opr. *PA0LOU*). Worked my former housemate, *NH6J/NH0*, whom I haven't talked with in eight months ... *KA7KSY/YB*. My first contest, very comfortable to join ... *YB4FNN*. I missed *EA9CE* and *CT2FN* on 1.831 MHz, too much EU QRM ... *9M2AX*. Nothing heard or worked on 160 or 10 meters ... *ZL1AIZ*.

Wish I had a much shorter call sign for my first ever CW contest ... *WA7CQE/DV2*. License came through day before contest; tossed a dipole into a tree ... *KD6TB/DU2*. My alarm clock failed to wake me up; I slept well for 5½ hours ... *NH6J/KH0*. Went swimming when pileups got too deep ... *ZK1XU* (Opr. *W7TB*). 599 32 from Polynesian paradise ... *ZK1XT* (Opr. *K5BDX*). With such a distinctive call sign I thought I'd have no duplicates. You can see how wrong I was ... *A25/G3HCT*. Thunderstorm and broken rotator crashed my record attempt, but had good fun ... *ZS6BCR*. I was ready to go all band, but when I heard about *D44*, *CN8*, *C53*, and *EA9*, I knew I had no chance; I did what was possible on 20 anyway in spite of dead band during the day and night ... *5H3BH* (Opr. *SM0AJU*).

Delighted to get Mexico on 7 MHz for my WAZ ... *ZC4CZ*. I got 117 zones but no zone 4 on 20 meters. Why? ... *VS6DO* (Opr. *JA5TQH*). 28 MHz propagation was the pits ... *VE1BNN*. Rig was Heathkit SB-401 with Hallicrafter SX-111; receiver is older than I am ... *VO2AC*. Worked *ZL* and *VK* on 21 MHz, but where were the JA's? ... *VE3NBE*. CQ contests are tops ... *VE6OU/3*. My second contest, licensed 8 months ... *VE3OZB*. Special prefix seemed to be more of a hindrance than a help ... *VG3KRN*. Seems like all the 20 meter ops were on 160 meters ... *VE3INQ*. Been chasing China since 1952; both *BY1PK* and *BY4AA* called me ... *VE4IM*. Best conditions ever on 80 meters ... *VG5RA*. *BV2DA* was a nice surprise with only one hour to go ... *VE6CB*.

STATION OPERATORS Multi-Operator Single Transmitter

AK1L & KA1X, KC1X, BY1PK: Tong Xiao-Yong, Yan Pi-Dong, Gong Ke-Lu, Li Guo-Zhen, Yuan Bo, Wang Guo-Xiang. **BY4AA:** Xuru, Hu Song-Qin, Zhou Yu-Hong, Gao Ming, Gu Hu-Ming. **BY5RA:** Lin Shaowen, Dai Jiagi, Hong Zhipim. **BY8AA:** Club. **DF8ZH/CT3 & DF4ZL, DL1RK, CY8SAB:** AK4L, K2GHV, VE1AIH, VE1YX. **DA1WA:** DJ9CB, DL1AO, DJ1MU, DL9FBB, DJ0LC, DA2DG. **DF8AFZ:** DJ0GN, DL2ZAE, DL3ZI.

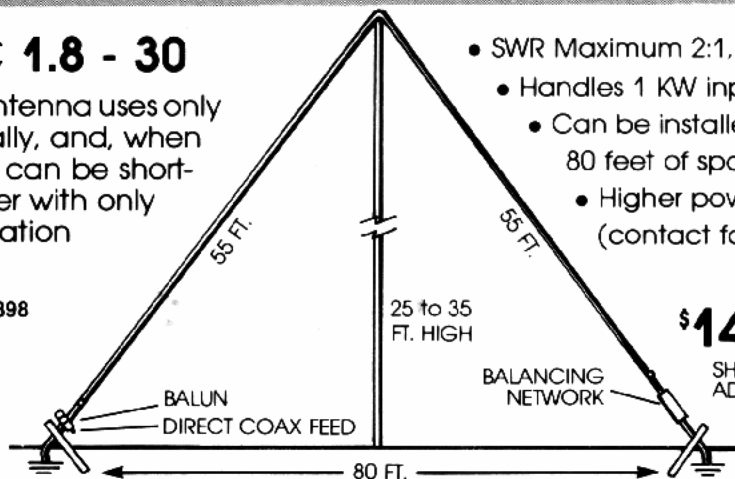
NEW from BARKER & WILLIAMSON!

1.8 - 30 MHz. Continuous Coverage Antenna for Commercial and Amateur Service

Model AC 1.8 - 30

The AC 1.8 - 30 Antenna uses only 80 feet horizontally, and, when space is limited, can be shortened even further with only slight loss of radiation efficiency.

U.S. Patent No. 4,511,898



- SWR Maximum 2:1, 1.4:1 Average
- Handles 1 KW input ICAS
- Can be installed in approximately 80 feet of space
- Higher power models available (contact factory)

\$149.50

SHIPPING AND HANDLING ADD \$4.00

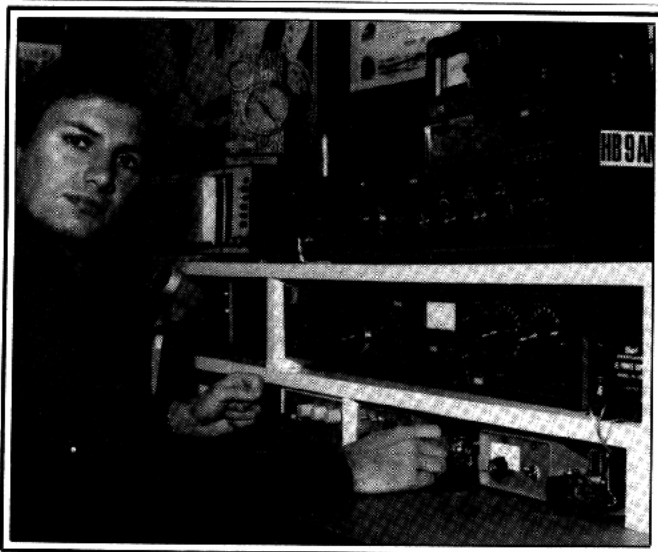


BARKER & WILLIAMSON

Quality Communication Products Since 1932
At your Distributors write or call, 10 Canal Street, Bristol PA 19007
(215) 788-5584

ALL OUR PRODUCTS MADE IN USA





HB9AMO, top European 160 score.

DL2ZAM, DK1DO, DL5FO, DF4RD & DK7IT, DF6WR & DK5PZ, DK6WJ, DF9PY, DK9WI, DJ1FC & DK3BJ, DL8MS, DK0MM: DJ7IK, DJ8WL, DK5CZ, DL4FJ, DL8WR, DL8ER: DL2ECW, DL3CU, DJ2LA, DL5EBN, DJ5GW, DF5EN, DK7FP, DL9XY, DL1IU: DK8AG, DK7AH, DK8AN, DK6BO, DL2HBX, DL1BHO, DL4AAA, DL4AAE, DX2F: KA3DRR/DV2, KK7Y/DU2, EA3Y & EA3AIR, EA3AVV, EA3DDX, EA3FER, EA3FNN, EA3KU, F5IN & F6ARC, F6BEE, F9IE, G64DX: G4BWP, G4DRS, G4EOF, G4GIR, G4JQL, GJ0AAA: G3SXW, G3TXF, G3WVG.

HAKMNR: Jozsef, Attila, Gabor, Csaba, Janos, Laszlo. **HAKKNA:** HA3FTA, HA3OV, HA3OU, HA3NS, HA3NU. **HAKKDX:** HA5OM, HA5LN, HA5VJ, HA5FM. **HAKKZF:** Frigyes, Zoltan, Tibor, Miklos, Laszlo, Gabor. **HAKKNG:** HA60A, HA60L, HA6IOB, HA6NG, HA6OI. **HAKKNX:** Jozsef, Gyula, Szoll, Nandor. **HAKKLG:** HA7MY, HA7LD, Anikoj. **HAKKMP:** Janos, Attila, Tamas, Alexanderosz. **HAKKAX:** Erika, Istvan. **HAKKUC:** HA8VX, HA8GB, HA8GZ, HA8XY, Erlo. **HAKKUN:** Janos, Janos, Antal. **HBCVQ & HB0CF:** HB0DDY, HB0CWE, HB9AJ: HB9AQF, HB9COB, HB9CZF, HB9DZI, HB9COC, HB9BWN, HB9CRP, HB9COF, HB9CJR, HB9CBT, HB9OL, HB9CTU, HB9CJL, HB9CJT, HB9UH, HB9CYK. **H6SA:** HA5MK, HA5UA, HA5GF, HA5WE, HA7SU, HA7RY, & 5 0M's. **H6ND:** HA6ND, HA6NY, HA6ON, HA6NQ, HA6OO, HA6NF. **H6TB:** HA5UY, HA5KQ, HA5PP, HA5WA, HA7UO, HA7UO, HA7UO. **H6OU:** HA8ZC, HA8UB, HA8XF, H6GR: HA9PP, HA9PB, HA9RU, HA9PV, HA9RP, HA9RX. **H8SA:** AH2AK, DL7MAE, G4UAV, KB2A, SM3D5Y, WA3SLK. **J1YAD:** JA10GC, JA9UFS, JH5GHM, JH5XMK, JH9ADA, JH9AMJ, J01HJK, JP1DMX, JR6JOE. **J1YAG:** JH0SEF, JR4EJW. **J1YBK:** JH0LFE, JL10E, JG2CLS, JI2LDF. **J1YCL:** JL1LNC, J01GAD. **J1YFF:** J01RUR, JP10GL. **J2YDC:** JE2ZO, JI2RQ. **J2YKD:** M. Kato, K. Murata, M. Murata, N. Taniguchi, Y. Taniguchi. **JABYAU:** JH5ONJ, JR7COO, JH8DXI, JH9VFO. **JABYBY:** JE3XWH, JI2VXS, JR8DQB. **JEZYRD:** JA1KFI, JA2EZO, JI2KXW, JR4WVK, JH6NGB, JR8CHX. **JS1JRZ:** Club.

K1KI & K1TO: W10D, K1XM & K1CI, K01F, K1MC & K81T, W1PH, W88BTH, KY1H & K1RO, KB1KE, KB1W, K2NJ & K2BK, K0Z0, WA8DSO, K3MD & W2UP, K3NZ & KJ3R, KW3W, KU3K, K300 & K3ZF. **K3SO & K5PM:** KE6EW, K3WJV & WA3ZTR. **K3MM & N3ARK:** W83FIZ, WB3LFZ. **K4VX/B & AH2U:** K9BGL, KR8Y, KM9P, WB9IU, K5RR & W04W, K5KJ, WA5CBE. **K6ZM & AK6T:** N6AUU, N6ICV, N8BL, K16T & N8MNB. **K7LXC & K57L:** W3XY, K9ZD & K9MFI, K9GN, KM9L, ND9V, WB9JKI. **K8P & N9DMT:** WA9AWO, WB9CEJ, WD9IBH. **KJ0G & K0GAS:** K4TEA/KH6 & K4TKM, KH6DW, KH6XX & KH6ND. **KP4BZ:** NP4Z, WC4E. **LASX:** LA1EE, LA5UF, LA8XM, LA2VJ, LA9OI. **LX9BV:** LX1WW, LA4DCA, LX1JP, LX1CF. **LZ1KAZ:** Petkov, Topchev. **LZ1KKI:** Vasilev, Komsalov. **LZ1KKR:** LZ1BE, LZ1BG. **LZ1KRC:** Dinev, Kostadinov, Pavlov. **LZ1KTM:** Stovan, Stefan, Alexander. **LZ1KTS:** LZ2CC, LZ2DF, LZ2HE, LZ2PO, LZ2E72. **LZ1KVF:** LZ1C-92, LZ1C-94, LZ1C-105. **LZ2KAC:** Radev, Ivanov. **LZ2KMM:** LZ2E33, LZ2D0.

N2PP & W2HPF: WA2EKV. **N2RM:** N3AD, KM3T, N3ED & KB2XZ, N2ME, WA2HGM. **N6AW & W6KP:** N6ND & K6XT, N16W, WA6DBC. **N6VR & AC6T:** A06C, K13Y, KY6L, N6ADI, N6GI, N8BJO. **N7CK & N7FP:** N9WA & KA9SLM, WD9GYX. **NM8F & AK0P:** OH2BAH & OH2BJJ, OH2PQ, OH2BPC, OH2BX, OH2-601. **OH2VY & OH2JA:** OH2BOS, OH2BVI, OH6EI. **OH5AF:** OH6OU, OH2RF, OH3US, OH7J, OH6AA: OH6W, OH6HM, OH6BI. **OH6AW:** OH6J, OH6LK, OH6LD, OH6KJ, OH6FT, OH6IG, OH6V, OH6Y, OH6XY. **OH8AV:** OH8DD, OH8NW, OH8PF. **OH9AB:** OH9UW, OH9PH, OH9TD. **OK1KQ:** OK1BY, OK1AYP, OK1DQZ: OK1DDG, OK1DFF, DL1BLN, OK1-20579. **OK1ORA:** OK1AYD, OK1-22310. **OK2XMR:** OK2SSS, OK2BOZ. **OK3KAB:** OK3CDX, OK3ZWA, OK3ZFM. **OK3KGD:** OK3-2351, OK3ZDD, OK3CLL. **OK3KTD:** OK3CEC, OK3TCV, OK3TCF, OK3-27707, OK3-27722. **OK3RJB:** OK3CQD, OK3CQR, OK3TCL, OK3CKV, OK3TCN. **OK3RKA:** OK3TDP, OK3CPC, OK3-27254. **OK5R:** OK1ADM, OK1ADS, OK1ALW, OK1AWZ, OK1DIM, OK1RI. **OK5SSM:** OK1AYE, OK1DRI, OK1FRI, OL4BEV, OK1HAI, OK1HBC. **OK5W:** OK1AE, OK1JCW, OK1AI, OK1AXK, OK1JKT, OK1WT, OK1TS, OK1JJB. **P8WKR & P8JNA:** PA3DQW & PA3DGM.

