

# 2002 ARRL International DX Contest Phone Results

“If it’s too good to be true, it must be ARRL DX phone.”

After the spectacular conditions enjoyed two weeks previously during the ARRL DX CW, contestants can hardly be blamed for holding their collective breath. I’m sure many were watching the propagation indices all week, fearing that OI’ Sol would let loose with some mighty blast. But ’twas not to be and propagation was excellent—almost a repeat of the CW weekend.

How good was it? Just take a look at the solar indices for Saturday/Sunday...

CW Solar Flux—194/197; Ap—5/8; Averaged K—1.3/2.3

SSB Solar Flux—191/183; Ap—5/10; Averaged K—1.6/2.5

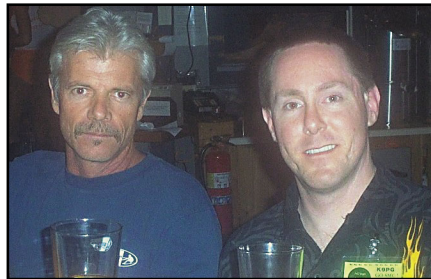
I’ll take those numbers any time!

## Records

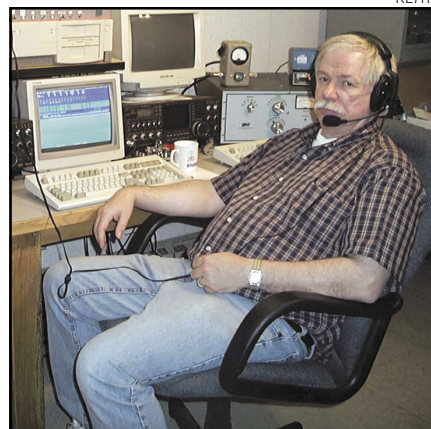
If conditions are good, then records must fall like tenpins, right? Maybe not! When the dust had settled and the log checkers had done their work, only nine new records were set—eight of them by DX stations.

The single new US-VE record was in the Single-op All-Band High-Power (SOAB-HP) category. Bob Shohet, KQ2M, broke his old record from 2000 with 6.78 Megapoints (M). Meanwhile, eight new calls joined the ranks of the DX record holders:

- SN2B—operator SP2FAX—set a new European SOAB-HP record with 3.964 M. M6T also broke the old record (3.828 M) as did GM4YXI (3.342 M).
- LY2PAJ at LY5A repeated last year’s feat, setting the SOAB-QRP record for Europe with 801 kilopoints (k) and smashing last year’s 540 k effort.
- The European SOAB-Assisted record fell to YT7A with 2.525 M. S51DX was right behind at 2.484 M, also breaking the old record.
- JH7LRS set a new SOAB-Assisted record for Asia with 1.848 M.
- The African Multi-Single (M/S) record is now EA8BH’s due to a fine 6.516 M score.
- Asia also has a new M/S champion—JH7PKU’s team made 2.876 M to set the standard.
- The 9A1A Multi-Multi (M/M) 7.764 M raised the European bar by 20% from I3MAU’s 1992 record of 6.1 M.



Overall DX Combined High Power Single Operator champion Mike, KH6ND, shares a celebration in Dayton with DX Phone champion Paul, K9PG, operator at ZF2MM.



Rich, KL7RA, the #3 finisher in DX 15-meter Single-Band.

- EA8ZS’s 5.032 M set a new African M/M record.

## Exceptional Performances

- Mike Gibson, KH6ND, piloted KH7R to a fifth World Combined Score trophy (1981, 1988, 1991, 2001, and now 2002). In the process, he missed breaking the Oceania SOAB-HP record by 1%.
- There is something special going on up in Alberta. The crew at VE6JY did some serious contesting last March submitting several top single-band scores. VE6WQ was #1 on 15 meters with 1.044 M over N3RD and N2TX far to the east and south. VE6MA finished #3 on 40 meters, while TI2MGO put the station in the top 20 with 348 k using a 7/7/7/7 stack of OWA Yagis. Visit [narc.net/ve6jy](http://narc.net/ve6jy) for more.

## US-VE QRP

The QRP motto is *Vi Minore, Plus Gaudium* or *Less Power, More Joy*. There was plenty of joy to go around this year. Tom, N4KG, walked away with top honors by a huge margin and a big 769 k score. In a surprising #2 finish from the Pacific Northwest in EWA, Dan, K7MM put up 469 k.

## US-VE Low Power

As mentioned earlier, Yuri, VA3UZ, won by a whisker over Paul, K8PO, in a really close finish. If three multipliers had been subtracted or added, respectively, these guys would have traded places. Bill, ACØW, put a MN station in the third position with 1.592 M and Les, N1SV, represents New England in fourth.

## US-VE High Power

Bob, KQ2M, continues to add to his string of victories, outdistancing challenger Dave, KM3T, at K5ZD (5.378 M) with a score of 6.586 M—and another record. Ken, K4ZW, was close behind, along with John, VE3EJ and Mike, W9RE.

## US-VE Assisted

SO-Assisted is a popular category, particularly among the DXers who are looking mainly for multipliers. 203 logs were submitted this year. Running high power, perennial winners Chas, K3WW, and Ray, W2RE, traded places this year with K3WW finishing in first place and both comfortably ahead of the pack.

## US-VE Single-Band Entries

To really get to know a band, do a 48-hour DX contest in the single-band category. You will find unusual openings—skew paths, long path, sunrise, sunset, sporadic-E—that you might not be able to take advantage of in an all-band effort when other bands are open.

### 10 Meters

Although he was unable to repeat his record-setting performance of 2000, Bill, W4ZV, was once again the leader with 893 k. Chuck, W5PR, and Neal, K4EA, were hot on Bill’s heels in second and third

## Top Ten

### US

#### Single Operator High Power

KQ2M	6,586,785
K5ZD (KM3T, op)	5,378,688
K4ZW	5,198,226
VE3EJ	5,180,736
W9RE	5,163,342
N2YT	4,858,050
VY2SS (K6LA, op)	4,044,504
AA1K	3,958,254
WB9Z	3,921,681
K3ZO	3,907,806

#### Single Operator Low Power

VA3UZ	1,802,808
K8PO	1,786,536
AC0W	1,592,604
N1SV	1,458,972
N5AW	1,421,766
K8EP	1,393,560
N4TZ	1,374,744
W2TZ	1,326,051
K1VR	1,309,608
WS1A	1,223,046

#### Single Operator QRP

N4KG	769,860
K7MM	469,572
N2XT	370,296
W3EWL	350,625
WA8ZBT	322,575
KB3TS	292,746
KK0Q	281,220
N0UR	254,364
N3GXY	167,322
VE6BF	160,890

#### 10 Meters

W4ZV	893,025
W5PR	833,112
K4EA	727,665
K9NW	722,502
K5RX	721,020
K4WI	657,189
VO1MP	616,308
K7XZ (K1MY, op)	589,950
K4VX (N9JF, op)	570,630
K7QQ	551,304

#### 15 Meters

VE6WQ	1,041,216
(@VE6JY)	
N3RD	994,698
N2TX	920,586
W7WA	904,860
K6HNZ	425,907
AD4L	411,336
(@N4AF)	
WA7AR	322,050
VF7J	194,400
VE7ZBK	122,604
N1HRA	109,824

#### 20 Meters

N7DD	488,436
WW4M	362,880
K1QS	341,649
VE6EX	218,442
(@VE6JY)	
N9HCA	178,668
W7EB	175,491
K4VUD	173,280
KB1EAX (WA1LNP, op)	153,846
W0ID	143,748
W5ZO	103,788

#### 40 Meters

K4XS	234,600
WQ2M	69,423
VA6MA	62,622
(VE6MAA, op)	

W2MF	56,832
K7KR	41,382
VE7IG	39,168
K8DJC	34,506
W9GXR	28,350
K8AO	25,575
KD4RH	17,784

#### 80 Meters

AA1BU	92,664
KM1R	21,576
AC8Y	6,048
VA6DXR	2,592
(VE6JY, op)	
K16PG	858

#### 160 Meters

AA4MM	2,754
N8LIQ	240

#### Single Operator Assisted

K3WW	5,128,524
W2RE	4,846,485
K2DM	3,387,912
W1GD	3,038,706
W2GD	2,997,558
W2GDJ	2,833,056
N8TR	2,804,490
N2MM	2,802,462
K5KG	2,608,392
AA3B	2,489,619

#### Multioperator Single Transmitter

K8AZ	4,803,405
W0GU	4,557,558
W4MR	4,458,690
K8CC	4,245,648
K5NZ	4,073,994
K0DU	3,759,465
K2XR	3,706,680
NE3F	3,509,505
K5NA	3,386,358
AA1ON	3,329,214

