Results of the 2023 CQ World Wide WPX SSB Contest

BY BUD TRENCH,* AA3B

"Lots of fun even with some funky band conditions. Great to see a phenomenal opening of 10 meters!" – KB3TB

"Organized mayhem! Had a great time. Can't wait until next year" – N5BLY

"Excellent contest, many poor signals but great operators" – K4CGY

I operated CQ WPX SSB from Antigua for the first time this year. When I arrived on 21 March, I found band conditions to be fantastic and the station needed minimal repairs, so I was psyched! And then, a G4 (severe) geomagnetic storm hit on 24 March, profoundly degrading the HF bands. When the contest started, my rates fell short of my goals. After a bit of a panic, I settled down and made the best of the hand I was dealt. Fortunately, conditions improved, rates steadily increased, and I had a fantastic time overall.

The G4 storm was not a deterrent to participation as a record 7,735 logs were received, surpassing the previous peak set at the height of the COVID19 pandemic in 2020. As shown in Figure 1,

Jean-Pierre, P43A was #1 in the World on 15M!

* director@cqwpx.com

	Continent							
Metric	AF	AS	EU	NA	OC	SA	ALL	2022
Logs	55	908	3,384	2,342	601	445	7,735	6,213
Operators	78	1,122	4,112	2,646	730	539	9,227	7,199
DXCC	21	30	60	26	13	16	166	145
Prefixes	36	276	864	571	118	143	2,008	1,704
Reported QSOs By Band (Post Log Checking)								
160M	178	130	14,811	2,524	31	5	17,679	12,904
80M	1,471	3,544	120,009	28,724	576	738	155,062	134,508
40M	5,710	19,917	213,740	114,953	32,352	9,352	396,024	402,874
20M	9,562	37,027	310,980	177,799	17,163	24,274	576,805	578,641
15M	16,089	75,042	259,784	235,900	31,074	42,309	660,198	621,395
10M	31,737	92,475	195,081	209,226	37,970	130,898	697,387	236,200
All	64,747	228,135	1,114,405	769,126	119,166	207,576	2,503,155	1,986,522
Average Productivty								
QSOs/Log	1,177	251	329	328	198	466	324	320
QSOs/Opr	830	203	271	291	163	385	271	276

Figure 1. 2023 Activity Level Summary by Continent

Jaime, NS3T, was #6 in the USA in the Single Op, All Band, Low Power category. Note that there is no microphone – all SSB QSOs were made using recorded voice files.

there was a growth of more than 1,500 logs processed as compared to last year. Over 2.5 million QSOs were validated based on logs received from 166 DXCC entities. Ten meters was the most productive band accounting for 28% of all QSOs.

Single Operator Highlights

Single operator entries grew by over 1,300 as compared to 2022, and Figure 2 shows the breakdown of Single Operator category selections by continent. Low Power is clearly the category of choice and saw a participation growth of nearly 35% compared to last year. The most popular single band selection was 10M likely due to the progress of Cycle 25.

A study of Figure 3, showing operating times by power levels for the Single Op All Band categories, reveals that

	Continent							Average per Entry		
Category	AF	AS	EU	NA	OC	SA	All	Op Time (Hours)	Score Reduction	All 2022
Single Op High Power Entries										
All Band	16	155	654	739	90	40	1,694	12	8%	1,476
Single Band	6	97	296	114	46	52	611	12	9%	511
Single Op Low Power Entries										
All Band	15	290	1,346	1,074	184	100	3,009	10	11%	2,299
Single Band	12	223	499	188	213	197	1,332	9	12%	1,102
QRP Entries										
All Band	1	12	68	34	11	6	132	10	10%	105
Single Band	0	38	86	29	22	11	186	7	12%	151

Figure 2. Single Operator Participants by Continent

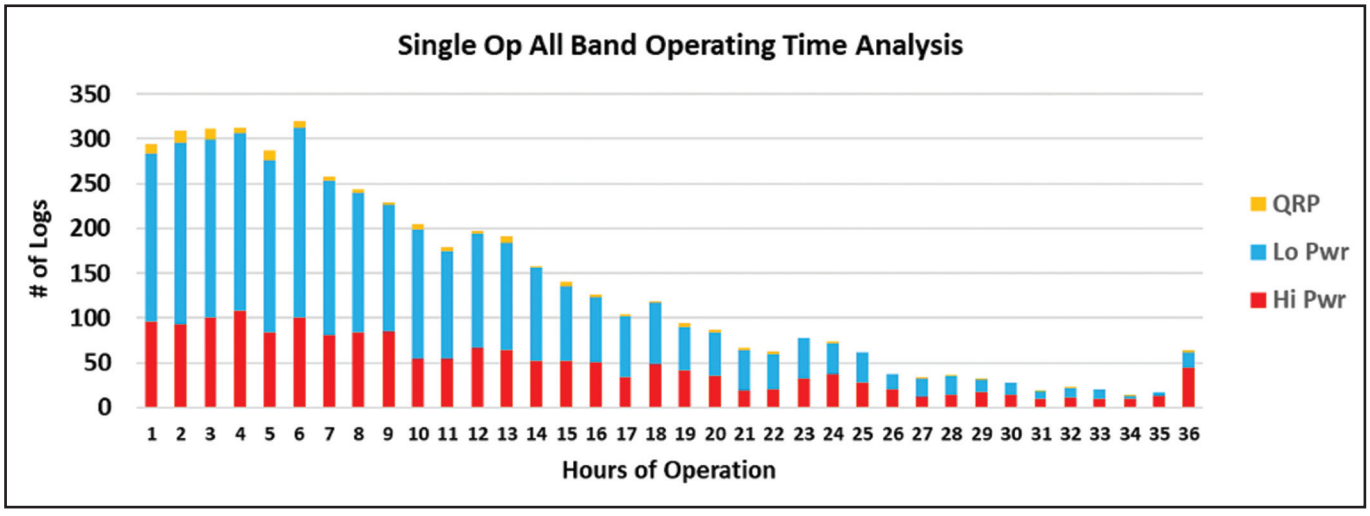


Figure 3. Single Op All Band Operating Time Histogram

about 70% of the operators exited after 12 hours and 90% by 24 hours. There were 64 All Banders that lasted the full 36 hours along with 12 Single Banders. Overall, average operating times were down slightly in most single operator categories as compared to 2022.

The top Single Op score in the World was achieved by D4Z (E77DX) who held off last year's winner PJ4K (N6KT). D4Z's multiplier total was the discriminator, which more than offset the QSO points advantage achieved by PJ4K. KQ2M was way out in front of all the other Single Ops from the USA.

P4ØL (W6LD) dominated the Single Op Low Power category to earn his second consecutive win. AC1U (N1UR) was #1 in the USA and #4 overall.

One of the closest races in the contest was between 5B/HA5PP and ZY6G (PY6GOE) for the top spot in the Single Op QRP category. The finish order was determined by logging accuracy with 5B/HA5PP on top. K3WW achieved his third consecutive QRP victory in the USA.