RL8PYL: UL7PAE, UL7PAZ, UL7PCZ, RL7PAV, RL7PHO, RL8PA, RL8PY, UL7-023-500. **RZ10WA:** Club. **SK2AU:** SM2DQS, SM2BJE, SM2LCI, SM2CDF. **SK5EU:** SM5JBM, SM3JWS, SM5LZM, SM5ODD. **SK6EI:** SM6CMR, SM6LPG, SM6LPF, SM6LJU, SM6GCM, SM6LJP, SM6GOR, SM6JZ. **SK6TW:** SM6AOU, SM6CKU, SM6CXY, SM6DER, SM6DOI, SM6DOD. **SM6DYK & SM7BUA:** SP1CE, SP1NDP. **SP5PBE:** SP5ANJ, SP5ELA, SP5GII, SP5JTM. **SP6PAZ:** SP6CYX, SP6HEK, SP6DJE, SP6FJG, SP6DVP. **SP7KTE:** SP7AU, SP7IT. **SP9KAO:** SP9UBK, SP9JZT, SP9ODD. **UB8SSZ:** UB8SSN, UB8-074-258, UB8-074-285. **UB4DWW:** Club. **UB4UWC:** Al, Ivan, Vlad. **UB4IWN:** UB4IRI, UB5ING, UT5SI. **UB4IWR:** Nick, Tim, Vlad. **UB4IYU:** Club. **UB4LZA:** Nick, Oleg, Vlad, Yuri. **UB4MWA:** UB5MDA, UB5MDD, UB5MOJ. **UB4MWW:** UB5MBM, Mederov, Vihitskaja, Stein. **UB4MZK:** UB4MZK, UB5U5U, UB5MRE, Ily, Lery. **UB4QWE:** Club. **UB4DWW:** RB5DD, RB5DD, UB4DD, UB5ODU, UB5DQV, UB5-064-886. **UB4QXK:** Andrej, Igor, Oleg. **UB4TWO:** UB5TAU, UB5TCB, UB5TCM. **UB4WZA:** UB5WBV, UB5WCX. **UB4XWB:** UT5GO, UB5-062-240, UB5-062-647, UB5-062-56. **UB4ZWC:** UB5ZF, UB5ZJL, UB5-069-376.

UC1AWC: Alexander, Natalisa, Leonid, Serge. **UC1OWA:** Valentin, Vlad, George. **UD7DWC:** UD6DCF, UD6GF, UD6-001-5. **UD7DZA:** Club. **UG7GWL:** UW3AA, UG6GAF, UG6LQ, UG6-004-124, UG6-004-127. **UH9AW:** RH8AD, UH8-191-6. **UI9AWX:** Lew, Serge, Mike. **UI9BWJ:** Club. **UL8LWA:** UL7-125-577. **UL8LWU:** UL7LCH, UL7LDR, UL7-026-515. **UP1BWB:** UP2BLQ, UP2BPY, UP2-038-1232. **UP2-038-728.** **UP1BWF:** Club. **UP1BWW:** RP2BD, UC2WAO, UP2BAV, UP2BJJ, UP2BKW. **UP1BXA:** Club. **UP1BYW:** UP2BDZ, UP2BEG, UP2BVG. **UP1BZM:** UP3BI, UP2PCI, UP2BDV, UP2BDW, UP2BLU. **UQ1BWW:** RQ2GG, UQ2GLK, UQ2OC, UQ2OI, UQ2PZ, UQ2-037-83, UQ2-037-116. **UQ1GXN:** UQ2GII, UQ2GKA, UQ2GM, UQ2GN. **UQ1GXT:** Club. **UR1RWX:** UR2RJ, UR2QD, UR2RDJ, UR2RFH, UR2RHF, UR2RND, UR2RNJ, UR2RNK, UR2-083-165, UR2-083-167, UR2RRR. **UR1RVY:** UR2QA, UR2RE, UR2RO, UR2RM, UR2RL. **UZ2CWA:** RW0CA, UA8CZ, UA8CCD, UA8CCW, UA8CCN, UA8-110-297. **UZ2LWU:** RW0LAA, UA8LD, UA8LF, UA8LS. **UZ2LWX:** RA8LDX, UA8LFD, UA8-107-726. **UZ1TWB:** UA1TAE, RA1TAD, UA1TEE. **UZ2FWA:** UA2FF, UA2FJ, UA2FX, UA2FZ, UA2FFQ. **UZ2FWN:** UA2DC, UA2-125-329, UA2-125-902, UA2-125-940.

UZ3AWP: UV3ACX, UA3-170-563, UA3-170-567. **UZ3AXH:** Club. **UZ3AXX:** RA3DUU, UA3AOV, UA3AQW, UA3AQX, UA3DHW, UA3-170-79, UA3-170-108, UA3-170-503. **UZ3AYR:** UA3DOF, UA3-170-481, UA3-170-528. **UZ3AZB:** Club. **UZ3AZM:** UA3DPX, RW3AN, UA3APL. **UZ3DWC:** Club. **UZ3DXW:** UA3-142-1754, UA3-142-1944, UA3-142-1945, UA3-142-1949. **UZ3DZA:** RA3DTD, JA3DUJ, UA3DVS, UA3-142-858. **UZ3DZW:** Club. **UZ3DWM:** UA3QPA, UA3-121-3104, UA3-121-3106. **UZ3DXU:** Mesheryakov, Vladimirov, Falaleev. **UZ3SWW:** UA3SEY, UA3SCH, UA3SET. **UZ3TWT:** Rudolph, Serge, Siava. **UZ3WWW:** Club. **UZ3XBY:** UA3XCT, UA3XDD. **UZ3XWN:** UA3XEC, UA3XEQ, UA3-127-384. **UZ4FWE:** UA4-148-572, UA4-148-573, UA4-148-599. **UZ4FWO:** UA4FZ, UA4FAO, UA4FDS, UA4FER, UA4-148-473. **UZ4LWU:** UA4LE, UA4LDN. **UZ4WVB:** Club. **UZ6LWZ:** UA6-150-1103, UA6-150-1336, UA6LIG, RA6LRT, UA6-150-1060.

UZ9AYA: UA9AKI, UA9QCC, UA9-165-938, UMBNKK, UWS9AN, UWS9AR. **UZ9CWA:** UA9CG, UA9CR, UA9CFY, **UZ9CYP:** UA9CON, UA9CUA, UA9-154-2105. **UZ9DWD:** Andre, Serge, Konstantin. **UZ9OWE:** UA9ODP, UA9OGF, UA9-099-234. **UZ9OXI:** UA9-145-205, UA9-145-206, UA9-145-207. **UZ9OXU:** Club. **UZ9SWY:** UA9TS, UA9SA, UA9SHO, UA9SGW, RA9SVT, UA9ST, **UZ9XWA:** UA9XDM, UA9-090-200, UA9-090-280. **UZ9XWW:** UA9-090-601, UA9-090-622, UA9-090-623. **UZ9AWB:** UA8-103-239, UA8-103-347, UA8-103-390. **UZ9CWD:** UA8CDS, UA8CHG, UA8CGL. **UZ9DWA:** UA8CDL, UA8QEW, UA8QAS, UA8-098-113. **UZ9DWE:** UA8QJ, UA8QG, UA8-098-107. **UZ9DWF:** UA8QK, UA8QFR, UA8-098-130. **V3A:** K8RWL, W3UM, W6OUL, W8JLC. **VE2UMS:** VE2BCH, VE2BLX, VE2CP, VE2FE, VE2FKZ. **VE3JW:** VE3JTZ, VE3OWL, Tom. **VE6CSE & VE6CZ:** V63IY: VE3EDG, VE3IY. **VG4ALO:** VE4ALO, VE4VY. **VO2WL:** K3TM, VE1BJW. **VU2TEC:** VU2HRY, VU2MVX, VU2TOZ.

WB1CNM & N1BUZ: W2UI & N3KR, W3GU & K3CY. **W4PRO & AA4NG:** KA2IMI, N7FBM, W64O. **WA4QQV & WA4QMQ:** W14R & KB4HZ. **W5ASP & K5RVK:** N5EA, W5SSJ, W5VWN. **W6B1P & WA6AUE:** W6BFDQ & A6GH. **W6KV & KD6YZ:** N6BK, N6HAO, N6NW, N6VW, WA6AN, W80QPO. **W6WC & KD8V:** KZBY, N8DCJ, WA4MAT, W8GZN, W8JGU, W8BBIN, W8BDXB, W8BRCN. **W8DIE & K8BNS:** NZ4K, W9CA & N9AIB. **W9NA & W9AR:** W8CY, W8YR, W8FHI. **Y3ZL & Y3VLL:** Y54DL, Y26IL. **Y4SSM & Y4SWM:** Y05KTB: Y05AXF, Y05CUG. **YT2C:** YU2QS, YU2FU, YU2FE. **YT2R:** YU2MM, YU2MY, YU2OH, YU2OD, YU2SE, YU2OG. **YT3T:** YU3BO, YU3DRW, YU3GO, YU3DE, YU2CBV, YU3EJ, YU3AI & YU3BM. **YU3EO:** YU3DFT: YU3WC, YU3WK. **YU3GHI:** YU3OZ, Mario. **ZS3W6QL & W6K6:** 4N4C: YU4EJC, YU4JLM, YU4WCW. **4U1VIC:** N4AN, K7AWD. **8P9AG:** K4VTX/6, K6ZM.

STATION OPERATORS

Multi-Operator Multi-Transmitter

DF8BV: DJ9ND, DJ1US, DK2OY, DL1MAJ, DL4NAC, DL5MAE, DL6RAI. **DL0KF:** DF3LZ, DF6LI, DJ2BV, DJ3UL, DJ4FZ, DJ5AZ, DJ5UZ, DJ6TK, DJ7SW, DJ8FR, DK9AV. **DL0WJ:** DJ8SW, DJ8UW, DK5JM, DL1HX, DL2KBM, DL4EBH, DL8EBC. **EA9CE:** EA5BRA, EA7ALG, EA7DS, EA7TL, EA7LE, EA9EU, EA9EK, EA9G, EA9J. **J1YXP:** JH9CAU, JI2DLF, JN10TE, JN15BT, J01BKL, JR8ALC, JR8GUM, JR4VCV. **J2YKA:** JA4UD, JA9PPC, JA9SSY, JA9XSS, JE2JCV, JE2VYM, JE7BIZ, JF2DQJ, JF2EZA, JF2PFO, JF2UJL, JG2MTC, JG2VTD, JG3OET, JI2JXR, JI2BTC, JI2NJE, JR70MD. **J3YBF:** JA9TOZ, JA9UXW, JE3MCC, JE6BXJ, JF3NXX, JF4BME, JG3LZG, JH5BT, JH5RM, JI1APL, JR46GT, JR4IZK, JR8DHE. **J3YCK:** JE3MAS, JE6LPM, JG3CPE, JG3HJG, JG3HLY, JG3MRT, JG3WON, JG6VTM, JI3DNR, JI3ERY, JI3SRU, JI3GRR, JI4ARF, JR4BMS, JR4IMK, JR4PMX, JH5EML, JR5ARJ, JR6NWN, JR6NWA. **J3YCUA:** JI3OYM, JH74HE, JEAZZZ, JE7HLZ, JE7QCC, JG3EDV, JG3JRM, JG7BLL, JH0MRP, JH0RWR, JH7CUO, JH7HWR, JI1MVV, JI1PEU, JN1VYN, JR7DRV, JR7PGL, Takaca, Nishi-Mura. **J4Y7FB:** JE7JWB, JF7AAD, JF7GOK, JF7TDN, JH0QNT, JH7XKI, JH7XMO, JN1RDN, JR7GYC, JR7JLU, JR7JVO, JR7OEF, JR7RLB, JR7WFH. **J4Y7BA:** JA9LNL, JA9TKX, JA9QWJ, JA9UAD, JA9VWB, JA9VDA, JH8CAZ, JH7UJR. **K1RX & K1CC:** K1VDF, K1WJL, K02M, KS1K. **K2TR & K1DH:** K2WR, K2XA, WA2SPL. **K6TQ & WA6EJL:** WA6TBO. **K8S & AD8P:** K8NZ, K8UE, N8ABL, W8FN, W8SAE, WM4T.

