2020 World Wide Digi DX Contest

29 August - 30 August

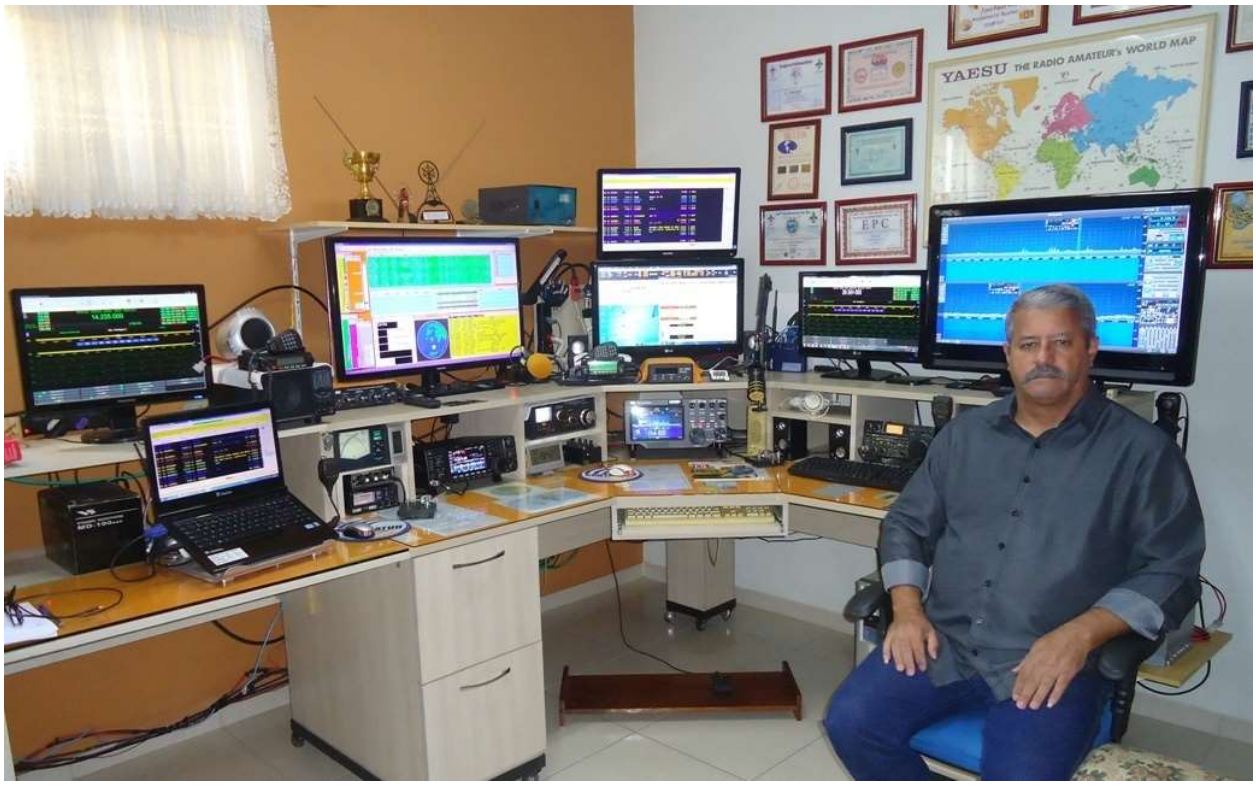
Robert, T6A (S53R), 1st Place Single Band 20 Meters High Power

The second running of the World Wide Digi DX Contest took place the last full weekend in August, 2020. A record number of participants took part from 160 different countries. From reading the comments and looking at the scores, it appears the contest grew in leaps and bounds.

The number of logs received increased from 1,329 in 2019 to 1,690 in 2020. That's a 27% increase. 259,247 total QSOs were reported as compared to 168,685 last year. That is a whopping 54% more contacts made. All this despite no sunspots. The propagation numbers at the start of the contest were not great with the solar flux index at 70, the A index at 10 and the K index at 3. However, many operators noted that conditions were much better than last year which could explain why activity and scores were up. It's also possible that the pandemic forced many inside and what better way to spend time inside than a radio contest?

Despite low sunspot activity, nearly 12% of all QSOs were made on 10 and 15 meters compared to only 5% last year. This should be a good sign of things of come. 20 meters was the most popular band with 47% of QSOs. 40 meters was next popular with 31%. 80 meters accounted for 9% while 160 meters amounted to just over 1% of all QSOs.