Ten meter results were thrilling as compared to last year. The winning Single Band 10M score from PT5J (PP5JR) was nearly 3X the top score from 2022, while KW7MM Single Band 10M score was nearly 10X the top USA score from 2022. The first place USA Low Power score on 10M was achieved by a portable operation conducted by K4TMC. P43A reported many dupes due to bad spots of his call as P4ØA and P4XA while on the journey to the top

Kris, YL3JA, set a new world record in the Low Power Youth Overlay and submitted a log with impressive accuracy!

	Continent							Average per Entry		
2023 Category	AF	AS	EU	NA	OC	SA	All	Op Time (Hours)	Score Reduction	All 2022
High Power Overlay Entries										
TB-Wires	3	26	91	100	17	14	251	14	8%	238
Classic	3	20	64	66	13	5	171	12	8%	162
Rookie	0	4	19	10	2	1	36	16	10%	29
Youth	0	2	6	3	0	0	11	13	9%	9
Low Power Overlay Entries (Includes QRP)										
TB-Wires	2	43	202	93	29	26	395	12	10%	332
Classic	5	75	280	146	45	26	577	10	11%	336
Rookie	1	26	116	81	30	13	267	9	13%	35
Youth	0	14	34	8	2	0	58	6	9%	30

Figure 4. Single Op Overlay Participation Summary

	Continent							Average per Entry		
2023 Category	AF	AS	EU	NA	OC	SA	All	Op Time (Hours)	Score Reduction	All 2022
Multi-Single HP	1	24	81	25	9	16	156	31	11%	107
Multi-Single LP	0	25	45	26	8	10	114	20	11%	71
Multi-Two	2	8	34	23	3	3	73	33	10%	45
Multi-Multi	1	3	9	12	2	2	29	37	11%	29
Multi-Distributed	0	1	8	4	2	1	16	32	10%	16

Figure 5. Multi-Operator Participation Summary

score for 15M. Congratulations to WIØWA (WØEWD) on a second consecutive USA 20M category victory. Two of the top single band scores in the USA came from the same station - K3JO @ K1LZ and K1LZ were the USA winners on 15M and 40M respectively.

Fun with Overlays

The Classic Overlay is for Single Operators using one radio, without QSO finding assistance, and the score is based on the first 24 hours of on-times. This was the most selected Overlay in 2023 as shown in Figure 4 and was up by 109 participants (17%) from last year. There were 56 Classic Overlay participants that made it to the 24 hour operating time limit. PJ4R (KK9A) won the High Power Classic Overlay for the second year in a row. WK5T (N2IC) was the USA winner and #4 in the World. The Low Power Classic Overlay victory belongs to ZF2VE (W1VE); N8II was tops in the USA.

The Single Operator Tribander – Wires (TB-Wires) Overlay is for participants with antennas that meet the following requirements: a single feedline for the single antenna used on 20M / 15M / 10M and single element antennas for 160M, 80M and 40M. Separate receive antennas are not permitted.

2023 CQWW WPX SSB TOP SCORES

WORLD

SINGLE OPERATOR HIGH POWER All Band

D4Z (E77DX) 29,854,668
PJ4K (N6KT).....27,568,088
CR3DX (OM3GI).....26,099,616
8P5A (W2SC) 24,670,996
V26K (AA3B) 18,272,265

28 MHz

PT5J (PP5JR).....18,778,994
PV2G (PT2IC).....12,398,582
CQ3W (DF7EE).....10,392,928
EF8BBM (EA4BQ) 9,138,765
4X6FR.....6,278,610