N2AA & K2BQ: K2GL, K2NG, K2SS, K2TT, K2TW, K2UR, K3EST, K5NA, KA2MXO, KC2X, KR2J, KR2O, KUZM, KU2O, W82BHC, N2WT. **N3LR:** KR3W, K5SD. **N3RS & N3RD:** WA3LRO. **N4Z & K2SD:** WA8MAZ. **N5AU & K5MR:** K5RX, K5XN, N5RZ, N5TR. **N6RO & AA6AD:** K6TMB, N6BV, N6XJ, N6VZ, W6RGG. **N6SW & W6XX:** W7MAP, W6I. **N6TU & K1DG:** N6GO, N6BT, N6RZ. **N6WV & WA6OCV:** W6BDSV, W6B6SD. **NL7G & KL7PJ:** KL7U, KL7Y, NL7CT, NL7G, NL7GP, NL7P, WL7E, WL7Y. **OH7AB:** OH6JW, OH7JR, OH7KA, OH7MA, OH7PF, OH7RS, OH7UE, OH7VR, OH7XJ, OH7XK, OH7YF. **OK7AA:** OK3CAW, OK3CEI, OK3CEM, OK3CLA, OK3COA, OK3COW, OK3CUM, OK3CJU, OK3EA, OK3JW, OK3LU, OK3MB, OK3TAO, OK3TFM, OK3TMF, OK3WV, OK3YEC, OK3YK, OK3CP, OK3VY, UP2BFF, UP2BCC, UP2BCT, UP2BCV, UP2BCW, UP2BEL, UP2BFE, UP2BFN, UP2BGF, UP2BJK, UP2BM, UP2BN, UP2BNO, UP2BNI, UP2BMA, UP2BMO, UP2BPC, UP2BQ, UP2BOS, UP2BW, UP2NK, UP2OM, UP2OO, UP2OU, UP2QA, UP2BA, UP2PB, UP2PL, UP2BN, UP2BZ, UP2CY, UP2PAJ, UA3-132-071, UM8-036-145, UA3-142-303, UA4-094-440. **V2A:** K6GXO, N9AG, NC8Q, NY5O, V2ACW, WB1LC, W8OK, W8PR, WB9ICF. **WB9IH/9 & K6XVF:** K6TG, K69S, KN0U & K1DG, W8UC, W8VU, WA8RWB. **W3GM & K3GM:** K3ND, N2BA, N3VY, W3VF, W3MM, W3RJ. **W3PL & A13M:** K3DI, KA1GO, KC8C, N8II, W3FG, WD4AXM. **W3NX & AD3V:** W6TMD & AB6R, NCGU, NN6U, NW6S.

SINGLE OP ZONE WINNERS

Zone	Call	Score	Call	Score
1	AL7CQ	377,195	21	RF0FWW 3,030,030
2	CH1PJ/VG8	166,200	22	VU2AJ 114,777
3	A16V	1,985,916	23	JT0APE 5,880
4	W0ZV	1,675,080	24	VS6DO 1,534,698
5	K1AR	3,397,905	25	J11QPU 1,340,808
6	X2FU	665,728	26	No Entry
7	HP1XKR	249,227	27	NH6J/KH0 3,364,986
8	4V2C	4,281,212	28	YB0ARA 1,714,405
9	9Y4VT	5,676,536	29	VK6AJ 233,100
10	OA4ZV	940,168	30	VK2BQQ 380,017
11	PT7AA	109,142	31	KH6RS 760,548
12	CE3DNP	752,496	32	HA8A 1,218,400
13	LU8DQ	3,989,814	33	EA9IE 5,731,360
14	DF9ZP	2,164,709	34	No Entry
15	OH2BH	1,716,972	35	D44BC 5,418,018
16	UB5EC	1,468,310	36	TR8JLD 90,771
17	RW9WA	1,136,770	37	SH3BH 760,784
18	UA9URF	102,816	38	ZS6BZS 492,525
19	UW0LT	793,755	39	3B8DB 154,332
20	ZC4CZ	1,127,648	40	TF3CW 156,728

USA Club Scores

Frankford Radio Club	98,873,103
Yankee Clipper Contest Club	94,556,313
Northern California Contest Club	61,053,342
Potomac Valley Radio Club	36,527,767
Dixie DXer's	34,430,305
Mad River Radio Club	27,540,555
Southern California Contest Club	22,636,404
Over The Hill Contest Club	19,609,502
North Texas Contest Club	17,381,055
Texas DX Society	13,092,718
San Diego DX Club	12,300,547
South East DX Club	8,844,311
Southern California DX Club	8,825,202
Carolina DX Association	8,023,622
Southwest Ohio DX Association	7,463,449
Willamette Valley DX Club	6,547,724
South Florida DX Association	5,020,200
Greater Milwaukee DX Association	4,842,152
Kansas City DX Club	4,752,035
Hoosier Contest Club	4,312,188
Society Midwest Contesters	4,092,286
Rochester DX Association	3,992,187
Eastern Iowa DX Association	3,879,379
Mississippi Valley DX/Contest Club	3,843,076
Northern Ohio DX Association	3,645,725
Grand Mesa Contesters	3,361,165
Meriden Amateur Radio Club	3,087,784
Central Arizona DX Association	2,814,123
Rubber Circle Contest Club	2,737,912
Northern Illinois DX Association	2,545,189
Northern California DX Club	1,701,734
Western Washington DX Club	1,581,373
Fraser Valley DX Club	1,463,926
Colorado Contest Conspiracy	1,132,204
South Jersey DX Group	851,111
North Florida DX Association	795,280
Contest Association of South Texas	781,220

Murphy's Marauders	502,014
Metro DX Club	414,799
Redwood Empire DX Association	412,595
Long Island DX Association	325,766
Ohio Valley Amateur Radio Association	302,727
Arrowhead Amateur Radio Club	257,251
Western PA Amateur Radio Club	182,128
Rip Van Winkle A.R.S.	124,644
Central California DX Club	116,124
Fort Wayne Radio Club	67,766
Eastern Michigan A.R.C.	64,922

DX Club Scores

Bavarian Contest Club	32,315,853
Rhein Ruhr DX Association	22,207,579
Kaunas Polytechnic Institute R.C.	17,056,645
Southern German DX Group	10,468,083
Northern Lithuania DX Group	10,255,648
Sevilla Contest Club	9,524,399
Ontario Contest Club	7,286,045
Riga Radio Club	4,831,904
Alaska DX Association	4,622,316
Pretoria Radio Club	4,127,046
Kiel Canal Activity Group	3,909,040
YU DX Club	3,892,356
Lithuanian Contest Group	3,476,369
Uruguay DX Club	2,882,397
Viimsi Radio Club (UR2)	2,764,647
Mid Beds Contest Association (G)	2,527,470
Lvov Radio Club	1,511,037
Condor DX Group CE	937,240
Danish DX Group	845,196
Tallinn Radio Club	797,965
East Anglian Contest Club	433,014
G.A.C.W. (LU)	261,345
Voroshilovgrad Radio Club	215,399
Kiev Radio Club	169,581
SP DX Club	127,128
Saar-Palz DX Club	106,086

**WORLD TOP 10 QRPp
(5w input)
All Band**

1. YU3BC	544,810
2. SP3KEY	492,900
3. RB5IJ	267,997
4. 4X6IF	246,019
5. K3WS	241,345
6. K7SS	192,700
7. OK3IAG	148,400
8. G4ELZ	130,938
9. UT4UB	106,820
10. DL9YX	95,064

Team Contesting

- Downhill Contest Team (EA9IE, 9Y4VT, CN8ES, D44BC, K6NA) 23,593,748
- Wait Till Next Year Contest Team (W3BGN, N2LT, K4JPD, K4BAI, PJ2FR) 15,511,563

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

K1AR	A	3,397,905	2398	120	363
W1KM		2,713,558	2040	117	337
K1EA		2,002,184	1617	116	312
K1IU		1,461,473	1292	103	286
K1VR		1,427,580	1254	110	286

N1CQ		1,242,712	1322	88	238
W1IHN		1,072,932	976	99	272
KS1L		1,028,608	1094	93	235
AK1A		993,580	1141	90	212
K1VUT		857,265	913	88	247
W1RR		623,964	694	85	234
W1FJ		617,516	692	88	229
W1WAI		556,010	594	89	249
KA1DWX		481,950	550	89	226
W1BIH		436,770	453	103	242
W1CWJ		351,948	455	83	195
AA2Z/1		229,680	401	60	138
W1WEF		206,029	402	62	117
K1SA		187,476	317	46	158
AJ3E/1		130,942	239	62	137
KA1LZR		130,091	298	57	110
N1AU		107,616	226	55	122

K5MA/1		104,115	225	59	106
W1HUE		70,692	187	47	90
W1WY		63,474	166	51	98
WA2WIP					
/1		51,858	143	51	83
N4XR/1		45,584	113	52	102
K1MEM		41,480	108	49	87
K1V5J		25,840	115	29	51
W1FM		22,932	94	36	62
AB1U		21,097	106	27	46
KT10		15,843	74	34	53
KA1KFC		9,896	51	29	42
WA1ZAM		7,440	56	15	33
W1AX		6,837	49	18	35
W1PLJ		5,670	48	16	29
W10PJ		4,646	47	19	27
K2MN/1		4,559	35	17	30
K01V	28	588	15	6	8
K1RM	21	275,100	673	30	110
W1BET		3,804	38	12	24
K1BW	14	462,594	1220	34	95
W1YN		147,874	473	29	78
WA1FCN		117,828	375	29	79
W16G		114,623	469	26	57
WB1DXD		47,952	208	26	55
K10X	7	439,632	1065	32	110
			(Opr. KC1F)		
K1MM		437,112	992	37	119
K1TR		13,617	100	15	36
W1FV	3.5	197,120	603	27	85
K2RR/1		54,570	228	19	66
N2LT	A	2,703,206	2076	120	326
W2REH		2,000,432	1611	114	310
N2MM		1,594,020	1494	103	269
W2VJN		1,498,416	1143	126	330
K2RD		856,665	827	102	263
K20Y		692,045	808	93	212
			(Opr. N1EE)		
K2SHZ		392,445	496	78	207
W1FR		328,015	433	86	203
K20IL		243,474	372	73	165
WA2UEC		234,976	373	69	155
			(Opr. KA2HMJ)		
W2NC		218,940	321	74	172
N2AIF		192,691	320	66	167
N2MR		180,455	336	64	129
WA2ASQ		177,408	336	65	127
KN2Q		176,052	326	62	142
W2FTY		160,890	310	61	125
WA2CNF		144,900	276	72	138
K2FS		141,316	246	66	140
K2QF		132,496	247	67	129
WA20RX		106,377	222	58	119
W2SAW		100,320	247	47	93
W2DW		100,182	215	61	116
K2JLA		96,624	191	64	127
W0VU/2		78,848	167	60	116
KW2J		67,944	182	57	92
W2KHQ		58,464	150	52	92
K2WK		57,717	200	27	72
W2RQ		50,160	208	36	52
W2PHT		45,220	133	43	76
NA2O		44,550	128	51	84
KD2HE		20,500	88	31	51
W2KTF		13,132	69	25	42
WB2SZY	21	40,180	166	22	60
K2VV	14	655,046	1567	35	107
K2SX		480,340	1179	35	105
KY2P		402,996	1089	32	97
K2SG		217,392	655	32	80
NG2X		147,288	507	28	74
K2MFY		111,780	339	31	84
N2DT	7	139,482	401	31	92
N2KW		100,116	282	34	95
NC2V		34,142	147	30	56
W2HG		27,000	110	28	62
KA2VMZ	3.5	150	36	3	2
W3GRF	A	2,634,252	2053	110	334
			(Opr. KND0)		
K3TUP		2,323,376	1667	133	340
			(Opr. K5ZD)		
K3ZD		2,157,395	1704	128	316
W3BGN		2,090,889	1698	114	309
K3WV		1,723,153	1422	113	308
W3XU		1,592,032	1546	99	257
KB3TZ		1,221,966	1243	92	250
K3ZT		1,058,255	1039	101	254
K3NA		460,053	562	93	204
KS3F		423,793	604	86	171
W30V		372,800	525	72	161
W3GNZ		342,696	474	80	182
W3AZ		313,680	460	74	166
WB3CAC		308,672	521	63	145
W3ARK		231,633	411	58	149
W3EVM		216,558	356	69	158
N2MA/3		213,525	373	60	135
N3HW		191,564	416	53	113
KQ3F		180,600	379	51	121
KD8WX					
/3		90,335	227	46	99
W3SOH		75,900	180	56	109
W3QIR		66,748	153	52	112
WA3JUZ		64,320	189	38	82
K3WGR		42,975	123	40	85
N3BNA		40,992	149	45	77
N3CW		23,632	81	42	70
KC3EK		20,202	85	34	57
W3FOE		4,600	49	15	20
KA3AOX		4,094	43	18	28
WA3IMY		3,565	51	9	22
N3SI		2,322	22	10	17
WA3CGE	28	2,822	32	11	23
WA3VPL	21	1008	17	9	15
KA3NED	14	183,665	575	31	78
N3DLZ		61,194	228	25	69
KX2A/3	7	31,343	35	13	26
N3RL		864	14	12	12
AA1K/3	1.8	24,120	166	16	51
N4WW	A	2,482,248	1882	131	341
N6AR/4		1,427,533	1198	120	299
AA4S		1,337,772	1197	102	291
W3VT/4		1,317,120	1112	120	300
N4KG		1,015,230	845	126	304
K4JPD		1,000,701	1020	104	247
N4RV		993,870	868	121	288
N4VZ		736,038	664	114	283
N4VT		665,496	669	105	246
NEAV/4		621,824	645	100	247
K4LTA		582,192	705	89	223
N4XM		495,170	622	88	205
K4PQL		486,796	635	70	192
W4BV		325,745	417	89	198
W60KX/4		229,810	325	76	169
K4FW		221,752	377	59	153
N4NX		201,600	294	88	164
N4JF		178,304	307	78	146
K4LQ		176,040	297	71	145
K4PB		168,775	290	69	146
N4KE		147,712	206	88	168
WB4MAI		133,536	231	76	138
K4OD		133,118	246	68	134
N4JL		115,240	197	75	140
K4FFF		113,040	235	59	121
N4MM		91,760	212	52	103
WM4Z		83,237	194	56	105
K4CA		68,728	185	50	92
W1UA/4		67,450	183	51	91
W4YN		57,084	154	50	84
W4BFR		49,352	144	40	84
W506/4		47,158	123	56	90
WB40SN		46,050	118	58	92
KG4AM		19,552	78	39	55
KV4AM		16,826	79	35	59

