# 2021 World Wide Digi DX Contest

## 28 August - 29 August

The 3rd annual World Wide Digi DX Contest had a successful run in 2021 and it seems nearly everyone had a good time even though most are still getting acclimated to this relatively new way of contesting. Ron, WV4P operating as N4PX wrote "My Love/Hate with FT-X Contesting continues but I keep coming back for more." Randy, K5ZD, said "The FT modes were not made for contesting... but it makes for a challenging slow-motion video game. Lew, W7EW, added "This event is really a giant real-time computer game that bounces RF around the world to each other." Tyler, K3MM, said "I'm still not sold on FT8/4 as a contest mode, but I guess it's here to stay and FT8 is unbelievable for pulling out the weak ones."



Lew, W7EW, repeats as World Single Operator All Band High Power winner from Oregon

The contest brought in both experienced contesters and newcomers. Teng, BA7LAB, wrote "The first HF contest I made, really fun! Thank you." Others, like Anton, R2DMD, got hooked "I viewed the contest as an opportunity to get more countries on 160m band. But after several

hours I became so much involved that I decided to stay the whole night." In the "never too old to start" category, Gheorghe, YO4BKM, wrote "At the age of 75, my first contest in FT-modes."

For some, the contest was special for other reasons. Robert, KZ2T, solemnly wrote this "My first contest in memory of my very best friend Urb LeJeune - W1UL (formerly W2DEC) who passed away due to COVID related illness. Every time I transmit, I hope his released energy hears me, because I hear him every time I receive."

Anton, ON6NL, wrote "Nice contest requiring balancing between distance, multipliers, speed (FT4) and DX (FT8). Conditions were disappointing on 10, 15 and 20 but fine on 40 and 80. A pity the FT4 frequencies on most bands are the general used FT4 frequencies." The reason the FT4 frequencies on some bands are the generally used FT4 frequencies is that FT4 was created to be a "contest" mode. It's possible the WSJT-X development team didn't foresee it becoming an everyday casual mode like FT8, but it did. The contest committee may need to look at having a different set of frequencies for FT4 in the future where they don't conflict with "everyday" FT4 activity. Regardless, it seems nearly everyone had to migrate to the standard FT frequencies at some point when they ran out of stations to work on contest frequencies.



Ron, WV4P, operating as N4PX, won the Single Operator All Band Low Power category with a new World Record from Tennessee

Post contest statistics show that FT contesters are getting more efficient. Despite total logs received being down 12% this year, total QSOs were only down 6.5% as compared to last year. There were 241,227 QSOs made in 1420 logs. It's hard to speculate why the lower number of logs, but last year many of us were locked down due to Covid-19. It didn't help that propagation was not great either. With the SFI at 90, expectations were that the higher bands would be better, but they weren't. There were many reports of conditions being poor at the start, but

much better right at the end. Unfortunately, that's the way it goes sometimes with 24-hour contests. Remarkably, eleven new world records were set in 2021 in the 25 different categories.

## **SOAB High Power**

The Single Operator High Power category was dominated by USA stations. Six of the top ten SOABHP stations and four of the top five were from the United States. For the second year in a row, Lew, W7EW, won the single operator high power category while breaking his own world record from Oregon. Lew stuck to his strategy of relying heavily on FT8 to make more DX contacts. Lew said "FT4 makes it seem like you're working a bunch of stations, but it doesn't work so well with DX so after the repeats and misfires it is usually more effective to stick with FT8. Rate is not king in this contest." Lew's 2.54 points-per-QSO was nearly identical to his 2.55 average last year. He made 1205 contacts with 151 multipliers for a score of 462,513 points.

Perennial East Coast powerhouse contester Bud, AA3B, moved up from 4<sup>th</sup> place the past two years to take second with 412,920 points (1081 QSOs, 180 multipliers, 2.1 points-per-QSO) from Pennsylvania. More than 80% of Bud's contacts were on FT8.