21 MHz

P43A 12,056,712
FY5KE (F5UII) 10,265,807
DF7A (DL2ARD) 8,013,789
IY3A (IZ3EYZ) 6,053,232
SO9I (SQ9ORQ) 6,040,122

14 MHz

IB9T (IU3BTY) 5,843,404
YT3X.....4,725,783
CQ8Q (PT2FM) 4,185,550
S57DX 3,575,236
E74A 3,395,770

7 MHz

ED5R (EA5Z).....7,996,128
SN3A (SP3GEM) 5,731,180
IB8A (I8QLS) 5,530,214
HK1T.....4,445,476
K1LZ 3,896,800

3.7 MHz

4L5O 2,421,760
4L2M.....1,687,560
HA1TJ.....1,413,184
EE7L.....1,261,638
DQ2C (DL2SAX).....1,186,339

1.8 MHz

S56X 267,380
WF2W.....70,632
IK1PMR 51,910
K5UR 43,776
9A2KD 39,130

LOW POWER All Band

P4ØL (W6LD) 15,141,360
TA3NE 5,370,000
ZF2VE (W1VE) 4,895,838
AC1U (N1UR) 4,353,687
W1RCR.....3,915,054

28 MHz

PY2UD.....4,994,210
ZV2HAM (PY2EX) 2,952,418
TO1Q (F1ULQ) 2,302,785
ZM4T (ZL3IO) 1,994,709
LS7H (LU1HHT) 1,958,859

21 MHz

PR2E (PY2WH) 1,087,488
EA3CX 1,059,656
CT7BJG (DL6IAK) 999,297
V55Y (V51WH) 911,232
CT3IQ 819,819

14 MHz

YV4EK 1,110,032
YU5M.....1,100,610
S52OT 948,330
UT3EV 832,038
PY2NY 715,616

7 MHz

YT7A (YT7BA) 1,518,075
IT9EWR 844,845
E7ØY 803,984
HZ1TL.....600,010
HA8LLK 559,702

3.7 MHz

DR2T (DO1ABW) 816,871
IZ4REF 461,890
PCØØT (PA2TMS) 447,966
9A1AR 428,868
YO8PS.....343,530

1.8 MHz

YT8A.....131,016
UA7K 64,059
SQ1NXW 17,195
OK2BRQ.....16,720
SP6LUV 7,502

QRP All Band

5B/HA5PP (HA5PP) 1,114,206
ZY6G (PY6GOE) 1,086,206
ES6RW 846,304
LY9A 643,456
K3WW.....572,300

28 MHz

EE3O (EA3O) 229,080
UZ7M (UT9MZ).....160,080
PU2TWZ.....124,650
W5GAI 74,580
VE7DX 60,192

21 MHz

UN4L.....738,924
HG1S (HA1DAE) 248,040
K3OO.....192,576
SY1AEA.....156,782
TA2IB.....122,003

14 MHz

LY5G.....166,216
YV6BXN.....90,508
YO8RC 53,196
YO9XC.....25,239
YU1NR.....23,680

7 MHz

E77Y (E77CV) 137,936
OK6OK 97,416
OU2V (OZ1FJB) 58,032
SO55K (SP5FKW) 49,926
HA3GC 49,769

3.7 MHz

OL4W.....112,312
OMØA (OMØAAO) 89,870
GW8C (MØWLY) 18,216
OH1LEG 920
JA2MWV 24

1.8 MHz

HA1TI.....17,088
YO8WW.....779
UR5FEO 364
UT4UBZ.....312
DO4HZ.....286

MULTI-OP SINGLE-TRANSMITTER HIGH POWER All Band

P33W 40,316,976
UP2L.....25,587,564
LZ5R.....23,513,475
ZF1A 21,853,128
J68HZ 17,702,548

MULTI-OP SINGLE-TRANSMITTER LOW POWER All Band

NP3X 10,357,434
VP5P.....9,778,728
ED7B 5,408,308
PR1T.....4,956,685
LW1F 4,897,479

MULTI-OP TWO-TRANSMITTER All Band

ES9UKR 36,746,300
PX2A.....33,937,725
WP4X.....33,516,900
CR6K 30,927,879
TM6M.....28,429,640

MULTI-OP MULTI-TRANSMITTER All Band

CN3A 93,720,960
NH7T 39,108,440
PJ2T 35,630,408
LZ9W 33,492,160
9A5ØP 33,163,955

MULTI-OP MULTI-DISTRIBUTED HIGH POWER All Band

IQ4FA 21,249,657
WW4LL 12,009,679
NC1CC 5,757,350
OE2S 4,930,409
MX4Y 3,276,350

ROOKIE HIGH POWER

DL3ON.....3,944,272
PP5KW 3,760,569
ON7FT 1,466,135
VE3GJP 837,151
KH6KW.....779,553

LOW POWER

D44PM.....1,311,684
ED4J (EA4HKF).....690,640
MI7DGO.....636,000
VE3RGO.....571,095
VA3OOL 548,080

CLASSIC HIGH POWER

PJ4R (KK9A) 12,614,900
EB8AH (EA8RM) 10,454,016
ED8M (EA8DIG) 7,882,960
WK5T (N2IC) 7,641,940
UA9MA 5,743,348

LOW POWER

ZF2VE (W1VE) 4,895,838
TO1Q (F1ULQ) 2,302,785
9A3B (9A1AA) 1,783,944
UP7L (UN6LN).....1,773,551
N8II 1,656,645

TRIBANDER/WIRES HIGH POWER

CT3KN 14,358,500
PW2L (PY2MNL) 10,097,568
DK8ZZ 5,329,730
FG4KH (F6ASS) 4,963,294
TA3DE 4,745,594

LOW POWER

HZ1TT.....2,825,280
IU4FNO.....2,374,415
CW3A (CX5CBA).....1,799,124
RG5A 1,538,510
N3AAA 1,446,597

YOUTH HIGH POWER

SO9I (SQ9ORQ).....6,040,122
YL3JA 3,389,568
SM5D 176,415
BG5VAR 157,215
9A/TA7YLY 65,514

LOW POWER

LY7K.....1,220,102
BU2GA.....1,113,396
R3DCB.....551,955
SP3LM 109,816
JS2FZH.....94,680

UNITED STATES

SINGLE OPERATOR HIGH POWER All Band

KQ2M.....12,159,576
WK5T (N2IC) 7,641,940
K3RA 7,436,583
WZ4F (K4AB) 6,383,682
KF3P (K3MM) 5,501,678

28 MHz

KW7MM 3,608,150
KZ5MM (W5PR) 2,638,605
KR4Z (N4OX) 2,633,799
WK7S (K6LL).....2,507,679
AB3CX 1,769,790

21 MHz

K3JO (@K1LZ) 5,422,980
N7RQ.....2,579,475
AD6WL 1,503,936
WR5J (K7ZQ) 1,049,950
NF7E.....954,515

14 MHz

WIØWA (WØEWD @WØEWD) 1,674,992
N5JJ.....751,752
WW4L.....54,120
W8GOC 31,720
W3IK.....11,620

7 MHz

K1LZ 3,896,800
W6KW.....256,880
AF8C.....52,050
W3PAX 47,422
N9LR.....32,032

3.7 MHz

W3BGN.....442,656
ND8DX.....342,090
K7STO 6,431
K9PY.....3,486

1.8 MHz

WF2W.....70,632
K5UR 43,776
K2KW.....1,485

LOW POWER All Band

AC1U (N1UR) 4,353,687
W1RCR.....3,915,054
N8II 1,656,645
N3AAA 1,446,597
WZ8T 1,201,248

28 MHz

K4TMC.....447,678
K9KE.....344,715
NA4W (K4WI) 147,322
N3GB 135,473
WA3RHW/4 114,648

21 MHz

NG1R (W1QK).....594,561
KA4RRU 545,310
N3ZA.....130,980
KØEA.....105,711
NU5DE (N5KF).....90,250

14 MHz

NY6DX.....223,779
W5CSM 150,335
WI1K.....126,594
W3RFX 61,440
AC1MT.....10,224

7 MHz

N8BV 75,524
KA1IS.....25,160
K7BWC 19,125
K4FT 2,093
AJ3M.....1,160

3.7 MHz

NM2R.....111,888
KW4SW 39,308
WZ6ZZ.....33,880
N2WF.....26,529
W6RKC.....60

QRP All Band

K3WW.....572,300
W6QU (W8QZA).....199,168
KA8SMA 139,552
W7YAQ.....82,346
WQ6X 75,116

28 MHz

W5GAI 74,580
K9JK 21,614
NA4RR.....20,610
W2VRK.....8,127
NN5Z (K5PX).....5,085

21 MHz

K3OO.....192,576
KO1H 19,491
N3MWQ.....1,705
KFØJBP.....1,435
WZØW 1,342

Entries increased by 80 (14%) from 2022. This High Power Overlay also had a repeat winner – CT3KN. N3QE led all USA participants for the fourth time. Low power TB-Wires Overlay winners were HZ1TT (World) and N3AAA (USA).

Great news - the Rookie Overlay saw a growth of 54 entries (22%) as compared to 2022! The Rookie Overlay is intended to attract new contestants licensed under three years. Of the 303 Rookies this year, 92 were in their final year of eligibility, 107 in Year 2 and 104 in Year 1. The High Power Youth Overlay results were very close with DL3ON finishing just ahead of PP5KW with the discriminator being the extra operating time expended by DL3ON. The best High Power Rookie Overlay score in the continental USA came from W3FR. D44PM moved up from #4 last year to #1 this year in the Low Power Rookie Overlay, and KFØIDT was #1 in the USA.