K4KUZ	13,317	69	25	44	W6RJ	3.5	103,224	438	30	58	W90A	136,136	466	27	77
KB4FO	3,264	30	23	25	W6JMS		6,160	77	13	22	K9MMS	43,360	193	22	58
W4WJJ	1,680	23	12	16	K6DDO	1.8	8,534	86	13	21	K9GW	33,966	160	24	50
NU4Y	1,764	62	10	11	K6SE		7,320	88	13	17	W8BYVR				
K4DD8	576	30	9	9							/9	256,080	672	35	97
W4NL	162,162	469	30	96	K5MM/7	A	738,106	931	106	183	W9YSX	93,456	283	33	85
N4BP	130,758	423	30	81	W6WGT	A	152,760	420	55	79	K9SQ	86,000	343	32	68
WB4TDH	116,702	341	29	89	W7AYY		151,704	331	66	102	NSAW	24,273	108	26	61
KC4HN	24,026	106	22	60	KATZT		134,745	265	85	110	K9RX	58,696	241	25	63
W4JFL	12,032	72	22	42	KS2T		85,059	286	52	65	W9BPOH	41,888	172	24	64
K3RV/4	634,293	1444	37	112	W7TC		54,400	210	50	50	K9RS	38,184	170	21	65
N4MO	227,540	638	34	90	KX7J		51,213	156	49	80	KE9U	13,702	90	19	43
AA4LU	176,896	483	36	92	N7HJM		42,237	135	49	68	N9MM	19,966	119	19	48
N4RJ	122,451	378	29	90	W7JIT		41,664	157	43	53					(Opr. N9AC)
N4PN	21,608	114	20	53	W7QW		37,248	141	44	53	W9YYG	3,616	55	12	20
N4SU	15,840	104	15	45	K7UU		36,156	106	61	77					
N4TX	13,847	121	19	46	K7RIE		33,908	136	42	56	W8VZ	1,675,080	1374	141	282
KG4W	9,412	80	16	36	K7WA		32,178	130	38	55	W8WP	920,304	974	96	236
K4X0	3,135	43	12	21	W7JUE		23,828	149	36	38	W8HBH	473,457	602	96	195
					KA7FEF		21,580	103	42	42	KJ8H	421,950	511	94	197
					W7GUR		16,704	96	30	34	KJ8G	244,340	475	78	112
					KY7M		13,804	76	31	37	W8Z	209,517	332	72	159
					KD7H		13,566	97	18	33	KM8L	208,159	355	77	150
					KR7L		3,724	38	19	19	K8YF	95,355	215	63	100
					W7IVX	21	115,479	442	27	64	W8GOR	90,636	204	66	100
					KE7C		68,931	347	24	45	W8RXL	77,140	214	52	93
											KS8T	75,336	201	51	95
											(Opr. W87QJ)				
											K8HR	67,482	158	57	106
											K8MR	66,000	199	52	80
											K8TL	38,514	108	56	75
											N8G	37,750	116	45	80
											K8Q	32,552	112	35	69
											W8CW	26,264	102	33	65
											K8JGH	24,420	86	44	66
											N8SM	23,268	95	29	55
											K8Z	18,357	80	33	54
											KE8Y	18,174	85	30	48
											K8ZX	11,561	64	28	41
											K8M	11,023	60	33	40
											NC8O	10,575	50	29	46
											W8NGB	10,120	72	19	36
											KA8OMX	7,906	48	33	34
											K8RW	5,104	62	30	28
											K8W	48,792	294	23	34
											K8OD	41,678	168	29	62
											K8OU	15,264	78	26	46
											K8WX	12,066	132	21	57
											W8UO	25,347	180	19	32
											N8XA	15,504	116	18	33
															(Opr. A80X)
											K8CS	1,794	32	10	16

COSTA RICA														
TE7T	A	118,655	600	38	57	ZS8P	28	65,680	288	21	59			
DOMINICAN REPUBLIC														
HI8WRE	A	15,872	253	16	15	ZS6TUK		6,510	73	8	22			
HI8RPD	21	760	40	5	5	ZS6BRC	7	296,537	967	30	73			
HI8LC	3.5	17,056	200	12	29	TANZANIA								
GUATEMALA														
CG5H	A	1,127,648	1549	69	193	5H3BH	14	760,784	1882	36	100			
CG5H	A	1,127,648	1549	69	193	(Opr. S8BAJU)								
HAITI														
CG5H	A	1,127,648	1549	69	193	ASIA								
HONG KONG														
CG5H	A	1,127,648	1549	69	193	VS6DO	A	1,534,698	2474	117	220			
HONDURAS														
HR1AT	14	17,568	165	16	32	(Opr. JASDQH)								
JAMAICA														
BY5HN	A	95,511	474	36	57	INDIA								
MEXICO														
XE1VW	A	588,636	1393	75	122	VU2AJ	A	114,777	384	33	84			
XE2MX		129,270	515	50	63	VU2JN		77,520	276	50	86			
XE2GL	14	475,405	1714	33	86	ISRAEL								
XE2FU	7	665,728	2201	35	93	4X4JD	21	126,434	595	24	53			
XE2KN	3.5	136,218	865	21	52	JAPAN								
XE2AAM	1.8	6,992	181	8	11	J11QPU	A	1,340,808	1519	110	212			
MONTSEERRAT														
VP2MEV	A	2,514,512	3621	92	216	JF1EQA		954,786	1326	95	159			
PANAMA														
HP1XKR	A	249,227	827	47	92	JH1OGC		703,768	956	103	165			
PUERTO RICO														
KP4FI	7	696,864	2330	27	92	JF1SEK		391,950	628	90	135			
AFRICA														
BOTSWANA														
A25	/G3HCT	21	329,360	1202	21	71	JAIQJ		121,511	289	67	102		
CANARY ISLANDS														
EAT7H/8	A	3,115,730	3017	98	248	JAI1MTR		96,026	271	59	74			
EAB8E		116,156	287	45	97	JE1ARQ		88,236	191	75	96			
EAB8G		13,920	80	20	40	JA1OJZ		85,315	239	66	85			
EAB8F	14	27,496	169	18	38	JH1AWN		70,412	212	68	48			
EAB8R	3.5	840	20	2	12	JA1CE		51,062	163	57	64			
CAPE VERDE ISLANDS														
D44BC	A	5,418,018	4397	117	300	JA1BSU		47,187	163	44	63			
CEUTA & MELILLA														
EAB9E	A	5,731,360	4252	113	339	JP1SRH		29,072	138	33	46			
GABON														
TR8JLD	7	90,771	390	23	56	JA1AAT		25,947	99	36	57			
GAMBIA														
C53AA	A	3,447,396	2952	112	281	JA1JVP		17,886	102	28	38			
MADEIRA ISLANDS														
CT3ET	21	171,014	776	20	54	JS1IVF		14,892	85	34	39			
MAURITIUS														
3B8DB	A	154,332	480	35	73	JA1BNW		11,095	100	26	39			
MOROCCO														
CN8ES	A	5,422,763	4103	107	336	JA1JBP		4,715	45	28	23			
NIGERIA														
JG1FVZ	/5NB	21	79,416	376	18	54	JG1JHT		2,160	38	10	11		
REPUBLIC OF SOUTH AFRICA														
ZS6BSZ	A	492,525	609	91	184	JA2SAP		360	8	7	8			
ZS2RM		143,361	325	54	99	J11TUY	28	2,320	35	13	16			