#### Multioperator Two Transmitters

K1AR	10,978,902
K4JA	10,436,928
K1IG	9,132,552
KR1G	7,705,359
N4TO	7,296,330
K1IR	6,794,550
W5KFT	5,689,749
KB1H	5,651,208
VE6SV	5,390,784
K2RD	5,212,464

#### Multioperator Unlimited Transmitters

W3LPL	17,860,626
KC1XX	16,928,352
K9NS	15,504,795
W2FU	11,211,258
W1FJ	9,843,207
N2RM	8,866,956
W3PP	8,380,587
K1TTT	7,748,055
K3NM	7,427,160
K3ANS	7,424,235

#### DX

##### Single Operator High Power

ZF2MM (K9PG, op)	9,125,403
8P5A (W2SC, op)	8,219,232
KH7R (KH6ND, op)	6,668,160
VP2E (N5AU, op)	6,330,636
T15/VE7CC	5,481,864
V47KP (W2OX, op)	5,045,256
WP2Z (N2TK, op)	4,595,331

SN2B (SP2FAX, op)	3,942,576
M6T (G4PIQ, op)	3,799,275
NH7A	3,680,040

#### Single Operator Low Power

P40P (W5AJ, op)	5,233,569
HK3JJH	1,954,578
J6/G3TBK	1,690,920
JH4UYB	1,148,490
JM1LPN	1,019,466
ZX2B (PY2MNL, op)	999,312
EA3CI	959,004
6Y8Z	872,505
EA1WS	813,768
XE2AUB	811,440

#### Single Operator QRP

TI5N (W8QZA, op)	949,200
LY5A (LY2PAJ, op)	801,216
F5BEG	372,960
F5NOD	202,206
JA2AXB	161,172
JR4DAH	156,600
LU1VK	116,376
RX9SR	93,174
IK7RVY	92,184
F6FTB	86,355

#### 10 Meters

ZX5J	598,959
PJ2K (K6RO, op)	568,800
ZF2AH	501,972
HC1HC	477,360
NP3X (KP4WW, op)	474,120
I4TJE	435,774
9A5Y	423,738
DF9ZP	419,136
IU2P	410,640
S50C (S55OO, op)	399,135

#### 15 Meters

P40A (KK9A, op)	640,917
OK1RI	450,180
KL7RA	446,217
9A1P	397,188
HR3J (JA6WFM, op)	393,120
IR4T	378,720
4O6A (Z32AF, op)	377,718
OH6AC (OH6CS, op)	363,255
OH6RX	359,778
IQ3A	351,900

#### 20 Meters

OH4A (OH6LI, op)	470,580
OH5LF	397,260
RJ1Z (RW1ZA, op)	330,315
OM5M (OM2RA, op)	327,960
CT1AHU	311,040
RA1ACJ	296,280
SM0W (SM0WKA, op)	269,394
IT9STX	235,338
S51CK	220,719
LY9A (LY3BA, op)	199,620

#### 40 Meters

GW7X (GW4BLE, op)	196,272
EA1DLU	113,100
DF3GY	85,800
9A4D (9A5WA, op)	85,065
JS2LGN (JA7KAC, op)	54,774
UT4UO	53,664
PY3NZ	51,357
PY6KY	18,093
OK2GG	16,695
LZ2RF	5,760

#### 80 Meters

YV5OHV	114,741
YV4FZM	105,435
OT2T (ON4UN, op)	60,228
I4AVG	59,469
S59CAB (S53CC, op)	49,770
YT6A	43,401
S57O	31,080
IV3OWC	30,135
SP6HEQ	19,908
UZ7U (UT3UA, op)	17,052

#### 160 Meters

YV1CP	13,068
HA5JI	3,315
S57M	2,295
F6CWA	1,302
DL7CX	828

#### Single Operator Assisted

8P6SH	2,634,864
YT7A (4N7DW, op)	2,515,590
S51DX	2,482,560
JH7LRS	1,822,356
OH6NIO	752,115
IZ5CML	447,393
7L4IOU	410,670
EA5FD	340,632
YL2LY	216,423
SN2E	160,785

#### Multioperator Single Transmitter

VP5B	7,713,498
FY5KE	7,480,368
EA8BH	6,508,608
PJ4G	5,865,552
TM5C	5,284,104
6D2YFM	5,180,097
V31DJ	4,575,501
FG/TO4T	4,230,882
CT9M	3,960,414
OM0M	3,574,977

#### Multioperator Two Transmitters

RU1A	4,824,360
HG6N	4,768,353
DL6RAI	4,387,770
OA4O	4,122,495
RM6A	3,327,168
EA5DFV	3,298,392
IO2A	2,653,410
J12KVW	1,676,700
JA1YFG	1,015,692
SP4KEV	647,328

#### Multioperator Unlimited Transmitters

VP5A	9,571,968
9A1A	7,659,792
9A7A	5,436,957
EA8ZS	4,882,500
V26S	4,419,519
LY7Z	3,883,932
YT9X	3,624,942
JA3YBK	3,531,990
LT1F	3,154,800
LY7A	2,171,325

the nearest competitor, Mike, WQ2M, at 69,423. Maurice, VA6MA, finished third with another VE6JY station entry from Alberta and Manny, W2MF, was fourth.

## 80 and 160 Meters

These sparsely populated categories are currently in the dozey doldrums waiting for the sunspots to return to their 11-year slumber. Nevertheless, Joe, AA1BU, and Leo, AA4MM, should be congratulated for their 92 k and 2.7 k efforts and discipline to deal with what must have been tough conditions on these bands.

## US-VE Multioperator

The multioperator categories account for a surprisingly large percentage of QSOs and operators. Behind every big multiop station score can be found two to more than a dozen operators working away.

The Midwest and Southeast duked it out for the title this year in Multi-Single. The crew at K8AZ scored 4.8 M from OH to squeak by W0GU's fine score of 4.56 M from CO. The NC station of W4MR was oh-so-close behind at 4.46 M, one of the tighter Top Ten finishes. The perpetually competitive K8CC team came in fourth from MI and K5NZ's crew placed 5th from STX.

Operating from K1EA's fine station, K1AR and associates prevented the operators at K4JA's equally impressive station from repeating last year's win in Multi-Two, but only by the slimmest of margins—10.98 to 10.44 M—one of this year's closest races. Tightly clustered a bit further back, KIIG from the sought-after state of RI, KR1G, and N4TO all put together good team efforts.

In a swap from the CW competition, the Multi-Multi of W3LPL took the top trophy of the terrific titans, hotly pursued by KC1XX, last year's tympanic titlist. The up-and-coming crew at K9NS was in hot pursuit for the bronze—much closer than in years past. Look out New Englanders! The big M/M stations also manage to find the most multipliers of any category—W3LPL bagged 149 on 10 meters, 155 on 20 meters, and put a DXCC together on 40 meters while KC1XX found an incredible 158 on 15 meters. W3LPL missed 5BDXCC by only 18 multipliers on 80 meters.

## Affiliated Club Competition

With all the hot conditions, the club totals are staggering. In the Unlimited category, the Yankee Clipper Contest Club pushed their totals to an all-time high of 372 M. The order remains the same as last year—Frankford RC (although FRC had a higher average score), Potomac Valley RC, and Society of Midwest Contesters (with a huge jump in par-

place, respectively. This year's peak rate was 194/hr compared to 215/hr in 2000.

## 15 Meters

While 10 meters was rockin' just above, 15 meters had more multipliers available and there was no shortage of QSOs. In an upset win from the Canadian plains, Hirsh, VE6WQ, at the controls of VE6JY's big station, took the #1 spot with 1.04 M.

## 20 Meters

The Top Ten on 20 was widely distributed with 7 call areas represented from Maine, to Alberta, to Arizona, to Florida. When the dust had settled on the "Queen of the Bands," Larry, N7DD, had put together a big 488 k score to win.

## 40 Meters

This category was dominated by Bill, K4XS, with 234 k—better than 3:1 over

ticipation to 141 logs).

The most popular club category is the Medium category and the North Coast Contest Club held on to the top spot despite a strong challenge from the Florida Contest Group. In the Local category, the Hudson Valley Contesters & DXers retained bragging rights at the top of the heap, fending off the River City Contesters again this year, 19 to 17 M.

## DX QRP

Guest operating from Costa Rica, Bill, W8QZA, took home the trophy at TI5N with an impressive 949 k. Right behind was LY2PAJ setting another European record from LY5A with 801 k. The top Asian finisher was JA2AXB with 161 k and from South America, LU1VK with 116 k.

## DX Low Power

While the US-VE category was extremely tight, not so in DX SOAB-LP where Bob, W5AJ, at P40P finished first with a big 5.2 M effort that would have been sixth in the High Power category. Pedro, HK3JJH's 1.954 M was second while G3TBK made an expedition to St Lucia to finish third with 1.69 M. JH4UYB placed 4th with the top score from Asia of 1.148 M and EA3CI was the European low-power champ at 959 k. XE2AUB contributed North America's top score of 811 k.