The Youth Overlay targets operators aged 25 or younger. This overlay also enjoyed growth of 23% over last year. The 69 Youth Overlay participants ranged in age from 8 to 25 years with an average of 18.4. SO9I (SQ9ORQ), age 25, had a peak rate of 174 QSOs / hour as part of his winning High Power Youth Overlay effort. LY7K, age 25, winner of

14 MHz
N7SVI 1,408
K4CUZ 684
K9TR 480
W9GPB 110
KI6PIE 1

7 MHz
N8URE 3,034
KO3T 2,964
KZ3W 1,650
K3RWN 510

MULTI-OP SINGLE-TRANSMITTER HIGH POWER All Band
KT5J 14,048,040
WV4P 6,013,232
KY7M 5,608,022
N4RV 4,485,416
ND3D 4,322,760

MULTI-OP SINGLE-TRANSMITTER LOW POWER All Band
NV9L 2,704,650
WA1F 1,536,360
AD3PA 1,336,323
KM4WPR 192,512
KØUK 179,928

MULTI-OP TWO-TRANSMITTER All Band
WR3Z 10,819,683
WD6T 10,074,433
KU1CW 9,441,670
N7DX 8,342,838
NI4W 8,037,510

MULTI-OP MULTI-TRANSMITTER All Band
ND7K 28,009,023
WX3B 20,945,100
NR6O 13,285,272
NE1C 12,714,111
KB3VQC 995,112

MULTI-OP MULTI-DISTRIBUTED HIGH POWER All Band
WW4LL 12,009,679
NC1CC 5,757,350
KQ7I 1,614,906

ROOKIE HIGH POWER
W3FR 779,025
KC3TAU 603,402
WB4DKU 364,364
W9DCT 117,312
K9MWG 104,636

LOW POWER
KFØIDT 498,632
W3POT 355,752
KFØHCN 217,005
N3BAS 216,619
KE8SIQ 202,826

CLASSIC HIGH POWER
WK5T (N2IC) 7,641,940
KU2M 4,056,832
N7RQ 2,579,475
WDØT 1,838,060
NF6A (K6XX) 1,789,880

LOW POWER
N8II 1,656,645
NE8P 942,714
K5FUV 742,105
N5YIZ 693,056
N7MZW 523,200

TRIBANDER/WIRES HIGH POWER
N3QE 3,863,180
AD5XD 3,752,112
K3DNE 3,691,394
KR4Z (N4OX) 2,633,799
W1AW/5 (K5TA) 2,562,390

LOW POWER
N3AAA 1,446,597
K8ZM 741,108
KW1X 555,370
KG4IGC 434,010
N2YO 427,728

YOUTH HIGH POWER
W3MLJ 21,375
KN4LGM 15,416

LOW POWER
KC3UII 70,840
KM6VRX 34,629
W7MTH 25,935
KQ4AKR 23,647
K5TRP 6,996

EUROPE

SINGLE OPERATOR HIGH POWER All Band
E7DX (E7ØT) 13,769,374
LY4A 10,766,866
HG8R (HA8JV) 10,603,200
EB5A 10,372,095
OM7M (SP9LJD) 9,179,412

28 MHz
OL9Z 2,991,230
ES7A (ES7GM) 2,880,548
EE7P (EA7ATX) 2,749,098
IR9W 2,639,879
TMØT (F4HQZ) 2,412,658

21 MHz
DF7A (DL2ARD) 8,013,789
IY3A (IZ3EYZ) 6,053,232
SO9I (SQ9ORQ) 6,040,122
RW7K 5,566,113
CR6T (CT1ESV) 5,508,594

14 MHz
IB9T (IU3BTY) 5,843,404
YT3X 4,725,783
CQ8Q (PT2FM) 4,185,550
S57DX 3,575,236
E74A 3,395,770

7 MHz
ED5R (EA5Z) 7,996,128
SN3A (SP3GEM) 5,731,180
IB8A (I8QLS) 5,530,214
YT1A 3,552,354
S51CK 2,740,420

3.7 MHz
HA1TJ 1,413,184
EE7L 1,261,638
DQ2C (DL2SAX) 1,186,339
SN9B (SQ9OB) 1,047,861
OL7P (OK1CRM) 945,210

1.8 MHz
S56X 267,380
IK1PMR 51,910
9A2KD 39,130
YU1P 8,520
EW1OW 8,192

LOW POWER All Band
TM3Z (F4DSK) 3,370,662
SQ6H (SQ6PLH) 2,632,760
IU4FNO 2,374,415
S55X 1,799,160
9A3B (9A1AA) 1,783,944

28 MHz
9A9R 1,355,383
IT9BLB 995,085
ED2X (EA2LMI) 917,568
II2G (IU2IDU) 662,451
IK2YGZ 660,303

21 MHz
EA3CX 1,059,656
CT7BJG (DL6IAK) 999,297
R3DCB 551,955
IT9FRX 396,256
IT9ATF 367,004

14 MHz
YU5M 1,100,610
S52OT 948,330
UT3EV 832,038
IR9Z (IT9VCE) 637,182
SP7Y 623,220

7 MHz
YT7A (YT7BA) 1,518,075
IT9EWR 844,845
E7ØY 803,984
HA8LLK 559,702
SP3AYA 473,110

3.7 MHz
DR2T (DO1ABW) 816,871
IZ4REF 461,890
PCØØT (PA2TMS) 447,966
9A1AR 428,868
YO8PS 343,530

1.8 MHz
YT8A 131,016
UA7K 64,059
SQ1NXW 17,195
OK2BRQ 16,720
SP6LUV 7,502

QRP All Band
ES6RW 846,304
LY9A 643,456
OMØRX 433,710
HG6C (HA6IAM) 273,774
MI5JYK 218,990

28 MHz
EE3O (EA3O) 229,080
UZ7M (UT9MZ) 160,080
IZ1ANK 57,260
YU7ZZ 53,040
IZ2KPE 50,820

21 MHz
HG1S (HA1DAE) 248,040
SY1AEA 156,782
IZ3NVR 121,506
LY2OU 83,809
HG3C 51,653

14 MHz
LY5G 166,216
YO8RC 53,196
YO9XC 25,239
YU1NR 23,680
GWØVSW 22,820

7 MHz
E77Y (E77CV) 137,936
OK6OK 97,416
OU2V (OZ1FJB) 58,032
SO55K (SP5FKW) 49,926
HA3GC 49,769

3.7 MHz
OL4W 112,312
OMØA (OMØAAO) 89,870
GW8C (MØWLY) 18,216
OH1LEG 920
E74FRS (E74MK) 6

1.8 MHz
HA1TI 17,088
YO8WW 779
UR5FEO 364
UT4UBZ 312

MULTI-OP SINGLE-TRANSMITTER HIGH POWER All Band
LZ5R 23,513,475
SP8R 16,212,222
IR6T 16,160,808
9A7A 16,025,310
IB9A 13,801,808

MULTI-OP SINGLE-TRANSMITTER LOW POWER All Band
ED7B 5,408,308
9A23Y 3,523,181
ZB2BU 2,398,312
9A9J 2,336,156
LZ8A 2,067,989

MULTI-OP TWO-TRANSMITTER All Band
ES9UKR 36,746,300
CR6K 30,927,879
TM6M 28,429,640
RU1A 28,139,600
EI23M 26,975,888

MULTI-OP MULTI-TRANSMITTER All Band
LZ9W 33,492,160
9A5ØP 33,163,955
YT5A 28,282,584
OT5A 17,628,450
SK6D 3,585,688

MULTI-OP MULTI-DISTRIBUTED HIGH POWER All Band
IQ4FA 21,249,657
OE2S 4,930,409
MX4Y 3,276,350
EA4URE 2,630,484
PA6AA 2,428,075