JA2VQP A	897	19	11	12	JABCJY	34,200	213	22	38	UA9CAQ	624	26	5	8	BALEARIC ISLANDS				OK3CAB	15,288	194	14	28	
J12NOS	885	21	7	8	JR6JTO	17,936	125	21	38	UWBLT A	793,755	1241	105	174	OH2LP					OK3ZWX	14,280	120	16	26
JR20DK	300	9	7	8	JABKKI	7,035	73	16	19	UABLZC	363,321	750	84	135	/EAB A	68,026	463	36	77	OK3IF	7,740	110	11	25
JR2EIV 21	108,756	387	32	74	JABEJO	2,808	40	13	13	RABJB	109,347	550	50	73	EAG6P	54,280	313	35	83	OK2PKS	5,940	96	10	20
JA2DN	40,716	199	29	49	J1KIDM					UA8CFF	109,010	488	43	67	EABVQ 21	25,862	189	21	46	OK1JDJ	810	27	4	6
JA2KPY	16,881	131	19	32	JABUBV 3.5	3,584	41	16	16	UA8Z1	94,963	513	48	49	OK1DWX	796	29	7	9					
JF2DDE	7,353	43	43	14	J8BKRM	396	14	6	6	UA8SAG	96,856	252	51	103	OK1AMF 7	97,239	511	31	63					
JE2SSX	420	10	7	8	JABJFO A	278,658	484	86	140	UZ8AB	61,963	230	47	84	OK1AZI	61,664	497	21	67					
JA2BNN 7.0	11,684	99	16	30	JASCWJ	93,670	243	61	84	UA8S5Y	47,138	266	24	50	OK1MNV	56,358	340	24	61					
JG2LGN	2,500	51	10	10	JASPBZ	12,862	141	30	39	UA8S8Q	22,230	191	23	42	OK1DKW	41,920	307	20	60					
JA2IVK 3.5	19,224	144	19	35	JASFT	1,320	21	13	11	UW9CM	12,354	107	26	32	OK1MAW	38,064	245	27	77					
JE2LPC	4,170	66	14	16	JABLSZ 21	39,234	190	27	51	UA8DAK	5,319	127	11	16	OK1ABP	34,104	230	19	68					
JA2EVO	4,032	50	21	15	JH9XVF	16,020	125	17	28	UA8CS	1,065	69	10	10	OK1GS	16,818	181	14	39					
JA2EJ1	3,960	43	21	15	JH9XKB	165	8	5	6	UA8SG 21	13,970	173	18	37	OK2SRA	9,360	147	12	36					
JA2LA	740	20	10	10	JH9XBF	117,040	549	28	48	UA8BCK 14	48,316	384	15	32	OK2TED	650	17	7	18					
JF3CCN A	352,581	647	79	132	JH9XBO 1.8	1,314	27	30	9	UA8BCL 14	48,316	384	15	32	OK1XW 3.5	62,250	574	15	60					
JJ3AIO	316,580	553	86	134	JH9XCV	68,094	328	27	51	UA8BCK 14	48,316	384	15	32	OK2HI	39,329	479	13	54					
JR3BOT	292,800	578	74	109	JH9XCV	3,818	58	11	12	UA8BCK 14	48,316	384	15	32	OK1XJ	37,881	460	13	48					
JJ3JUL	199,296	410	79	113	JH9XCV	67,322	312	27	55	UA8BCK 14	48,316	384	15	32	OK1DLF	14,178	248	9	42					
JA3AA	156,519	329	73	114	JH9XCV	2,990	52	13	10	UA8BCK 14	48,316	384	15	32	OK1AWF	12,780	284	8	37					
JA3HTK	89,700	256	56	82	JH9XCV	1,072	23	8	8	UA8BCK 14	48,316	384	15	32	OK1MGW	11,480	132	11	45					
JA3ARM	53,318	207	43	63	JH9XCV	96	6	3	3	UA8BCK 14	48,316	384	15	32	OK2BUD	9,635	200	7	34					
JG3EHD	6,647	93	21	23	JH9XCV	68,094	328	27	51	UA8BCK 14	48,316	384	15	32	OK2PCF	8,904	188	7	35					
JN1ENK					JH9XCV	3,818	58	11	12	UA8BCK 14	48,316	384	15	32	OK3TDO	8,639	113	9	44					
/3	3,080	38	17	18	JH9XCV	67,322	312	27	55	UA8BCK 14	48,316	384	15	32	OK2PFX	8,235	139	9	36					
JM3EYZ	2,820	38	12	18	JH9XCV	2,990	52	13	10	UA8BCK 14	48,316	384	15	32	OK3PCW	8,148	169	7	35					
JF3GKE	646	15	8	9	JH9XCV	1,072	23	8	8	UA8BCK 14	48,316	384	15	32	OK2PIO	2,548	88	5	23					
J13BFG 28	49	4	3	4	JH9XCV	96	6	3	3	UA8BCK 14	48,316	384	15	32	OK1KAY	680	40	5	12					
JH3FQF 21	22,770	130	24	42	JH9XCV	68,094	328	27	51	UA8BCK 14	48,316	384	15	32	OK1KAP 1.8	32,448	314	16	60					
JE3ZF5	18,480	142	22	38	JH9XCV	3,818	58	11	12	UA8BCK 14	48,316	384	15	32	OK2DFW	29,160	467	9	51					
JG3NKP	17,802	90	30	39	JH9XCV	67,322	312	27	55	UA8BCK 14	48,316	384	15	32	DLBCOS	15,271	259	8	47					
JG3OCV	14,702	89	25	39	JH9XCV	2,990	52	13	10	UA8BCK 14	48,316	384	15	32	OK3CWQ	14,456	239	8	44					
JE3NWN 14	87,932	370	30	59	JH9XCV	1,072	23	8	8	UA8BCK 14	48,316	384	15	32	DLBCQP	12,852	242	7	44					
JR3NZC	56,287	270	26	51	JH9XCV	96	6	3	3	UA8BCK 14	48,316	384	15	32	OK1JDX	11,421	232	9	38					
JF2ONG					JH9XCV	68,094	328	27	51	UA8BCK 14	48,316	384	15	32	DLBCRG	10,890	230	7	38					
/3	5,859	79	12	15	JH9XCV	3,818	58	11	12	UA8BCK 14	48,316	384	15	32	OL7BLO	9,635	220	6	35					
JH3DEJ	5,544	30	9	7	JH9XCV	67,322	312	27	55	UA8BCK 14	48,316	384	15	32	OK2PLA	7,544	165	7	35					
JA3JM 7.0	62,389	265	32	57	JH9XCV	2,990	52	13	10	UA8BCK 14	48,316	384	15	32	OK2PLR	5,781	140	7	34					
J130IP	1,040	30	7	6	JH9XCV	1,072	23	8	8	UA8BCK 14	48,316	384	15	32	OL9CPG	4,305	119	7	28					
JH3BGG 3.5	69,046	349	27	52	JH9XCV	68,094	328	27	51	UA8BCK 14	48,316	384	15	32	OK1FZM	3,204	89	6	30					
JH4UYB A	257,873	494	79	118	JH9XCV	3,818	58	11	12	UA8BCK 14	48,316	384	15	32	OK2BYG	3,010	70	8	35					
JA4ESR	113,538	304	65	84	JH9XCV	67,322	312	27	55	UA8BCK 14	48,316	384	15	32	OK1FYZ	2,940	72	6	20					
JR4VGV	51,272	197	43	61	JH9XCV	2,990	52	13	10	UA8BCK 14	48,316	384	15	32	OL6BNN	2,914	95	4	27					
JA4QZR	2,296	28	14	14	JH9XCV	1,072	23	8	8	UA8BCK 14	48,316	384	15	32	OK1DWC	2,910	85	5	26					
JR4PY	683	17	9	8	JH9XCV	96	6	3	3	UA8BCK 14	48,316	384	15	32	OL6BWN	2,460	80	5	25					
JE4MKG 21	520	21	12	14	JH9XCV	68,094	328	27	51	UA8BCK 14	48,316	384	15	32	OK2PST	1,175	47	5	22					
JE4QP	42	3	3	3	JH9XCV	3,818	58	11	12	UA8BCK 14	48,316	384	15	32	OL5BOL	340	21	4	13					
JE4VVM 14	153,450	610	31	59	JH9XCV	67,322	312	27	55	UA8BCK 14	48,316	384	15	32	OL6BKZ	285	20	4	11					
JE4CZM	53,710	235	30	52	JH9XCV	2,990	52	13	10	UA8BCK 14	48,316	384	15	32	OK1DWW	15	3	2	3					
JR4ISK	4,288	55	16	16	JH9XCV	1,072	23	8	8	UA8BCK 14	48,316	384	15	32	DENMARK									
JA4GXS 7.0	10,512	86	19	29	JH9XCV	96	6	3	3	UA8BCK 14	48,316	384	15	32	OZ7HT A	605,935	1310	73	180					
JR4SRW	2,507	40	12	11	JH9XCV	68,094	328	27	51	UA8BCK 14	48,316	384	15	32	OZ5KU	210,474	502	53	145					
JA5JGV A	28,325	111	47	56	JH9XCV	3,818	58	11	12	UA8BCK 14	48,316	384	15	32	OZ1CAR	116,160	374	47	118					
JA5HF	28,188	129	36	51	JH9XCV	67,322	312	27	55	UA8BCK 14	48,316	384	15	32	OZ1NF	97,727	355	44	117					
JR6JZF					JH9XCV	2,990	52	13	10	UA8BCK 14	48,316	384	15	32	OZ4IO	26,572	152	28	63					
/5	90,792	341	34	63	JH9XCV	1,072	23	8	8	UA8BCK 14	48,316	384	15	32	OZ2NU	25,043	190	23	56					
JA5BOX	42,772	232	25	43	JH9XCV	96	6	3	3	UA8BCK 14	48,316	384	15	32	OZ1AXG	11,070	97	21	33					
JA5BJC	421,296	1125	35	96	JH9XCV	68,094	328	27	51	UA8BCK 14	48,316	384	15	32	OZ4OC	2,981	32	18	24					
JA5EZI 1.8	1,848	36	11	11	JH9XCV	3,818	58	11	12	UA8BCK 14	48,316	384	15	32	OZ9MM	2,519	63	15	27					
JA6BIF A	232,522	448	88	123	JH9XCV	67,322	312	27	55	UA8BCK 14	48,316	384	15	32	OZ5OU 21	11,110	80	18	37					
JE6JRY	223,300	410	83	137	JH9XCV	2,990	52	13	10	UA8BCK 14	48,316	384	15	32	OZ1DKG	10,455	108	13	28					
JA6LDD	95,880	210	77	93	JH9XCV	1,072	23	8	8	UA8BCK 14	48,316	384	15	32	OZ8CT 14	73,372	447	24	59					
JA6GCE	88,400	257	55	75	JH9XCV	96	6	3	3	UA8BCK 14	48,316	384	15	32	OZ1AFA	13,959	122	16	31					
JA6AKV	17,500	94	29	41	JH9XCV	68,094	328	27	51	UA8BCK 14	48,316	384	15	32	OZ2PA 7	28,471	326	15	56					
JF6JOM	15,535	89	29	36	JH9XCV	3,818	58	11	12	UA8BCK 14	48,316	384	15	32	OZ5WO	13,444	235	16	48					
JF6KAC	13,786	82	28	33	JH9XCV	67,322	312	27	55	UA8BCK 14	48,316	384	15	32	OZ1FTE 3.5	45,390	255	21	68					
JA6ABG	5,724	64	19	34	JH9XCV	2,990	52	13	10	UA8BCK 14	48,316	384	15	32	OZ2E	8,464	155	9	37					
JA6BCV	5,687	42	22	25	JH9XCV	1,072	23	8	8	UA8BCK 14	48,316	384	15	32	ENGLAND									
JR6LDI	396	10	9	9	JH9XCV	96	6	3	3	UA8BCK 14	48,316	384	15	32	G3LNS A	1,571,970	1888	100	266					
JR6GIM 21	39,270	196	26	51	JH9XCV	68,094	328	2																

DL1JF	544,635	902	75	198	OH5UL	26,864	216	18	55	Y31MO	125,330	750	27	56	NETHERLANDS				Y02BP	74,200	563	25	81		
DK6NP	502,054	722	80	249	OH1RZ	2,184	32	12	30	Y32UC	111,825	772	53	22	FA3BFM	291,720	659	69	151	Y05AAT	58,504	213	36	106	
DJ4AX	499,912	902	85	231	OH2DE	1,872	30	10	16	Y44NO	52,360	385	24	44	FA3CXC	141,390	425	50	116	Y08PB	50,652	300	32	76	
DL4FF	475,710	826	73	233	OH5AM	966	32	6	15	Y51XE	44,608	328	20	44	FA3BDC	105,336	352	45	126	Y04BEX	41,760	243	31	89	
DL3LU	375,100	627	67	233	OH2BC1	79,580	647	19	65	Y51XL	31,122	237	19	44	FA3CBL	62,604	214	40	101	Y04ZF	27,160	169	34	86	
DL7AV	340,656	549	85	197	OH1TN	41,888	413	17	60	Y27GL					FA3CBW	39,338	222	32	57	Y03CFF	13,860	104	29	61	
DL4BB0	339,190	902	63	151	OH2PM	39,455	434	12	53	Y21XC	7,282	99	13	25	FA3BTH	30,994	143	29	53	Y06JX	12,137	152	22	31	
DJ60T	309,400	591	73	207	K8MN					Y21UL	6,831	83	11	22	FA3BNT	29,999	201	37	94	Y09CYD	8,265	123	18	39	
DJ9MH	279,864	632	74	202	/OH2	22,214	303	14	44	Y23BF	2,240	65	11	22	FA3BTH	29,999	201	37	94	Y05BRZ	6,138	74	22	40	
DJ2YA	273,399	449	87	242	OH3TR	17,225	152	9	44	Y24LA	2,136	36	9	15	PA2REH	29,700	177	32	58	Y03KBC	2,898	52	16	26	
DL8KJ	265,846	506	89	169	OH6RC	7,830	145	8	37	Y46XF	1,800	34	8	10	PA3BZL	5,406	38	19	32	Y04BQV	552	19	6	18	
DK3SN	213,354	503	54	108	OH6CD	5,624	134	8	30	Y21FL	1,612	34	10	16	PA3CCF	5,358	35	25	32	Y06ADM	210	7	3	7	
DJ8JY	198,764	513	48	110	OH6UL	4,551	82	7	34	Y24YH	42,484	322	16	70	PA3CFL	3,510	80	12	33	Y06DDF	70	4	3	4	
DL1TH	175,131	526	48	135	OH1SA	170	20	3	7	Y21BE	6,194	133	9	29	PA8KHS	7,832	71	17	27	Y08BO1	4,558	39	19	24	
DL9EY	141,930	432	48	118	OH6NG	19,981	319	9	44	Y21HE	1,647	60	5	22	PA8UV	30,899	271	16	37	Y08MI	1,248	34	6	10	
DJ5GG	135,605	385	54	131	OH1MA	9,800	154	12	37	Y21NE	814	36	5	17	PA3DKX	20,776	162	14	42	Y04ATW	300	11	5	6	
DL2JO	128,586	406	48	126	FRANCE				Y24HA	1,647	60	5	22	PA3CEX	4,864	83	10	22	Y06VZ	87,600	682	17	54		
DL9MBZ	102,770	237	26	87	FD1JCB	357,603	1083	54	145	Y41TA	2,296	85	4	25	PA8LVB	28,944	230	13	54	Y03RF	59,976	273	29	73	
DF4TD	94,540	393	42	103	F6DYX	158,514	800	38	93	ZB2EO	239,400	730	50	130	P15PVI	17,408	161	13	55	Y09YE	21,616	257	14	42	
DL3NAA					F6DKV	148,678	522	49	111	OH2KI	445,897	2105	29	98	NORWAY				Y05AVN	20,475	200	15	45		
DL2JX	91,105	302	43	112	F6HWM	95,708	314	55	87	ZB2E0	239,400	730	50	130	LA4YW	121,218	415	45	133	Y08VG	18,900	186	8	46	
DF2HL	85,936	310	46	98	F6EPP	83,710	315	40	70	OH2ZK1	445,897	2105	29	98	LA9XC	117,096	331	48	116	Y04BBH	5,565	120	7	28	
DK1GF	84,095	273	41	98	F6IRA	67,658	289	41	69	/ZB2					LABCE	55,600	204	56	83	Y04DCF	5,552	96	12	38	
DJ4LK	75,036	202	53	116	F6B8	60,884	208	42	82	SV1RP	77,921	1015	14	53	LA7SI	7,384	100	13	39	Y05YHF	23,782	467	9	39	
DK5PR	72,800	204	53	107	F6TAT	60,858	205	54	93	/SV7	77,921	1015	14	53	LA8CJ	5,106	59	17	29	Y09CH	21,306	262	12	41	
DJ1YH	71,862	195	57	117	F6EOV	58,740	234	35	75	SVBAA	3,936	77	8	33	LA1HCA	13,692	141	15	27	Y08DD	17,802	385	6	37	
DL1S8F	70,016	261	42	86	F6HJU	45,900	183	22	68	SV8XJ	16,008	343	7	19	LA2IE	5,700	100	4	5	Y03AMC	10,710	272	7	31	
DJ1VP	63,288	292	35	107	F6HWU	32,760	123	43	61	Y22T0	2,511	79	6	25	LA9HW	37,051	458	13	54	Y06BTY	1,560	82	6	14	
DL1MCD	63,104	270	36	92	F6CUD	22,922	120	23	50	Y41TA	2,296	85	4	25	LA2CF	34,142	227	21	65	Y03KJW	61,466	687	12	61	
DL1SBR	57,480	233	43	77	F6EZR	22,922	120	23	50	GIBRALTAR				LA8WG	22,140	292	15	45	Y04KCA	26,300	430	10	40		
DJ0CP	44,036	172	32	89	F/FG4DI	8,664	134	20	33	GREECE				LA7J0	65,824	752	21	68	Y09KAG	231	25	4	7		
DK1DB	41,580	212	33	77	F6CXI	6,792	125	9	15	HUNGARY				LA2EG	11,376	122	10	38	SARDINIA						
DK7ZT	39,123	279	26	55	F6IRF	126,217	620	25	66	HA0MM	938,508	1295	103	268	POLAND				IS0DMH	162,814	731	32	95		
DL1ES	38,950	174	33	62	F6AUS	52,836	236	22	62	HA619HB	739,364	1130	94	238	SP2PDI	680,640	1233	88	255	SCOTLAND					
DJ2UU	36,951	213	31	62	F5DE	24,672	198	16	32	HA3RU	565,350	1320	65	169	SP7NIX	201,846	427	62	172	GM3NHQ	14	21,436	256	14	32
DL1ZQ	36,279	210	59	87	F5AM	2,212	34	10	18	HA7LM	448,024	968	77	207	SP9D8A/9	180,185	436	57	124	GM3YOR	3.5	72,310	727	15	55
DJ5AV	27,456	164	34	62	F5DK	60,480	433	23	47	HA8X	387,484	563	71	215	SP3BYZ	145,440	460	54	106	SICILY					
DK1PG	22,256	81	43	64	F6BBJ	116,737	679	29	78	HA8XX	278,731	805	60	151	SP9AKD	114,268	437	51	103	IT9LMK	21	20,735	176	19	46
DJ1OJ	18,848	120	31	45	F3JL	56,232	462	18	54	HA8B1	196,779	505	50	144	SPAIN										
DF3DN	18,423	133	24	45	F8TQ	270	18	4	11	HA8HG	145,044	488	47	106	ED1CI	513,600	964	64	150	EA3FAA	173,684	544	57	126	
DL6QW	11,920	54	36	44	GERMAN DEMOCRATIC REP.				HA8HJ	67,564	315	39	88	EA3BOW	155,295	476	48	105	EA7XC	81,906	321	52	85		
DL4RC	11,704	93	26	50	Y24UK	1,827,525	2212	107	306	HA8HL	7,670	237	28	67	EA7ACR	75,677	300	37	96						
DL7YS	10,676	70	26	42	Y32KE	360,060	953	61	143	HA8JG	6,336	55	17	31	EA7AAW	48,642	302	52	82						
DF2RG	1,470	33	9	12	Y31PA	220,675	695	50	125	HA1WD	4,479	63	15	29	EA4CPI	27,927	321	27	60						
DK8NI	1,215	30	11	16	Y34SE	188,656	471	55	153	HA1XR	2,575	36	12	23	EA7AZA	17,280	100	37	59						
DL1RB	48,555	223	24	59	Y28FF/A	182,450	665	46	132	HA1XQ	2,575	36	12	23	EA4CQJ	14,616	93	26	46						
DJ9ZB	3,875	48	11	20	Y78ZL	152,076	502	48	126	HA1YR	2,575	36	12	23	EA5CKP	2,121	37	10	11						
DL0ZC	1,649	40	7	8	Y28XL/A	148,848	526	48	120	HA1YR	2,575	36	12	23	EA3DBO	1,922	28	14	17						
DF5WN	1,440	31	9	15	Y26BH	132,936	436	49	125	HA1YR	2,575	36	12	23	EA3DWB	735	21	7	8						
DK3D1	776,860	1985	38	117	Y540L	120,624	435	49	119	HA1YR	2,575	36	12	23	EA7BU	5,106	62	14	32						
DL4RX	85,942	389	28	69	Y22DK/A	107,450	343	51	124	HA1YR	2,575	36	12	23	EA7BWN	3,549	47	15	24						
DL3ZBJ	15,207	152	16	21	Y42YG	104,912	402	44	114	HA1YR	2,575	36	12	23	EA4BV	1,139	29	7	10						
DL4NBV	2,175	52	7	18	Y36UE	99,687	564	46	95	HA1YR	2,575	36	12	23	EA7CFW	274,789	1270	29	80						
DJ5JH	86,020	378	29	86	Y22WF	95,004	369	39	87	HA1YR	2,575	36	12	23	EA3FKS	23,540	226	15	29						
DF3ZF	38,025	268	17	58	Y25OF/A	90,300	357	46	104	HA1YR	2,575	36	12	23	EA3CSX	2,024	53	6	17						
DJ3TF	26,400	184	18	57	Y53YN/P	89,675	285	54	121	HA1YR	2,575	36	12	23	EA7LM	7,805	121	11	34						
DL3DD	19,080	230	13	47	Y21DG/A	88,560	333	46	118	HA1YR	2,575	36	12	23	EA2IA	258,408	1397	28	83						
DF1SF	5,796	78	11	31	Y71WN	61,312	239	35	95	HA1YR	2,575	36	12	23	EA1NZ	14,841	141	11	40						
DF4QP	2,210	45	10	24	Y23UL	60,604	205	37	72	HA1YR	2,575	36	12	23	EA7AIN	3,077	49	7	24						
DL6LW	48,896	614	13	51	Y51XG	58,688	247	38	93	HA1YR	2,575	36	12	23	SVALBARD ISLAND										
DL1HBT	11,868	240	10	33	Y55WH	57,517	364	29	84	HA1YR	2,575	36	12	23	JWBA	136,192	1043	23	63						
DL4NAC	3,255	40	13	34	Y25MG/A	56,160	209	45	90	HA1YR	2,575	36	12	23	SWEDEN										
DK3KD	17,523	237	12	47	Y44UI	56,088	257	37	115	HA1YR	2,575	36	12	23	SM5ADE	271,488	684								