In 3<sup>rd</sup> place was Tyler, K3MM with 389,607 points (1055 QSOs, 183 multipliers, 2.0 points per QSO) in Maryland. This was Tyler's first serious effort in WW Digi after getting his feet wet last year. Hehad this to say "I just wish we could get people to spread out more. Seems like if you aren't in the bottom two KC running a KW your rate suffers and many stations won't "hear you" unless you call them very close to their TX frequency. The answer is SDR wideband radios like the Flex so we can spread out without "spinning a knob" and perhaps more variety in the messaging, but that'll be an evolutionary process that won't happen overnight."

Julo, OM7JG, placed 4th with 361,638 points on 1206 QSOs and 181 multipliers. Julo had more QSOs and nearly the same number of multipliers as the top 3 yet could only muster 1.66 points-per-QSO. His QSOs were evenly split between FT4 and FT8.

Rounding out the top five was Randy, K5ZD, from Massachusetts. Randy scored 319,680 points on 914 QSOs and 180 multipliers, averaging 1.94 points-per-QSO. Randy's best rate hour was 74 which supports the claim that FT-contesting, in its present form, may never come close the rates of other modes.



Paul, A65DR, was 7th Place Single Op All Band High Power (#1 Asia)



Yuri, UR4QX, 9th Place Single Operator All Band High Power

### **SOAB Low Power**

Possibly the most impressive effort of the contest came from SOABLP winner Ron, WV4P, operating as N4PX remotely in southern Tennessee from the contest station he's in the process of building. He moved up to the top spot after finishing sixth a year ago. Ron set a new SOABLP world record with 300,730 points on 983 QSOs and 170 multipliers. And to top it off, it was his birthday. Ron had 3 towers loaded with JK antennas at his disposal (he's added more since).Tower one rotates and has a JK 404 Grande (that's 4 elements on 40 meters), a JK 205, and JK 10/15, Tower 2 has a JK Mid-Tri and Mid-Tri-40 stack. Tower 3 has a JK801-T rotatable 80M dipole. Unfortunately for the competition, he's not done building towers and antennas yet.

Ron had this to say "WW Digi is a fun albeit a frustrating contest. In traditional contests you can get the needed exchange from "Casual" ops. In FT8, with some in contest mode, some in normal, even folks on the contest frequencies not sending grids... It can be tough with much time wasted on busted Q's. I used 100% FT8. FT4 is unreliable, the LCR hates it, and the faster TX/ RX times only give more repeats and busted Q's. It (FT4) had great potential when we were Alpha testing it before release as a Contest Mode... But then it was released for normal use and the benefits were lost." In his 3830 post he added "I may have to step up to the big boy levels next year." Looks like he's building the hardware to do it with.



The WV4P remote radio site sits 230' above the Tennessee River in Southern Tennessee (and he's not finished yet)

Ron's score was nearly 120k points higher than second place finisher David, VK3BDX. David had only half of Ron's QSO total at 433 but his 4.5 points-per-QSO average shows how distance scoring can play out depending on your location. David ended up with 181,908 points and 93 multipliers. According to David "Propagation in southern Australia was highly variable and at times closed to everywhere but YB - thank goodness a large number (of YB stations) were active. The distance scoring calculations aid VK when the propagation is good. The poorer conditions meant that FT8 was more reliable than FT4, with usually many more repeats to complete an FT4 QSO."



David, VK3BDX, placed 2nd Single Operator All Band Low Power

In one of the closest finishes of the contest, Dave, KA6BIM, in Oregon, edged out Hani, YB2HAF, for third place by only 132 points. Dave scored 147,318 points on 496 contacts and 129 multipliers while Hani had 147,185 points, 503 contacts and 111 multipliers. With the number of contacts nearly the same, Dave needed 18 more multipliers to offset Hani's higher point-per-QSO total (2.63 for Hani vs. 2.30 for Dave). Dave had this to say "Conditions were pretty good, and I was able to put in a full effort this time. Probably best conditions in the 3 years I have played in it."



Dave, KA6BIM, placed 3rd Single Operator All Band Low Power

Hani was hampered by a 25% reduction in score due to NILs (QSOs not in log) compared to Dave's 7.6%. This was Hani's reaction "Compared to last year's contest, there is a faster FT4 additional mode to save the transmit power. I've been joining 24hrs for this year's contest, but the result was a bit disappointing between the temporary score and the ending that was significantly reduced. However, I hope that I can participate in the contest again next year and the results will be even better." The official contest rules state: "Call sign errors (bust) or call signs not in the other log (NIL) are removed and receive a penalty of the QSO point value for that contact." NILs have always been a problem with FT mode contesting. This year, NILs were at 5.9% overall, up from 5.6% the previous year.