ROOKIE HIGH POWER
DL3ON 3,944,272
ON7FT 1,466,135
9A5TW 661,181
DD5VL 354,320
HA5MIG 348,210

LOW POWER
ED4J (EA4HKF) 690,640
MI7DGO 636,000
SN3J (SP3DAT) 498,235
OH8RX 406,296
LZ8GT 296,100

CLASSIC HIGH POWER
IO4T (IK4VET) 4,838,778
EA3CI 2,886,464
M4T 2,800,554
PA4VHF 2,039,016
EA5KB 1,028,160

LOW POWER
9A3B (9A1AA) 1,783,944
IK8UND 596,359
EW1M 459,648
F4WDL 394,918
RL4F 390,528

TRIBANDER/WIRES HIGH POWER
DK8ZZ 5,329,730
IK3UNA 4,598,506
IB3M 4,299,009
OH8K (OH8KXK) 3,300,654
EW4A 1,724,378

LOW POWER
IU4FNO 2,374,415
RG5A 1,538,510
9A9R 1,355,383
SP3H 1,179,900
DO4OD 1,154,636

YOUTH HIGH POWER
SO9I (SQ9ORQ) 6,040,122
YL3JA 3,389,568
SM5D 176,415
9A/TA7YLY 65,514
DM7XX 20,825
9A/S54UNC 322

LOW POWER
LY7K 1,220,102
R3DCB 551,955
SP3LM 109,816
EA2ETK 88,110
SN3G (SP3GTP) 62,868

Highest QSO Points/QSO by Stations Operating 36 or More Hours													
Category	Africa		Asia		Europe		N. America		USA		Oceania		S. America	
Single Op AB HP	CR3DX	3.44	C4W	3.34	E7DX	2.91	VC3T	3.21	KA6BIM	2.67	VJ4T	2.84	PJ4K	3.29
Single Op AB LP	-	-	TA3NE	3.47	TM3Z	2.30	HQ2E	2.49	N1NQD	2.34	YB9ELS	2.64	P40L	3.24
Single Op AB QRP	-	-	JH7UJU	2.65	ES6RW	1.92	-	-	-	-	-	-	-	-
Single Op SB HP	-	-	-	-	ED5R	3.63	-	-	-	-	-	-	P43A	2.90
Single Op SB LP	-	-	-	-	YU5M	1.33	-	-	-	-	-	-	-	-
Multi-Single HP	-	-	UP2L	3.25	IR6T	2.75	ZF1A	2.65	WO2T	2.57	VK4A	2.86	PW7T	2.77
Multi-Single LP	-	-	TC100TC	3.29	DK65ERD	2.37	VC2W	2.94	AD3PA	2.34	DX1EVM	2.11	LW1F	2.76
Multi-Two	9G4X	2.85	JH8YOH	2.79	TM6M	2.58	KL7RA	2.81	AG3I	2.23	VJ4K	2.96	PX2A	2.95
Multi-Multi	CN3A	3.52	AT3K	2.73	LZ9W	2.33	CY0S	2.74	WX3B	2.37	NH7T	3.42	PJ2T	3.31
Multi-Distributed	-	-	9M2A	2.63	IQ4FA	2.24	WW4LL	1.96	WW4LL	1.96	-	-	-	-

Highest Mults Worked/Total Mults (%) for Stations Operating 36 or More Hours													
Category	Africa		Asia		Europe		N. America		USA		Oceania		S. America	
Single Op AB HP	D4Z	49%	C4W	37%	E7DX	43%	8P5A	46%	KQ2M	41%	VJ4T	38%	PJ4K	44%
Single Op AB LP	-	-	TA3NE	25%	TM3Z	32%	W1RCR	31%	W1RCR	31%	YB9ELS	17%	P40L	36%
Single Op AB QRP	-	-	JH7UJU	7%	ES6RW	17%	-	-	-	-	-	-	-	-
Single Op SB HP	-	-	-	-	IB9T	40%	-	-	-	-	-	-	PT5J	49%
Single Op SB LP	-	-	-	-	YU5M	22%	-	-	-	-	-	-	-	-
Multi-Single HP	-	-	P33W	57%	LZ5R	54%	ZF1A	46%	KT5J	46%	VK4A	41%	ZP5AA	42%
Multi-Single LP	-	-	TC100TC	23%	ED7B	35%	NP3X	38%	NV9L	25%	DX1EVM	9%	PR1T	31%
Multi-Two	9G4X	38%	JH8YOH	31%	ES9UKR	60%	WP4X	52%	WR3Z	40%	VJ4K	44%	PX2A	55%
Multi-Multi	CN3A	65%	B7P	41%	9A50P	58%	ND7K	54%	ND7K	54%	NH7T	47%	PJ2T	47%
Multi-Distributed	-	-	9M2A	21%	IQ4FA	51%	WW4LL	44%	WW4LL	44%	-	-	-	-

Figure 6. QSO point and Multiplier Capture Performance Benchmarks

the Low Power Youth Overlay, submitted one of the most accurate logs of any Single Op participant. W1KBN (KFØINO), age 19, and KC3UII, age 15, were the USA High Power and Low Power Youth Overlay winners respectively.

The Return of the Multi-Ops

Figure 5 shows the breakdown of Multi-Op participation by continent. Activity was up likely due to waning COVID19 concerns. The 60% increases in Multi-Single Low Power and Multi-Two entries is particularly noteworthy.

After missing 3 years, P33W returned to dominant the Multi-Single High Power category. KT5J is making progress in recovering from a recent ice storm damage as evident by from the top USA Multi-Single High Power score. NP3X was the winner of the Multi-Single Low Power category, falling just short of breaking the North America record. NV9L using wires and vertical antennas did mostly search and pounce to secure the top Multi-Single Low power position in the USA. A team of Ukrainian operators received special permission to travel to Estonia and powered ES9UKR to a "memorable and phenomenal" victory in the Multi-Two category. The Muli-Two winner in the USA was WR3Z, back in action after a nine year absence. Congratulations

Best 10, No Reduction	
Call	QSOs
HB9EXQ	261
ED3Z	202
KK6ZIZ	194
DF2RG	183
DG3NAB	180
N1WRK	177
OU2V (OZ1FJB)	168
WQ5L	155
ON7TG	154
L33M (LU3MAM)	153

Best 10, Single Op, >1000 QSOs		
Call	QSOs	Reduction
EA3CI	1,734	1.4%
N3FJP	1,088	1.4%
KR4Z (N4OX)	1,565	1.6%
VC3T (VE3DZ)	2,618	2.5%
PA9M	1,426	2.5%
OL0W (OK1DSZ)	1,058	2.5%
N0GN	1,307	2.6%
RG5A	1,276	2.6%
LY7K	1,122	2.7%
V26K (AA3B)	5,162	2.8%

Best Youth, >500 QSOs		
Call	QSOs	Reduction
LY7K	1,110	2.7%

Best Rookie, >500 QSOs		
Call	QSOs	Reduction
KF0IDT	937	3.5%

Best Multi-Op by Category, >500 QSOs			
Category	Call	QSOs	Reduction
Multi-Single HP	W1FM	1,022	1.6%
Multi-Single LP	VC2W	1,519	3.3%
Multi-2	DG1E	774	0.5%
Multi-Multi	NH7T	8,293	5.6%
Multi-Distributed	OE2S	1,021	5.2%

Figure 7. Exemplary Log Accuracy

Przemek, SO9I (SQ9ORQ), had a peak rate of 174 QSOs / hour as part of his winning Single Operator, High Power Youth Overlay effort!

to the CN3A team who achieved the second highest Multi-Multi score ever recorded, and to ND7K for an impressive Multi-Multi stateside victory. IQ4FA repeated as the Multi-Distributed category, and WW4LL's first outing in the Multi-Distributed category resulted in a second place overall finish and USA victory.

