Results of the 2021 CQ World Wide VHF Contest

BY JOHN "JK" KALENOWSKY,* K9JK

The third full weekend of July 2021 brought another opportunity to competitively exercise amateur radio stations and operators on the 50- and 144-MHz frequency bands throughout the world as another CQ World Wide VHF Contest was conducted. The overall number of logs submitted this year dropped by a little over 20% from the amazing log count of 2020. Even with that reduction, there were still 1,159 logs received (plus another 17 checklogs) so this year's count is the second highest this century.

As compared to 2020, propagation conditions this year seemed more favorable toward 6 meters and less toward 2 meters. The total count of QSOs in the 1,159 logs was 58,691, yielding an average of just over 50 contacts reported in each log. For 6 meters, 48,099 QSOs were reported in the 907 logs that included QSOs on that band versus 10,592 QSOs in the 560 logs that reported QSOs on 2 meters. Looking at percentages, 82% of QSOs reported were on 6 meters and 18% were on 2 meters; this compares to a 79% / 21% split in 2020 and 88% / 12% in 2019.

Based on the mode reported on the Cabrillo QSO: lines, just over 65% of 6-meter QSOs and just over 38% of 2-meter QSOs were completed using digital modes in 2021; the actual percentages of digital mode QSOs is likely higher since many logs record "PH" as the mode for those. Surprisingly, those percentages are lower than last year's, which were 77% digital on 6 meters and 42% on 2 meters with the same expectation that the actual percentages of digital mode QSOs would have been higher due to logs recording "PH" as the mode. Did more participants look at the signal levels reported for their digital mode QSOs and try to make more QSOs using the traditional voice and CW modes?

USA

Stations in the contiguous 48 U.S. states submitted 489 logs in 2021 (plus three checklogs) which was less than 60% of last year's count of 854 from U.S. participants, a notable

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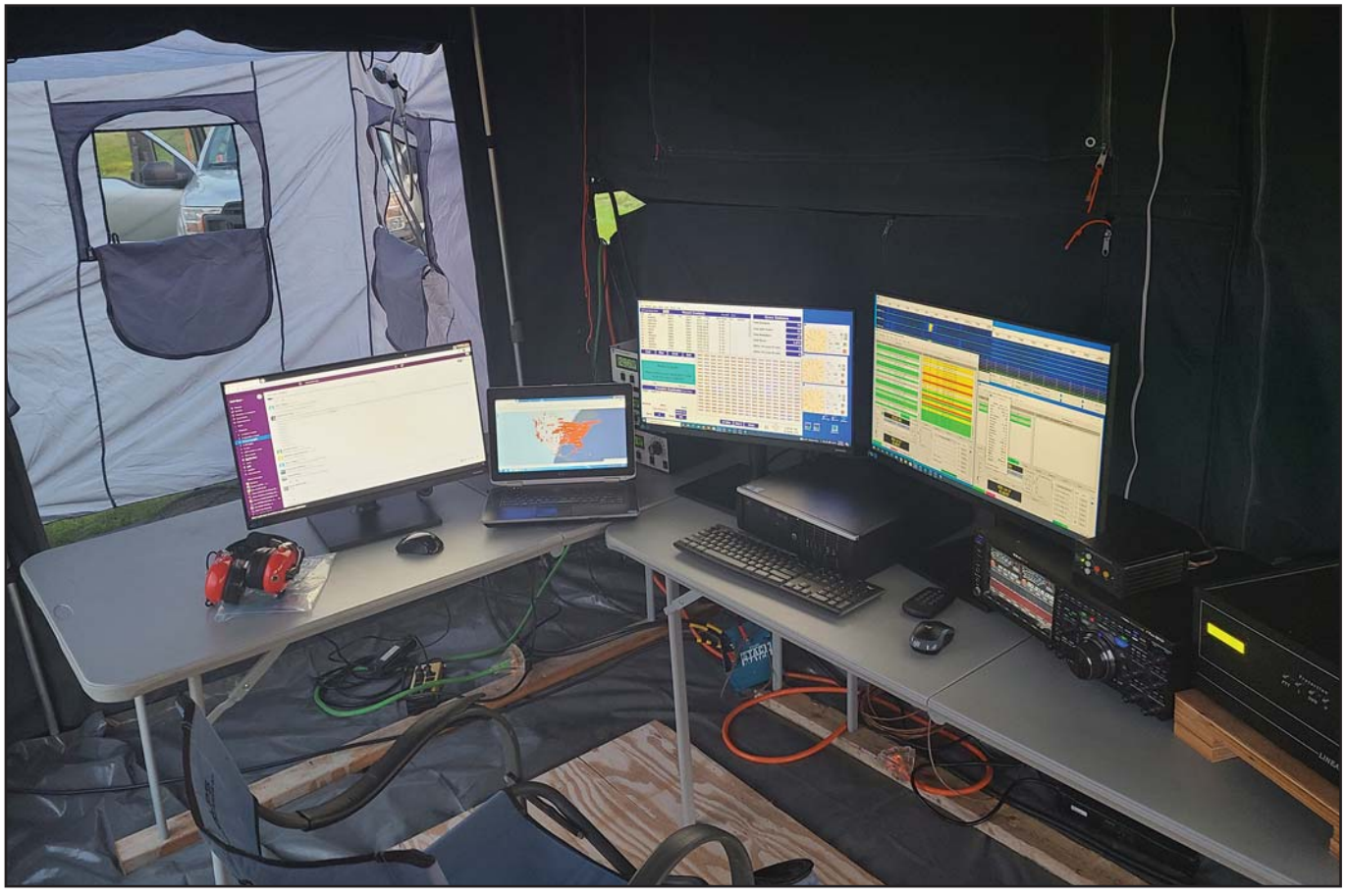