## DX High Power

In first place, the checkered flag went to Paul, K9PG, guest operating as ZF2MM from ZF2NT's growing station. Paul also put together some major rate and still managed to have an error rate of less than 1 percent. In second place, we find Tom, W2SC, in the Bahamas with 8.22 M, chased by Mike, KH6ND, with 6.67 M from KH7R's super Oahu QTH.

## DX Assisted

Overcoming the extensive European network advantage, 8P6SH bested the top European finishers 4N7DW at YT7A and S51DX with 2.63, 2.51 and 2.48 M, respectively. In fourth place, JH7LRS posted 1.82 M, the highest score from Asia by a wide margin.

## DX Single-Band

Single-band operation is even more popular from the DX side than from the states and Canada. Because the ARRL DX contest is targeted (i.e., DX works only US and VE) it is unlikely that there will be propagation to North America 24 hours a day from many DX locations. So many DX operators pick the "good" bands and stay there. Also, single-band makes a contest expedition less of a chore and leaves a little time for the beach.

**Table 2**

## Phone and Combined Sponsored Plaque Winners

Congratulations to the winners of the following sponsored plaques for the 2002 ARRL International DX Phone Contest.

Winner	Plaque Category	Plaque Sponsor
KQ2M	W/VE High Power Phone	Frankford Radio Club
VA3UZ	W/VE Low Power Phone	Dauberville DX Association
N4KG	W/VE QRP Phone	Jeffrey Briggs, K1ZM
K3WW	W/VE Single Operator Assisted Phone	Pete Carter, K3VW Memorial
K8AZ	W/VE Multioperator Single Transmitter Phone	Steve Adams K4RF
K1AR	W/VE Multioperator Two Transmitter	Northern Neck Contest Club
W3LPL	W/VE Multioperator Unlimited Phone	Western New York DX Association
AA1BU	W/VE 3.5 MHz Phone	K1ZM Communications, Inc
N7DD	W/VE 14 MHz Phone	William F. Beyer Jr, N2WB
ZF2MM (K9PG, op)	World Single Operator Phone	North Jersey DX Association
P40P (W5AJ, op)	World Low Power Phone	DX Publishing, N4AA
TI5N (W8QZA, op)	World QRP Phone	Southern Arizona DX Association
8P6SH	World Single Operator Assisted Phone	Willamette Valley DX Club
VP5B	World Multioperator Single Transmitter Phone	Carl Cook, A6V/P49V
RU1A	World Multioperator Two Transmitters Phone	W6NL and K6BL
VP5A	World Multioperator Unlimited Phone	Stanley Cohen, W8QDQ
YV1CP	World 1.8 MHz Phone	In Memory of ZL2BT
OH4A (OH6LI, op)	World 14 MHz Phone	Don Wallace, W6AM, Memorial Award
P40A (KK9A, op)	World 21 MHz Phone	Long Island DX Association
ZX5J	World 28 MHz Phone	North Shenandoah DX Association NS4DX
KH7R (KH6ND, op)	World Single Operator Combined Score—High	Mike Manafo, K3UOC
J6/G3TBK	World Single Operator Combined Score - Low	C. Sharp, K5DX Memorial by the Texas DX Society
9A1A	World Multioperator Unlimited Combined	W2PC Memorial - Schenectady ARA
KQ2M	W/VE Combined Score	National Contest Journal
W9GXR	W/VE 7 MHz Combined	N7DD in memory of Jim Rafferty N6RJ
N4TZ	W/VE Low Power Combined Score	Rochester DX Association K2FR Memorial Plaque
7J2YAF (JA1KSO, op)	Asia Single Operator Phone	Tim Coad, NU6S
JA1YPA	Asia Multioperator Single Transmitter Phone	Yankee Clipper Contest Club
M6T (G6PIQ, op)	Europe Single Operator Phone	Jerry Griffin, K6MD
RW2F	Europe Multioperator Unlimited Phone	Operators at K1TTT
8P9JA (@8P9Z)	North America Multioperator Single Transmitter Phone	Nick Lash, K9KLR
KH7R (KH6ND, op)	Oceania Single Operator Phone	W7EW in honor of W7IYW
LU1FC	South America Multioperator Two Transmitter Phone	Operators at K1TTT
W9RE	Central Division High Power All Band Phone	Society of Midwest Contesters
KD9ST	Central Division Multioperator Single Transmitter Phone	Society of Midwest Contesters
W0ETT	Rocky Mtn Division Single Operator Low Power Phone	Grand Mesa Contesters
W7EJ	Seventh Call Area All Band Phone	Willamette Valley DX Club
JH4UYB	Japan Low Power All Band Phone	Western Washington DX Club

Overall category winners, continental winners, ARRL Division winners or US call area winners may purchase their unsponsored plaque for \$60 by contacting the ARRL Contest Branch at 860-594-0295. Inquiries may also be sent via email to [contests@arrl.org](mailto:contests@arrl.org).

## 10 Meters

Even in peak form, 10 meters still is best on the long north-south paths and ZX5J was able to make that work with a close win over K6RO at PJ2K, 598 to 568 k. This year, even the stations in the Caribbean and close to the North American continent were able to make big scores as ZF2AH's 501 k in third place illustrate.

## 15 Meters

The hop across the Caribbean was positioned just right and KK9A's big P40A score of 640 k shows it. In such good conditions, this band also thrives on the polar paths and this year KL7RA made a huge move to the #3 spot worldwide with 446 k, just missing being #2 by a whisker behind OK1RI's Europe-leading 450 k.

## 20 Meters

Reliably open 24 hours a day to somewhere, 20 was a pipeline across the North Pole and the Top Ten were all European scores—from OH and UA1 to CT1 and IT9. Congratulations to OH6LI who handily outscored countryman OH5LF 470 to

397 k and fended off a challenge from eastern neighbor station RJ1Z with 330 k.

## 40 Meters

Band misalignments and "sharing" with multi-Megawatt BC stations makes 40-meter phone the toughest DX band. That said, GW4BLE at GW7X, perched on the western edge of England, was able to make over 1100 QSOs for 196 k and take home first place over EA1DLU's 113 k.

## 80 meters and 160 Meters

Braving static crashes, the top two spots on 80 meters were claimed from the north shore of South America by YV5OHV (114 k) and YV4FZM (105 k.) The big Belgian station of ON4UN put OT2T in enough logs to be the top European entry at 60 k. The following had enough gumption to make a single-band 160-meter entry: YV1CP—13 k, HA5JI—3.3 k, S57M—2.3 k, F6CWA—1.3 k, and DL7CX—828 pts.

## DX Multi-Single

Here's another category packed with

teams traveling far and wide and by far the most popular DX multi-op category. More than a one-man show, a team can be competitive, enjoy a vacation, and not be completely exhausted on returning home. The Caribbean is a favorite destination and the VP5B team managed a close, but solid #1 finish over the South American winner, FY5KE, 7.71 to 7.48 M. From Africa, EA8BH not only came in third, but set a new record from that continent with a score of 6.5 M. TM5C was the top-scoring European team with 5.28 M. JH7PKU's 2.82 M were enough to be the best in Asia.

### DX Multi-Two and Multi-Multi

Not as popular internationally as it is in North America, these lightly populated categories still put up some big scores. Both categories are dominated by the European club stations that appear in all of the major contests. For M/2, the team at RU1A scored 4.82 M and was able to maintain a slim lead over the big signals of HG6N and their 4.77 M for a top slot.

Making the Turks and Caicos a very crowded RF environment, the VP5A team garnered nearly 10 M on their way

to taking the world title in M/M. 9A1A set a new European record in the #2 spot with 7.66 M and the EA8ZS team set a new African record with a #4 finish and 4.88 M. JA3YBK's 3.53 M was the big score from Asia and LT1F kept Argentina in everyone's log as the top South American score at 3.15 M.

The 2003 running of the ARRL International DX Phone Contest is scheduled for March 1-2. We can't promise great propagation or record-setting performances. But we can promise participants will have a great challenge and lots of fun.

### Scores

Scores are listed by DXCC entity and ARRL/RAC sections. Within each entity or section, scores are listed in descending order, Single Op by power categories, then Single Band entries. All Single Assisted and Multioperator entries then follow. Line scores list call sign, score, QSOs, multipliers, power (A = QRP, B = Low Power, C = High Power), and band (if single band).

