

Results of the 2022 CQ DX Marathon

BY MARK WOHLSCHEGEL,* WC3W

First time in many years, I was without a beam, tower, and amplifier—so I tried concentrating on 30 meters. A whole new experience, and a lot of fun! I have all DX confirmed except for North Korea, and I can't do the weekend frenzies anymore; the Marathon has kept me active. I also note that for those of us "little" guys, FT8 is the difference between having fun and not. — Stephen Oksala, NI3P

Thoroughly enjoyed the challenge. — MØVQ

One more year (my 14th) I participate in this great challenge! — Piero Giorgi, IK5FKF

Thanks millions to the CQ DX Marathon organizers, sponsors, and everyone involved with this wonderful yearlong activity. — Marvin Hlavac, VE3VEE

Thank you CQ magazine, the annual DX Marathon was a blast! – Bert Rollen, K4AR

A year of amazing and unprecedented growth! With Cycle 25 coming in like a "lion," participation in the 2022 CQ DX Marathon grew at a double-digit rate. Specifically, we saw a 46.5% increase in participants from 2021, making the DX Marathon program the fastest growing DX program in amateur radio today!

The participation graph (Figure 1) shows the growth in 2022. Entrants worked 21,570 unique callsigns, the highest total in DX Marathon history. We also had a record number of logs submitted and the highest ever number of total QSOs as shown in Figures 2 and 3. Some of this growth may be attributed to Cycle 25 coming in strong, as well as the increasing popularity of the DX Marathon program. The popularity of digital modes is making it possible for those without large stations and linear amplifiers or those constrained by HOAs and limited antennas to play in the DX game. Digital participation accounted for 79% of all QSOs in 2022. This is an increase from less than 20% in 2015. The Mode graph (Figure 4) shows the change over the last few years.

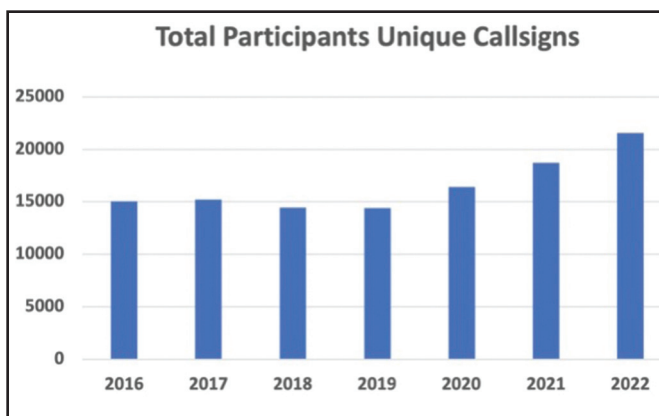


Figure 1. Total participation (unique call signs in submitted logs) in the CQ DX Marathon, 2016-2022.

* Director, CQ DX Marathon
E-mail: <wc3wmark@gmail.com>

During the scoring process, the DX Marathon staff carefully checks the accuracy of the submissions. Since the Marathon program does not require validating QSOs, we do recognize that the integrity of the program is dependent on accurate reporting of valid QSOs. As shown in Figure 5, for

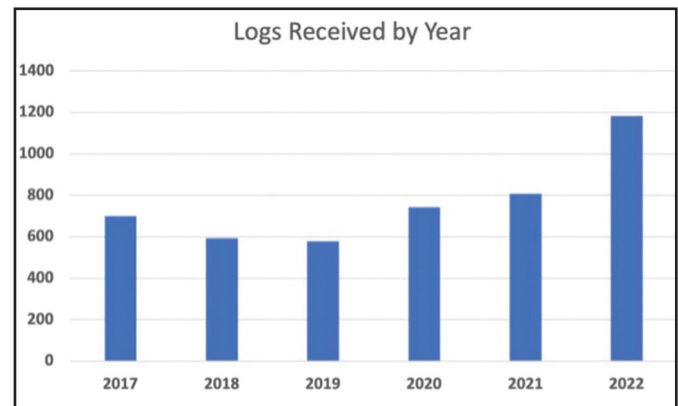


Figure 2. Number of logs submitted, 2016-2022. This year represented a 46% increase over 2021.

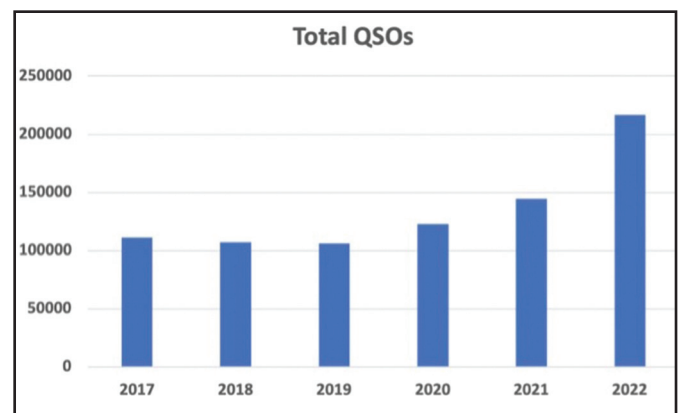


Figure 3. Total number of QSOs reported by Marathon participants, 2017-2022.

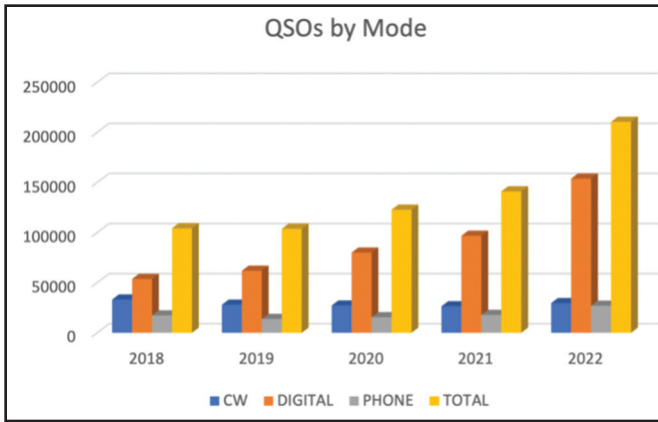


Figure 4. Mode breakdown of Marathon QSOs, 2018-2022. The percentage of digital QSOs keeps climbing.

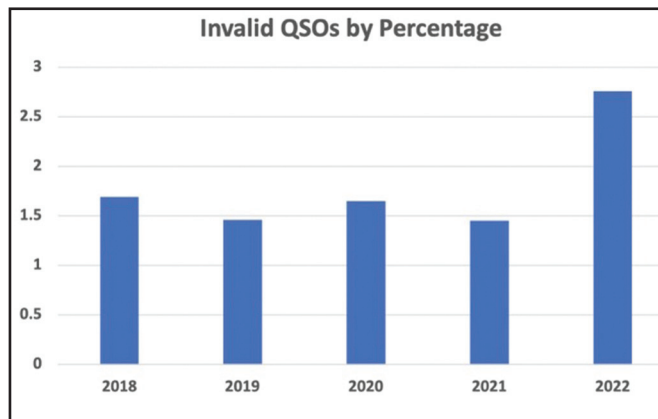


Figure 5. Tracking of invalid QSOs, 2018-2022.

2022 we had a much higher error rate than in years past, as expressed as a percentage of submittals. This was due to a number of items including a much more accurate scoring tool which includes a more comprehensive validating process that we are now using. Another reason was the larger than normal invalidation of QSOs claimed for Russia and Belarus. The CQ magazine policy was reflected on the Marathon website in the rules section, yet many participants reported QSOs during the invalidated period. This should not happen in the 2023 as the policy was updated in late 2022. We encourage all participants in 2023 to carefully check their logs and utilize the information that is posted on our new website at <www.dxmarathon.com>.

The highest scores in the DX Marathon program have historically been dependent on 1) propagation and 2) number of DXpedition activations. Both of these factors resulted this year in a top score in the Unlimited Class of 307. Surprisingly, the Limited Class turned in a top score of 303 which was quite formidable. Competition was fierce this year for the top spots in both Unlimited and Limited Class as six scores in the Unlimited and three scores in the Limited category exceeded 300 points.

Finally, we saw an unprecedented number of records broken this year. In 2021, our participants broke 28 all-time records which was a threefold increase over 2020. In 2022, 53 all-time records were broken! Three new band scores hit all-time highs, 2 meters, 6 meters, and 12 meters. Three digital continent mode records were broken, one continent Phone, and one continent CW score set new records. In addition, nine zone records were shattered while 29 new coun-

try records were broken. These will be posted on our website shortly so stand by for the details.