Randy, K5ZD, noted "Twenty meters was almost too good. So much QRM it was hard to make QSOs at times and very hard to work the deep Asia paths. The Digi contest does a great thing by suggesting use of different channels to spread activity out. Might be better with 3 kHz rather than 2 kHz so you know which channel a station is actually using." It's an interesting idea Randy. Not all operators were happy with band conditions. Ed, VE4VT, exclaimed "Absolutely no Europe heard on 80/40. Not a single signal on 15 meters!!!" Sunspots are coming Ed, we promise.



Joao Paulo, PY2QT, 1st place Single Band 15 Meters Low Power

Operators having more experience with FT-mode contesting seems to be another reason the event was successful. Jim, K6OK, said "Great contest, much better than last year's. I don't know if it is due to improvements to software, more experienced operators or both, but I enjoyed long stretches of completed QSOs without repeats or callbacks. Overall the contest felt a lot less chaotic than last year, a smoother experience."

Yet there were still new FT-mode contesters out there. One was Bill, K3WJV, who wrote "I just got set up for these FT modes during the week and it was all very new for me. I had a couple days to work stuff and see what it's all about so I have gone over to the dark side." Ah, the dark side indeed.

The contest committee decided to allow multi-operator categories in the contest this year despite the pandemic. The committee felt multi-operator teams would conduct themselves safely and that appears to be the case. The ZW5B Multi-Multi team actually had everyone test for COVID-19 before coming to the station "in order to protect the old guys". One multi-operator team had no "old guys". The Multi-Single High Power team of W4IPC consisted of all teenagers (Charles, AA4LS, 13. Mason, KM4SII, 17. Conner, W4IPC, 18). A few multi-operator stations (K6UFO, W4IPC, YU5R & WW4LL to name a few) were remote which allowed them to operate together, yet apart, without fear of the virus.

ZW5B 1st place Multi-Multi (left to right PY5CC, PY5KD, PY5EG, PY2WC, PU2TIB)

The K1TTT multi-op entry was a hybrid combination of both remote and on-site operators. Dave, K1TTT, explains "We had 6 stations all set up for remote access, I think all of them were used by a remote operator at one time or another during the contest. We had 3 local operators including myself. The local operators were tasked with monitoring the older amplifiers in

addition to actually operating, though there were times when there were no operators in the shack itself."

One multi-operator team consisted of the husband/wife combination of Steve, KJ5T, and Mayra, KG5ONN. Steve said after the contest "My wife surprised me a couple of weeks ago by upgrading to her General class license. I thought it would be fun to enter this one with her, and using her call. These were her first ever HF digital contacts!" Way to go Mayra. Overall, there were 59 multi-operator logs submitted compared to only 31 last year.

Another reason for higher scores is the fact that the software has improved. The most popular combination was WSJT-X 2.2.2 and N1MM Logger+. With an improved WSJT-X decoder which now shows decoded callsigns on FT8 earlier in the cycle than in previous versions, the operator has more time to react. Says Iztok, S52D, a member of the S51A Multi-2 team, when talking about WSJT-X 2.2.2 and N1MM Logger+ "At S51A we ran five radios (two run stations with both FT4 and FT8 instances) plus a multiplier station. All linked with N1MM. It simply worked as expected."

S51A won Multi-2 for the second year in a row. (sitting left to right Iztok S52D, Ziga S55KZ (standing left to right) Sergej S51ZJ, Andreja S56B, Tone S51TC

WriteLog users benefited from a year's worth of improvements in DigiRite which now also shows decoded callsigns earlier in the cycle. MSHV also included several improvements to facilitate FT-mode contesting.

In the "not so good news" department, "not in log" (NIL) contacts were 5.6% which is about the same as last year. Despite efforts to educate on this subject, NILs are still a problem. More work needs to be done to improve the NIL statistic. As a start, it's recommended everyone read this paper on the subject located at:
http://physics.princeton.edu/pulsar/k1jt/FT4_FT8_Contesting.pdf

Here are the results. Remarkably, new records were set in every category except one.