Phone	Score	QSOs	Multipliers	Power	Band
<b>US</b>					
<b>Single Operator</b>					
<b>Connecticut</b>					
N1TM	127,602	278	153	A	
W1CTN	1,152,921	1127	341	B	
W1QJ	633,255	815	259	B	
W3SM	213,921	417	171	B	
W1AZT	170,855	367	155	B	
WD4JR	112,512	293	129	B	
W1AMF	98,010	270	121	B	
K3UFG	76,638	241	106	B	
W1DMM	22,644	102	74	B	
K3YJP	1,530	30	17	B	
KQ2M	6,586,785	4365	503	C	
K1KI (KM1P, op)	2,841,894	2778	341	C	
AK1N	541,680	740	244	C	
KF2XK	410,400	608	225	C	
NT1N	354,888	636	186	C	
N1JW	139,464	312	149	C	
K1RO	23,400	100	78	C	
KM1R	21,576	124	58	B 80	
W1AW (N1ND, op)	41,664	248	56	C 20	
<b>Eastern Massachusetts</b>					
N1SV	1,458,972	1422	342	B	
K1VR	1,309,608	1269	344	B	
K1VUT	1,164,429	1281	303	B	
N1DD	1,055,000	1250	308	B	
K1NU	1,012,680	1164	290	B	
N3KJ	532,452	765	322	B	
K1HT	502,152	686	244	B	
WG1Z	490,956	652	251	B	
N1DS	204,750	375	182	B	
KATEKR	197,895	395	167	B	
WA1OLV	122,292	316	129	B	
N1QVN	118,035	305	129	B	
K1WCC	117,150	275	142	B	
K1RB	107,865	235	153	B	
N1HTS	87,465	185	119	B	
N1VI	83,460	260	107	B	
W1TE	69,324	218	106	B	
KY1B	54,756	169	108	B	
K1VU	48,015	165	97	B	
KB1CJ	41,160	140	98	B	
K1EP	24,708	116	71	B	
N1ST	12,312	76	54	B	
W1KRS	667,880	856	260	C	
N1AU	572,025	725	263	C	
K5MA	274,329	489	187	C	
W1MK	40,848	148	92	C	
W1DO	30,000	100	70	C	
AA1BU	92,664	429	72	C 80	
N1DC	72,303	313	77	B 10	
N1WRK	23,316	134	58	B 10	
W1PLK	5,220	58	30	B 10	
<b>Maine</b>					
W1CEK	23,010	118	65	A	
N1LW	528,525	725	243	B	
AA1UT	241,956	429	188	B	
NS1Z	82,485	235	117	B	
AA1WI	59,340	230	86	B	
K1SWG	55,386	181	102	B	
W1GX	29,400	140	70	B	
N1YIS	14,952	89	56	B	
N1RY	1,026,060	980	349	C	
W1AO	832,869	981	283	C	
K1QS	341,649	957	119	C 20	
<b>New Hampshire</b>					
WS1A	1,223,046	1278	319	B	
W1UR	380,598	554	229	B	
W1DAD	260,178	421	206	B	
K1OEO	188,754	386	163	B	
K1RDM	186,576	368	169	B	
W1LZ	59,364	194	102	B	
WA1Z	50,634	174	97	B	
AE1D	34,200	150	76	B	
K1MOM	1,020	20	17	B	
KC1F	2,035,152	2019	336	C	
WT1M (N1HKO, op)	403,305	805	167	C	
NR1DX	102,684	199	172	C	
KB1EAX (WA1LH, op)	153,846	174	99	B 20	
KG1V	62,826	283	74	B 10	
<b>Rhode Island</b>					
K1V5J	295,668	516	191	B	
KB1LN	134,964	326	138	B	
W1VET	20,160	96	70	B	
W1OP	1,033,344	1196	288	C	
WA1MKS	52,425	233	75	C 20	
N1HRA	109,824	416	88	B 15	
N1YKH	3,828	44	29	B 10	
<b>Vermont</b>					
K8EP	1,393,560	1470	316	B	
KA1LDS	71,043	199	119	B	
N1HLP	61,740	196	105	B	
KA1BSZ	34,506	142	81	B	
KD1F	18,000	100	60	B	
N1BCL	449,235	745	201	C	
N2CN	84,252	238	118	C	
W1ZK	20,580	140	49	C 20	
<b>Western Massachusetts</b>					
W1KT	747,840	779	320	B	
W1TS	244,770	410	199	B	
N1SR	23,808	128	62	B	
K5ZD (KM3T, op)	5,378,688	3864	464	C	
N1FUS	422,496	652	216	C	
KV1W	147,408	332	148	C	
W1QA	714	17	14	C	
WR1X	51,612	253	68	B 10	
<b>2</b>					
<b>Eastern New York</b>					
W2IX	61,056	192	106	A	
KE2DX	1,165,110	1094	355	B	
W2ENY	423,852	572	247	B	
K2PH	227,448	468	162	B	
N2MTG	121,437	309	131	B	
N2BZP	92,828	236	121	B	
K2RI	29,862	126	79	B	
N2HTT	22,869	99	77	B	
N2CJN	16,218	102	53	B	
N2SKHM	3,672	36	34	B	
N1JP	1,064,232	1137	312	C	
K2BX	852,768	987	288	C	
K2ZF	560,745	733	255	C	
N2SQW	247,212	436	189	C	
K2XF	182,358	307	198	C	
N2LH	45,990	219	70	C 20	
WX2N	34,362	166	69	B 15	
<b>NYC-Long Island</b>					
WB2ZTH	653,982	677	322	B	
N2GA	484,191	711	227	B	
N2MUN	227,704	551	168	B	
WB2OOQ	143,448	344	139	B	
N2LDV	70,620	214	110	B	
K2CAD	44,847	151	99	B	
N2LEB	41,040	152	90	B	
N2GCG	1,246,140	1290	322	C	
WB2AMU	9,225	75	41	B 40	
K2RE	32,472	166	66	B 20	
KA2VVO	4,785	55	29	B 20	
WA2OVG	468	13	12	B 20	
N2TX	920,586	2161	142	C 15	
K2MFY	249,417	749	111	B 10	
K2WY	122,808	476	86	B 10	
K2SG	93,480	410	76	B 10	
N1GNV	9,912	59	56	A 10	
<b>Northern New Jersey</b>					
K2JT	3,552	37	32	A	
W2JEK	2,688	32	28	A	
K2YSY	212,040	380	186	B	
K2SZ	155,964	317	164	B	
N2TJT	99,702	191	174	B	
W2P1	74,256	221	112	B	
K2YLH	53,289	117	93	B	
N2LK	45,924	178	86	B	
N2VM	36,984	134	92	B	
WB2IDV	31,806	186	57	B	
N2NT	4,858,050	3475	466	C	
N2LT	2,433,684	2266	358	C	
N2KPB	662,547	821	289	C	
W2UDT	501,228	702	238	C	
WA4ATJ	313,311	577	181	C	
WA2BKN	83,616	208	134	C	
K2ZB	81,084	233	116	C	
WQ2M	69,423	317	73	C 40	
KX2S	58,560	244	80	B 20	
AE2JC	48,750	250	65	B 15	
W2KXD	1,368	24	19	C 15	
W2KV	259,875	825	105	C 10	
N2GM	177,686	617	96	B 10	
K2OEI	30,528	192	53	B 10	
<b>Northern New York</b>					
N2JNZ	92,574	278	111	A	
NS2F	458,229	667	229	B	
K2CC (KC2BMG, op)	24,360	116	70	B	
NT2W	6,273	51	41	B	
KC2GHT	4,032	48	28	B 15	
NG2C	88,893	357	83	B 10	
<b>Southern New Jersey</b>					
KV2M	191,688	392	163	B	
KA2YKN	66,750	178	125	B	
K2MK	45,816	166	92	B	
W2ZQ (KC2DLA, op)	44,880	170	88	B	
W2DBA	27,903	131	71	B	
K3MRY	23,625	105	51	B	
AF2F	3,672	36	34	B	
N2MR	1,313,940	1436	305	C	
KZUT	607,944	694	292	C	
WK2W	407,232	606	224	C	
W2MF	56,832	256	74	B 40	
K2BQW	67,890	290	78	B 15	
AD3Y	5,133	59	29	B 15	
K2SWZ	13,536	94	48	B 10	
KF2BQ	2,970	55	18	B 10	
KD2P	2,646	42	21	C 10	
<b>Western New York</b>					
N2XT	370,296	556	222	A	
WB7OCV	67,374	197	114	A	
W2TZ	1,326,051	1377	321	B	
K2BF	38,460	578	190	B	
N2CK	254,388	493	172	B	
KV2X	144,000	320	150	B	
N2LQO	133,866	333	134	B	
WB2SXY	124,683	299			