Some Interesting Metrics...

The average scores in the four categories of Unlimited, Limited, and Formula were slightly higher than in 2021: 187 for Unlimited, 168 for Limited, 159 for Formula 100, and 107 for Formula 5W. All combined, the average score was 178. The percentage of participants by class in 2022 was: Unlimited 65%, Limited 19.2%, Formula 100 13%, Formula 5W 2%.

As might be expected, with Cycle 25 advancing, the percentage of QSOs submitted for the 10, 12, and 15 meter bands increased from 44,306 in 2021 to 82,327 in 2022. The 10-meter band submissions were three times larger in 2022 while the 15-meter submissions were twice the number, while 20-meter QSO numbers were approximately the same.

Single-mode participant entries in 2022 represented 33% of the total, while all-mode entries were 67%. Single band entrants represented 5% of the total submissions. The 10-meter band represented the largest single band declared for single entry.

North America (including Canada) turned in 33.8% of the Continent entries. The second largest continent was South America at 27.9%. Oceania had 20.8%.

The breakdown of total QSOs submitted by mode yielded digital submittals at 73% of the total. CW submittals were 14%, while phone landed at 12.8%. Digital QSOs in 2022 increased by 5% while CW decreased by 4% over 2021. SSB was approximately the same percentage of the total QSOs. The total QSOs submitted by all participants set an all-time record of 216,505.

And the Winners Are...

The point spread at the top of the Unlimited Class ranged from 307 to 303 among the top six participants! John Carioti,



Photo A. The winner of the 2022 Unlimited Class was John Carioti, K2ZJ. John is a very active ham and regular participant in the DX Marathon program. John is shown here with his 2021 plaque for high score in North America. (All photos are of 2021 plaque winners)

K2ZJ (Photo A), who was runner-up last year in this class, squeaked out the top spot with 307 points, followed by a tie for second at 306 points by Antonio D'Arpino, IK0OZD, and Graham Alston, VK3GA. Ed Kuebert, K5EK, was at 305 for the number-3 spot, while a tie occurred for the number-4 spot with 303 points achieved by both Kent Olsen, N6WT, and Marvin Hlavac, VE3VEE. In the Limited Class, the competition was just as keen with Savas Pavlidis, SV2AEL, scoring 303. Pavlidis last year finished in second place, behind Jim Leahy, K2JL (Photo B). Ali Aktas, TA4RC, finished second this year with 302, and Mehmet Çevik, TA1CM, with 301 points, held down the third position. Congratulations to all of these excellent DX Marathon operators in the Unlimited and Limited classes.

In the Formula 100W Class, Karel Karmasin, OK2FD, bettered last year's score by 6 points finishing in the first position with a total this year of 297 points. Carlos Rincon, PY2CER, finished in second place with 269 points. Congratulations to Dan Walker, III, WG5G, in the QRP category for a first-place finish with 262 points. Anthony Luscre, K8ZT, finished in second place at 226 points. Working the Marathon with wire antennas is a real challenge but working DX with QRP power is quite an accomplishment.

All categories and scores are posted in this article but it is worth mentioning a couple of significant accomplishments. We are trying to encourage club submittals and would like to see a major increase in club participation in future years. In 2022, there was an increase of 23% in club submittals over 2021. For 2024, we have some plans to fuel the growth in club submittals. These proposed changes will be published in the November 2023 edition of CQ. In the interim, engage your clubs to submit in 2023 to get ready for some exciting

competition in 2024. This year, we had an amazing performance from YB-Land. DXing Passion of Indonesia had an amazing record-setting total of 40,225 points! This set an all-time DX Club record by a very large margin. For the first year, we will be issuing a plaque to the top Club Score, compliments of the South Florida DX Association. The Rio DX Club, which won first place last year, held the number two position with 20,869, followed by the CDR Group of Brazil at 9998. Holding the number 4 and 5 positions were the Western Washington DX Club at 9026 and the Northern Illinois DX Association at 7573.

Single-Mode Winners

It is fitting to recognize the single-mode accomplishments for 2022. Lada Prajsner, OK2PAY (Photo C), the program's superstar CW performer with his 8th consecutive first-place

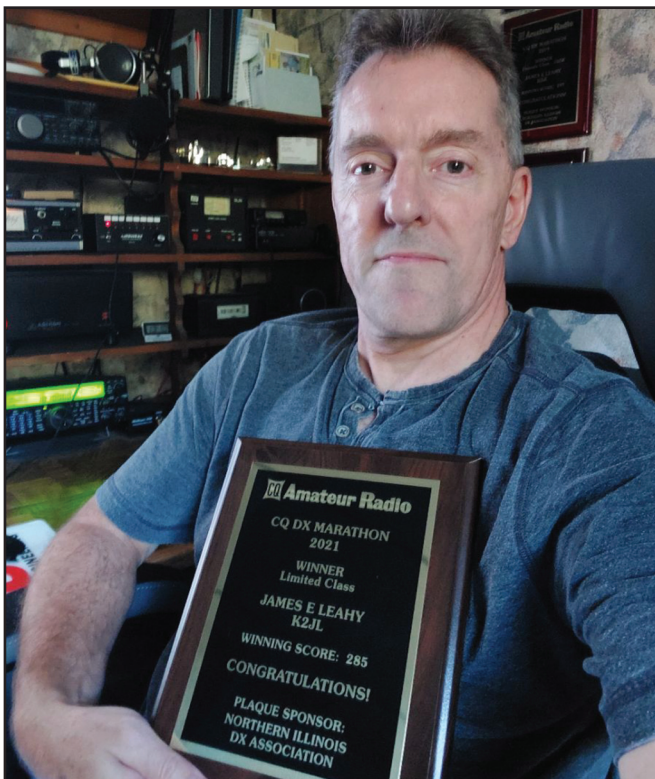


Photo B. The winner of the Limited Class in 2021 was Jim Leahy, K2JL. Jim is a veteran participant of the Marathon Program as well as a regular contester. Jim likes it simple with 100W and wire antennas and previously won the 2018 and 2019 Formula Class awards.



Photo C. One of the most consistent performers in the program, and an 8-time plaque winner, Lada Prajsner, OK2PAY, once again secured the CW world top score. Congratulations, Lada!



Photo D. Julio Peralta, W4HY, is the winner of the worldwide top phone category. Julio is definitely keeping phone alive in the Marathon program.

finish, won the worldwide CW mode competition with a score of 275. Julio Peralta, W4HY (Photo D), secured the first-place worldwide phone award with 274 points. Julio, thanks for keeping SSB alive! Fred Souto Maior, PY7ZZ, won worldwide first in digital with a score of 298. These gents will soon hold a beautiful DX Marathon plaque for their efforts.

Turning to North America, Bob Gill, K5BG (Photo E), after tying in 2021 for the NA CW top spot, won it outright this year with 250. Steve Larson, N3SL, secured top digital spot in NA with 287 points. Good going!

In addition to the overall and Mode plaques, each year we award plaques to the top score on each continent plus the highest score on each of the 6 through 160-meter bands. Top honors for Africa went once again to repeat winner Jose

Vasconcelos, CT3MD (Photo F) with his top score of 291 which bettered his previous year's score of 279 by 12 points. Second place went to Barry Murrell, ZS2EZ, with a score of 258. Ever-present on the bands, Mikalai Makeichyk, D2UY, in Angola, secured third place with 235 points. In Asia, there was a tie for top score at 302 points between Halil Ayyildiz, TA2LG, and Ali Aktas, TA4RC. In the case of a tie, top honors go to the participant with the earliest date of the last QSO submittal. Ayyildiz had the earlier date of the last QSO submittal. Tac Yoshihori, JE1FQV, finished third in the Asia competition with a score of 297. In Europe, Antonio D'Arpino, IK0OZD, took the honor of first position with a score of 306. Savas Pavlidis, SV2AEL, from Greece finished second with 303 points. Mehmet Çevik, TA1CM, in European Turkey,