Wyatt Dirk's, ACØRA, Field Day style setup for the 2021 CQWW VHF contest. Here is ACØRA's "shack." (Photo by ACØRA)

reduction. If 2020's log count from the U.S. stations had had been matched this year, the total logs received would have topped last year's excellent total. The Single-Operator, Single-Band, 6-meter category remained the most popular among U.S. entrants with 235. Single Operator All-Band was not too far behind with 183. There were 22 Rovers, 20 Multi-Operator, 16 Single-Operator All-Band QRP, seven 2-meter only, and six Hilltoppers made up the balance of U.S. entries. Among the U.S. call areas, 4-land returned as the log submission leader with 103 (a 37% drop from last year's 180). The 7th call area returned as 2nd busiest with 71 logs (also a decrease of 36% from 111 in 2021). Stations in Illinois, Indiana, and Wisconsin, also known as the 9th district, submitted 53 logs to claim the third busiest call area spot (this was a 22% drop from last year's count of 68 from the area).

Scores between the various categories are typically not compared in the results but an interesting inter-category scoring battle was noted between Wyatt, ACØRA, and Jeff, K1TEO. After roving for the past few years and achieving amazing scores from his roving efforts, Wyatt decided to stay in one place and focus on 6 meters for 2021, entering in the Single-Operator, Single-Band, 6-meters category. Jeff piloted his very capable station and improved his Single-Operator, All-Band score by about 20% over last year. Wyatt's 619 QSOs topped Jeff's 582 (445 on 6 meters, 137 on 2 meters) but with 2-meter QSOs earning two QSO points, that gave Jeff a 100 QSO point advantage over Wyatt, 719 vs. 619. Multipliers were where Wyatt overcame Jeff's QSO point advantage, with Wyatt recording a total of 235 grids worked on 6 meters compared to Jeff's total of 202 (160 on 6 meters, 42 on 2 meters). Their final scores were outstanding: 143,585 for Wyatt and 143,218 for Jeff; a difference of less than 400 points between them, even though they were competing in different categories.

With a total score not too far behind Wyatt's and Jeff's scores, a Multi-Operator team gathered at the QTH of AA4ZZ to use the W4VHF callsign, amassing 322 Qs and 161 multipliers on 6 meters and 139 Qs and 60 multipliers on 2 meters for a final score of 131,053 to claim the top U.S. score in that category. Some may remember the W4VHF call as very active in the previous decade but with a "/R" suffix, often claiming the top score in this contest's Rover category over a number of years, when the call was held by Ted Goldthorpe, who unfortunately now is a Silent Key. Their operation was a nice tribute in memory of Ted's past roving achievements.

For the third year in a row, Jim, KO9A, achieved the top U.S. score in the Single-Operator, All-Band QRP category. Jim collected 266 QSOs on 6 meters (with a VUCC plus two of multipliers) plus 49 QSOs and 23 multipliers on 2 meters for a final score of 44,875. Again, Jim capitalized on the capabilities of the digital modes in the WSJT-X software but ALSO spent time in the SSB and CW segments of the bands. Also of note is that, in 2021, Jim was the 23rd person to complete making contacts in each of the 488 maidenhead grid squares in the contiguous 48 U.S. states for the ARRL's Fred Fish Memorial award from what is a very modest station.

Tony, KG9OV, bested the 22 Rover category entrants from the U.S. with an 8-grid trek through western Illinois. His 154 QSOs and 118 multipliers netted him a final score of 22,420. This was an excellent result for Tony's first effort as a Rover in this contest.