KC1YC	43,026	142	101	C	W3SE	422,295	599	235	B	WR0N	144,144	312	154	B	W0ETC	240,240	770	104	B	10
WD4GOY	39,690	135	98	C	KB6ATT	188,067	451	139	B	WABWV	45,120	188	80	B	K0VSV	55,080	255	72	B	10
ACB9	6,048	56	36	C 80	WB6NFO	121,158	318	127	B	N45EA	410,481	661	207	C	<b>Kansas</b>					
AB4D	17,649	111	53	B 20	K6MCM	40,800	130	98	B	W4P	420,240	776	226	C	N0YYO	536,362	774	231	B	10
KAG6WP	194,400	648	100	C 15	N6OPR	30,810	130	79	B	K3JT	307,692	1036	99	C 10	KB0MZJ	168,912	368	153	B	10
WF3J	113,523	479	79	B 10	KR6ED	2,700	36	25	B	W7WK	158,256	314	168	C	WBOYJT	120,474	291	138	B	10
W0YR	113,523	479	79	B 10	W6UE (W4EF, op)	2,126,817	2079	341	C	N7CZ	95,748	404	79	B 10	K0CEG	88,032	262	112	B	10
KO4MR	71,613	219	109	C 10	W06M	131,880	314	140	C	<b>Nevada</b>					W9HL	33,540	130	86	A	10
N3JT	50,580	281	60	B 10	W0KC	62,680	212	130	C	WATCWMM	199,794	469	142	C	W9GG	60,741	769	263	B	10
W4ZYT	19,965	121	55	C 10	W0K6YAN	55,900	242	77	C	W7EB	115,629	693	93	C 20	W9FGH	554,112	832	222	B	10
N8IK	780	20	13	B 10	N6UB	19,902	107	62	C	W7PW	22,440	136	55	B 10	K9JLS	514,650	730	235	B	10
<b>West Central Florida</b>					K6SE	5,832	54	36	C	K7C1W	10,920	104	35	B 10	N9AVY	338,688	576	196	B	10
N4IG	1,041,228	1116	311	B	KU6T	23,427	137	57	B 20	N9AK	230,724	377	204	B	W0HED	213,642	429	166	B	10
K8OSF	163,986	362	151	B	NK6A	24,528	146	56	B 15	N9RHQ	215,460	420	171	B	N9TF	184,800	352	175	B	10
W9NWW	139,590	330	141	B	N6ED	463,386	1298	119	C 10	K9JDM	174,735	353	165	B	K9J	167,445	305	183	B	10
W4T1J	110,550	275	134	B	W6RCL	17,802	138	43	A 10	K9AC	136,629	323	141	B	NG9R	128,760	296	145	B	10
K8F4	97,125	259	125	B	<b>Orange</b>					N7VS	17,976	107	56	B	W9ACCCQ	105,633	291	121	B	10
K6R9	43,884	159	92	B	N6WIN	569,298	794	239	B	W7EJ	3,240,900	2770	390	C	K9OZA	104,076	236	147	B	10
KU3O	27,612	118	78	B	K0NWN	240,543	453	177	B	W7GG	2,732,349	2537	359	C	N9CZY	89,280	248	120	B	10
WN4DX	21,420	119	60	B	AA6PW	182,736	376	162	B	K0J	385,817	603	213	C	K9ACAR	79,230	278	95	B	10
N4AO (W4AE, op)	1,106,700	1190	310	C	AD5WL	154,632	379	136	B	W7WA	389,975	618	213	C	W9TMMW	70,902	202	117	B	10
WB2LEZ	172,980	372	155	C	W6BNL	18,618	107	58	B	W7G6	2,732,349	2537	359	C	N9KO	61,812	204	101	B	10
K4XS	234,600	850	92	C 40	KE6GFI	7,821	79	33	B	K0J	385,817	603	213	C	K9YSI	61,074	174	117	B	10
K4FB	1,026	19	18	A 20	KE6GFI	7,821	79	33	B	W7YU	322,050	950	113	C 15	K9OWC	59,472	168	118	B	10
K9H5U	323,552	998	108	C 10	K6HRT	19,364	204	97	C	U7AH	4,071	59	23	B 10	W9JJT	56,496	214	88	B	10
W4J0BUU	109,725	385	95	C 10	AC6WD	124,344	471	88	B 10	K11F	237,474	474	167	B	K9C9YL	55,920	233	90	B	10
WA2NDP	7,035	67	35	B 10	<b>Santa Barbara</b>					W7YAZ	226,098	477	158	B	K916EN	78,000	216	119	B	10
<b>5</b>					W46FV	261,648	474	184	B	W7YU	322,050	950	113	C 15	W9S2	34,506	142	81	B	10
<b>Arkansas</b>					KD6PQF	78,408	264	99	B	K17G	18,896	116	52	A	W9Y3	31,098	146	71	B	10
W4SKAK	126,945	273	155	B	K0BEM	21,948	118	62	B	N7Y7	18,127	63	43	C 40	K9KM	24,072	118	68	B	10
W4SKQJ	119,805	277	155	B	W45VGI	186,120	376	165	C	KE7NS	112,644	447	114	B 10	W9CEO	20,664	123	56	B	10
W5MK	83,880	233	120	B	<b>Santa Clara Valley</b>					W7SAW	9,180	68	45	A	W9WHL	18,150	110	55	B	10
W4SSOQ	46,410	221	70	C	K8PO	1,786,536	1838	324	B	N9HWF	15,753	89	59	B	N9EYF	8,745	55	53	B	10
K5NLX	17,640	105	56	C	W6RXO	294,840	546	180	B	K8BN	232,528	421	169	B	K9B9WQJ	6,240	52	40	B	10
<b>Louisiana</b>					N6EM	272,160	540	168	B	N7UK	208,980	405	172	B	W3MDM	4,278	46	31	B	10
KM5YL	274,752	477	192	B	N6NF	215,760	496	145	B	W7GTO	129,921	341	127	B	KD9XP	3,366	34	33	B	10
W5WZ	194,832	396	164	B	N6BXO	19,348	118	62	B	K7SR	49,686	182	91	B	K9BVHA	147	7	7	B	10
K1DW	88,506	298	99	B	K6GDEX	7,722	66	39	B	N7XY	35,640	120	99	B	W9BZ	3,921,581	3019	433	C	10
K9DN	460,977	671	229	C	W6ZZZ	4,059	41	33	B	K7WDL	30,267	177	57	B	W9BZ	2,111,265	2005	351	C	10
W4STRX	31,110	122	85	C	K6GT	143,871	403	119	C	W7SNH	21,624	106	67	B	K9X9D	292,230	510	191	C	10
<b>Mississippi</b>					NN6XX	50,640	211	80	C	K7R1	17,324	107	55	B	K9R9E	204,120	405	168	C	10
KE5K	246,840	440	187	B	AJ6V	44,100	147	100	C	N7GYD	614,331	1119	183	C	N9DSE	170,850	335	170	C	10
W5KX	200,364	283	236	B	K6HNZ	425,907	1279	111	C 15	N7YX	217,455	665	109	C	K9IDQ	169,260	364	155	C	10
KBSFET	174,835	377	158	B	K6III	25,872	154	56	A 10	W7SNH	21,624	106	67	B	K7EG	146,772	324	151	C	10
N5KGY	48,735	171	95	B	<b>San Diego</b>					K7R1	2,856,753	2809	339	C	K9CJ	4,699	74	29	B 40	10
W5KWB	48,300	161	100	B	W6VJA	59,400	200	99	B	N7GYD	614,331	1119	183	C	W9ILY	9,675	75	43	B 15	10
N5PYQ	39,615	139	95	B	AE6AT	1,122	22	17	B	N7YX	99,825	275	129	C	K9BGL	395,046	1291	102	C 10	10
N5YW	13,944	83	56	B	W46PY	145,017	369	131	C	KE7SW	50,220	180	93	C	W9OF	152,796	476	107	C 10	10
N5PA	332,010	527	210	C	<b>San Francisco</b>					K7B7X	904	268	13	C	K9GN	113,022	483	78	C 10	10
<b>New Mexico</b>					W6WR	111,750	298	125	B	W6WX	32,574	178	61	C 15	K9ARR	29,520	164	60	B 10	10
W5GZ	372,960	592	210	B	K6OWL	16,236	123	44	B	W7X	3,674	178	61	C 15	K9RL (K9B9FC, op)	29,058	167	58	B 10	10
W5PDO	270,648	504	179	B	W6ESJ	25,380	141	60	B 15	K7QQ	551,304	1612	114	C 10	<b>Wyoming</b>					
N6ZZ	1,149,258	1583	242	C	<b>San Joaquin Valley</b>					W6Y7	307,881	543	189	B	W6Y7	307,881	543	189	B	10
KD5JAA	55,986	217	86	C	K6MI	3	1	1	A	KD7RX	73,428	211	116	B	W6Y7	307,881	543	189	B	10
W5JRP	20,625	125	55	C 20	K6CSL	43,980	181	81	A	K0DJ	15,132	97	51	B	K9G	460,191	727	211	B	10
K5AM	532,800	1600	111	C 10	K6GUTC	17,858	119	50	B	N7YV	34,884	171	68	B 10	K9FCF	434,238	686	211	B	10
<b>North Texas</b>					W6FRH	339,048	554	204	C	K9D	17,324	107	55	B	N9DR	367,425	575	213	B	10
W4BZBT	322,575	575	187	A	N6TNX	131,670	285	154	C	N7YV	34,884	171	68	B 10	N9KT	313,026	514	203	B	10
KY5N	343,380	590	194	B	N6HK	91,500	250	122	C	K9M	251,991	459	183	B	K9CM	174,636	378	154	B	10
W0VX	201,690	405	166	B	K6YV	67,200	224	100	C	K9M	167,352	367	152	B	K9W	152,079	311	163	B	10
AB5C	113,577	289	131	B	K16PG	858	22	13	B 10	K9KLR	149,037	329	151	B	W9A9	137,151	311	147	B	10
N5BT	12,669	103	41	B	N6MU (@N6NB)	300,024	926	108	B 10	W9A9	137,151	311	147	B	W9BFS	17,498	108	54	B	10
KM5LO	5,184	54	32	B	<b>Sacramento Valley</b>					N9RVE	5,132,342	379	54	B	N9RV	3,509,730	3095	378	C	10
KZ5A	269,824	566	157	B	K06IS	201,465	363	185	B	K8KHZ	256,686	478	179	B	W91TMKE	426,564	578	246	C	10
W5FO	234,857	409	191	C	W6FFF	196,524	412	159	B	N8NX	154,350	350	147	B	K9M	167,352	367	152	B	10
K5RA	108,855	295	123	C	W6FO	139,230	357	130	B	K9CV	118,204	359	144	B	N9RV	3,509,730	3095	378	C	10
K5RX	721,020	1970	122	C 10	K06LF	97,569	293	111	B	W6BNGX	150,778	338	142	B	W91TMKE	426,564	578	246	C	10
N5KB	37,800	168	75	C 10	N6QPF	27,030	170	53	B	W6BWA	143,934	299	141	B	K9M	167,352	367	152	B	10
K5DWI	29,280	160	61	B 10	W6BOUA	7,708	58	42	B	W6RXX	142,956	361	132	B	W9A9PYH	3,816	53	24	C	10
<b>Oklahoma</b>					K6LRN	460,017	647	237	C	KE8FO	136,080	324	140	B	K9NW	722,502	1958	123	C 10	10
KD5DLL	162,432	384	141	B	N6IG	368,697	679	181	C	W8BAJ	87,108	238	122	B	W9IND	243,972	753	108	C 10	10
AB5GH	113,544	249	152	B	K1LU	303,048	552	183	C	K8GT	82,584	222	124	B	W9CM	2,394	38	21	B 10	10
N5PMP	26,448	116	76	B	K6BEW	146,412	332	147	C	N8KZG	91,816	246	111	B	W9OZ	1,839	22	23	B 10	10
KD5DRY	24,120	120																		