TOP SCORES

BOLD = Plaque Winners
 * = Certificate Winners
 Callsign is followed by score

Unlimited Class

K2ZJ	307
IK0OZD	306
VK3GA	306
K5EK	305
N6WT	303
VE3VEE	303

Limited Class

SV2AEL	303
TA4RC	302
TA1CM	301
K2JL	297
PY2TC	295

Formula Class - 100w

OK2FD	297
PY2CER	269
HA7LJ	261
PY2DPM	261
K4AR	261

Formula Class - 5w

WG5G	262
K8ZT	226
DL6GBM	200
W8QZA	198
4Z4UO	166

CW

OK2PAY	275
PA3FQA	264
ZL3CW	263
K5BG	250
W4JS	238

Phone

W4HY	274
PA2LO	268
IZ5CML	254
PY4JW	249
N3CDA	242

Digital

PY7ZZ	298
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HA1RB	296
YO5LD	295
R6YY	294
IK2RPE	293

Africa

CT3MD	291
ZS2EZ	258
D2UY	235
CT3HF	221
3C3CA	213

Asia

TA2LG	302
TA4RC	302
JE1FQV	297
JA0DAI	290
A71AE	283

Europe

IK0OZD	306
SV2AEL	303
TA1CM	301
CT1IUA	298
OK2FD	297

North America

K2ZJ	307
K5EK	305
N6WT	303
VE3VEE	303
K4ZO	302

Oceania

VK3GA	306
YB5QZ	297
VK3MH	285
YE9CDL	280
VK3IK	278

South America

PY7ZZ	298
PY2TC	295
PY4AZ	295
HK3W	292
PU2UAF	283

6 Meters

F5BZB*	189
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PY2XB	152
IW2CAM	140

10 Meters

PU2UAF	283
EA1DR	278
PY2NF	264
CT1GFK	263
KB0EO	202

12 Meters

K2TQC	293
PY2CT	270
PU2MBO	251
PU2MST	237
PY5DD	157

15 Meters

PY4AZ	295
PY2CER	269
PU2RTO	221
K6RO	179
YC1LJT	122

17 Meters

PY2XU	278
PY2LCD	271
LY5M	211
PY5IP	194

20 Meters

VE3VEE	303
PY2TC	295
PP5DZ	167
PY2XJ	166
YI3WHR	132

30 Meters

LY5O	263
NI3P	185

40 Meters

W9KNI	271
PY5EG	266
9A2EU	250
OD5ZF	197
YD2CZV	173

60 Meters

HA5WA	194
W1NG	192
LY2FN	151

80 Meters

PP5JR	220
DL6DH	216
DL8OH	197
N3QE	121

160 Meters

LA3MHA*	137
K7ZV	117
IK0XBX	110
PY5XH	21

CW - Europe

OK2PAY	275
PA3FQA	264
LY5W	232
PA0INA	222
MM0TWX	191

CW - North America

K5BG	250
W4JS	238
K0AL	209
W2NK	205
W3GW	195

Continental Modes

Phone

VU2DED*	159
PA2LO*	268
W4HY	274
VK2BY*	237
PY4JW*	249

CW

TA4MA*	54
ZL3CW*	263
PY1VOY*	206

Digital

ZS2EZ*	258
4X4MF*	258
HA1RB*	296
N3SL*	287

rounded out position 3 with a formidable score of 301. In Oceania, Graham Alston, VK3GA, from down under, took the top spot at 306. Anton Iriawan, YB5QZ (Photo G), who generously did the translation for our new website into his native language, took the third position with a score of 297. Great job, Anton, and thank you for your special effort on the translation. The top North American score was our Unlimited Class winner, John Carioti, K2ZJ, with a total of 307. John will receive a beautiful plaque for top unlimited, but will just get an "attaboy" for top North American score as participants can qualify only for a single plaque according to the DX Marathon rules. Second place was Ed Kuebert, K5EK, with a strong 305 total, followed by Kent Olsen, N6WT, in third place at 303. Kent shared third position with

steady performer Marvin Hlavac, VE3VEE (Photo H). Down south, Fred Souto Maior, PY7ZZ, took the top spot in South America with a score of 298, followed by Zaza Cabeco, PY2TC, at 295. Alex Alfenas, PY4AZ, was tied for second, also achieving a score of 295.

Band winners enjoyed great propagation this year. Six meters this year was won by Eric Trumeau, F5BZB, with a total of 189 points. This was an all-time high for six meters. Last year the 6-meter winner posted a score of 162. *Bon travail*, Eric, as this year we will issue a plaque for the 6-meter winner. Ten meters was won by Francisco Fagotte, PU2UAF, who will enjoy a beautiful plaque for his total score of 283. Last year, the 10-meter winner's total was 201! Veteran marathoner Bill Gibbons, K2TQC, had the top 12-meter score

YB1UUN* 275
PY7ZZ 298

Zone Winners

KL7TC* 267
VO2AC* 168
N6WT* 303
VE3VEE 303
K2ZJ 307
HI8RD* 285
HK3W* 292
OA4DX* 153
PY7ZZ 298
CE3BT* 234
LU2NI* 263
CT1IUA* 298
IK0OZD 306
R6YY 294
EX0DX* 104
SV2AEL 303
A71AE* 283
VU2IBI* 282
BV1EK* 179
JE1FQV* 297
E21EIC* 231
4F3BZ* 251
YB5QZ* 297
VK6DW* 265
VK3GA 306
WH6EY* 170
ZL3CW* 263
CT3MD 291
D2UY* 235
5H8HZ* 171
ZS2EZ 258
TF3JB* 247

Country Winners

3C3CA* 213
4X4MF 258
5H8HZ 171
7X - 7R68AR* 61
9A2EU* 250
9H/TA1HZ* 121
9M2SAF* 133
9V1PL* 78
A71AE 283
A92GE* 240
BV1EK 179
CE3BT 234
CO2QU* 251

CT1IUA 298
CT3MD 291
CX7BBR* 249
D2UY 235
DJ3AA* 286
DU - 4F3BZ 251
E21EIC 231
E76C* 281
EA1DR* 278
EI3CTB* 235
ER/UR7FM* 67
EX0DX 104
F6GCP* 294
FS - TO9W* 163
GU0SUP* 236
GW3SFC* 187
HA1RB 296
HB9FWB* 201
HI8RD 285
HK3W 292
HZ1SK* 201
IK0OZD 306
IT9RYJ* 272
JE1FQV 297
K2ZJ 307
KH8 - K8H* 152
KL7TC 267
KP4JFR* 261
LA3MHA 137
LU2NI 263
LY2MM* 266
M0NKR* 293
M10BHX* 222
MM0HVU* 199
OA4DX 153
OD5ZZ* 254
OE1SGU* 272
OK2FD 297
ON6NL* 287
OZ - 5P1KZX* 277
PC3T* 290
PJ2/W9VA* 74
PJ7AA* 121
PU0FDN* 94
PY7ZZ 298
R6YY 294
S56A* 226
SM - 8S9J* 245
SQ8N* 287
SV2AEL 303
SV5SKD* 192

SV9COL* 262
TA1CM* 301
TA2LG 302
TF3JB 247
V73MS* 161
VE3VEE 303
VK3GA 306
VU2IBI 282
WH6EY 170
YB5QZ 297
YI1WWA* 168
YO5LD* 295
YU6DX* 188
YV5OIE* 253
ZL3CW 263
ZS2EZ 258

USA Modes

Phone

W4HY 274

CW

K5BG 250

Digital

N3SL 287

US Call Areas

Unlimited

W1-W1JR* 288
W2-K2ZJ 307
W3-K3RA* 300
W4-K5EK* 305
W5-WA9PIE* 283
W6-N6WT 303
W7-W1YY* 295
W8-NU8Z* 283
W9-W9ILY* 301
W0-N3SL 287

Limited

W1-AK1P* 204
W2-K2JL* 297
W3-WA3WZR* 210
W4-AA8R* 262
W5-K5DC* 245
W6-WW6G* 203
W7-N7UVH* 215
W8-WT8E* 227
W9-W9RF* 280
W0-KY0O* 130

Formula 100W

W1-W1NG* 192
W2-KD2SPJ* 13
W3-NI3P* 185
W4-K4AR* 261
W5-AC7P* 197
W6-N6NFB* 145
W7-NY7H* 200
W8-K4YJ* 215
W9-W9KVR* 209
W0-AD1C* 230