Pete, K9PW, returned to operate in the Hilltopper category as he did in 2020, but operating in the first six hours of the contest this year before leaving to participate in one of the Chicago area's Saturday evening hidden transmitter hunts. Pete bettered his score from 2020 by more than 60%, completing 74 QSOs for a final score of 3,528.

After last year's heightened conditions on 144-MHz produced a close and high scoring battle between AA4ZZ and W1VD in the Single-Operator, Single-

2021 CQWW VHF PLAQUE WINNERS AND DONORS

SINGLE OPERATOR, ALL BAND

WORLD: Dr. Gene Zimmerman, W3ZZ Memorial, sponsored by Directive Systems and the Grid Pirates. Won by: **Andy Yanulyavichus, UW8SM**
USA: Steve Bolia, N8BJQ Trophy. Won by: **Jeff Klein, K1TEO**

SINGLE OPERATOR, SINGLE BAND

WORLD 50 MHz: Jorge F. Rios Alvarado, XE2X Trophy. Won by: **Marco Angioni, ISØBSR**
USA 50 MHz: Florida Contest Group Trophy. Won by: **Wyatt Dirks, ACØRA**
WORLD 144 MHz: CQ VHF Contest Committee Trophy, sponsored by Joe Devenyi, HAØLC. Won by: **Bostjan Sever, S56P**
USA 144 MHz: Chuck Dietz, W5PR Trophy. Won by: **Jim Christiansen, K7ND**

SINGLE-OPERATOR QRP ALL BAND

USA: Curt Roseman, K9AKS Memorial, sponsored by the CQ WW VHF Contest Directors. Won by: **Jim Spence, KO9A**

ROVER

USA: Northern Lights Radio Society Trophy: Won by: **Tony Contratto, KG9OV**

MULTI-OPERATOR

WORLD: Dr. Gene Zimmerman, W3ZZ Memorial, sponsored by Directive Systems and the Grid Pirates. Won by: **Station TC3A, operated by: TA3E, TA3LHH**
USA: Bob Striegl, K2DRH Trophy: Won by: **Station W4VHF, operated by: W3GQ, NI4E, W3OA, W4MW, KU4V, AA4ZZ, W4GRW**

**Denotes awarded to runner-up in category*

TOP SCORES

WORLD

All Band
UW8SM.....53,130
VA2BN 37,536
VE3WY 33,728
VA6AN 23,328
I1JTQ 19,504

6 Meters
ISØBSR 70,110
UT5X.....62,658
IZ5EME 32,800
F4ARU 32,604
E77A 30,171

2 Meters
S56P 22,040
EM8A 9,506
E74G.....7,440
DL1DBR.....5,888
UR7IMM.....4,960

Hilltopper
VE2NCG 3,744
IZ3NVR 3,060
JR1UJX/2.....2,475
UR4RZA.....2,052
UY2RA 1,518

QRP
UZ7W 13,360
M5W.....10,086
E24QND.....2,744
DO1FDK 2,184
UT6EY 1,750

Rover
VE3OIL/R.....5,368
BG2KAJ/R.....4,400
E22FFJ/R.....726
VE2GT/R.....378
VA7OTC/R 315

Multi-Op
TC3A.....30,250
OK1RDO.....28,890
UZ2I 24,570
TC3EC 19,260
LY5W 16,600

USA

All Band
K1TEO.....143,218
K2DRH.....121,402
KD2LGX.....57,040
N2NT.....55,948
N2JMH.....49,248

6 Meters
ACØRA.....143,585
NØURW.....32,342
KØVG.....32,226
N7PHY.....27,495
W5PR.....23,247

2 Meters
K7ND 486
WE7L 418
W7OJT.....320
AF7GL.....250
KC3SWL 50

Hilltopper
K9PW.....3,528
AJ6X 799
W9SZ.....703
N6AN 117
KD7WPJ 16

QRP
KO9A 44,875
NØUR 23,901
WB9AYW.....3,002
WA5DM.....1,600
NØSUW 1,575

Rover
KG9OV/R.....22,420
AA5PR/R.....14,935
K9JK/R.....14,608
AE5P/R 14,472
N6RH/R.....13,462

Multi-Op
W4VHF 131,053
NV9L.....66,299
N4SVC.....40,905
K5QE 40,040
W4ZST.....34,848

ACØRA's three 6-meter antennas, two 7-element Yagis and a 5-element Yagi, not to mention a 60-foot pneumatic mast for one of the 7-element Yagis. (Photo by ACØRA)

QSO & GRID LEADERS

6-Meter QSOs

ACØRA	619
K2DRH	446
K1TEO	445
ISØBSR	371
UT5X	355
W4VHF	322
NØURW	321
NV9L	310
UW8SM	288
SV6JHA	281
VA2BN	274
W9GA	271
KØVG	268
E77A	267
KO9A	266