VE3XL 19,200 100 64 B  
VE3IGJ 330 110 B  
VE3EJ 5,180,736 368 484 C  
VE3AT 3,177,236 285 371 C  
VA3VN 8,733 71 41 B 20  
VY2MGY/3 105,219 433 81 B 15  
VA3FP 62,100 276 75 B 15  
VE3RCN 33,150 170 65 B 15

**Manitoba**  
VE4YU 450,042 701 214 B  
VE4MG 150,375 401 125 C

**Saskatchewan**  
VE5SF 803,840 1040 257 C  
VE5FX 631,436 929 228 B  
VE5AAD 6,216 56 37 B 15

**Alberta**  
VE6BF 160,890 346 155 A  
VE6ZT 410,625 625 219 B  
VA6DXR (VE6JY, op)  
2,592 36 24 C 80  
VA6MA (VE6MA, op @ VE6JY)  
6,822 294 71 C 40  
VE6EX (@ VE6JY)  
218,442 743 98 C 20  
VE6WQ (@ VE6JY)  
1,041,216 2552 136 C 15  
VE6JY (TI2WGO @ VE6JY)  
315,684 948 111 C 10  
VE6FN 50,922 246 69 C 10

**British Columbia**  
VE7FO 420,885 705 199 B  
VE7UQ 184,371 407 151 B  
VE7FCO 85,248 256 111 B  
VE7OSO 18,468 108 57 C  
VE7XO 190,854 461 138 C  
VE7IG 39,168 205 64 C 40  
VE7ZBK 122,604 601 68 B 15  
VE7NI 60,420 265 76 B 15  
VA7XX 510,048 1518 112 C 10  
VE7VF 150,696 552 91 B 10  
VE7NS 32,340 245 44 B 10

**Northwest Territories**  
VY1MB 41,370 197 70 B

**Single Operator Assisted**  
1  
K2TE 1,824,612 1532 397 C  
AA1V 1,717,380 1363 420 C  
N1DG 1,548,027 1313 393 C  
K1AE 1,537,272 1294 396 C  
K1DX 1,274,592 1136 374 C  
K1GU 1,138,272 1136 374 C  
N6RFM 1,026,498 1133 302 C  
KK1H 901,968 989 304 B  
W1RY 855,665 815 211 C  
KE1IH 834,100 930 299 C  
K0562 805,662 939 286 C  
K1JE 762,912 883 288 C  
K1EO 733,320 840 291 C  
K1LD 732,954 809 302 B  
W01N 730,269 731 333 B  
W1NG 669,438 693 322 C  
AQ1K 437,400 450 224 C  
W1UK 383,250 511 250 C  
N1NB 373,464 532 234 B  
KB1GW 348,957 609 191 B  
W1QK 329,511 497 221 C  
W1BHH 320,370 362 295 C  
K1RV 257,715 415 207 C  
AA1QD 250,848 416 201 C  
H1API 244,210 450 224 C  
K1TH 242,190 351 230 C  
K1TW 239,424 464 172 B  
WC1M 181,419 371 163 C  
J1JB 122,400 425 96 B  
AB1R 117,192 257 152 C  
K1OA 114,816 299 128 B  
W1ZZ 111,708 214 174 C  
K1KU 90,180 251 104 C  
W1ZT 94,608 219 144 C  
N4XR 69,000 184 125 B  
W1TO 37,944 136 93 B  
NF1A 32,625 125 87 C

2  
W2RE 4,846 485 3199 505 C  
K2DM 3,387,912 2504 451 C  
W1GD 3,038,706 2266 447 C  
W2GD 2,997,558 2073 482 C  
W2GDJ 2,833,056 2186 432 C  
N2MM 2,802,462 2318 403 C  
KE2TR 2,307,987 1881 409 C  
N9Y6D 1,894,358 1563 404 C  
W2FRD 1,835,892 1609 361 C  
N2ED 1,708,974 1578 361 C  
WE2F 1,606,995 1599 335 C  
N1RK 1,572,120 1320 397 C  
W2TV 1,259,796 1108 379 C  
K2ONP 1,235,970 1329 310 C  
NA2U 1,227,828 1244 329 B  
N1EU 1,172,736 1018 384 C  
WB9SR 1,096,146 1149 330 B  
N2CY 950,130 1035 306 C  
K2ED 891,333 1021 291 C  
K2EP 770,043 907 283 C  
K2OWE 587,508 692 283 C  
N2VW 562,683 649 289 C  
K2SB 434,073 563 257 C  
NA2M 412,416 537 256 C  
W2KA 391,676 529 221 B  
N2SS 351,486 566 207 C  
K2SX 336,330 505 222 C  
K2DHE 307,200 512 200 C  
K2DBK 266,742 438 203 B  
WK2H 256,131 447 191 C  
K2PF 244,620 453 180 B  
W2FCA 196,900 340 195 C  
AB2E 175,392 359 174 C  
W2VZ 95,922 219 146 C  
NU2W 89,784 232 129 C  
WF2B 48,216 164 98 B  
KQ2O 26,865 199 45 C

3  
K3WW 5,128 524 3313 516 C  
AA3B 2,489 619 2039 407 C  
K2QM 2,310,003 2021 381 C  
KQ3F 2,119,980 1780 397 C  
K3FP 2,098,326 1831 382 C  
W3VF 2,092,800 1744 400 C

W3MF 2,061,216 1684 408 C  
N3AM 2,042,694 1698 401 C  
N3ED 1,979,209 1693 392 C  
W3PLF 1,902,054 1771 358 C  
N3DL 1,743,378 1339 434 C  
N3ZA 1,482,948 1194 414 C  
WT3W 1,132,704 1104 342 C  
NN3Q 1,091,580 1130 322 C  
K3NZ 1,020,075 1015 335 C  
WB3CIW 988,545 1117 295 C  
W4ZLE 980,811 1079 303 C  
W3GH 974,985 1045 311 C  
W3GM (K3ND, op)  
868,575 925 313 C  
W8FJ 737,856 772 316 C  
AJ3M 681,489 913 251 C  
W3AP 657,663 853 257 C  
K3CP 605,337 713 283 C  
W3PQV 493,500 598 275 C  
W2UP 414,027 537 257 C  
KB3MM 399,834 582 229 B  
W3FVT 365,856 592 206 C  
KU3X 307,230 539 190 C  
K3JG 295,698 442 223 C  
W3KV 203,343 421 161 C  
K3ZV 169,554 367 154 C  
K3SD 114,912 252 152 C  
K3ADF 123,934 434 119 C  
K3SKE 42,723 141 101 C  
NZ3O 32,385 127 85 C  
W3BG 26,775 105 85 A