Formula 5W

W1-KA1PPV* 13
W3-KZ3I* 157
W4-KR4EE* 36
W5-WG5G 262
W6-W8QZA* 198
W8-K8ZT* 226
W9-KW9E* 64

Canada Call Areas

VE2BR* 284
VE3VEE 303
VA7CRZ* 189
VE9VIC* 189
VO1HP* 200
VO2AC 168

Youth Score

PU5FJR 221
KJ7KOJ 199
PU5JDA 186
PU5BOB 176
PY2POA 156

Top Club Scores

YB-Land DXing Passion Is
Indonesia 40225
Rio DX Group
Brazil 20869
CDR Group
Brazil 9998
Western Washington DX Club
USA 9026
Northern Illinois DX Assoc.
USA 7523

of 293. Rumor has it that Bill will try another single band for 2023. The 15-meter winner, Alex Alfnas, PY4AZ, will secure a nice plaque for this band with a score of 295. Fellow Brazilian Val, PY4XU, is the winner of the 17-meter plaque with a 278. Veteran Marathoner and king of 20 meters, Marvin Hlavac, VE3VEE, secures the 20-meter win with a formidable score of 303. The 30-meter award goes to Bro Sriubas, LY5O, with a 263. It is wonderful to see that the founder of this program, Bob Locher, W9KNI, still enjoys participating. He won the 40-meter single band plaque with a score of 271. Thanks, Bob, for all you have done and wonderful to see you

still enjoy participating in DX Marathon. George Szabadkay, HA5WA, from Hungary takes the 60-meter honor with a score of 194. Eighty-meter honors go to another Brazilian participant, Sergio Almeida, PP5JR, with a total of 220. Finally, 160 meters – for which a plaque sponsor has stepped up – was won by Morten Nordby, LA3MHA. Congratulations, Morten, for winning the first 160-meter plaque sponsored by the South Florida DX Association.

Youth Winner

This year we are awarding a plaque for the first time to the top



Photo E. Bob Gill, K5BG, took the top NA CW award this year. Bob is also a formidable force on 6 meters with his Killer Bee 6-element quad antenna.



Photo G. Anton Iriawan, YB5QZ, took home the Oceania prize plaque in 2021, but finished third in the category in 2022.



Photo F. Jose Vasconcelos, CT3MD, is an avid DX Marathon participant and won the top African award for the second straight year with a total score of 291, besting his 279 from 2021. His beautiful location of Porto Santo Island is gorgeous. He is frequently heard on all bands and all modes.



Photo H. Marvin Hlavac, VE3VEE, and is a veteran and frequent player in the Marathon program secured the single-band world 20-meter win.

youth performer in the program. This year that plaque will go to 14-year-old Eduardo Almeida, PU5FJR, of Brazil. He is under the tutelage of his father, PP5JR. His total score was 221.

Certificate Winners

In addition to the plaque winners, we are awarding many certificates of recognition. Please consult the detailed listings for the calls of the certificate winners. Certificates are awarded for the top continental score for each of the three modes, top score in each country, top score in each CQ zone, top score in each Canadian call district, top score in each USA call area for each of the four DX Marathon classes plus the top single mode score in the USA. Con-

gratulations to all the 2022 certificate winners!

Some Operating Advice

During Hamcation® in Orlando this year, the DX Marathon launched a new website, <www.dxmarathon.com>. We encourage all participants to check it out. We also have a Group IO page that is available to exchange information and post questions. Please sign up as there are many great discussions that take place within the group.

Each year the DX Marathon website publishes a large amount of information to help participants minimize errors in their submissions. The Helpful Hints page can be accessed from the DX Marathon home page. In 2022, we pub-

lished over 1,000 callsign exceptions and notes to help every participant reduce the number of errors in their submissions. We also recommend that you regularly update your logging program callsign database if it has one. Unusual callsign prefixes seem to multiply every year, so updating your program's database is critical to properly determining the DX location and/or zone.

All participants work very hard at working country entities and zones. We encourage all to check their logs before submission, as each error discovered will result in a one-point deduction from your overall score. One of the highest error categories is *Wrong Zones*, which typically result in one-third of the errors. Confusion with USA zones is one of the biggest sources of zone errors. It is especially important to note that USA callsign numbers are no longer required to match their QTH. A W6 could be in New York, or a KL7 could be in Florida. There are many special callsigns in Russia that do not follow the traditional callsign mapping, thus creating many errors in zones 16, 17, 18, and 19. Zone 2 also continues to be a problem. Very few VE2 stations are in Zone 2 – most are in Zone 5. The DX Marathon website does list the most active Zone 2 stations. The next highest error category was *Invalid Callsigns* – callsigns that were entered by participants but do not actually exist. There are many unique callsigns being used today so it is critical to review your DX Marathon submissions carefully. The number of bad spots on the DX Clusters also remains a big problem.

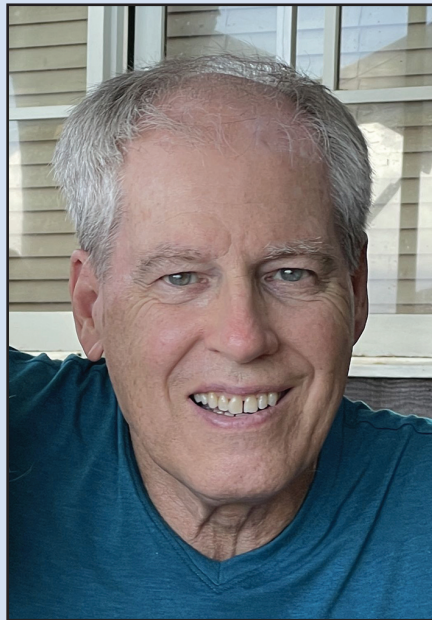
When logging a QSO from a DX spot, listen carefully to the DX station to make sure the callsign is logged correctly. Nearly 40% of all point subtractions are due to busted or incorrect callsigns. Some invalid callsigns may have been busted calls that were so bad that we could not determine the real callsign. Once again there were many mix-ups between “Ø” (Zero) and “O” (Oh). The computer is not forgiving, so check your log carefully! The database that is used for scoring the DX Marathon includes start and end dates for all major expeditions, so please make sure that dates and times are properly logged along with the callsign, country, and zone for each QSO. With more logs being posted online, it is easy to check if you are in the log before entering that QSO in the DX Marathon. We do publish a lot of helpful information on the DX Marathon website, but there is nothing we can do to make sure you

A Big “Thank You” to John Sweeney, K9EL

Back in 2005, when Bob Locher, W9KNI, approached the leadership at *CQ* magazine with the idea of reconstituting the CQ DX Marathon program, he presented them with rules that are pretty much the same as those in place today. Bob recognized the huge amount of work involved in administering this program, and recruited a young John Sweeney, K9EL, who unselfishly picked it up. Seventeen years later, with much blood, sweat, and tears put into the program, not to mention the thousands of hours given back to “his hobby,” John is “hanging up his cleats” and will continue to enjoy his hobby in retirement. So many of us over the years have taken from this wonderful hobby but few have given back unselfishly to it. John is clearly an exception. He has brought the program to the point where it is the fastest-growing DX program in the world and loved by so many of our fellow hams worldwide.

An active DXer, John has worked all countries and needs only P5 on CW. He's also earned 5BWAZ (#703) and 160-Meter WAZ. Besides being active working DX, John enjoys *being* DX and has operated from VR2, HS, YB, 9V, 9K2, KH6, XE, 6Y5, VK, JA, EA6, F, G, DL, 4X, FS, VE, and others. He holds several foreign callsigns and is an active DXpeditioner, most recently frequenting FS, St. Martin.