Performance Benchmarks

How do competitive operators maximize their scores in the WPX contests? It often boils down to selecting bands, on-times and operating techniques that maximize QSO point production from multiplier-rich regions. Figure 6 provides

Merzuke operating remotely in her first CQ WPX SSB Contest as 9A/TA7YLY, achieved 4th place in the Single Operator High Power Youth Overlay, and set the record for Croatia. Then she activated YM7KK, achieved 12th place in the Single Operator Low Power Youth Overlay, and set the record for Turkey!

The IQ4FA Team Won the Multi-Distributed Category for the Second Year in a Row! Front to back: IN3IDQ, IU4NIZ, IU4AZC, IU4CSS, IZ4AKO, IZ4UEZ

Single Op HP Peak Rates		Single Op LP Peak Rates		Single Op QRP Peak Rates	
Call	Rate	Call	Rate	Call	Rate
8P5A (W2SC)	295	P40L (W6LD)	224	5B/HA5PP	98
PJ4K (N6KT)	271	ZF2VE (W1VE)	208	ZY6G (PY6GOE)	87
D4Z (E77DX)	261	CO6LC	192	UN4L	85
KP2M (NN3W)	249	PJ7AA (AA9A)	188	OL4W	79
EB8AH (EA8RM)	247	TI2JS	158	WP4KEY	72

Youth Overlay Peak Rates	
Call	Rate
SO9I (SQ9ORQ)	174

Rookie Overlay Peak Rates	
Call	Rate
ON7FT	144

Multi-Op by Category Peak Rates		
Category	Call	Rate
Multi-Single HP	P33W	260
Multi-Single LP	ZB2BU	193
Multi-2	PX2A	434
Multi-Multi	PJ2T	595
Multi-Distributed	WW4LL	401

Figure 8. Peak 60 Minute Rates

benchmarks for QSO point and multiplier productivity for stations that operated 36 or more hours. The highest QSO points / QSO ratio was 3.63 achieved by ED5R (EA5Z) operating exclusively on 40M using high power, followed by 3.52 produced by the CN3A Multi-Multi team. Log checking indicated that there were 2915 valid multipliers; two thirds of them were logged by CN3A and half by D4Z (E77DX). This seems to suggest that increased multiplier capture remains an opportunity for all.

Log accuracy can be a competitive discriminator and the calls listed Figure 7 were the accuracy role models. Particularly impressive was the Multi-2 effort by DG1E. This five-operator team's log had one incorrect call, one incorrect exchange and no "not in log" penalties out of 774 QSOs. That is operating excellence! Also, congratulations to LY7K and KFØIDT for outperforming many of their more experienced and senior peers. The top three most busted calls were 9A5ØP, ES9UKR and IQ4FA.

Congratulations to the new record holders shown in Figure 9, which includes two new world records and 15 new continental records. PT5J (PP5JR) is now the owner of the Single Op High Power 10M world record, and one must wonder what will happen here as Cycle 25 progresses. The other new world record was set by LY7K (age 25) in the

2023 CQWW WPX SSB PLAQUE WINNERS AND DONORS

SINGLE OPERATOR ALL BAND

WORLD - High Power: Tom Georgens, W2SC Plaque. **Won by: D4Z operated by Emir Memic, E77DX**
WORLD - Low Power: Caribbean Contesting Consortium Plaque. **Won by: P4ØL operated by John A Fore, W6LD**

USA - High Power: Alabama Contest Group Plaque. **Won by: Robert L Shohet, KQ2M**
USA - Low Power: Terry Zivney, N4TZ Plaque. **Won by: AC1U operated by Ed Sawyer, N1UR**
USA - QRP: Doug Zwiebel, KR2Q Plaque. **Won by: Charles D Fulp Jr, K3WW**
USA Zone 3 - High Power: Adrian Ciuperca, KO8SCA Plaque.
Won by: KT7E operated by Andreas Ziemann, KE7AUB
USA Zone 3 - Low Power: Buz Reeves, K2GL Memorial by Willamette Valley DX Club Plaque.
Won by: David Cherba, WZ8T
USA Zone 4 - High Power: Jerry Rosalius, WB9Z and Val Hotzfeld, NV9L Plaque.
Won by: WK5T operated by Steve London, N2IC
USA Zone 4 - Low Power: Jerry Rosalius, WB9Z and Val Hotzfeld, NV9L Plaque. **Won by: James J Reisert, AD1C**
USA Zone 5 - High Power: Charles Wooten, NF4A Plaque. **Won by: Rol Anders, K3RA****

EUROPE - High Power: David Siddall, K3ZJ Plaque. **Won by: E7DX operated by Vlado Lesjak, E7ØT**
EUROPE - Low Power: Richard DiDonna, NN3W Plaque. **Won by: TM3Z operated by Dimitri Cosson, F4DSK**
EUROPE - QRP: Walter Skudlarek, DJ6QT Memorial by Rhein-Ruhr DX Association Plaque.
Won by: Rein Kolk, ES6RW

AFRICA: Atilano Oms, PY5EG Plaque. **Won by: CR3DX operated by Jozef Lang, OM3GI****
ASIA: Chris Terkla, N1XS Memorial by Yankee Clipper Contest Club Plaque.
Won by: UPØL operated by Vladimir Vinichenko, UN9LW
NORTH AMERICA* - High Power: Martin Huml, OL5Y Plaque. **Won by: 8P5A operated by Tom Georgens, W2SC**
NORTH AMERICA* - Low Power: Tim Shoppa, N3QE Plaque. **Won by: ZF2VE operated by Gerry Hull, W1VE**
SOUTH AMERICA: Andrew Faber, AE6Y Plaque. **Won by: PJ4K operated by Rich Smith, N6KT**
SOUTHERN CONE (CE CX LU) - Low Power: LU Contest Group Plaque.
Won by: CW3A operated by Carlos Martinez, CX5CBA
OCEANIA - High Power: Sid Caesar, NH7C Plaque. **Won by: VJ4T operated by Ken Bawden, VK4QH**
CANADA - High Power: Saskatchewan Contest Club Plaque. **Won by: CF3A operated by Ron Vander Kraats, VE3AT**
CANADA - Low Power: Paul Cassel, VE3SY Memorial by Contest Club Ontario Plaque.
Won by: VG2Z operated by Pierre Loranger, VA2CZ
JAPAN: Hamad Alnusif, 9K2HN Plaque. **Won by: Masa Okano, JH4UYB**
ASEAN (3W 9M 9V DU HS V85 XU XW XZ YB) - High Power: Siam DX Group Plaque.
Won by: E2A operated by Champ C Muangamphun, E21EIC
Southeast Asia (ASEAN + 4W, VU4) - Low Power: Pongsakorn E2ØNGF and Tana E27EK Plaque.
Won by: E Sri Wahyuni, YB9ELS**