SWITZERLAND				UA6AF				UA6AS				RB5EV				VI3KS													
H9SAGA	A	636,768	1214	77	220	RZ3AM	"	547,937	787	99	274	UA3TCG	"	15,008	186	11	45	RB5III	"	93,789	420	45	108	V13KS	"	2,325	53	9	6
H9SKC	"	135,056	389	52	132	UA1Z0	"	293,384	797	45	129	UV6VY	"	14,742	274	7	35	UB5TJ	"	91,356	330	41	97	VK6JA	21	233,100	882	25	65
H9SDZ	"	106,492	414	48	110	UW3VZ	"	277,020	569	62	167	UA3BK	"	13,248	272	8	40	UB5TN	"	85,244	207	60	151	V14XA	"	219,120	942	28	55
H9SCXR	"	51,980	239	33	59	UA4CK	"	266,400	752	58	167	UA3XB	"	5,670	109	7	35	UB5UHT	"	67,203	325	30	101	VK2APK	14	280,497	868	31	80
H9SDA	"	19,080	106	32	58	RA3RN	"	247,211	435	69	200	UA4FM0	"	2,898	74	9	37	UB5UGR	"	65,296	208	39	115	VK4TT	"	47,520	244	25	41
H9SAYZ	"	10,200	77	21	39	RW3AU	"	235,712	514	68	196	UA4FM0	"	2,704	66	6	30	UB5VK	"	60,915	251	37	94	VK3MJ	3.5	13,572	66	17	12
H9SJCJG	21	125,928	500	30	78	RA3VW	"	193,980	354	72	193	UA4CL	"	9,912	184	8	34	UB5LAL	"	57,876	195	39	117	VK6HD	1.8	12,330	97	19	26
H9BZY	"	41,624	179	27	61	UA6LUE	"	193,256	624	47	149	UA4QV	"	9,912	131	9	50	UB5TCL	"	49,200	276	27	93	FRENCH POLYNESIA					
H9B9X	"	14,760	67	26	64	UA4HDV	"	170,304	472	57	135	UA4NFV	"	8,843	156	8	29	UB5YVY	"	49,050	191	34	75	F08JP	21	59,052	480	17	25
H9BCWZ	"	11,891	113	18	29	UA4CH	"	165,912	511	57	129	UW3GL	"	5,966	105	7	31	UB5DAV	"	48,372	256	35	104	GUAM					
H9BCVW	14	18,172	189	14	30	RW3DW	"	161,119	468	63	169	UW6GE	"	5,883	129	7	37	UB5IPH	"	38,412	233	25	74	HAWAII					
H9B9PP	"	14,384	114	15	47	RV6AA	"	131,880	785	44	124	UA3YBJ	"	4,472	79	8	35	UB5KDD	"	37,278	162	39	70	KH6RS	A	760,548	1416	86	97
H9BCWA	3.5	65,076	843	11	47	UA1AFM	"	123,032	568	45	124	UA3QN0	"	4,315	107	6	29	UB5KBB	"	33,390	138	37	68	WH6W	21	53,145	408	19	26
H9SAM0	1.8	95,201	740	17	66	UA4IY	"	120,048	451	47	117	UA3RFZ	"	2,883	79	6	25	UB5KVV	"	32,315	127	46	69	KH6MD	14	610,722	1640	37	89
WALES				UA6BFI				UA3ATV				UB5EPA				INDONESIA													
GW3JJ	A	239,412	675	52	161	UA6BQ	"	106,500	464	38	112	UA3ATV	"	1,092	34	5	16	UB5JGW	"	29,145	196	25	62	YB0ARA	A	1,714,405	1898	104	201
GW3MPB	7	34,686	246	20	62	UA1ANA	"	100,200	516	35	105	UA3ATV	"	820	32	6	14	UB5JUU	"	24,430	210	24	46	YB3ATB	"	325,422	623	59	120
YUGOSLAVIA				UA4ALI				KALININGRAD				RA2FC				YB0ARA													
YU3EA	A	942,288	1137	106	282	UA4HEK	"	86,728	289	47	101	RA2FC	"	13,588	111	12	29	UB5JRR	"	17,780	204	28	40	YB3ATB	"	325,422	623	59	120
YU20B	"	402,875	692	85	208	UA4WCE	"	84,348	400	34	98	UA2EC	1.8	12,555	248	6	39	UB5RDL	"	12,702	120	19	54	KA7KSY	"	128,684	408	45	61
YU7PXT	"	302,696	732	68	173	RA4PM	"	88,445	405	44	125	UB5RDL	"	12,702	120	19	54	UB5TAU	21	41,280	216	24	62	YC2FEA	"	78,064	215	50	86
YU7SF	"	119,392	414	51	113	UA3LAR	"	59,408	190	50	108	UB5EFA	"	12,240	74	27	58	RT5UJ	"	18,328	95	24	55	YB4FNN	21	118,746	493	24	57
YU3CB	"	106,891	428	40	99	UA3TCJ	"	57,875	192	40	85	UB5EFA	"	8,510	57	30	44	UB5ZC	"	11,978	97	16	37	YB0BRX	"	45,024	218	24	43
YU3MM	"	27,300	343	21	44	UA3GG0	"	36,948	256	27	78	UB5EIT	"	5,703	117	27	78	UB5ZFX	"	4,218	76	9	28	YC2FEA	"	18,900	114	23	37
YU70RQ	"	24,360	164	33	72	UA3ECJ	"	36,640	250	21	59	UB5EIT	"	5,665	62	16	39	UB5ZFX	"	4,218	76	9	28	KERMADEC ISLANDS					
YU2LNF	"	22,144	251	15	49	UA6ARX	"	34,450	187	34	72	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	ZM80Y	21	314,880	1304	26	56
YU1POI	"	24	2	2	2	UA3Q00	"	33,820	233	26	63	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	MARSHALL ISLANDS					
YU3ER	28	4,032	55	11	31	UA3UCD	"	33,024	245	29	67	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	KX6DS	1.8	14,246	150	16	18
YU2LLL	"	264	17	4	8	UA3TRY	"	31,668	220	21	63	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	NEW ZEALAND					
YU2CT	21	201,360	683	31	89	UA6LFO	"	26,040	216	22	71	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	ZL1AIZ	A	59,052	188	46	68
YU1SZ	"	49,358	351	21	53	UA3GEC	"	24,695	289	17	38	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	ZL2BDC	"	2,772	36	13	15
YU7MGU	"	15,555	117	22	39	UA3TGO	"	21,840	183	27	64	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	PHILIPPINES					
YU10X	14	476,047	1451	37	106	RV3DN	"	21,357	250	17	46	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	WA7CQE	"	23,952	223	18	41
YT3A	"	417,600	1222	36	108	RV30M	"	20,475	102	30	75	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	/DV2	21	70,928	465	17	35
YU7AU	"	268,499	942	32	89	RV3DVC	"	20,119	127	14	45	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	KD6TB	"	13,810	140	17	32
YU7RU	"	256,850	1025	31	79	UW4CN	"	18,912	123	30	66	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	/DU2	7	9,432	91	13	23
YU7BJ	"	220,500	995	28	77	RZ3DZ	"	15,662	115	18	64	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	SAIPAN					
YU1KQ	"	159,520	943	24	56	RA6AJQ	"	15,028	180	14	38	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	NH6J/KH0	A	3,334,986	3721	112	190
YU1HA	"	100,881	558	27	72	UA3DMJ	"	14,280	109	30	54	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	SOUTH COOK ISLANDS					
YU4EJC	"	55,683	458	17	52	UA4ANZ	"	12,851	93	25	47	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	ZK1XU	A	90,043	262	56	71
YU3TE	"	48,070	427	21	53	UA4CAR	"	12,844	126	16	47	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	ZK1XT	21	225,432	1224	22	40
YZBA	7	637,144	2017	36	110	RV6AF	"	11,826	83	25	56	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	ZK1XR	14	1,360	30	11	9
YT3M	"	472,102	1664	34	103	UA4SSS	"	11,431	114	24	56	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	ARGENTINA					
YU2AKL	"	120,201	732	27	78	UA1AUA	"	9,804	98	20	37	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	LU8DD	A	3,989,814	3030	134	315
YU30J	"	113,564	979	31	85	UA1CFE	"	7,632	162	14	36	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	LU8UO	"	348,530	890	70	122
YU2LCF	"	29,025	226	16	59	UA6JDF	"	7,360	160	14	32	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	LU1EWL	"	231,819	557	59	88
4N1A	3.5	200,655	1911	24	81	UA3QJL	"	6,027	95	18	23	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	LU7J/J	"	29,526	214	46	65
YU3RU	"	141,944	1037	20	68	UA4CDL	"	4,631	76	18	32	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	LU4JFM	21	561,200	1654	30	85
4N3E	"	131,024	1276	15	61	UA1CED	"	3,999	96	11	32	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	LU10Z	"	26,502	223	14	28
YU4EU	"	112,926	864	22	65	UA1ABB	"	3,043	230	11	15	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	BRAZIL					
YU7PFR	"	61,855	486	20	69	UA3TF	"	754	45	11	11	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	PT7AA	A	109,142	451	23	59
YU7DWW	"	45	6	3	6	UA3SET	"	672	26	9	19	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	PY2KP	"	70,224	201	57	75
YU7BW	1.8	46,209	527	14	59	UA6L28	"	1,200	31	7	18	UB5KEG	"	5,000	75	17	33	UB5ZFX	"	4,218	76	9	28	PY20HJ	"	13,170	73	33	37
YU4YA																													