SOAB High Power

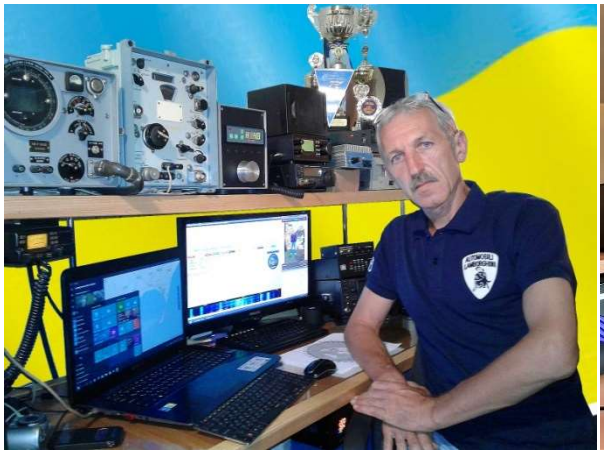
Lew, W7EW, relied heavily on FT8 contacts to win the Single Op High Power category from Oregon. He dominated the rest of the field. Remarkably, 92% of his contacts were FT8. Both second and third place finishers, Sergey, ER4A (UT5UDX), and Julo, OM7JG, had more multipliers but W7EW's 2.55 points-per-QSO average was a significant factor in the win. Lew said "There is a huge amount of DX out there via FT8. This is truly a world-wide contest with a different flavor than the usual legacy contests."

ER4A averaged 1.77 points-per-QSO while OM7JG averaged 1.65 points-per-QSO. Interestingly, Lew averaged nearly identical points-per-QSO last year (2.45) in his 3rd place finish. The big difference this year was that he made 190 more QSOs.

Lew, W7EW, 1st place SOAB HP

Julo, OM7JG, 3rd place SOAB HP

Bud, AA3B, matched his 4th place finish last year. However, his score was 50k points more than in 2019. In a very tight race for 5th, Boyan, LZ2BE, operating as LZ8E edged out Yuri, UR4QX.



Yuri, UR4QX, 6th place SOAB HP

Boyan, LZ8E (LZ2BE) 5th place SOAB HP

SOAB Low Power

The Single Operator All Band Low Power category was the most popular with just over half of all logs submitted. Levi, K6JO, operating as KR1DX, moved up from second place last year to win in 2020. He smashed the category record by nearly 100k points from California using a modest station. Levi also relied heavily on FT8 just as W7EW did in the SOABHP category. 72% of Levi's contacts were FT8 while averaging 2.09 points-per-QSO.

Brian, VK6MIT, took advantage of his DX location to place second. Brian's 3.89 point-per-QSO average was well below that of VK3BDX who won SOABLP last year averaging 4.7 points-per-QSO.

Finishing third was Valery, UP4L. Fourth place went to Zlatko, 9A2EU. Anda, YB6HAI, rounded out the top 5 in SOAB LP.

Anda, YB6HAI, 5th place SOAB LP

Ricardo, CT3KN, 8th place SOAB LP

SOAB QRP

The Single Operator All Band QRP category was dominated by Europeans as 4 of the top 5 were from Europe. Patrick, ON3CQ, outpaced the field. Doni, YC0VM,was second. Oskar, ES5NY, was third. EA3FHP was fourth while Wayne, MW7WAD finished fifth.

Doni, YC0VM, 2nd place SOAB QRP

Wayne, MW7WAD, 5th place SOAB QRP

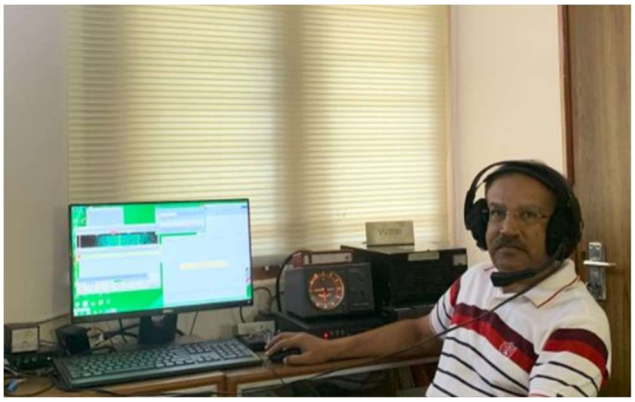
Single Op Single Band

Just over 26% of all logs received were Single Operator Single Band entries with Single Band 20 Meters Low Power (SB20LP) being the most popular with 43% of all single-band entries.