2-Meter QSOs

E25GNL	289
S56P	191
W4VHF	139
K1TEO	137
OK1RDO	127
E74G	121
E2ØWVV	108
K5QE	99
EM8A	98
E24QND	98
OM6TX	97
DL1DBR	92
AE5P/R	89
N6RH/R	86
N2NT	82

6-Meter Grids

ACØRA	235
ISØBSR	190
UT5X	177
IZ5EME	164
K2DRH	162
W4VHF	161
K1TEO	160
UW8SM	146
F4ARU	143
NV9L	140
VA2BN	136
SV2AEL	133
UT4XU	128
W5LO	126
W5PR	123
KØVG	123

2-Meter Grids

K5QE	61
W4VHF	60
S56P	58
EM8A	49
K1TEO	42
UR7IMM	40
K2DRH	40
W4ZST	38
KG9OV/R	38
OK1RDO	37
N4SVC	36
YR8D	36
KD2LGX	36
N2NT	36
N2JMH	33

ROVERS & GRIDS OPERATED

AA5PR/R	DM65 DM74 DM75 DM84 DM85
AE5P/R	EM20 EM21 EM22 EM30 EM31 EM32
BG2KAJ/R	PN23 PN24
E22FFJ/R	NK92 NK93 NK94 OK02 OK03 OK04
JJ1WWL/R	PM96 QM06
KØBAK/R	FN10 FN11 FN20 FN21
KØBBC/R	EN13 EN14 EN15
K9JK/R	EN50 EN51 EN52 EN60 EN61 EN62
KD6EFQ/R	DM12 DM13
KE7MSU/R	CN85 CN86
KG6BXW/R	CM86 CM96 CM97 DM07
KG9OV/R	EM47 EM49 EM57 EM59 EN40 EN41 EN50 EN51
KI5FIQ/R	EM20 EM21 EM22 EM30 EM31 EM32
KI5RAT/R	EM20 EM21 EM22 EM30 EM31 EM32
KK6MC/R	DM54 DM55 DM64 DM74 DM75
KO4IJH/R	FM08 FM09 FM18
KX6A/R	DM03 DM13
N6GP/R	DM03 DM04 DM13 DM14
N6JSO/R	CM87 CM97
N6RH/R	EM20 EM21 EM22 EM30 EM31 EM32
N6UTC/R	DM03 DM04 DM13
NV4B/R	EM43 EM53 EM54 EM55 EM64 EM65
UR3ABM/R	KO70 KO71
VA7OTC/R	CN88 CN89
VE2GT/R	FN35 FN36
VE3OIL/R	EN93 FN03
VE3RKS/R	EN93
WØZF/R	EN13 EN14 EN15 EN34
W3DHJ/R	DM77 DM78 DM87 DM88
WB6AGE/R	CN76 CN85 CN86
YD3ALU/R	OI62
YF3CYT/R	OI62
YG3FZT/R	OI62

Band, 2-meter category, activity in the category ebbed substantially in 2021. Congrats to Jim, K7ND, for achieving a final score of 486 from 27 QSOs and 9 multipliers to lead this year's seven U.S entrants in the category.

From 28 U.S. clubs from which more than three logs were received, the Society of Midwest Contesters reclaimed the top spot in the club competition with 21 entries for an aggregate score of 358,735. With a final score of 121,402, Bob, K2DRH, was the top contributor to SMC's total.

DX

There were 670 logs (plus 14 checklogs) received from all six continents, which is an increase in the DX log count as compared to last year. The breakdown by continent is shown in the table below:

Continent	Logs	# of different DXCC Countries
Africa	4	1
Asia	129	13
Europe	276	35
Oceania	98	2
South America	103	2
North America (other than U.S.)	72	5 (other than U.S.)
Total	670	58

With 99 logs submitted (96% of the logs submitted from South America), Brazil repeated as the top source of logs among the non-U.S. countries. Ukraine was the participation leader for Europe, with 67 logs submitted. Among non-U.S. North America, Canada was the top log submitter, with 56. Japan with 47 logs submitted was the leader in log submissions from Asia with China growing its count of logs to 28. Oceania's log submission count grew to 98 (88 logs from Indonesia and 10 from the Philippines) a significant increase

Another view of ACØRA's antenna farm. (Photo by ACØRA)