4  
K5KG 2,608,392 2008 433 C  
619,297 857 241 C  
AA4V 602,127 769 261 C  
K4YT 578,760 728 265 C  
W3YY 475,092 636 249 C  
K3KO 432,180 588 245 C  
AK4XX 285,822 474 201 C  
N4TL 244,035 435 187 C  
K8VC 223,494 386 193 C  
N4XK 123,934 434 119 C  
WH3 63,075 145 145 B  
N4XMX 21,384 99 72 C

5  
N5TY 1,078,101 1163 309 C  
N5JR 994,125 1205 276 C  
N4SM 641,938 894 308 C  
W5FL 380,874 514 247 C  
K5HDU 89,199 187 159 C

6  
W6TK 905,616 993 304 C  
N6WS 838,527 893 313 C  
N6CCL 643,203 803 267 C  
K6XX 616,923 939 219 B  
K1ET 509,355 693 245 C  
W6TE 435,954 643 226 C  
N6OU 428,733 603 237 C  
KJ6RA 393,354 533 246 C  
WN6K 344,866 514 223 C  
K6FRM 276,297 413 223 C  
N6UJ 230,562 394 177 C  
K6ACZ 132,756 299 148 B  
K6KYJ 119,646 289 138 B  
W6BLYM 30,528 192 53 C

7  
N7TT 1,214,424 1336 303 C  
K7DB 332,640 595 224 C  
W7BX 323,490 526 205 B  
W7YES 86,304 248 116 C  
W7HS 10,716 76 47 B

8  
N8TR 2,804,490 1989 470 C  
N8KM 1,542,240 1440 357 C  
K8LN 1,298,160 1202 360 C  
K9VR 1,291,998 1234 349 C  
N8DS 1,270,269 1001 423 C  
W8CAR 993,417 1231 269 C  
K5ID 862,248 971 296 B  
K8LY 349,164 549 212 C  
N8SHZ 309,537 489 211 C  
K9WBW 48,336 152 106 C  
N9DL 33,528 127 88 B

9  
KB9BUM 840,000 1000 280 C  
N2BJ 688,416 808 284 C  
N9LCR 432,837 697 207 C  
N9VB 414,903 551 251 C  
W9LVN 275,400 450 204 B  
N9LF 255,918 442 193 B  
WD9GMM 255,099 403 211 B  
W9GIG 137,808 232 198 C  
K9YG 130,530 458 95 B  
KF9YR 107,160 235 152 C  
KJ9C 102,675 185 185 C  
NA9D 82,176 214 128 B  
W9VQ 77,469 217 119 B  
K9OR 75,438 198 127 B  
W9TU 60,681 179 113 C  
K9RU 22,968 116 66 C  
W9VA 21,708 108 67 C  
W9OS 21,357 113 63 C  
N9IO 16,800 100 56 C  
KM9M 3,552 37 32 B  
N9BOR 48 4 4 B

0  
N0AV 1,560,405 1151 385 C  
N0AT 1,185,768 1149 344 C  
K0IR 1,106,700 1085 340 C  
K0KX 1,089,909 1091 333 C  
N0XB 845,736 1048 268 B  
K0LQ 620,940 655 218 C  
AB0RX 428,736 616 232 C  
K0PC 394,200 584 225 B  
N0HJZ 261,900 485 180 B  
K0AD 222,678 417 178 C  
WM0F 214,830 385 186 B  
W0TT 179,982 297 202 C  
K0XD 174,680 355 164 B  
AA0A 119,798 298 134 C  
AK0M 102,150 227 150 B  
NT0V 95,934 271 118 C  
N0PO 70,092 177 132 B  
KC0KSA 64,872 212 102 B  
KE0FT 50,100 167 100 C  
W0GOM 22,557 103 73 C

VE  
VE1OP 1,422,900 1395 340 C

VE9FX 600,750 750 267 C  
VE6TN 200,208 388 172 B  
VA3NR 198,432 318 208 B  
VE5OPU 25,615 135 63 C  
VE6YP 97,632 226 144 C

**Multiprotocol Single Transmitter**  
1  
AA1ON (+W1RH, AA1IZ, KC1YR)  
3,329,214 2557 434 C  
N1MM (+N1IXF)  
3,200,337 2419 441 C  
K0TV (+KB1PZ, NF1A, W1MJ, W01N, W1IA, W1TO)  
2,596,530 2111 410 C  
W1BK (+W1NR)  
504,108 627 268 C  
W1YK (AD5EY, KB3AWM, N1PFC, N2YHK, ops)  
185,706 342 181 C  
W1FM (+N1SOH)  
138,169 303 152 C  
WJ0TA/1 (KB1HO, KB1GW, KB1GW, KB1FYQ, KB1HOA, KB1HNZ, K11MW, ops)  
101,928 248 137  
KB1GHC (+KB1GUR)  
396 12 11 B

2  
K2XR (+K2OWR, WB2WIK)  
3,706,680 2866 460 C  
K2KQ (+W2WB)  
3,293,202 2434 451 C  
WB2KHO (+KB2NOW)  
535,500 700 255 B  
WB2ELW (KB2KOL, KC2F, KA2MGE, KC2DGC, K2OO, KC2GJ, ops)  
293,760 480 204 C

3  
NE3F (+K3S3, K3ATO, NT3V, NZ3G, KB3GW)  
3,509,505 2505 467 C  
W3GNQ (+N3OC, W1ZT, W3ZZ)  
3,261,825 2289 475 C  
W3LJ (+K3NCO, W3IDT, KA3UBJ)  
849,723 941 301 C  
N3BNA (+WB3CTD, NB3I)  
790,398 861 306 C  
K3BSA (K3JLK, WB3BSA, ops)  
308,700 525 196 C  
W3LRC 3,672 36 34 B

4  
W4MR (AA4NC, N4YDU, K4HA, ops)  
4,458,690 3210 463 C  
K1PT (+AE4SW, AE4FO)  
3,059,109 2251 453 C  
W2YE (+LZ3SM)  
4,109,268 3092 443 C  
867,000 200 289 C  
NY4T (+N4LEK, KG4MHH, KG4RDF, W1ADE, KR4FO)  
807 394 201 C  
KV4CN (+KG4PZQ, KG4CCX)  
96,078 239 134 B  
W4AU (+KG4RDI)  
22,338 102 73 B

5  
K5NZ (+W5BA, KG5A)  
4,073,994 2841 478 C  
K5NA (+K5DU, K15DR, NS5C, K2UR, NT5C)  
3,386,358 2514 449 C  
N1LN (+K7LEX, W5MF, W5WJ)  
2,305,200 1921 400 C  
W6TER (+K6E5L)  
661,254 946 233 C

6  
KA6BIM (+N6TK)  
1,689,372 1686 334 C  
W6EEN (+K6XC, W6AQ, W6ORD)  
1,363,026 1411 312 C  
N6KI (+N6NB, KG6GIC)  
471 231 101 C  
K6ZM (K6WG, K2KW ops)  
297,654 746 133 C  
K6TV (+WB6JDH)  
109,989 303 121 A  
W6YRA (WA6AY1, IK3ZAW, KE6TZX, KU6T, ops) 27,219 211 43 C  
W6TDM (N7RF, KB6AL, ops)  
23,664 136 58 C

7  
WX7P (+N7VF)  
499,686 673 226 C  
W7TU (WB7EQ, W7RRR, ops)  
101,748 278 122 B

8  
K8AZ (+K8BL, K8NZ, ND8L, W8KIC, WB8K, W8TC)  
4,803,405 3109 515 C  
K8CC (+K8GL, KE8OC)  
4,245,648 2922 473 C  
W8NP (K8UN, KB8HR, ops)  
244,209 401 203 B  
W8DZ (W3TFI, K18GG, W8XS, W5APEA, WB8TX, WB9BV, KB8TCN, K4ZLE, N8SJM, KC8OLI)  
230,955 445 173 C  
W3XM (+K8BLTF, NB8LK, NB8OS)  
80,040 230 116 B  
KC8ELY (NB8U, NB8ESV, NB8MMF, NB8MPO, ops)  
20,865 107 65 B

9  
K9DST (+KA9SQR, KA9SQS, KB9EXE)  
2,429,973 2093 387 C  
WN9O (+W9IU)  
1,886,844 261 388 C  
N9DT (+K9BZS, KB9ZFG, KB9ZEK)  
57,942 174 111 B