There were only two Single Band 10 Meter High Power (SB10HP) entries where Chuck, W5PR, repeated his win from last year but failed to break his own record. This was the only category record that wasn't broken. Chuck beat out Marco, IK2TDM, who placed second, despite making less QSOs. In the 10 Meter Low Power category, Kristjan, S50XX, was also a repeat winner and prevailed over seven others. Zeljko, 4O6ZD, was the lone 10-Meter QRP entry.

Tine, S50A, took the SB15HP category over five other entries. Paulo, PY2QT beat out fellow Brazilian Paco, PU2UAF, in SB15 LP to win. UR3ABM won the 15-meter QRP category over three other entrants.

Eugenio, CX7SS, 2nd place SB 15 HP



Kash, VU2IBI, 4th place SB 15 HP

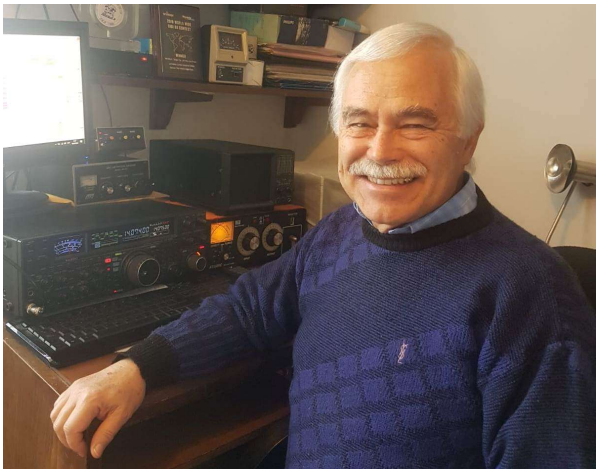
Matti, OH4SS, 5th place SB 15 HP

Robert, S53R, operating as T6A, put in a tremendous effort from Afghanistan to win SB20HP. After the contest Robert reflected "What a surprise! 20m was open 24 hours - a very rare occurrence in this "zone of radio silence". Was expecting it to remain open till about 22:00 local time and then catch a decent sleep. Yet it went on straight through the night, with wall to wall - well full-screen I mean really - JA pileup, starting at around 4 AM. So ended being up 40 hours, more or less. Felt almost like a real WW.[1]" Finishing second was Andy, 5Z4VJ, in Kenya. Pete, W1RM in Connecticut was third.

In the SB20LP category, Leonardo, CX3AL, beat out Andy, UW8SM, for the win. Third was Daniel, S54Z. Alex, LY1R, was fourth and Alexander, UA6FZ, was fifth.

[1] Robert only operated 24 hours. But was awake 40 hours straight because he had planned to get a few hours sleep in the middle of the 24-hour contest period. 20m conditions were so good, he never got his expected mid-contest sleep period.

In the 20-meter QRP category, Francisco, HK3W, won in a landslide over twelve other entrants. Erwin, DH9DX, took his operation outside to enjoy the nice weather while operating portable.



Leonardo, CX3AL, 1st place SB 20 LP

Alexander, UA6FZ, 5th place SB 20 LP

Pete, W1RM, 3rd place SB 20 HP

Steve, WB4OMM, 2nd place SB 20 QRP

Erwin, DH9DX/P, 4th place SB 20 QRP

Leo, S50R, 5th place SB 20 HP

In the 40-meter HP category, Al, K7CA, in Utah outscored fellow American Dennis, K7BV, in North Carolina. This was Al's first WW-Digi Contest. In third place was Leonardo, PY2KNK.

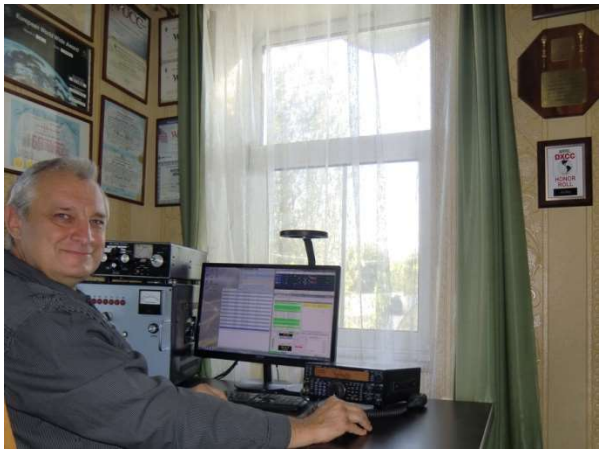
In the 40-meter LP category, Daniel, VK4AFU, took the top spot. Guillermo, OA4DTU, was second. Finishing third was Bob, WA1FCN, in Alabama. Robert, AA6OC, won the 40-meter QRP category over three other competitors.