CLUB COMPETITION

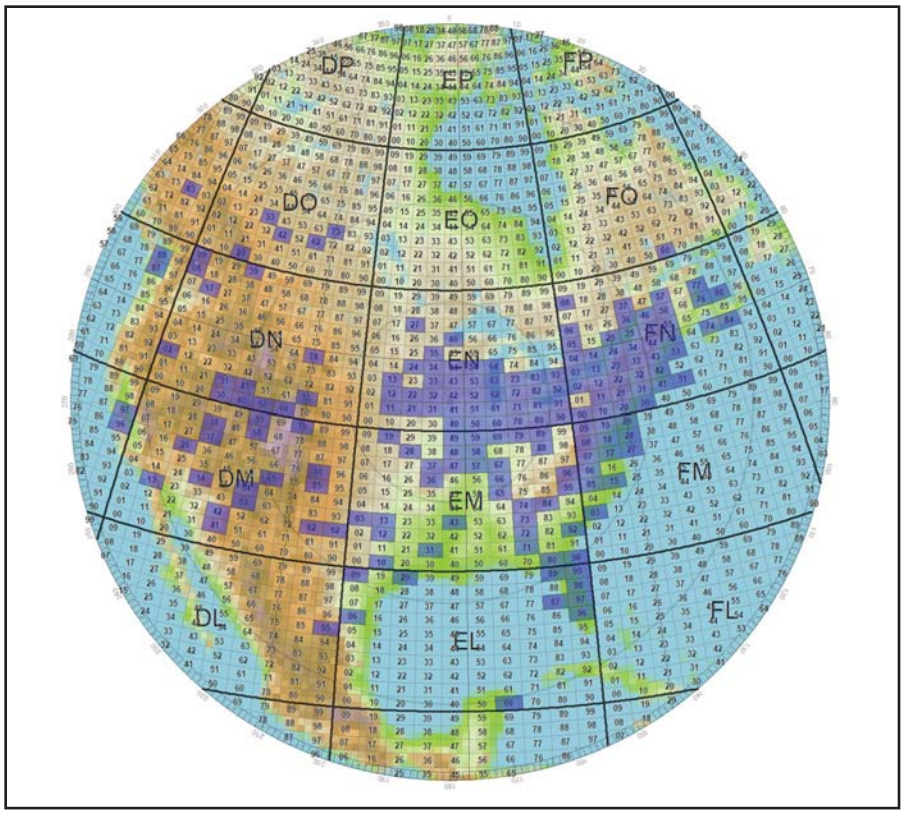
(Minimum of 3 entries required for listing)

UNITED STATES

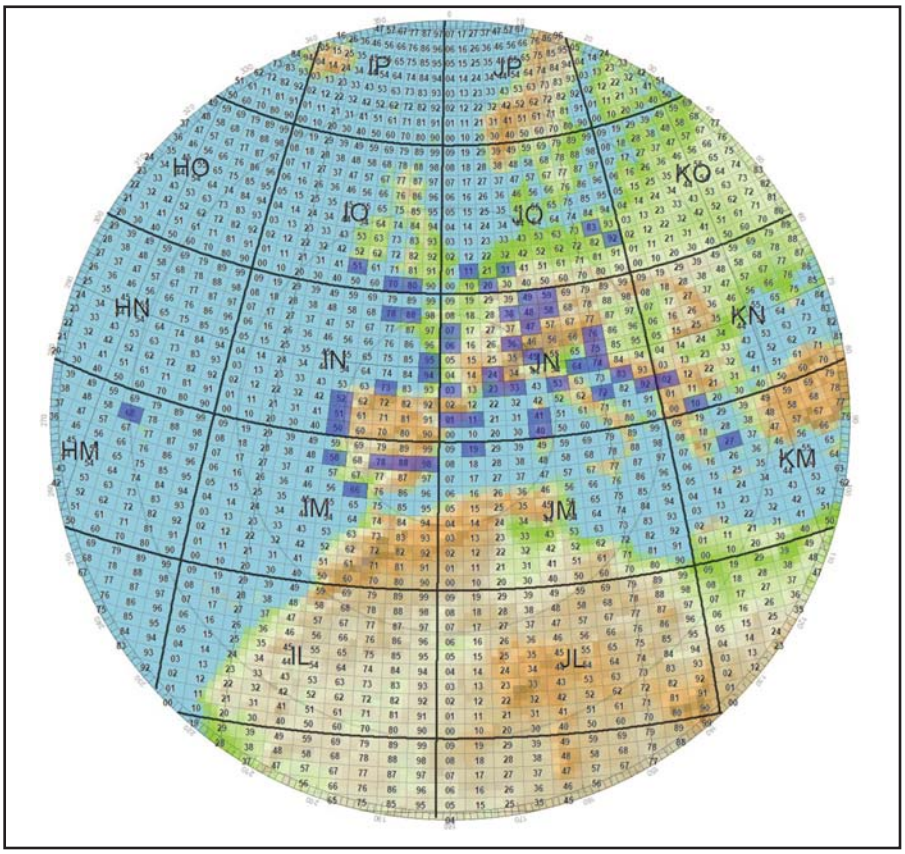
Club Name	# Entries	Score
SOCIETY OF MIDWEST CONTESTERS	21	358,735
POTOMAC VALLEY RADIO CLUB	41	183,016
CAROLINA DX ASSOCIATION	4	135,199
ROCHESTER VHF GROUP	5	114,700
MT AIRY VHF RADIO CLUB	7	94,037
YANKEE CLIPPER CONTEST CLUB	8	93,109
NORTHERN LIGHTS RADIO SOCIETY	11	91,959
NORTH EAST WEAK SIGNAL GROUP	7	82,386
PACIFIC NORTHWEST VHF SOCIETY	22	81,504
BADGER CONTESTERS	7	76,990
FOURLANDERS CONTEST TEAM	5	55,665
DFW CONTEST GROUP	6	44,253
FLORIDA CONTEST GROUP	13	44,246
FRANKFORD RADIO CLUB	4	43,394
ARIZONA OUTLAWS CONTEST CLUB	20	40,101
SOUTHERN CALIFORNIA CONTEST CLUB	12	39,257
KENTUCKY CONTEST GROUP	4	35,688
NACOGDOCHES AMATEUR RADIO CLUB	3	27,315
MAD RIVER RADIO CLUB	5	23,906
TEXAS DX SOCIETY	3	23,528
NEW MEXICO VHF SOCIETY	5	22,371
GRAND MESA CONTESTERS OF COLORADO	6	21,074
NORTHERN CALIFORNIA CONTEST CLUB	7	13,989
SOUTH EAST CONTEST CLUB	7	11,244
HUDSON VALLEY CONTESTERS AND DXERS	4	7,929
BRISTOL (TN/VA) ARC	3	4,246
CENTRAL OHIO OPERATORS KLUB	3	2,829
TENNESSEE CONTEST GROUP	3	1,933