When I first heard of John's retirement from the program, I called him up and asked him what was involved with its administration. Well, after that 30-minute phone discussion, I could not



John Sweeney, K9EL (Photo courtesy K9EL)

believe what one man could do in running this program, and I surely appreciated all he has done to bring it from starting from scratch to what it is today. I gave this much thought and came back to John and *CQ* with a plan. The plan was to basically redistribute what John had been doing single-handedly to a committee of 5 individuals plus myself. Today, we are off and running, but I still am amazed at how much John accomplished in those 17 years. We all owe John a debt of gratitude and I ask you to join me in congratulating John for a job well done. – WC3W

MODE & BAND SCORES

BOLD = Plaque Winners
 * = Certificate Winners
 Callsign is followed by score

CW

OK2PAY	275
PA3FQA	264
ZL3CW	263
K5BG	250
W4JS	238
LY5W	232
PA0INA	222
K0AL	209
PY1VOY	206
W2NK	205
PY4XX	201
W3GW	195

PHONE

W4HY	274
PA2LO	268
IZ5CML	254
PY4JW	249
N3CDA	242
VK2BY	237
KD8NYP	222
MI0BHX	222
PU5YSV	220
KD8NYO	215
VA3IDD	201
PY6HD	198

DIGITAL

PY7ZZ	298
HA1RB	296
YO5LD	295
R6YY	294
IK2RPE	293
N3SL	287
IK5FKF	284
E76C	281
W9RF	280
IK0PEA	279
5P1KZX	277

2 METERS

YD5NPC	47
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6 METERS

F5BZB*	189
PY2XB	152
IW2CAM	140

10 METERS

PU2UAF	283
EA1DR	278
PY2NF	264
CT1GFK	263
KB0EO	202
PY1AX	179
PY2WLM	169
NP3YL	147

PY2TMV	130
PX5M	124
PR2D	103
PY1OX	55
PU2SEX	46
KC1RWM	33

12 METERS

K2TQC	293
PY2CT	270
PU2MBO	251
PU2MST	237
PY5DD	157

15 METERS

PY4AZ	295
PY2CER	269
PU2RTO	221
K6RO	179
YC1LJT	122

17 METERS

PY2XU	278
PY2LCD	271
LY5M	211
PY5IP	194

20 METERS

VE3VEE	303
PY2TC	295
PP5DZ	167
PY2XJ	166
YI3WHR	132
KD2SPJ	13

30 METERS

LY5O	263
NI3P	185

40 METERS

W9KNI	271
PY5EG	266
9A2EU	250
OD5ZF	197
YD2CZV	173

60 METERS

HA5WA	194
W1NG	192
LY2FN	151

80 METERS

PP5JR	220
DL6DH	216
DL8OH	197
N3QE	121

160 METERS

LA3MHA*	137
K7ZV	117
IK0XBX	110
PY5XH	21

JH1AJT – A Winner in So Many Ways

BY JOHN SWEENEY, K9EL



Among the mementos of the late Zorro Miyazawa, JH1AJT, kept by his widow on her obutsudan (a Buddhist home altar) is Zorro's plaque from the 2021 CQ DX Marathon, in which he became the first worldwide winner from Asia. Zorro was a businessman, philanthropist, DXer, and DXpeditioner. He is a member of the CQ DX and Amateur Radio Halls of Fame, and became a Silent Key in 2022. (Photo via K9EL)

Managing CQ's DX Marathon from 2006 through 2022 was not only a challenge, but also very rewarding. The best rewards came from the winners of this annual DX challenge when they opened their plaques and posted their certificates on their walls.

From 2006 though 2020, we had 8 winners from North America, 5 from Europe and 2 from South America – not a single winner came from Asia, Africa, or Oceania. In 2020, Zorro Miyazawa, JH1AJT, whom I had met many years ago in Japan and maintained contact with over the years, decided he wanted to participate in the DX Marathon and wanted to become the first winner from Asia. He did well in 2020 but made enough mistakes to finish third worldwide – a fantastic result for his first year participating.

Zorro and I spent some time going over his 2020 results and he made some adjustments in his approach for his second attempt in 2021. After the logs were submitted, he told me he was quite ill but was anxious to hear the results of his efforts. Of course, I could not reveal the results early, but I never expected to hear a few days later that he had passed (Zorro became a Silent Key on March 23, 2022). I always felt bad that I never told him that he won the 2021 DX Marathon – the first-ever winner from Asia.

Through the wonderful efforts of Loren Pleet, AE6P, who was a good friend of Zorro, the 2021 Unlimited Class winners' plaque was prepared and shipped to Zorro's widow. She was able to display it as part of the many tributes to Zorro (see photo). It was a tremendous accomplishment by Zorro and many QSOs were made while he was in significant pain. Thank you, Zorro, for being such a wonderful person and we shall miss you. - John, K9EL

are in the log. Unfortunately, subtractions due to pirates tripled from 2020.

As part of this article, you will find a complete listing of all scores plus a listing of the top scores in all available categories. The DX Marathon website will include additional information and details on the 2022 results plus photos of plaque winners as they become available. For any ques-

tions or comments about the DX Marathon, please contact the author.

Special Note from WC3W....

None of this wonderful program would be possible without you – our valuable participants. I am excited and believe we are in a position to double or triple our program partici-

CLUB SCORES

Club	Country	Score	Club	Country	Score
YB-LAND DXING PASSION IS	Indonesia	40225	Indio's Team DX		278
RIO DX GROUP	Brazil	20869	SFDXA		276
CDR GROUP	Brazil	9998	CWOp's Worldwide		275
Western Washington DX Club	USA	9026	DX101 Contest Club	USA	275
Northern Illinois DX Association	USA	7523	NEWDXA		274
Southeastern DX Club	USA	6804	OMIK Amateur Radio Association		273
Araucaria DX Group	Brazil	6364	FT8DMC		272
Willamette Valley DX Club	USA6	288	Contest Club Ontario	Canada	266
Carolina DX Association	USA	4205	STAR - Algarve STAR DX Team		263
CABREUVADX	Brazil	3092	Regionalis Radios Sportklub Puspokladan	Hungary	261
Mother Lode DX/Contest Club	USA	2974	IARC		258
East Tennessee DX Association	USA	2641	DX3H Ham Society of the Philippines	Philippines	251
ASSOCIACAO DOS RADIOAMADORES			GDXC	Cuba	251
DO PARANA	Brazil	1957	EA CONTEST CLUB	Spain	250
UBRO	Brazil	1940	Minas Dx Group		249
Italian Contest Club	Italy	1729	Danish DX Group		248
Hudson Valley Contesters and DX'ers	USA	1645	ARI		245
Chilean Pacific Dx Group	Chile	1631	SSA		245
Yankee Clipper Contest Club	USA	1618	Woodbridge Wireless	USA	237
VYTAUTAS MAGNUS UNIVERSITY			Kaunas University of Technology Radio Club		233
RADIO CLUB	Lithuania	1593	Mad River Radio Club	USA	232
Florida Contest Group	USA	1416	Mile High DX Association	USA	230
7A DX-CONTEST CLUB		1405	CDXC		227
FALCONS DX GROUP		1255	North Coast Contest Club	USA	226
Society of Midwest Contesters	USA	1213	TRUJILLO ALTO CONTEST CLUB	Puerto Rico	225
CMDXGROUP	Brazil	1195	RDRC		223
Salt City DX Association	USA	1145	CPDXG	Chile	222
Santiago de Cuba Contest Team	Cuba	1062	Nixa Amateur Radio Club	USA	216
Bavarian Contest Club	Germany	955	Gower/Gwyr CC		211
Southern California DX Club	USA	908	WACOM	USA	210
VU CONTEST GROUP	India	904	DARC P30	Germany	209
NERG	Australia	903	Iroquois County Amateur Radio Club		209
Central Arizona DX Association	USA	759	WNYDXA	USA	205
Black River Radio Ops	USA	704	NCDXC	USA	203
LU Contest Group	Argentina	699	Minnesota Wireless Association	USA	202
SPDXT		620	NADXC		201
Tennessee Contest Group	USA	567	TRAC		197
Maritime Contest Club		557	True Blue DXers Club		191
North East Radio Group		536	Contest Club Serbia		188
Radio Club Venezolano	Venezuela	528	Dallas Amateur Radio Club	USA	185
Clipperton DXC	France	527	MDXG Miramar DX Group		185
Arabian Gulf DX Group		523	AG8GT		183
LSDXA	USA	495	South East Contest Club		171
ARI Brescia		494	ADXA		162
Lake Washington Ham Club		482	Kentucky Contest Group		161
CDXA	USA	463	W WA DX CLUB	USA	158
Southwest Ohio DX Association	USA	440	Mississippi Valley DX/Contest Club		156
Metro DX Club	USA	432	RHR Youth		156
Potomac Valley Radio Club	USA	421	South Jersey Radio Association	USA	155
BALIDXCLUB	Indonesia	405	Lighthouse ARA		154
Just for Fun Contest Club	Germany	399	CWSP		153
CE Contest Group	Chile	397	DARC		153
DFW Contest Group	USA	382	Waverley ARS		152
REP		382	Contest Club	Belgium	151
Kansas City DX Club	USA	373	Columbia ARC		141
Southern California Contest Club	USA	368	Bristol (TN/VA) ARC		139
101 DX CLUB		362	CECG CE Contest Group	Chile	138
Spokane DX Assn	USA	356	Amateur Radio Club of Ohio State	USA	96
Lighthouse ARA		346	SILIWANGI DX HUNTER		91
Northern California Contest Club	USA	312	G-QRP		87
DUZRAD - Duzce Telsiz ve Radyo Amatorleri League		302	Northeast Wisconsin DX Assn	USA	85
TEAMPAPA		302	TARC		75
GPDX	Portugal	298	Giresun Radio Amateurs Club		67
GITRAD		292	YH2BB		57
Hotel India DX Club		285	Long Island CW Club	USA	42

pation in the next couple of years. I have been doing three to four Zoom meetings a week to clubs spreading the word. I would encourage all of you to speak up at your clubs and spread the word as well. We are the fastest-growing DX program in the world today and I believe we have not even begun to grow. With the advent of digital technology, and Cycle 25, many operators are now able to work DX regardless of station size or tower restrictions. Finally, we will be clarifying the classifications and rules for 2024. The success of our program depends on ensuring fairness and clarity in rules along with appropriate enforcement. Our program operates on the assumption of honest reporting and play, and we understand that to preserve our growth and encourage all, we must have rules and penalties for breaking of the rules. We do receive reports from our participants about potential violations of rules and we do vet these out when reported to ensure the continued integrity of our program. I am particularly concerned about the use of multi-locations/remote stations. Our rules are very clear on this issue, one TX/RX location per submission and it is my intent to clamp down on any participants who intentionally violate this rule.