SINGLE OPERATOR, SINGLE BAND

WORLD - 28 MHz: Mamuka Kordzakhia, 4L2M Plaque. **Won by: PT5J operated by Sergio Lima De Almeida, PP5JR**
WORLD - 21 MHz: Stuart Santelmann, KC1F Memorial by W3UA/RA3AA Plaque.
Won by: Jeanpierre Lauwereys, P43A
WORLD - 14 MHz: Lynn Schriner, W5FO Memorial by N5RZ Plaque.
Won by: IB9T operated by Valerio Spagnolo, IU3BTY
USA - 28 MHz: Maurice Schietecatte, N4LZ Plaque. **Won by: Lionel Mongin, KW7MM**
USA - 21 MHz: Maurice Schietecatte, N4LZ Plaque. **Won by: Velimir Deric, K3JO**
USA - 14 MHz: Charles Wooten, NF4A Plaque. **Won by: WIØWA operated by Mike Kelly, WØEWD**
USA - 7 MHz: Yankee Clipper Contest Club Plaque. **Won by: Krassimir Petkov, K1LZ**
USA - 3.5 MHz: Bernie Welch, W8IMZ Memorial by W3ASW Plaque. **Won by: Steven Sussman, W3BGN**

		New Record		Previous Record		
Category	Region	Call	Score	Call	Score	Year
Single Op High Power 10M	World	PT5J (PP5JR)	18,766,160	D4C (IZ4DPV)	17,885,556	2014
Youth Overlay Low Power	World	LY7K	1,220,102	KM4SII	1,122,498	2022
Classic Overlay High Power	AF	EB8AH (EA8RM)	10,737,115	CQ3W (DF7EE)	8,396,544	2021
Classic Overlay Low Power	AF	EA8TR	1,325,038	CT3IQ	514,080	2022
Multi-Distributed	AS	9M2A	2,510,848	VR2CC	1,941,192	2021
Classic Overlay Low Power	AS	UP7L (UN6LN)	1,773,551	R9YU	771,416	2021
Youth Overlay High Power	AS	BG5VAR	157,215	JP7XDO	170	2022
Youth Overlay Low Power	AS	BU2GA	1,113,396	BX2AHP	101,996	2022
Multi-Distributed	EU	IQ4FA	21,249,657	IQ4FA	14,669,700	2022
Multi-Two	EU	ES9UKR	36,714,728	OL4A	36,280,074	2014
Youth Overlay High Power	EU	SO9I (SQ9ORQ)	6,040,122	YT0C	4,098,870	2022
Youth Overlay Low Power	EU	LY7K	1,220,102	9A2ZI	834,815	2022
Classic Overlay Low Power	NA	ZF2VE (W1VE)	4,895,838	WP3C (N2TTA)	3,081,188	2021
Multi-Multi	OC	NH7T	39,067,070	KH7R	32,806,032	2002
Classic Overlay Low Power	OC	KH6CJJ	540,940	YC5AKH	383,019	2022
Single Op High Power All Band	SA	PJ4K (N6KT)	27,545,174	PJ4K (N6KT)	27,353,511	2022
Classic Overlay High Power	SA	PJ4R (KK9A)	12,614,900	PJ4R (KK9A)	9,967,888	2022

Figure 9. New World and Continental Records

EUROPE - 28 MHz: Chuck Dietz, W5PR Plaque. **Won by: Rostislav Rimeli, OL9Z**
EUROPE - 14 MHz: SJ2W Contest Team Plaque. **Won by: Miodrag Jakovijevic, YT3X****
EUROPE - 3.5 MHz: Ranko Boca, 4O3A Plaque. **Won by: Felber Gyula, HA1TJ**

SINGLE OPERATOR OVERLAYS

WORLD - Tribander/Single-Element: Tom Francis, W1TEF Memorial by Swamp Fox Contest Group Plaque. **Won by: Ricardo Martins, CT3KN**
USA - Tribander/Single-Element Low Power: Angel Turpin, EA5Z Plaque. **Won by: Art Collins, N3AAA**
EUROPE - Tribander/Single-Element: Val Edwards, W8KIC Memorial by K3LR Plaque. **Won by: Zrinko Zibert, DK8ZZ**
WORLD - Rookie: Bud Trench, AA3B Plaque. Won by: Leon Hellmich, DL3ON
USA - Rookie: GØCKV, OH1VR, OH2BH, OH2KI Plaque. **Won by: Fred Roeper, W3FR**
EUROPE - Rookie: Ukrainian Contest Club Plaque. **Won by: Jonas Coeckelberghs, ON7FT****
WORLD - Youth: GØCKV, OH1VR, OH2BH, OH2KI Plaque. **Won by: SO9I operated by Przemysaw Balcerzak, SQ9ORQ**
EUROPE - Youth: Latvian Contest Club Plaque. **Won by: Kristers Misa, YL3JA****

MULTI-OPERATOR, SINGLE TRANSMITTER

WORLD: Latvian Contest Club Plaque. **Won by: P33W operated by RA3AUU RW4WR LZ2HM 5B4AIE OG7F**
WORLD - Low Power: Mike Goode, N9NS Memorial by Hoosier DX and Contest Club Plaque. **Won by: NP3X operated by WP3C EB7DX N2TTA WP3A**
USA: Steve Bolia, N8BJQ Plaque. **Won by: KT5J operated by AI5A N5TJ K5TR**
USA - Low Power: Matt Tatro, NM1C Plaque. **Won by: NV9L operated by NV9L WB9Z**
EUROPE: Tonno Vahk, ES5TV Plaque. **Won by: LZ5R operated by LU9ESD LZ1NK LZ1ZF LZ3ZZ LZ5DB YO7WC YO9WF**
NORTH AMERICA*: Jerry Rosalius, WB9Z and Val Hotzfeld, NV9L Plaque. **Won by: ZF1A operated by NN1C N2NT K5ZD**
ASEAN (3W 9M 9V DU HS V85 XU XW XZ YB): Uncle Fred Laun, K3ZO Memorial by E21EIC Plaque. **Won by: 7AØC operated by YBØMZI YDØOVE YDØAUP YDØBIU YCØUI YCØOSU YCØBBJ**