Gary, KD4RH, 5th place SB 40 HP

Daniel, VK4AFU, 1st Place SB 40 LP

Guillermo, OA4DTU, 2nd place SB 40 LP

Bob, WA1FCN, 3rd place SB 40 LP



Igor, RA3S, 4th place SB 40 HP

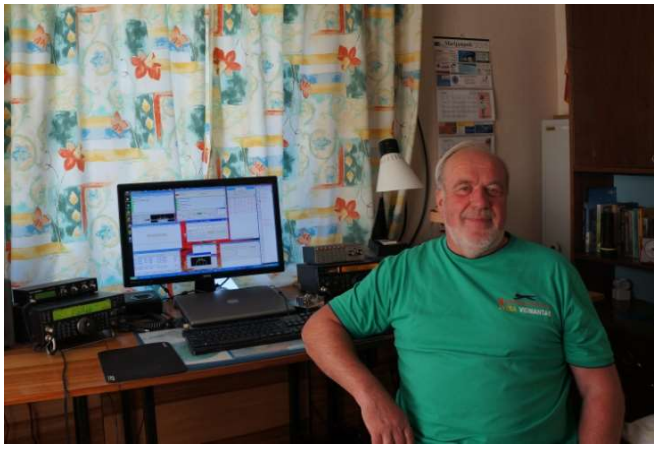
Dominique, FK8CE, 4th place SB 40 LP

The closest finish of the contest was in the 80-meter HP category where only a few points separated Vagner, PY5DC, and Ozren, 9A7W, operating as 9A5Y. Ozren had more QSOs, but Vagner's 2.71 points-per-QSO average was the difference in the win. Alex, RC0CB, finished in third place. In the 80-meter LP category, Andrius , LY7Z, more than tripled the score on second place finisher Eduardo, CO8LY. Andrius' score was higher than the 80-meter HP winner. Vinko, S53F, was a close third. In the 80-meter QRP category, Alan, KJ4LPI, in his first WW-Digi Contest won.

Andrius, LY7Z, 1st place SB 80 LP ***Vagner, PY5DC, 1st place SB 80 HP***

On top band, Eric, NO3M, won the HP category over Dmitry, UA6JQ, and Mario, LU8DPM. There were seven LP entries with Vidmantas, LY2SA, eking out the win over second place Jim, W4TMO. There were three QRP entries with Zdravko, E70E, picking up the win.