Special Thanks...

The DX Marathon would not be possible without the incredible support and assistance from so many people. The team effort makes the DX Marathon possible. I want to first thank *CQ* magazine for developing the Marathon and providing continuing support. Many generous hams have given back to this hobby by supporting the Marathon program. Just a few include Alex Shovkoplyas, VE3NEA; Jim Reiser, AD1C; all the plaque sponsors; Dave Bernstein, AA6YQ, for his incorporation of the program within his DX Labs program; Mike Ricketts, W9MR; John Holmes, W9ILY, who has done all the certificates; Bob Locher, Jr, W9KNI, and Atilano Oms, PY5EG. Bernie McClenny, Jr, W3UR, has also been a tremendous supporter by including lots of DX Marathon info in his Daily DX newsletter. I also thank Laurie Cowcher, VK3AMA, for including DX Marathon support in his popular JT Alert software. Finally, I wish to thank my amazing operating group who have advanced us at least six months ahead of schedule for the turnover of the program administration to me from K9EL.

Thank you for your participation in 2022 and best of luck in 2023!

Results 2022 CQ DX Marathon

Unlimited Class															
Callsign	Countries	Zones	Score												
K2ZJ	267	40	307	W7WM	229	40	269	CT2HUU	202	38	240	W2BJN	183	36	219
IK0OZD	266	40	306	PA2LO	229	39	268	A92GE	202	38	240	YD9RRB	179	39	218
VK3GA	266	40	306	W4PNY	229	39	268	A92AA	201	39	240	Y1CTCA	180	38	218
K5EK	265	40	305	YE6YE	228	39	267	YB1BZV	200	39	239	K6OK	180	38	218
N6WT	263	40	303	W9AP	228	39	267	ON7WMM	206	33	239	VK3GK	179	39	218
VE3VEE	263	40	303	W9MR	230	37	267	AD7Z	202	37	239	N2SQW	180	37	217
K4ZO	262	40	302	PY4OY	229	38	267	YE3ESW	200	38	238	YB7UTO	179	38	217
TA2LG	262	40	302	KL7TC	229	38	267	NK7Z	203	35	238	N7JP	179	38	217
W9ILY	261	40	301	LY2MM	227	39	266	YD9HJD	203	35	238	W9SN	179	38	217
K3RA	260	40	300	PY5EG	230	36	266	YB1TDL	199	39	238	WA0JZK	178	38	216
K9NU	258	40	298	W1AJT	226	40	266	W4JS	198	40	238	YD7ICF	178	38	216
N2BJ	259	39	298	VK6DW	226	39	265	PT9BM	199	38	237	YB4LYD	178	38	216
CT1IUA	259	39	298	YB1AYO	226	39	265	VK2BY	205	32	237	DL6DH	179	37	216
PY7ZZ	258	40	298	EA5YI	226	39	265	YD9ABC	200	37	237	DL8LAS	182	34	216
JE1FQV	259	38	297	PY2NF	224	40	264	KX1X	197	40	237	PY4LH	183	33	216
YB5OZ	257	40	297	K8YC	225	39	264	WA3AFS	199	38	237	KD8NYO	179	36	215
K1ZN	262	34	296	PA3FQA	225	39	264	PU2MST	199	38	237	YD2ULK	177	38	215
HA1RB	256	40	296	WB6JJJ	224	40	264	W8ZF	199	38	237	W7EED	179	36	215
W1YY	255	40	295	AF7NX	224	39	263	N4PQX	197	40	237	YB7YGR	184	31	215
YO5LD	255	40	295	CT1GFK	224	39	263	K0LB	199	38	237	YC4SIZ	178	37	215
W9MK	255	40	295	YB1TQL	225	38	263	PP2CS	198	38	236	VK4CC	176	39	215
PY4AZ	256	39	295	ZL3CW	224	39	263	K6MW	197	38	235	VU2TMP	176	37	213
R6YY	255	39	294	LY5O	223	40	263	YB9KA	195	40	235	PY2EU	178	35	213
F6GCP	254	40	294	SV9COL	225	37	262	W9PDS	196	39	235	3C3CA	178	35	213
K2TQC	253	40	293	N4TL	223	39	262	WT2P	195	40	235	WI7N	173	40	213
W6OAT	253	40	293	YB2HAF	224	37	261	D2UY	201	34	235	YB1HK	173	39	212
M0NKR	256	37	293	N1NK	223	38	261	PU4CEP	196	38	234	YC2CZF	175	37	212
N6WS	251	40	291	PY2COY	221	39	260	K9JU	197	37	234	YD0BJJ	180	32	212
KD5M	251	40	291	K9ARZ	224	36	260	CE3BT	194	40	234	N7EPD	174	38	212
CT3MD	251	40	291	ZS2EZ	218	40	258	KE4UW	195	39	234	KD7H	175	37	212
W7PC	250	40	290	4X4MF	219	39	258	KZ1W	195	39	234	YB3BGM	175	37	212
JA0DAI	253	37	290	WB9Z	219	36	257	K6YK	197	37	234	CT7AIX	177	35	212
PC3T	250	40	290	WX6V	218	39	257	PY7ZC	200	33	233	YD7MAW	175	36	211
W1JR	248	40	288	PY2GTA	216	40	256	N2JJ	195	38	233	LY5M	172	39	211
N3SL	248	39	287	KP4JRS	222	34	256	VE3CT	199	34	233	KN7K	173	38	211
WORIC	247	40	287	KI2D	217	39	256	KB8O	195	38	233	G0BIX	175	36	211
WO7R	248	39	287	YB3BBF	217	38	255	WA7CPA	194	39	233	WR7T	173	37	210
SQ8N	248	39	287	PS8CW	218	37	255	YC1RYX	193	39	232	AF4T	171	39	210