NETHERLAND ANTILLES		W3GU		574,992 676 88 209		CANADA		U.S.S.R. (ASIATIC)		CZECHOSLOVAKIA			
PJZFR	A 5,434,550 4071 123 328 (Opr. W8ZF)	K3WJ/V	353,726	433	91 207	V02WL	886,049 4639	63 128	UZ9BAY	3,881,148 2745	126 377	DK5R	3,865,496 3178 141 443
PERU		K3WMA	306,504	424	82 176	VE2UWS	352,640 1016	49 96	UZ9BWW	2,085,448 1903	102 290	DK5W	2,538,892 2369 125 384
OÄZV	A 940,168 1299 89 159	K3SO	165,807	303	63 144	VE3IY	1,763,784 2011	110 264	UZ9CWA	1,132,305 1453	77 208	OK3KAG	1,467,525 2025 103 322
TRINIDAD		WA4WJ	564,566	617	113 245	VE3JW	8,908 122	14 20	UZ9OWE	406,526 932	49 132	OK3KCM	1,066,736 1872 91 228
9Y4VT	A 5,676,536 4646 122 290 (Opr. OH2BH)	WA4CTC	453,120	516	103 217	VE4AL0	437,400 1322	61 101	UZ9XWA	315,720 653	50 130	OK3RJB	695,652 1179 89 259
URUGUAY		W41R	416,712	555	93 198	VE6CSE	13,630 137	25 22	UZ9CYP	313,467 699	52 125	OK5SSM	401,580 1025 66 164
CX5AO	21 1,300,025 2949 37 112	WA4QOV	384,769	551	89 174	VP48Z	4,992,390 4612	117 325	UZ9OWD	256,816 914	40 86	OK3RKA	359,900 712 70 166
VENEZUELA		W24Z	357,870	435	98 204	CY8SAB	3,316,973 4039	95 252	UZ9OXM	197,575 556	63 112	OK1OAZ	344,469 1020 51 148
YV5TK	A 4,839,410 3444 134 332 (Opr. K5GN)	W4LVW	270,144	391	82 170	AFRICA			UZ9OXI	100,495 562	40 61	OK2KMR	240,856 750 55 132
K3UOC	"/VY4	W400	260,568	351	97 185	MADEIRA ISLANDS			UZ9XWW	228 9	6 6	OK3KTD	227,424 706 59 147
YV7QP	28 2,664 49 10 14	K8UNP/4	256,680	351	93 183	DF8ZH/CT3	2,251,956 2283	87 245	UZ9CWA	781,334 1634	90 137	OK3KYR	161,568 447 48 128
YV5JUX	21 23,403 273 9 20	KA4EDW	154,508	264	69 145	NAMIBIA			UZ9BWA	681,724 1077	81 161	OK1KQJ	151,962 368 58 128
YV4ABR	** 4,354 107 7 7	WS4E	143,252	264	81 155	ZS3/W6QL	1,722,951 2343	70 189	UZ9BWA	599,890 1290	85 154	OK1ORA	129,762 346 50 128
YX5A	14 1,065,860 2637 33 104	W2SR/4	124,865	214	75 146	ASIA			UZ9CWO	291,166 865	80 117	OK1KZD	122,108 470 46 132
YV3AGT	1.8 147,588 591 21 63	W4PRO	122,100	236	60 125	PEOPLES REPUBLIC OF CHINA			UZ9BLW	271,284 658	78 110	OK1KLV	101,170 407 38 96
YV10B	** 51,042 365 12 35	WB4BBH	111,607	181	81 152	BY1PK	579,924 2832	61 117	UZ9BOW	255,510 939	45 122	OK3KGO	41,850 300 20 55
MULTI-OPERATOR SINGLE TRANSMITTER NORTH AMERICA UNITED STATES		KS0TI/4	94,954	177	64 133	BY4AA	281,214 1139	64 89	UG7GWL	2,519,400 2763	87 236	OK3KZA	41,607 421 20 47
K1KI	3,477,100 2180 134 416	W4KO	56,304	144	46 92	BY5AA	114,912 686	35 73	ARMENIA			OK2KPS	35,245 289 26 69
KM1C	2,251,770 1666 120 350	K4LW	8,254	83	35 64	BY5RA	95,942 1012	35 42	AZERBAIJAN			OK1KOK	34,755 190 30 75
K1XM	1,610,046 1359 114 300	KB4LN	1,736	24	11 17	INDIA			UD7DZA	61,110 219	35 70	OK2KLI	27,768 175 31 73
KY1H	1,024,380 1138 89 226	KSRR	1,039,346	954	118 279	VU2TEC	30,690 212	20 35	UD7DWZ	30,958 230	10 36	OK2KHF	20,064 270 13 63
AK1L	459,796 574 79 205	W5ASP	464,646	638	84 175	ASIA			RL8PYL	3,618,897 2874	133 354	OK3KHO	7,515 98 15 30
WB1CNM	46,965 303 49 106	N8ND	2,031,253	1617	143 296	JAPAN			UL8LWA	735,300 1460	50 130	OK3KSO	3,328 65 8 18
N2RM	2,893,366 1875 130 407	N8VR	1,319,921	1474	102 211	JA1YBK	1,774,676 1787	119 242	UL8LWU	103,536 431	36 77	ENGLAND	2,456,524 2879 108 305
N2PP	1,495,713 1300 108 301	K6ZM	1,297,545	1316	120 225	JS1JRZ	1,242,362 1506	111 187	UN9AWA	32,524 244	11 36	FINLAND	2,377,151 2415 129 368
K2NJ	1,461,465 1202 113 310	NGAW	1,258,631	1275	117 224	JA1YAD	731,340 1075	97 158	UZBKEZ	610,926 1059	70 163	OH2VY	1,833,350 2312 90 280
KU2C	873,633 825 118 263	W9CA	528,480	656	107 181	JA1YFG	485,780 822	91 136	TURKOMAN	303,456 692	55 119	OH6AW	1,107,478 1793 88 226
W2UI	329,807 449 81 190	KA9P	513,450	670	111 204	JA1YAG	81,065 233	68 87	UZBEK			OH2BAH	361,678 789 77 201
K2TD	314,784 402 85 203	K4VX/#	398,360	658	88 142	JA1YCL	70 20	8 6	FRANCE			OH9AB	182,546 595 47 135
N3ED	2,905,875 1777 138 429	W9NA	346,764	564	84 129	JE2YRD	976,088 1461	90 148	GERMANY (FRG)			OH5AF	73,659 278 40 89
K300	2,530,456 1626 138 398	KJ0G	306,070	470	80 161	JA2YDC	311,634 620	76 123	EUROPE			OH6AA	27,864 154 34 74
KT3M	1,809,804 1584 111 291	NM0F	189,388	296	79 147	JA2YKQ	27,413 131	35 44	BULGARIA			F5IN	3,403,656 3168 124 368
K3NZ	1,217,160 1075 116 276	BARBADOS	807,225 1490	72 163		JAB8YU	457,532 807	86 128	DL0IU	1,284,840 1614	106 281	OH2YV	2,377,151 2415 129 368
W3AP	1,026,292 874 116 296	BELIZE	5,068,554 4362	141 373		JA8YBY	56,286 205	43 63	DL0MM	1,020,006 1394	95 256	OH8AV	1,833,350 2312 90 280
KB3MM	736,848 751 96 248	V3A				THAILAND			DL0NW	963,558 1256	108 290	OH6AW	1,107,478 1793 88 226
K3MD	615,940 741 90 209					HS0A	1,978,767 3034	102 241	DL1FA	522,518 1028	78 196	OH9AB	182,546 595 47 135

FULL CHARGE FAST

Replace your old slow charger.
Handheld battery packs full to capacity in as little as

45 Min.


STATE OF THE ART DESIGN.

PROVIDES PRECISE MEASUREMENT AND CONTROL OF CHARGE AND DISCHARGE PARAMETERS.

- F** 1. Power connector and transformer supplied
- E** 2. Pocket size charger 4"x2½"x1"
- A** 3. Laser trimmed precision resistors
- T** 4. Reverse polarity protection built in
- U** 5. Solid state circuit measures charge and discharge
- R** 6. Automatic shutoff
- E** 7. Simple modification to adapt (special adapter for ICOM)
- S** 8. Controlled automatic discharge and auto switch to charge mode eliminates memory problem with Ni-Cd Batteries

Quick charge or discharge

Utilize your Ni-Cd To full capacity

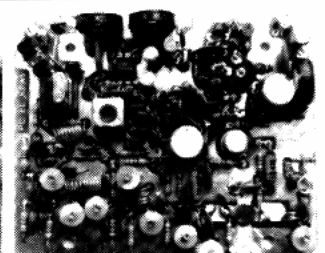


115 VAC or
12 VDC to
24V
Home **\$149.95**
Auto
R.V.
Boat
Plane

Mail Orders To:
NRG CONTROL
P.O. BOX 1602
Chelan, WA 98816
(509) 682-2381

Plus 3.50 Postage & Handling
Washington Residents add 7½ %

AMATEUR TELEVISION

KPA5 1 WATT 70 CM ATV TRANSMITTER BOARD

- **APPLICATIONS:** Cordless portable TV camera for races & other public service events, remote VCR, etc. Remote control of R/C airplanes or robots. Show home video tapes, computer programs, repeat SSTV to local ATVers. DX depends on antennas and terrain typ. 1 to 40 miles.
- **FULL COLOR VIDEO & SOUND** on one small 3.25x4" board.
- **RUNS ON EXTERNAL 13.8 VDC** at 300 ma supply or battery
- **TUNED WITH ONE CRYSTAL** on 426.25, 434.0, or 439.25 mHz.
- **2 AUDIO INPUTS** for a low Z dynamic and line level audio input found in most portable color cameras, VCRs, or home computers.
- **APPLICATION NOTES & schematic** supplied for typical external connections, packaging and system operation.
- **PRICE ONLY \$159** delivered via UPS surface in the USA. Technician class amateur license or higher required for purchase and operation.

WHAT IS REQUIRED FOR A COMPLETE OPERATING SYSTEM? A TV set with a TVC-2 or TVC-4 420-450 mHz to channel 3 downconverter, 70 cm antenna, and coax cable to receive. Package up the KPA5 add 12 to 14 vdc. antenna, and any TV camera, VCR or computer with a composite video output. Simple, eh?

CALL OR WRITE FOR OUR COMPLETE CATALOG & more info on atv downconverters, antennas, cameras, etc., or who is on in your area

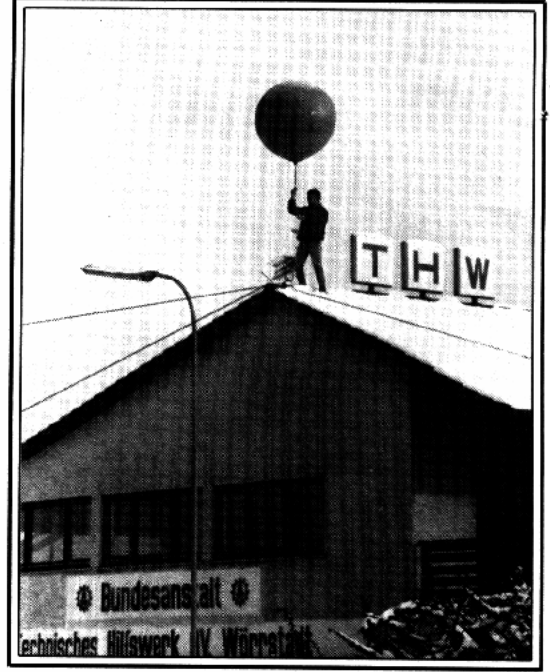
TERMS: Visa, Mastercard, or cash only UPON COD by telephone or mail. Telephone orders & postal MO usually shipped within 2 days. All other checks must clear before shipment. Transmitting equipment sold only to licensed amateurs verified in N984 Callbook. Calif. include sales tax.

CIRCLE 68 ON READER SERVICE CARD
(818) 447-4565 m-f 8am-6pm pst.