Mario, LU8DPM, 3rd place SB 160 HP



Vidmantas, LY2SA, 1st place SB 160 LP

Juri, ES8GP, 4th place 160 LP

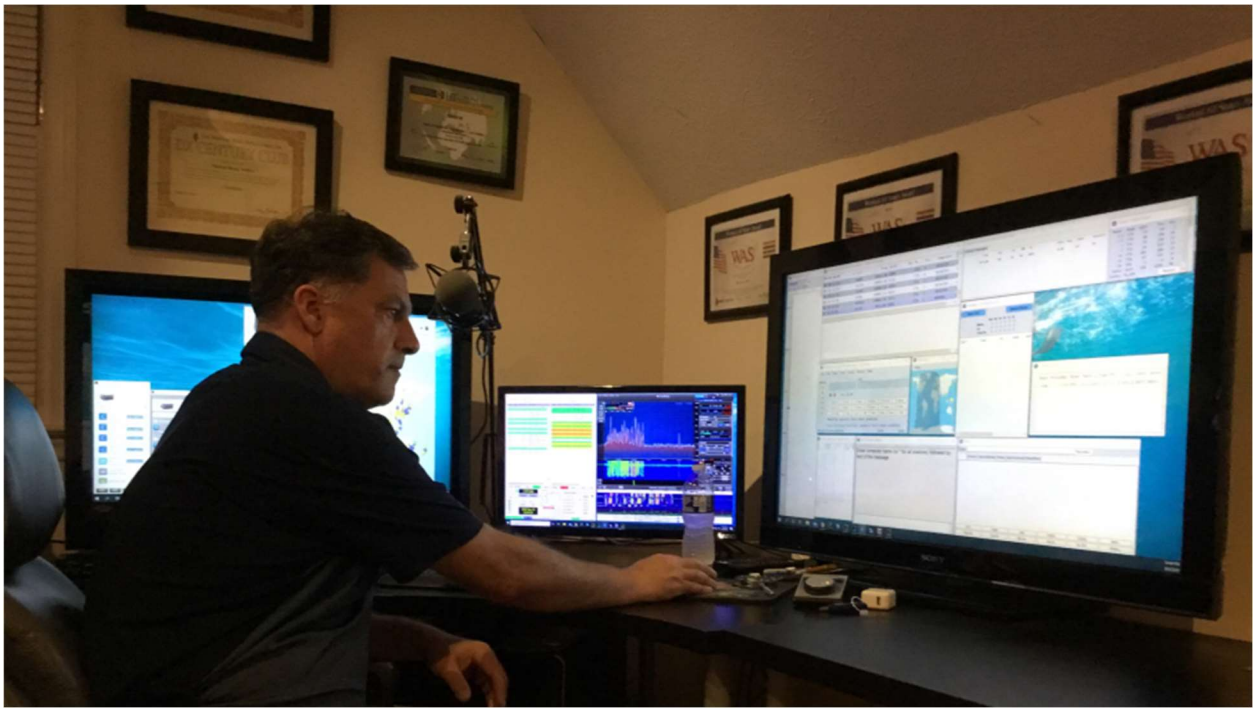
Multi-Single

The Multi-Single High Power winner was PT5J (PP5JR, PU5BIA, PU5FJR, PU5JDA, PU5FDA). They more than doubled the score of second place finisher DR1X (DG6YID, DF8XC). K6UFO (K6TD, ND2T, K6UFO) was 3rd.

Jak, DF8XC, at DR1X - 2nd place Multi-Single HP (along with Klaus DG6YID)

In the Multi-Single Low Power category, YU5R (YT2AAA, YT3PL, YT7AW) repeated as the winner. WW4LL (NN9DD, N2WF, WW4LL) piloted their remote station in Maine to second place. YO3GNF (YO3GNF, YO8ENF) placed third.

4A2MAX team placed 5th MS LP - (left) Jesus, XE2N, & Dora, XE2DLC, (right) Luis, XE2W



Mike, NN9DD, working the WW4LL Multi-Single LP station remotely to a second place finish (along with Fred, WW4LL and Scott, N2WF)

Multi-2

Repeating as winner of the Multi-2 High Power category was the S51A team of S51TC, S51ZJ, S52D, S55KZ and S56B. VR2CC (VR2XYL, VR2XMT) was a distant second. 9M2TO was third.

VR2CC 2nd place Multi-2 (Charlie, VR2XMT, & Pansy, VR2XYL)

Multi-Multi

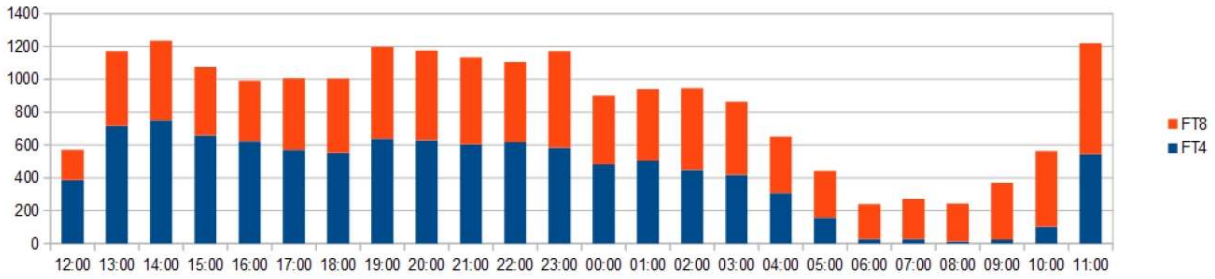
There was also a repeat winner in Multi-Multi as ZW5B (PY5HSD, PY2WC, PY5KD, PY5EG, PY5CC, PU2TIB) continued their dominance and was the only station to top a million points in the contest. LX9DX (DF7EE, DD5ZZ) was second. They ran 4 radios between the two of them but as Helmut, DF7EE, explained "no chance to beat the distance scoring from Brazil". K1TTT (W0AAE, K1NZ, KC1KUG, W1ZZ, K1TTT, K2IW, W1TO, W3ML,J NJ1F), finished third with 640,065 points.