Hani, YB2HAF, 4th Place Single Operator All Band Low Power

Finishing fifth was Kaspars, YL1ZF, with 123,510 points on 1027 QSOs and 115 multipliers. Completing the top ten in Single Operator All Band Low Power were 9A2EU, CB3R (XQ3SK), KH6CJJ, DM8MH and OG4W (OH4KZM). The SOABLP category was the most popular with 54% of all logs submitted (767 logs).



Jouni, OH4KZM, operating as OG4W placed 10th Single Operator All Band Low Power

# **SOAB QRP**

Repeating as winner in the Single Operator All Band QRP category was Patrick, ON3CQ, with 34,293 points, 377 QSOs and 69 multipliers. Patrick's score was off more than 16k points from his record setting effort in 2020. Patrick explained "The condx this year were not as good as last year, and the weather was not always good on my side." Despite his lower score, he still dominated the category and more than doubled the score of the second-place finisher.



Patrick, ON3CQ, repeats as Single Operator All Band QRP winner

Finishing second was Mikael, SMOLPO, operating as SFOA with 14,136 points, 200 QSOs and 62 multipliers. In third was Frans, PC2F, with 12,705 points, 273 QSOs and 55 multipliers. Boris, UX8IW, came in 4<sup>th</sup> (8,131 points) and Ajie, YB6UAK, was 5<sup>th</sup> (7,272 points). DL1LON was 6th, YD6ROA was 7th, JH1VIX was 8th, SV3AUW was 9th and AH6OC finished 10th. There were 31 SOAB QRP logs this year.

# Single Op Single Band

The single-band categories are quite popular and represent 25% of all logs submitted. Repeating as the most popular single band category was 20-Meter Low Power with 41% of all single band logs.

Only 2% of all QSOs took place on ten meters. With solar activity not quite supporting 10-meter activity yet, Andy LY7Z, was still able to make a respectable 254 QSOs while winning the 10M Single Band High Power category with 8,400 points. "Conditions were poor at the start. First day ended with around 60 QSO's in the log. I Woke up at 0300z and found an empty band. Tried to CQ and luckily a loud UA4 station answered. One, two, ... four, and an opening into UA4/6/9 land begins. Signals grow. HS, YB, UA9, UA0, VK, even JA stations show up on the screen. Unfortunately, the contest ended at 1200z when propagation improved."



Andy, LY7Z, won 10M Single Band High Power

In the 10M Low Power category, Nick, UT4XU, was able to scare up 119 QSOs and score 1,680 points. Victor, UR8IDX, scored 504 points on 63 QSOs to win the 10M QRP category. It appears that at least the band wasn't totally dead. We will be banking on ten meters being better next year.

Fifteen meters wasn't much better with only 12% of all QSOs. Kash, VU2IBI, used a 6-element yagi at 65' to muster up 268 contacts and 43 multipliers for a score of 27,864 points and win 15M Single Band High Power. He obviously had a good time. Said Kash "This is one of my best results in 25 years of Ham Radio". Not far behind was Dragan, YU1UN, who had nearly identical numbers as Kash. Dragan scored 24,528 points on 271 QSOs and 42 multipliers. The difference was that Kash averaged 2.4 points per QSO while Dragan's average was 2.2. Valeriy, UN3G, was 3rd with 8,642 points.



Kash, VU2IBI, won 15M Single Band High Power



Valeriy, UN3G, 3rd Place 15M Single Band High Power

In the 15M Low Power category, Eugenio, CX7SS, set a new world record of 39,688 points on 258 QSOs and 41 multipliers. Eugenio outpaced Joe, PY2QT, who had 28,260 points (195 QSOs/45 multipliers).

In 15M QRP, Yasuo, JR2EKD, needed only 1,700 points from 63 QSOs to win the category with a new world record.