DX

Club Name	# Entries	Score
UKRAINIAN CONTEST CLUB	18	204,806
CONTEST CLUB ONTARIO	17	95,924
ITALIAN CONTEST CLUB	8	80,664
RHEIN RUHR DX ASSOCIATION	8	23,918
LATVIAN CONTEST CLUB	7	23,470
BALTIC CONTEST CLUB	3	20,515
CONTEST GROUP DU QUEBEC	4	16,059
STRC KRYVBAS	3	12,884
SARMAT	6	12,339
THRACIAN ROSE CLUB	4	5,946
CABREUVADX	17	5,097
SP DX CLUB	3	4,606
UKRAINIAN VHF INTERNATIONAL CONTEST CLUB	3	4,185
WCWSA	3	3,684
MULAN DX CLUB	3	2,986
CDR GROUP	9	2,801
ORARI LOKAL KEDIRI	24	1,746
599 DX GROUP	6	1,352
NCG DX GROUP	3	1,268
ORCA DX AND CONTEST CLUB	3	1,164
RIO DX GROUP	14	882
ARAUCARIA DX GROUP	5	430
ORARI LOKAL GRESIK	7	426
LU CONTEST GROUP	4	399
144ZORIO	4	298
SINGLE FIGHTER DX GROUP	4	290
YBDXPI	6	275
LABRE-RS	6	172
YB LAND DX CLUB	3	57



ACØRA's map of the grids he worked in North America during the 2021 CQWW VHF contest. (Photo by ACØRA)



ACØRA's map of the grids he worked in Europe during the 2021 CQWW VHF contest. (Photo by ACØRA)

over last year's count of 54 from the region. All four of the logs from the African continent were from the Canary Islands.

The Single-Operator, Single-Band, 6-meter category remained the most popular among the DX stations, with 253 entries. With 168 entries, Single-Operator, Single-Band, 2-meters was next in popularity. Single-Operator, All-Band entries totaled 123 and there were 71 Single-Operator, All-Band, QRP logs. The remaining entries from DX stations were 26 Multi-Operator, 18 Hilltoppers, and 11 Rovers.

The top score of any entry from outside the U.S. was 70,110 by Marco, ISØBSR, in the Single-Operator, Single-Band, 6-meter category. Marco recorded 371 QSOs, stretching his signal to 190 different grids from his station on the island of Sardinia (JN40). In the Single-Operator, All-Band category, Andy, UW8SM, totaled 311 QSOs and 161 multipliers for a total score 53,130 from his KN28 locator in Ukraine. Just over 90% of Andy's QSOs and multipliers were made on the 50-MHz band. Another Ukrainian station was the top scorer in the Single-Operator, All-Band QRP category. UZ7W was operated by Igor, UT4WA, and logged 168 contacts with stations in 80 grid locators from his operating location in KN18 for a total score of 13,360. All of Igor's contacts were completed on 50 MHz.