P.C. ELECTRONICS
Tom W6ORG Maryann WB6YSS

2522 Paxson Lane
Arcadia CA 91006

GERMANY (GDR)				JAPAN				
Y33ZL	1,217,115	2173	99 288	J43YBF	4,519,400	3539	149 323	
Y45ZM	160,380	486	56 124	J4ZYKA	4,383,500	3166	159 341	
HUNGARY				J4Y8BA	3,861,927	3190	142 291	
H66N	3,403,056	3470	127 369	J4YKCC	3,012,256	2628	137 279	
H67B	3,091,548	3253	125 357	J47YAA	2,014,096	2164	123 220	
H65A	3,043,782	3039	127 366	J47YFB	1,975,125	2057	110 235	
H69R	2,774,904	2825	130 376	J41YXP	349,180	605	93 128	
H46KNG	1,150,560	2016	86 196	J43YUA	41,800	165	38 57	
H88U	815,300	1405	81 229	EUROPE				
HA7KLG	802,990	1518	81 214	CZECHOSLOVAKIA				
HA3KNA	779,868	1329	92 232	OK7AA	5,741,950	5260	139 436	
HA2KMR	579,072	1439	64 192	FINLAND				
HABKUC	521,118	1323	69 165	OH7AB	3,794,640	4357	124 365	
HASKDX	478,066	845	91 211	GERMANY (FRG)				
HABKAX	431,460	851	80 190	DL8KF	3,809,040	3739	135 389	
HASKFZ	238,648	802	59 125	DF8BV	2,872,155	3111	122 393	
HAKNXX	155,680	563	45 115	DL8WU	1,587,404	2193	91 273	
HA7KMP	137,760	506	52 112	LITHUANIA				
HABKCK	116,433	502	42 111	UP7A	6,882,560	6017	152 456	
HABKUN	86,800	387	41 99	QRPP				
JERSEY				YU3BC	A	544,810	905	74 227
GJ8AAA	2,987,988	3635	110 343	SP3KEY	"	492,900	784	82 236
LIECHTENSTEIN				R85UJ	"	267,997	552	74 189
HB8CVQ	760,194	2202	64 205	4X8IF	"	246,019	544	47 110
LUXEMBOURG				K3WS	"	241,345	376	76 159
LX9BV	662,354	1566	64 189	K7SS	"	192,700	437	62 102
NETHERLANDS				OK3IAG	"	148,400	443	55 157
PA3DQW	249,150	1002	46 119	G4ELZ	"	130,938	464	41 116
PA8KOR	183,654	444	56 123	DL9YX	"	95,064	213	62 171
NORWAY				J47AS	"	86,612	282	48 70
LA5X	1,643,895	2179	105 346	Y088SE	"	86,410	460	41 97
POLAND				SM5CCT	"	66,096	315	39 105
SP6PAZ	1,149,832	1653	93 259	OK1DKR	"	53,620	276	35 105
SP5PBE	981,704	1504	95 233	SP5LM	"	44,100	312	31 74
SP1PEA	333,648	835	69 183	N1AFC	"	43,785	156	38 67
SP6KSD	175,957	604	47 132	G4FDC	"	38,437	179	35 84
SP9KAO	13,800	146	27 42	UB5REN	"	30,996	154	37 89
SP7KTE	3,650	40	18 32	Y03CDN	"	28,896	190	30 66
ROMANIA				UA1ANP	"	28,036	289	20 66
Y05KTB	22,560	131	18 62	W1SOX	"	26,700	129	29 60
SPAIN				W4OEL	"	26,076	95	37 69
EA3VY	3,391,388	3484	123 361	J41XDA	"	18,728	134	22 56
SWEDEN				OK1DZD	"	16,575	128	27 48
SK6TW	1,095,192	1988	87 241	G4MOC	"	16,510	150	16 49
SK2AU	669,146	1541	69 209	Y23UA	"	14,620	126	24 62
SK5EU	518,425	1451	62 171	WB7APW	"	14,454	87	31 35
SK6EI	268,755	754	66 139	DL4FN	"	10,988	124	15 52
SM6DYK	225,036	840	47 124	WT4G	"	10,579	66	29 42
SWITZERLAND				Y26JD	"	10,416	200	10 38
H89AJ	398,088	1115	66 182	Y24TG	"	9,480	88	18 42
UN-VIENNA				G4KIU	"	8,990	104	15 38
4U1VIC	38,088	306	23 46	N8COA	"	8,432	62	30 38
YUGOSLAVIA				OK1DRO	"	8,190	111	12 53
YT2R	1,449,920	1911	102 292	YU1PKC	"	6,790	66	17 53
YT3T	1,363,401	1889	103 284	Y08CMB	"	6,750	73	15 39
YU3AI	933,524	1562	78 214	Y04BOV	"	6,060	72	17 43
YT2C	744,030	1354	80 235	Y23TL	"	5,565	80	13 40
YU3GHI	113,760	494	41 117	EA1KC	"	5,424	79	14 34
YU3DFT	19,434	120	27 52	L21WY	"	2,170	48	11 24
USSR (EUROPEAN)				VE3NYT	"	1,102	58	9 10
BYELO-RUSSIA				SM7CZC	"	736	20	8 15
UC1AWC	683,602	1448	85 193	UR2RBJ	"	300	16	4 16
UC10WA	201,299	658	50 143	Y24HG	"	270	19	6 9
ESTONIA				L22RM	"	110	6	4 7
UR1RWX	2,620,691	2865	127 380	424NUT	21	189,306	834	22 56
UR1RYV	415,777	902	73 204	4X6NM	"	109,080	511	23 53
EUROPEAN SSR				Y05BQ	"	20,328	117	24 42
UZ4FWD	3,046,956	2763	144 419	JH9HXF/1	"	18,644	111	22 37
UZ5LWZ	1,783,960	1979	132 383	UB5WAB	"	15,447	117	29 38
UZ4WVB	1,049,792	1639	97 279	UR2CR	"	10,143	84	17 46
UZ3AXH	571,298	1182	78 223	J41KUU	"	1,608	24	12 12
UZ3AYR	507,318	1011	74 208	SP2UU	"	1,071	21	9 12
UZ1TWB	419,328	1137	58 194	G3CWL	"	952	24	8 9
UZ3WWW	378,852	824	72 190	R85OZ	"	204	12	4 8
UZ3AZM	318,375	915	54 171	UA8SAU	14	63,770	405	22 48
UZ3AXX	313,922	1007	64 174	UC2AAX	"	45,852	889	17 51
UZ3AWP	287,976	951	63 150	JAZVKD	"	35,526	222	21 41
UZ4LWU	227,162	728	46 128	IAKRF	"	25,546	257	14 39
UZ3DXW	184,275	810	46 129	JA1BN	"	22,512	147	23 33
UZ3SWW	101,960	416	52 143	OK2BMA	"	10,575	109	15 30
UZ3AZG	77,625	399	31 84	PABADT	"	3,552	65	8 16
AFRICA				OZ1JVN	"	3,000	69	8 22
CEUTA				RA3GD	"	1,776	52	7 17
EA9CE	9,374,244	6088	121 396	G3DOP	"	1,716	62	7 15
ASIA				VE7EKS	"	150	15	3 2
GEORGIA				G3VMY	7	21,948	275	13 49
RF3V	12,666,192	7131	157 487	SP5CJP	"	15,720	120	12 54
ANTIGUA				OK1DCP	"	12,400	190	14 38
CEUTA				EA6NP	"	7,141	141	10 27
AFRICA				YU2CAH	"	1,081	34	5 18
CEUTA				YU10WW	"	817	42	4 15
ASIA				JH7ASD	"	252	17	4 3
GEORGIA				HA6AIM	3.5	17,531	353	7 40
ASIA				OK1JFF	"	13,684	304	7 37
GEORGIA				UP2BPN	"	9,196	203	8 30
ASIA				HA8LKB	"	7,884	207	6 30
GEORGIA				SP9GKM	"	7,650	220	6 29



The sky hook for DF0THW's 160 antenna.

OK2PAW	"	5,215	144	5	30	PA3AFF	"	72	8	3	6
Y25XA	"	4,680	110	7	33	UB5AFM	1.8	15,043	253	8	41
Y26WM	"	4,068	109	6	30	OK1DRO	"	8,400	198	6	36
Y2IRG	"	2,895	80	5	29	U050LW	"	5,696	157	6	27
Y24ZF	"	2,624	81	5	27	OK3CXS	"	4,323	145	6	26
OK1DIQ	"	2,580	87	5	25	UB5KBJ	"	4,064	121	6	26
OK1MNV	"	1,675	68	4	21	OL1BK0	"	3,944	114	5	29
SP9NSV	"	1,840	63	4	11	SP5SDA	"	2,937	85	6	27
Y23OH	"	703	38	3	16	OL4BOR	"	1,403	62	4	19
Y26EH	"	345	23	2	13	UB5VAA	"	920	32	6	17
Y23JF	"	165	16	2	9	UA3PNN	"	120	21	8	15
N7NV	"	112	8	4	4	Y06KKK	"	56	10	3	7

CHECK LOGS

Our thanks go to the following stations who sent in check logs: AK2H, DL4TH, DL5IJ, DL9VDD, EA7CJM, EA7FTN, EA9AM, HA4KYH, HA7KPW, HA8LG, KL7AF, KL7UR, KY8A, LA5DW, LA9ZV, LA8EH, LZ1DO, LZ1KAU, LZ1CW, LZ21A, LZ2EE/M, LZ2JE, LZ2KSB, NZRT, OH1XX, OH1KQ, OH2RL, OH3HS, OH3WR, OH3MC, OH4RM/3, OH5FA, OH6AK, OH6DZ, OH6OP, OH6XA, OH6NH, OH7NW, OH8ZX, OK1IAR, OK2BPU, OK2BQU, OK2BSG, OK2AG, OK3CGT, OK3CZ, OK3EQ, OK3CQD, OK3-28011, OZ1ABA, OZ1EUO, OZ1FGS, OZ1IDL, OZ1IPP, OZ1JLX, OZ1JNR, OZ2E, OZ2JJ, OZ4RS, OZ4XX, OZ5PA, OZ5S, OZ7GM, OZ7JU, OZ8AE, PA3BFH, PA8PUR, PY1LO, PY2MT, PY3CJ, RA1OAZ, RA1WA, RA3AOD, RA3AR, RA3EF, RA3NB, RA3VO, RA4NBR, RA6AHA, RA8AA, RB5BH, RB5TN, RB5OB, RB5RR, RB5UA, RB5JU, RB8HZ, RC2AP, RL7GC, RL7GE, RT5JH, RV4LA, SK8RQ/5, SM2LCI, SM2NTU, SM5APS, SM5BVC, SM5CVC, SM5DCC, SM5FUG, SM5LL, SM6BGA, SM6BZE, SM6CDN, SM6MNH, SM6OL, SM6OOF, SM6OPM, SM7ASN, SM7KNW, SM7KWE, SM7NEX, SM7OKC, SM8CSX, SM8LZT, SP2GJV, SP2HOU, SP2NAX, SP2GBL, SP2GUV, SP2DKI, SP2NA, SP2HFL, SP2GOW, SP2BRN, SP2GUC, SP2US, SP2ZDX, SP4ETO, SP4LKT, SP4EAK, SP4JWR, SP4DCR, SP4DGN, SP5CCO, SP5ENA, SP5CWO, SP5ATO, SP6BN, SP6NV, SP6DMI, SP6BFK, SP7HO, SP8JMA/8, SP8GC, SP9ADY, SP9BHH, SP9WV, UA10GI, UA10D, UA1ZGD, UA1ZGU, UA3AEX, UA3AGW, UA3AMV, UA3JAN, UA3ARI, UA3DB, UA3DFV, UA3DIW, UA3DL, UA3DUS, UA3EDQ, UA3ET, UA3IAK, UA3ICJ, UA3IDT, UA3LCC, UA3MDV, UA3NBT, UA3PB, UA3PDW, UA3PFF, UA3PGZ, UA3QJC, UA3QLC, UA3SEY, UA3TBM, UA3UAR, UA3UAV, UA3VGY, UA4CGP, UA4COQ, UA4HJA, UA4HKJ, UA4HL, UA4HLL, UA4HML, UA4LFU, UA4NBD, UA4SBW, UA4UBG, UA4WAP, UA4YA, UA4YAO, UA4YZ, UA6ADH, UA6AHF, UA6AUT, UA6HNU, UA6JDE, UA6JDW, UA6JW, UA6LON, UA6PCH, UA6YCI, UA9CBO, UA9DC, UA9FJZ, UA9HBM, UA9FOV, UA9OP, UA9QBT, UA9SEX, UA9SGN, UA9UGG, UA9XSE, UA9YIE, UA9FEO, UA8KCL, UA8QA, UA8QCA, UA8ZC, UB4LAA, UB5AGL, UB5AKA, UB5ECB, UB5FCE, UB5FDH, UB5FDM, UB5IMD, UB5LJ, UB5LIE, UB5JS, UB5QJA, UB5UCH, UC2AII, UC2LB, UJ8JMM, UL7VAD, UM8MP, UO5ODA, UO5OO, UP2BOW, UQ1GWY, UQ2GCV, UQ2GLQ, UQ2GLY, UQ2GMC, UQ2PG, UR2JU, UR2ZU, UT4UH, UT4UN, UT4UWJ, UT5UCU, UT5UDI, UT5UHR, UV6AZ, UV90K, UV9UL, UV9EG, UV9WH, UV9AO, UV9XZ, UV9YG, UZ3ER, UZ2HR, UZ2FW, UZ3EWW, UZ4SNW, W4KM, W6FGV, XE2AAM, Y22EO/A, Y22HU, Y22ON, Y22XO, Y22WB, Y23CO, Y24GE, Y24ND, Y24XD, Y24XJ/A, Y24XM/A, Y24WJ, Y24ZH, Y25GH, Y25JU, Y25SM, Y26GN, Y26IL/A, Y26SO, Y26SM/A, Y27IO, Y27KO, Y27YH, Y28FC, Y28IL, Y31TF, Y390H, Y41WM, Y43SM, Y43VA, Y44YK, Y47MN, Y54ZA, Y55NA, Y75VL, Y02ARV, Y02BON, Y03AAQ, Y04BI, Y05YJ, Y05TA, Y06LV, Y08BV, YU1RS-1066, YU2CKL, YU4EJA, YU7AJD, YV4ABR, F11ARQ, EA8-370082.

Disqualifications: AG2S excessive duplicates (4.0%) and unverifiable contacts; 4N4C excessive duplicates (6.1%).

Phone Results Corrections

Errata: UP2NK was a SSB score and #1 in Lithuania. HB0AEN was HB0AON; DF5BM was a CW log; DK1HY was DK1HV; DL9AV was DL7AV; Y5ANL was Y54NL; UG2GLW was UQ2GLW; K1OX should be K10X (Opr. KC1F); and K3RV/A, the #2 USA and #6 World 14 MHz score was omitted, his score was 914,132/1798/36/137.