ON6NL	247	40	287	PT7WM	216	39	255	YE7LTN	193	39	232	K4MQM	172	38	210
DJ3AA	249	37	286	W4UCK	218	37	255	YB1LUE	200	32	232	PY2KS	190	19	209
SV1CNS	247	39	286	W4HG	217	38	255	LY5W	193	39	232	YD9BIJ	174	35	209
HI8RD	248	37	285	DL1NKS	222	33	255	YB1IQE	192	39	231	K0AL	173	36	209
VK3MH	248	37	285	KA6BIM	215	39	254	YB1BA	193	38	231	YC0UI	170	39	209
VE2BR	244	40	284	AE4CW	215	39	254	E21EIC	192	39	231	W7RM	170	39	209
AA9A	244	40	284	IZ5CML	215	39	254	K2SD	197	34	231	YB1CQU	172	37	209
IK5FKF	244	40	284	K8AC	215	39	254	PY5ZHP	193	38	231	YC6IPX	170	39	209
W9ZCL	243	40	283	YC4AOK	214	39	253	PY5QW	191	39	230	YB9JF	172	37	209
NU8Z	243	40	283	ON4LG	216	37	253	YE4LWU	191	39	230	YC1IFR	171	38	209
PU2JAF	244	39	283	K9NB	213	40	253	YC9HIU	191	38	229	YB2SLF	171	38	209
CT1ILT	246	37	283	W6DR	215	38	253	YC2KJC	190	39	229	K4ELI	169	39	208
A71AE	243	40	283	PY2BEK	212	40	252	P58RV	190	39	229	YC2BST	174	33	207
WA9PIE	245	38	283	K9RR	212	40	252	PU2SWR	188	40	228	YC8GPH	170	37	207
K9KE	244	39	283	YB2MM	213	39	252	YD1FRU	189	39	228	YB1INQ	175	32	207
NS9I	243	39	282	KU1CW	212	40	252	PY2JG	189	39	228	K7ZA	169	38	207
N6JV	243	39	282	PY2VM	215	37	252	YB2VY	191	37	228	NF7D	171	36	207
AA5JF	242	40	282	N4MIK	212	39	251	K7ACZ	188	40	228	YB1VHC	171	36	207
KJ7TEA	242	39	281	VK3MB	214	37	251	IK0ALT	188	40	228	DV1IIV	174	33	207
PY2GM	242	39	281	PU2MBO	211	40	251	NOVT	187	40	227	YC2CAB	168	38	206
K4PI	242	39	281	WC4H	211	40	251	EI2GLB	189	38	227	PY2ACP	167	39	206
N6RV	241	40	281	WXOZ	212	39	251	S56A	194	32	226	PY2IQ	168	38	206
PY5DK	243	38	281	K5BG	210	40	250	PY5CC	191	35	226	PY1VOY	168	38	206
K9IR	240	40	280	9A2EU	211	39	250	K9QJ	187	39	226	YBOKTT	169	37	206
YE9CDL	241	39	280	PY4JW	211	38	249	YB2TS	190	36	226	YB2RT	168	37	205
IKOPEA	240	39	279	ON6CC	216	33	249	AJ8B	186	39	225	YB7NUS	171	34	205
F5RRS	240	39	279	W2FV	209	40	249	YE4FSB	188	37	225	W0VQ	171	34	205
EA1DR	241	37	278	NQ7R	210	39	249	EI7CC	186	39	225	K1SND	167	37	204
PY2AE	239	39	278	W7DO	209	39	248	KB2S	186	39	225	YB1APD	168	36	204
VK3IK	241	37	278	VE3ZZ	208	40	248	WP4WW	189	36	225	PY7XC	168	36	204
PY2KP	237	40	277	YB9BUD	211	37	248	YB7BOB	185	39	224	YF8BVD	167	36	203
5P1KZX	241	36	277	W7YED	209	39	248	W6DE	186	38	224	WE6Z	164	39	203
WC3W	238	38	276	W2AXR	209	39	248	YC5NKF	185	39	224	E2A	166	37	203
JA1WWO	236	40	276	PY2CX	216	32	248	YB2CAA	185	39	224	PY2YJ	169	34	203
NK7I	238	38	276	OZ1IKY	211	37	248	K7AR	184	40	224	LU6FOV	169	34	203
OK2PAY	235	40	275	W3GQ	209	39	248	PY4FD	185	39	224	N4TOL	167	35	202
YB1UUN	237	38	275	YB0SAS	208	38	246	VU2YYF	186	38	224	KB0EO	168	34	202
W1SRD	238	37	275	K4RUM	207	39	246	YB7WBC	185	38	223	E25KAE	164	38	202
PY2APK	236	39	275	W8GJK	209	37	246	KY7M	185	38	223	DM9EE	171	31	202
W4HY	234	40	274	W1NK	207	39	246	E74YM	183	39	222	HB9FWB	169	32	201
N7QT	234	40	274	PY2AB	211	35	246	KD8NYP	183	39	222	PY4XX	168	33	201
KZ2I	235	39	274	PS8MT	208	37	245	PA0INA	184	38	222	WA4ZXV	163	38	201
W7YAQ	234	40	274	PT7ZT	207	38	245	PP5ZP	184	38	222	YD9MBM	164	37	201
WA9GON	234	40	274	IK2XYI	206	39	245	CE3VRT	187	35	222	AB8M	164	37	201
WQ6Q	233	40	273	W1SSN	208	37	245	MI0BHX	185	37	222	TA3LHH	167	33	200
W9JJB	233	40	273	8S9J	211	34	245	PU1JSV	188	34	222	YD9AZN	168	32	200
IT9RYJ	234	38	272	K7MH	204	40	244	YC5NBY	186	35	221	W4DTA	165	35	200
AA5AM	232	40	272	W7AV	205	39	244	K6SEA	186	35	221	YE1BON	167	33	200
OE1SGU	233	39	272	AA4R	205	39	244	YE0PO	182	39	221	IN3VZE	163	37	200
K7PI	232	39	271	WC7Q	204	40	244	CT3HF	185	36	221	VO1HP	166	34	200
W9KNI	231	40	271	PY2OKB	204	40	244	W4UW	181	40	221	K9QVB	162	37	199
PY2LCD	231	40	271	N1EN	203	40	243	NV9L	184	36	220	YC2XCD	163	36	199
WD9DZV	232	38	270	YC5AKH	204	39	243	YB9FAO	182	38	220	N6MZ	161	38	199
YC9AAI	231	39	270	PY2GZ	203	40	243	PP5JR	181	39	220	KJ7KQJ	161	38	199
PY2CT	231	39	270	K0XM	204	39	243	NC6R	183	37	220	PY2UGO	165	34	199
W6XK	230	40	270	N1RR	20										