LX9DX team of Helmut, DF7EE, & Alex, DD5ZZ 2nd place Multi-Multi

Final

The high participation in this year's contest proves that a lot of operators are having fun with FT-contesting. It's not CW, SSB or RTTY. It's something new and totally diverse with different strategies needed to do well. What may be the most interesting surprise of the contest is how the top high and low power single operators both relied heavily on FT8 contacts to win. How can that be if FT4 is suppose to be twice as fast as FT8? FT4 speed comes with a price. It is 3.5 dB less sensitive and requires 1.6 times the bandwidth of FT8. Under crowded contest conditions, FT8 might just be as fast or better suited for this type of contesting. It sounds like a case of having to slow down to go faster. It certainly would help if we spread out more and there were signs of that happening this year but not to the extent that may be needed.

This year there seems to have been an even split between FT4 and FT8 signals on the recommended contest frequencies as observed by Dick, W3OA. Dick operates a Reverse Beacon Network (RBN) Skimmer node in North Carolina. During this year's contest he devoted his node to the contest recommended frequencies for the entire 24-hour period. Using a tribander pointed to Europe during the day and an 80-meter dipole at night, he recorded 10,382 FT4 spots and 10,106 FT8 spots. Below is a graph showing how the spots were distributed. Dick's complete report is available in the 2020 Results section of the website.



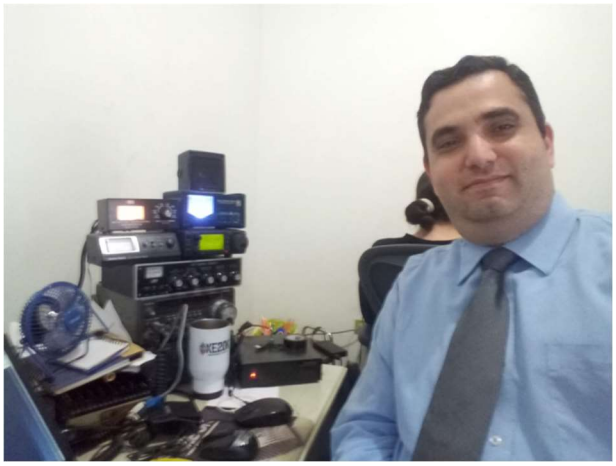
Total of FT4 and FT8 spots on all bands.

As we head farther into Solar Cycle 25 with improved conditions, especially on 10 and 15 meters, you have to be excited at the prospect of non-stop DX contacts on the high bands. Scores will skyrocket and the fun will also rise exponentially. It's certainly something to look forward to. We'll see you next year on the last weekend in August. Stay safe.

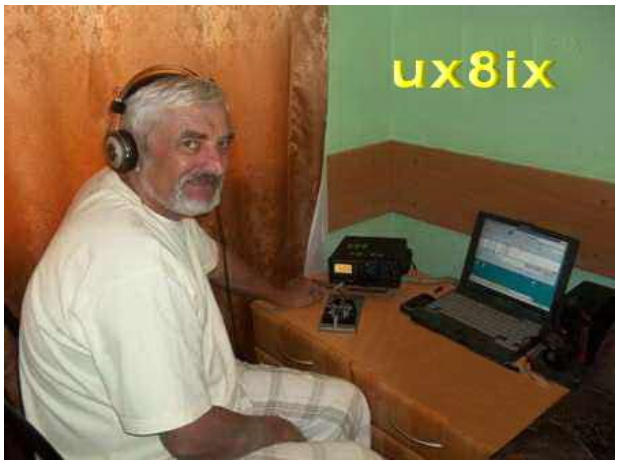
Tex, 9M2TO, 3rd place Multi-2

Daisuke, JA1KPF, 3rd place SB 15 QRP

Juan Carlos, CO2JD, 6th Place SB 80 LP



Orlando, XE2OK, 4th place SB 80 LP



Nick, UX8IX, 9th place SOAB QRP

Alex, LY1R, 4th place SB 20 LP

Dimitry, UA9FLK, 9th place SOAB HP

Brian, VK6MIT, 2nd place SOAB LP

YO3GNF 3rd place Multi-Single LP (Jack YO3GNF & Andrei YO8ENF)