A familiar name and call returned to lead the World scorers in the Single-Operator, Single-Band, 2-meter category. With 191 contacts to stations in 58 different grid locators from his QTH in Slovenia (JN76), Bostjan, S56P, reached a final score of 22,040. Bostjan was also the world's top scorer in this category from 2017 through 2019.

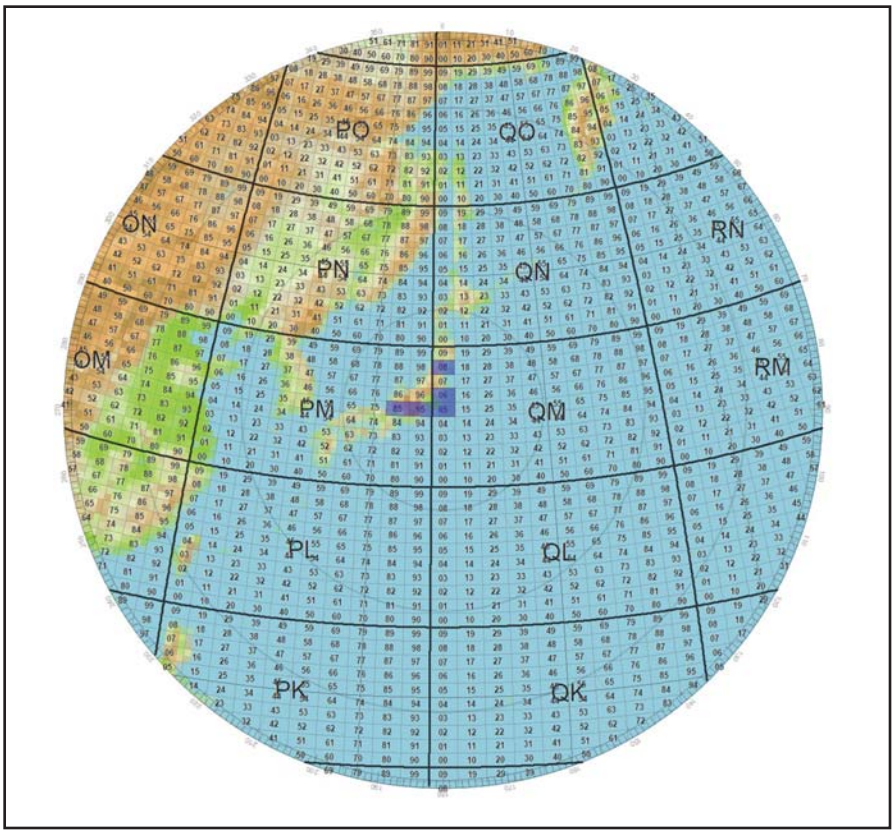
In the Multi-Operator category, the operators at TC3A prevailed with a final score of 30,250 from 251 QSOs that reached to 121 grid locators, all on 6 meters. With a score less than 5% behind TC3A's score, the team at OK1RDO utilized both 6 and 2 meters to achieve a final score of 28,890. Their 127 QSOs on 2 meters and 73 on 6 meters netted them 327 QSO points, approximately 30% more than TC3A. OK1RDO's total of 90 multipliers got them close but was not enough to top TC3A's score.

Returning to North America, the top non-U.S. scores in the Hilltopper and Rover categories were achieved by Canadian entrants. With just over 4 hours of operating time near the beginning of the contest, Nicolas, VE2NCG, achieved a total score of 3,744 using

digital modes exclusively. Sixty-five of Nicolas's 70 QSOs were on 50 MHz as were 47 of his 52 total multipliers. With a visit to two different grid locators in the province of Ontario, Russell, VE3OIL, piloted his rover station to put 84 QSOs and 61 multipliers in his logbook for a final score of 5,368. The majority of Russell's QSOs were completed on 6 meters.

From China, first-time rover Ma, BG2KAJ, travelled to two different locators to record 100 QSOs with 44 multipliers, all on 6 meters, for a final score of 4,400. In Ma's Scatter comments, he noted, "really a hot day but very happy to take part in the contest. Very good 6-meter SSB pile-up for me, very exciting." Hopefully Ma will return to roving in 2022 and beyond.

Among 19 DX clubs that met the minimum of three log submissions, the Ukrainian Contest Club claimed the top aggregate club score with a total of 204,806. A score of 62,658 from UT5X (operated by Nikolay, UT2XQ) was the leading score among the 18 logs from the club.