PY6HD	167	31	198	PY2UD	136	34	170	N7JB	104	31	135	ZV1T	63	19	82
PA7RA	162	35	197	PY2AD	139	31	170	PU1WZY	106	29	135	PT7KC	62	20	82
DL8OH	160	37	197	WH6EY	141	29	170	KK7GO	101	33	134	CE6MRD	59	23	82
PY2KKN	163	33	196	PY2TTN	136	34	170	VU2RS	104	30	134	PT4T	59	22	81
YE8TPA	158	38	196	YB1DCW	135	34	169	XQ7UP	105	29	134	PY1KIH	63	17	80
PY2NL	160	36	196	PY7GB	137	32	169	9M2SAF	101	32	133	PY1DK	58	22	80
CT7AKW	159	37	196	PY2WLM	136	33	169	OD5UI	104	29	133	K9UQN	57	22	79
YB4KAR	158	37	195	PU2TWZ	141	28	169	TA4AU	104	29	133	PY1AN	55	24	79
YB6MIX	156	39	195	VO2AC	134	34	168	DR5X	106	27	133	VU2KTW	64	15	79
YB1MAE	160	35	195	YC2KDU	133	34	167	PY2ANH	101	32	133	9V1PL	62	16	78
YC1MRF	159	36	195	N9EP	130	37	167	PY1KB	105	27	132	TA4IGN	59	18	77
YB0MZI	157	38	195	YB1CUZ	132	34	166	K9MM	99	32	131	PY1PL	61	14	75
YC5YDD	157	37	194	PY1ID	135	31	166	PY2TMV	106	24	130	PJ2W9VA	52	22	74
HA5WA	160	34	194	N7RVD	131	35	166	PY4BZ	106	24	130	CX6VM	51	22	73
PY7RP	157	37	194	PY2XJ	131	35	166	PY1XA	101	29	130	PY1LEO	51	21	72
PY2PPZ	158	35	193	PU1AJN	137	28	165	AT75RS	101	29	130	PU2KJX	53	19	72
YB4HKR	158	35	193	YB2BNN	138	26	164	WB5WAJ	102	28	130	YE1BNI	43	27	70
W4PGM	157	36	193	PY2MIG	129	35	164	PU1SKO	105	24	129	ON4RAT/P	53	16	69
N7DX	156	37	193	PP5AX	133	31	164	PY2OAL	99	29	128	KA4UPI	48	21	69
W4OX	154	38	192	YB7YDB	132	32	164	PY8SL	99	29	128	OR7R	53	15	68
PY2DSN	155	37	192	TO9W	127	36	163	PY2DMZ	97	31	128	PU1VFO	50	18	68
K5IB	154	38	192	TF3DC	134	29	163	YE3BER	107	20	127	W7YAO/KH6	40	28	68
WA7CPA/7	154	38	192	PU1VMA	129	33	162	PY1JR	102	25	127	K6DW	44	24	68
YB4AFL	157	35	192	W6DCC	127	35	162	YD0OXG	99	27	126	PY2MQ	46	22	68
WB9FLY	155	37	192	K7RF	126	36	162	YG9CLB	93	32	125	PY2RX	48	19	67
PY2VZ	162	30	192	YD2BHJ	128	33	161	ZW2T	97	28	125	DL9EE	44	23	67
KT7E	155	36	191	N7US	126	35	161	PY2HJ	95	30	125	CE1UGE	45	22	67
K2CIB	153	38	191	WX7HS	125	36	161	KX7DJ	93	31	124	PT7APM	45	22	67
YB2SPP	161	30	191	YB6IVW	125	35	160	W3DQS	97	27	124	VE3FU	50	16	66
MM0TWX	154	37	191	YC2LCZ	126	34	160	PU2YXB	93	31	124	ZW1M	46	17	63
PY1CD	158	33	191	K1GU	126	34	160	PT2EM	100	23	123	W4TE	46	17	63
YB8CMT	153	37	190	PT2AW	128	32	160	PY1SAD	96	27	123	PY1MK	49	13	62
PY1ZV	154	36	190	W4ATL	129	31	160	MM/W7YAO	96	26	122	W1WLL	43	19	62
N4FN	155	35	190	W1RH	126	34	160	N3QE	97	24	121	PT7KM	43	19	62
YC8ABD	153	37	190	KV3T	125	34	159	YC8DUL	94	27	121	PY4CCL	46	15	61
YC2DBW	156	34	190	PR8KW	126	33	159	PP5PD	95	26	121	ZV5O	41	20	61
YB4ECU	155	35	190	VU2DED	127	32	159	KR7D	88	33	121	YG9EY	37	24	61
YB1TS	157	33	190	YC0AIB	125	33	158	Y3TSJ	89	31	120	7R68AR	48	13	61
YF1ANL	154	36	190	K0BL	128	30	158	PY3OO	91	29	120	YB2BHX	34	23	57
F5BZB	157	32	189	PP5IP	131	27	158	KB7HDX	90	30	120	KJ7SJB	38	18	56
VA7CRZ	153	36	189	PY5AKW	124	33	157	W2XL	92	27	119	PT4A	40	15	55
YE2DOR	156	33	189	ZL1BBW	118	39	157	PY2NNM	91	28	119	PY1OX	41	14	55
KFOIQ	151	38	189	KO4VVQ	128	29	157	PY2CPS	90	28	118	YG1BCP	34	20	54
KD4RH	152	37	189	AD7L	123	34	157	K7ZV	84	33	117	PU7HLT	39	14	53
LY7M	153	35	188	NI0C	122	34	156	PU2PKL	88	28	116	PY4RP	32	18	50
PY1GB	149	39	188	KB2S/7	127	29	156	ZW5B	83	33	116	PY1BAB	33	14	47
YC1CBC	153	35	188	W2CN	124	31	155	PS2REG	81	34	115	PU2SEX	32	14	46
YC2FIK	156	32	188	KM8L	124	31	155	TA1API	90	24	114	ZW1CML	33	12	45
N4PL	153	35	188	WT8P	121	34	155	N6VH	83	31	114	7X4CZ	33	11	44
PY2VH	155	32	187	PY1KO	124	31	155	PY1DX	90	23	113	LU9CSM	29	15	44
WS7L	150	37	187	K1BDC	122	32	154	KI7Y	84	29	113	OP45IH	36	6	42
CE3DOH	147	39	186	K7ZS	118	36	154	YB2CTE	86	27	113	KC1RWM	20	13	33
YB1DMK	148	37	185	PU1KPS	126	28	154	PW8BR	81	29	110	PU1KGE	19	13	32
KG5EIJ	150	35	185	K4NNK	123	31	154	IK0XB	88	22	110	WW8RR	18	14	32
PP4T	153	31	184	N9LQ	119	35	154	ZZ1M	87	21	108	YC1UK	18	11	29
KT4O	148	36	184	PY2ZZ	120	33	153	PY1RI	86	22	108	PT2JAR	19	9	28
KM2O	149	35	184	PP1KV	118	35	153	TF3D	82	25	107	PY1IR	17	10	27
K2UF	148	35	183	N2ZZ	116	36	152	ZV8C	86	21	107	PY1FOX	19	8	27
IK7EOT	152	31	183	K8H	115	37	152	W1/PY1MX	85	22	107	PY2PZL	17	9	26
YC4AEW	149	34	183	PY2XB	126	26	152	PY2TTE	80	26	106	PY4DX	14	10	24
YB0DOS	149	34	183	W3OA	122	30	152	PY5IN	81	24	105	PY3TD	11	13	24
YC8CGZ	150	33	183	W7VAS	113	39	152	K6SZQ	75	30	105	CE6TTL	14	9	23
YC4GBF	149	34	183	VK3VT	116	36	152	CB6I	74	30	104	PY5XH	14	7	21
YD2GYO	150	33	183	K4FS	122	30	152	EX0DX	82	22	104	CT2UK	11	5	16
W7UDH	148	35	183	CE3PCG	122	29	151	ZZ1S	75	28	103	ZW1KDT	10	6	16
W7PEZ	147	36	183	CE2GT	122	29	151	NE7D	74	29	103	7X2JV	8	6	14
N8XHT	148	35	183	LY2FN	122	29	151	PY1RY	79	24	103	PY3ZZR	7	6	13
PY2QT	149	33	182	PY6RT	121	30	151	PR2D	75	28	103	PU1JAH	6	6	12
NM2R	149	33	182	PV2G	122	28	150	K9DX	71	31	102	CB7C	6	5	11
YG3CPY	145	36	181	YD9BUV	115	34	149	PT2SR	79	23	102	9A/TA7YLY	5	3	8
PY4ARS	147	34	181	CE7KF	123	26	149	CE2SCZ	75	26	101	PY1KJA	3	3	6
KK9H	148	33	181	KC7EFP	112	37	149	ZW2F	76	24	100	PU2VLI	3	2	5
PP2CC	145	35	180	PY2RVM	118	31	149	PY2AAK	75	25	100	PY5ZD	3	2	5
K6RO	143	36	179	PU2LOD	121	28	149	PU5ALE	79	21	100	PY1LOF	2	2	4
PY1AX	145	34	179	9A/W7AOF	118	30	148	CB6CPC	72	27	99	PY2GMI	2	2	4
BV1EK	140	39	179	PU2KNM	115	33	148	PY1LO	78	21	99	PU1LLF	1	1	2
YC3CUG	143	35	178	K7EG	112	36	148	KK7EXT	72	27	99	PY1MU	1	1	2
YC2DUC	145	33	178	KA2KON	120	27	147	PY4ME	78	21	99	PU1YLL	1	1	2
PY2WND	143	35	178	XQ4CW	116	31	147	PP5DKM	71	26	97	PY2RKG	1	1	2
PT2ARR	147	31	178	PY1IO	117	30	147	K7PAX/7	70	27	97	PY4BAL	1	1	2
PY5CV	161	17	178	PY1FI	114	31	145	KK4XA	78	19	97				
YC7AHV	146	31	177	PU4MAM	115	30	145	KU4NY	71	24	95				
YD2UFR	141	35	176	GW4EVX	114	31	145	N6GEO	67	27	94				
YB1DIU	143	33	176	E2WRTC	111	32	143	PP2DX	73	21	94				
TF3T	150	26	176	YE1BHR	112	31	143	K7WLG	71	23	94				
PY4LI	143	33	176	K7VIT	108	34	142	PY5KA	70	24	94				
PU2OYT	147	28	175	PY5EW	118	24	142	CT7ANO	67	27	94				
YE8DWC	138	36	174	PY1NS	110	31	141	K6KR	67	26	93				
CE4WT	138	35	173	N7ESU	110	31	141	Y1JGE	63	28	91				
W9YK	138	35	173	YD7ACD	107	33	140	K7PAX	63	27	90				
PY2BRA	140	33	173	IW2CAM	116	24	140	CE3MRD	68	22	90				
K7WTG	135	38	173	PY5FO	108	31	139	YB8CS	64	26	90				
K8AJS	142	31	173	PY1BL	110	29	139	LU1WCL	69	20	89				
PY2GIG	137	36	173	N4NT	109	30	139	K7FU	60	26	86				
PY3DX	137	35	172	LU1MAW	111	28	139	9A5MP	72	13	85				
TC3X	141	31	172	PY4HI	111	26	137	PY4WWW	65	20	85				
YB7MP	141	31	172	LA3MHA	106	31	137	KQ7I	59	26	85				
AG7N	135	37	172	PY8WW	110	26	136	PY5GA	62	22	84				
YC0NIU	135	36	171	PY3BEG	104	32	136	PT7BI	66	18	84				