MULTI-OPERATOR, TWO-TRANSMITTER

WORLD: Ken Adams, K5KA Memorial Plaque. **Won by: ES9UKR operated by ES2MC ES2RR ES5JR ES5MARI ES5QA ES5RY ES5TV ES6QC LY1FW RC5A URØMC UR5ECW UR5YKO UR8UQ USØYW US2YW UW7LL UW8SM**
USA: Florida Contest Group Plaque. **Won by: WR3Z operated by N3OC WR3Z W3IDT KC3VBZ**
EUROPE: Rich Strand, KL7RA Memorial Plaque. **Won by: CR6K operated by CT1CJJ CT1ILT CT1HXB CT2IMG CT2HUU CT7AGE CT7ADQ F4EGZ****

MULTI-OPERATOR, MULTI-TRANSMITTER

WORLD: Sid Caesar, NH7C Plaque. **Won by: CN3A operated by IK2SGC IK5AEQ IZ2ZOZ OK1GI OK1JKT OK1NP OK1RI OK1VVT OM1RI CN8WK**
USA: Dale Hoppe, K6UA Memorial by HP1XT Plaque. **Won by: ND7K operated by KJ6JET K1AR N2NC N2NL NK7U K7ZO K6JO N6MJ KL9A W4IX W9KKN KI6RRN K7ZS N6WIN**

MULTI-OPERATOR, MULTI-DISTRIBUTED

WORLD: Atilano Oms, PY5EG Plaque. **Won by: IQ4FA operated by IU4AZC IZ4AKO IZ4COW IZ4UEZ IU4NIZ IU4CSS IU4FBU IZ4ORO IK4LZH IU4ICT IU4NDY IK4RQF IK3AES I4AVG IK4SXH IU4OJU IZ4VUS IN3IDQ IU4AOY**

CONTEST EXPEDITION

WORLD - Contest Expedition: Gail M. Sheehan, K2RED Plaque. **Won by: CYØS operated by W2GD WØGJ N2TU K4ZLE K9CT W4DKS WA4DAN WW2DX**

* Applies only to North American stations outside the USA and Canada
** Denotes awarded to runner-up in category

Single Op Low Power Youth Overlay. The oldest continental record to tumble was in the Multi-Multi category from Oceania; the NH7T team smashed the previous record set in 2002 by KH7R.

Opportunities for Improvement

Tools and techniques developed by the CQ WW Committee, along with SDR reviews were used for rule compliance checks. These compliance checks demonstrated that the overwhelming majority of participants played by the rules. A small number of disciplinary actions were warranted for excessive unverifiable QSOs, using assistance in the Classic Overlay, improper power levels, self-spotting, out-of-band QSOs, excessive bandwidth, incomplete exchanges and intentional QRM.

The NH7T Team (left to right: N6CW, K7JA, N6TJ, KH6YY, KH7U and NH7T) smashed a 21-year-old Oceania continental record in the Multi-Multi category. It is sad to note that Chip, K7JA, passed away since this picture was taken – Chip will be deeply missed.

Vlatko, 9A9R - #9 in the Single Op Low Power Category and #6 in the Single Operator Low Power Tribander/Wires Overlay

Sandy, N7RQ – the Exterminator! Number 2 in the USA for the Single Operator, High Power, 15M category

It is likely that Cycle 25's progress will result in even better conditions next year, so strap in for a wild ride...

Participants are also reminded that logs must include valid received and transmitted serial numbers; logs lacking valid received or transmitted numbers are incomplete and are changed to checklogs. Reviews of these incomplete logs suggest that serial numbers are sometimes lost in the conversion of ADIF to Cabrillo 3.0 files. Participants experiencing difficulties with this conversion are encouraged to reach out to the CQ WPX Committee via the contact form available at <https://www.cqwpx.com/contact>.

Final Thoughts

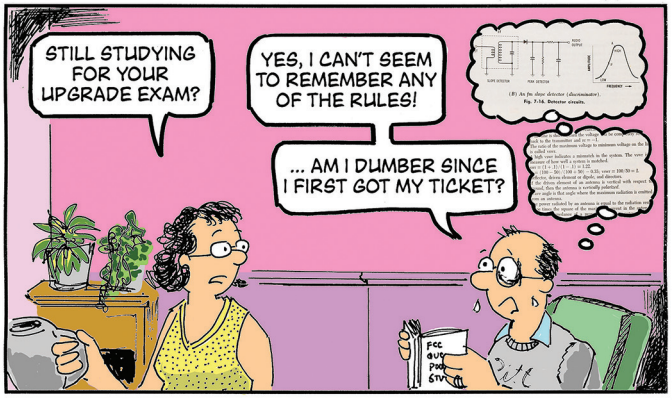
My thanks go to the CYØS Team as contest activity benefitted from the presence of this major DX expedition. It is likely that operators chasing CYØS for DXCC credit also elected to spend time in the contest which was no doubt a factor in the record number of logs received this year.

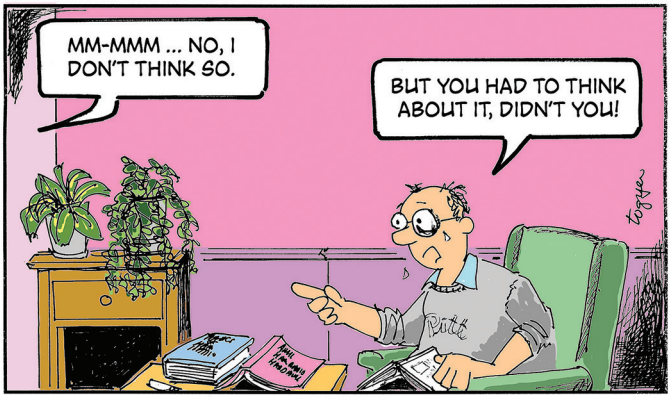
I would like to acknowledge all the volunteers contributing to the administration of the 2023 CQ WPX SSB contest including 3V8SS, EA4KD, ES5TV, F6BEE, G6NHU, I2WIJ, K1AR, K1DG, K1EA, K5TR, K5ZD, KM3T, KR2Q, LA6VQ, LU5DX, N8BJQ, NM2O, OH6LI, PA3AAV, S5ØA, S5ØXX, WØYK, WA7BNM, and YO3JR. The success of the contest is directly attributable to this team's efforts.

It is likely that Cycle 25's progress will result in even better conditions next year, so strap in for a wild ride on 30 and 31 March 2024 for the next CQ WPX SSB.

(Scores on page 94)

SPURIOUS SIGNALS By Jason Togyer W3MCK
spuriouscomic.blogspot.com





Bill, K5FUV. Single Operator Classic Overlay #9 World, #3 USA

Anton, ED8M (EA8DIG). Single Operator High Power Classic Overlay #3

Ed, KD3NE. USA #2 in the Single Operator, High Power 15M category