ACØRA's map of the grids he worked in Asia during the 2021 CQWW VHF contest. (Photo by ACØRA)

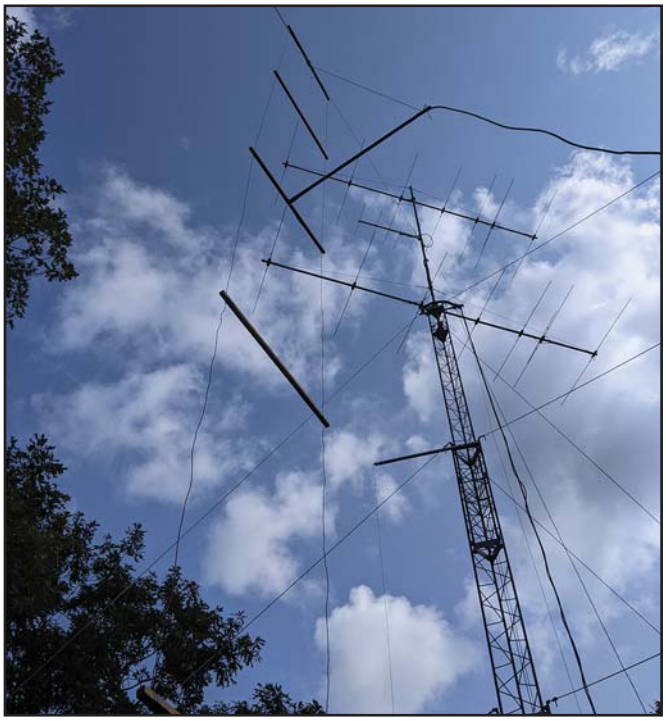
The Elephant in the Room – FT-8!

As the director for this contest, I am not ignoring the many postings to email reflectors and emails I have received about how FT-8 has impacted activity in this VHF radiosport event. I have reviewed the countless, varied, and often conflicting suggestions of what needs to be done to "improve" this contest.

Personally, I have not explored any of the digital modes myself ... preferring to follow the "KISS" principles (Keep It Simple Silly, though I have seen a different word for that last S) as I grid-hop in my rovermobile, the CoROVERolla. This means that I've been using only the "legacy" modulation modes (SSB mostly, but with an occasional CW or FM contact). Having finished third among U.S. Rovers this year and second in 2019, I've not felt limited by restricting myself to "legacy" modulation modes so I might not be the best person to judge how FT-8 has impacted this contest.

On the other hand, I have seen how FT-8 can be used to increase scores, especially collecting more distant multipliers that, even under the best conditions, might be very challenging to work with other modes. In the majority of cases, the higher scoring stations in the various categories have included the "legacy" modes in their QSO mixes, not relying exclusively on using FT-8 and other digital modes.

Paul, AA4ZZ, sent in these photos, shot by a drone, of the 2-meter Yagi used for the W4VHF contest station. (Photo by W4GRW)



This photo shows off the 6-meter Yagi at the W4VHF contest station. (Photo by AA4ZZ)

The team at W4VHF was comprised of the following members (from l. to r.) Dick, W3OA; Paul, W3GQ; Paul, AA4ZZ; and Bill, W4GRW. They are members of the Carolina DX Association. (Photo by AA4ZZ)

I also recall the incredible conditions that were experienced in the U.S. back in 2006 on the CQWW VHF Contest weekend. Several entrants logged more than 1,000 QSOs and I'm pretty sure this was "BD" (Before Digital), all using "legacy" modulation modes, so incredible contest scores CAN be achieved without the benefit of "new-fangled" modulation methods.

For 2022, the rules will not see any changes. Multiple contacts with the same station using different modes will be considered duplicates so feel free to do that if you must but don't expect any increase in your score from such activity. I do strongly request that logs submitted show "DG" on the Cabrillo QSO: Lines for contacts made using the various flavors of digital modes and NOT "PH" as other VHF contests have permitted. Use "PH" for SSB contacts (and if anyone is using AM in the contest, for those contacts), "CW" for CW contacts and "FM" for contacts made using FM voice.

Speaking of "Next Year," Let's Move On!

The dates for the 2022 CQWW VHF Contest are set as July 17th and 18th. Let's hope that the global pandemic will continue its easing but even if it doesn't, we can continue to "socially distance" on the 50- and 144-MHz bands. And has Cycle 25 really started? Propagation conditions on 50 MHz may answer that question, once the third weekend of July comes around this year.

Repeating the constant plea of past directors, if you operate, please send in a log. Any size log is greatly appreciated. If you need help, please ask. More logs make cross-checking logs more accurate.

Don't forget to check out the CQ VHF website <www.cqww-vhf.com>. Comments, suggestions, and corrections are always welcome. Quite a bit of the data was entered manually. If you find an error, please let us know.

(Scores on page 108)