0  
W0GU (N2IC, K0KR, NA5S, ops)  
4,557,558 3317 458 C  
K0DU (+K0CL, K0CCK, K0JK, N0ZA)  
3,759,465 3205 391 C  
K0K0A (+N0BK1, N0RA, KS0T, KJ0B, K0KF, KB0QA)  
3,099,978 2478 417 C

W0ZT (+K0SR, K0XN)  
2,723,220 2214 410 C  
KD0S (+W0DT, W0H)  
2,069,442 2017 342 C  
K0FJ (+K0BJ, KC0JAO)  
1,301,697 1303 333 C  
W0WJ (W9VHL, WB9PNU, W0WC, ops)  
708,288 952 248 B  
WB0NNI (+WB0RWH)  
405,369 617 219 C  
K0JE (+K0JA)  
336,384 512 219 C

VE  
VA3RU 3,211,656 2731 392 C  
VE3HG (+VE3RZ, VA3GGF, VA3EC)  
2,068,374 1694 407 C  
VE6AO (VE6TC, VE6GO, VE6RCI, VE6WTD, VA6WVVW, VE6WSI, ops)  
806,868 1116 241 C  
VE6PYJ (+VE6PY)  
11,088 77 48 B

**Multiprotocol Two Transmitters**  
K1AR (+K1EA, K1DG, KSZD, W1MD)  
10,978,902 6039 606 C  
K4JA (+W3BP, K4MA, K9JY, KE9I, KG9X)  
10,436,928 5722 608 C  
K1IG (+K1NG, WF1B, KS1J, K1SD, K1JN, KB1L, ops)  
9,132,552 5322 572 C  
KR1G (+WA1S, WC1M, W1AAX, NR1DX)  
7,705,359 4911 523 C  
N4TO (+K1TO, N4DL, T93M, T93Y)  
7,296,330 4546 535 C  
K1IR (+AA1TA, K1EF, KM2P, W1VE)  
6,794,550 4314 525 C  
W5KFT (+W6PH, K1STQ, K5PI, W5TA, W5JEN, W5TD, ops)  
5,689,749 3943 481 C  
KB1H (AA1CE, N1XS, NB1U, W3TB, KB1DFB, K1EBY, ops)  
5,651,280 3672 513 C  
VE6SV (+VE6FN, VA6EA, VE6AKY, VE6EZ, VE6NAP, VE6RFM)  
5,390,784 4011 448 C  
K2RD (+W1CU, WA1FCN, K2WR)  
5,212,464 3503 496 C  
NK7U (+K7ZO, W7ZRC, WA7LT, K7MK, K7K7)  
4,896,822 3761 434 C  
N5TW (+W5MR, NA4M, KM5TY, N5DUW, WS4G, W5TD)  
4,286,835 3255 439 C  
VE1JF (+VE1AI, VE1AMU, VE1DHD, VE1HC, VE1MOO)  
4,196,880 3216 435 C  
AA5NT (+N5BL, KK7JS, WD5FLK, N1NC, NSNJ, KC5LOS, KC5SDY, W5GDC)  
4,109,268 3092 443 C  
KK1L (+K1KD, W1DEC, K1WEY, AA1SU, K1HD, N1ZUK, W1SJ, K1WH1)  
3,138,098 2444 428 C  
W4CAT (N4YN, K0DF, KF4GNV, K1KY, W9W, WMAQ, KB5YJC, N04U, W1KLM, K4RO, ops)  
2,723,220 2214 410 C  
K6IDX (+K0BEE, W1SRD, K1ZKM, W6ATO)  
1,745,916 1682 346 C  
W2OW (AA2EQ, AA2MU, K2FU, N2BC, K2CM, KB2AV, N3VKM, K1OW, W6ZSCF)  
1,734,384 1571 368 C  
VE7SCC (VE7HHS, VA7DX, ops)  
1,517,304 1528 331 C  
KX1X (+KB1FL, KB1FSU, KB1FWN, KB1GHC) 955,092 1121 284 B  
KM5VI (+N5LYG, VE3VIP)  
652,620 745 292 C  
K9YB (N9WEV, KC8UD, KC9BBW, KC9BB, KC8WRW, KE5ZY, KB9VOR, KB9YHT)  
545,310 730 249 B  
W1SRG (AG1C, KB1HJW, ops)  
544,830 715 254 C  
K0SV (+KC0IRY)  
344,694 566 203 B

N5YA (+WX0B, K5MR, N5KR, KR5F, K5WO)  
3,306,624 2528 436 C  
W2XL (+K2ETA, KY2J, KD2NE, NE2I, N2SA, N2MI, W2BAQU)  
2,778,657 2149 431 C  
K3OO (+K3OOO)  
2,427,831 1869 433 C  
W2YC (+AA2WN)  
2,204,085 1651 445 C  
VE6FI (+VE6AG)  
1,707,657 1631 349 C  
K3DI (+W3OO, W3ICM)  
1,648,530 1409 390 C  
K3CT (+K3JJ)  
1,643,220 1611 340 C  
K2WB (+W2RDS, K2BP, W2MC)  
1,623,687 1343 403 C  
W8FT (AD8P, K8NUI, AA8JK, N8RTP, N8NMF, KC8AL, N9FJU, ops)  
1,173,000 1150 340 C  
K4WPM (+WA4ZJ, K4WZ, AD4QB, AK5E)  
634,746 889 238 B  
KB5TX (KC5OE, W5XW, K5FRZ, K5GL, W5ZJ, KM5SY, N5DXV, KC5HRN, K5DFDU)  
332,628 523 212 B  
W3JJH (+KB3GHE, W3ARS, W3XB, AK3Z, KP3L, N3YIM, KB3HAM, KB3HAN, KB3HNO)  
249,660 438 190 C  
WAMOT (K4M6L, N4CU, AF4NR, K4DGR, K4G4Q, K4M4LD, K4F4DG, K4N4R, K4G4CHW)  
205,392 389 176 B  
WA6BMH (K4B6S, KW6PE, KA6WZR, K4B6Q, KE6BBP, ops)  
5,565 53 35 C

**DX**  
**Single Operator Assisted**  
**Africa**  
**Madeira Islands**  
CT9KC (CT3KB, op)  
18,093 163 37 B

**Canary Islands**  
EA8/DJ1OJ 36,450 162 75 B  
EA8SP 705,795 1055 223 C

**Ethiopia**  
ET3PMMW 294,462 738 133 B

**Namibia**  
V51/SP6IXF  
269,064 808 111 B

**South Africa**  
ZS1N 10,404 68 51 B  
ZS6RAE 5,049 51 33 B  
ZS5NK 16,884 134 42 C 10

**Vietnam**  
3W2LWS (WA1LWS, op)  
25,986 142 61 B

**Kuwait**  
9K2HN 132,615 421 105 C  
9K2RR 33,456 272 41 C 10

**Nepal**  
9N7RB 55,470 215 86 B

**Singapore**  
9Y1YC 118,125 375 105 C  
9V1UW 47,088 218 72 C

**Taiwan**  
3W3/UA3VCS  
5,985 57 35 B

**China**  
BD5RI 149,820 908 55 C 10

**Kyrgyzstan**  
EX2T 344,706 787 146 C  
EX8O 21,300 142 50 C  
EX2X 67,230 415 54 C 20

**Tajikistan**  
EY8MM 125,766 411 102 C

**Turkmenistan**  
EZ8CW 585 15 13 B

**South Korea**  
HL5UOG 44,583 193 77 B  
HL1/WX8C 26,532 134 66 B  
HL3AMO 25,740 132 65 B

**Japan**  
JA2AB 161,172 444 121 A  
JR4DAH 156,600 435 120 A  
JE7DOT 36,636 172 71 A  
JH1BNL 20,988 132 53 A  
JH4UYU 1,148,490 1823 210 B  
JH1LPN 1,019,466 1798 189 B  
JA5JAP 289,536 754 128 B  
JA3JOP 240,320 523 145 B  
JF2QNM 157,320 437 120 B  
JF2BDK 153,873 417 123 B  
JA3MVI 109,890 330 111 B  
JH1UUT 89,490 314 95 B  
JA1XUY 85,284 276 103 B  
JA3YPL (JU3TBB, op)  
79,806 283 94 B  
JA1ALX/9 76,734 261 98 B  
JA1XRH 74,841 247 101 B  
JA1GYO 57,552 218 88 B  
JH1NEC 56,232 284 66 B  
JA1ZJG (JF3BEO, op)  
46,002 187 82 B  
JA2JGP 44,268 217 88 B  
JR1MRP 36,432 184 66 B  
JE1TSD 31,080 140 74 B  
JA2BQX 27,000 150 60 B  
JK2VO 26,730 135 66 B  
JA1JIC 25,344 132 64 B  
JA1HFY 25,146 127 66 B  
JA2KFP 22,878 123 62 B  
JA1KK 20,295 123 55 B