Valery, UN7LZ, operating as UP4L, won the 20M High Power category with 68,355 points from 496 QSOs. Not far behind in 2<sup>nd</sup> place was Andy, UB7K, with 62,205 points. YU5R was 3<sup>rd</sup> with 56,286 points. In the 20M Low Power category, Leonardo, CX3AL, was the winner with 54,876 points while setting a new world record. Savvas, SV2AEL, finished second and Alexander, UA6FZ, was third. In 20M QRP, EA4FHP won with 4,494 points followed by 9A4AA (3,990 points) and US5EFU (2,260 points).

While setting a new world record in the 40M Single Band High Power category, Jacky, ZL3CW, operating as ZM1A, effectively used both FT8 and FT4. FT4 contacts were 40% of his log. Jacky's score was 136,320 points on 488 QSOs and 60 multipliers. This is what Jacky had to say "Finally a Contest which takes into account the Real Long Distance (DX) Factor based on GRID Squares." Jacky's points-per-QSO average was 4.65. Finishing second in 40M HP was Mike, NT6X, with 72,261 points from California. Daniel, VK4AFU, finished 3<sup>rd</sup> with 49,348 points.



Jacky, ZL3CW, operating as ZM1A won 40M Single Band High Power



Daniel, VK4AFU, 3rd Place Single Band 40M HP (was not maritime mobile)



Hal, JR4OZR, finished 6th Single Band 40M HP (1st Asia)

The first four places in the 40M LP category were all separated by a total of 2,074 points. When the smoke cleared, UX7UW, operating as UZ4U, won with 18,228 points. JE7KJG was second with 17, 894, YD8RAG was third with 17,688, and YC0VM was fourth with 16,154 points.

In the 40M QRP category, RA2FCL won with 869 points. JH3DMQ was 2nd with 561 points while YC0RXA was 3rd. CM2DAH placed 4<sup>th</sup>.



Mune, JH3DMQ, placed 2nd 40M Single Band QRP



Bryan, N3FAA, placed 7th 40M Single Band Low Power (#1 North America)

After setting a world record in 20M HP last year from Afghanistan, Robert S53R, set the 80M Single Band HP world record this year with 26,531 points on 344 QSOs and 43 multipliers from Slovenia. RG5A was second and LY2SA was third.



Alex, RG5A, placed 2nd Single Band 80M High Power



Vidas, LY2SA, placed 3rd Single Band 80M High Power

LY3BRA won 80M LP with 4,137 points in a close finish over ES5MG (3,674 points). In the 80M QRP category, UR9QQ operating as EN30Q, won with 1,131 points.



Andrius, LY3BRA, won 80M Single Band Low Power

Top band had the lowest number of single band entries at eight. 160 HP went to JAOVSH (52 points), 160 LP went to W4TMO (1,470) in a close finish over R2DMD (1,326 points). Zdravko, E70E, was a repeat winner in the 160M QRP category with 273 points and a new world record.

# **Multi-Single**

The N4SVC team of K4SME, KD4AMP and N2CEI won Multi-Single High Power with 281,070 points on 923 QSOs and 162 multipliers. DR1X (DF8XD & DG6YID) was second with 194,400 points (597 QSOs/162 multipliers). K3AJ (K3AJ & K3MA) was third with 144,894 points (632 QSOs/123 multipliers) from Maryland.



K3AJ (K3AJ & K3MA) placed 3rd Multi-Single High Power. Bill, K3MA, taking his shift.

In Multi-Single Low Power, a new world record was set by the EC7KW team (EC7KW & EA7ZC) with a score of 82,620 points on 426 QSOs and 102 multipliers. WT0DX (WT0DX & NO0T) was second with 68,614 points and YO3FRI finished third with 63,661 points.



DR1X (Klaus DG6YID & Burkhard DF8XC) placed 2nd Multi-Single High Power

### Multi-Two

For the third year in a row, S51A (S51JM, S51TC, S51ZJ, S52D, S54ZGA, S55KZ, S55MZ, S55SG, S56B, S56NE and S59MZ) won the Multi-Two category with a score of 414,757 points on 1295 QSOs and 193 multipliers. In a valiant effort, finishing second, was K6UFO@K6MTU (K6UFO, ND2T, W0YK, WD6T and K6TD) in California with 393,601 points (1039 QSOs/169 multipliers). K6UFO outpointed S51A 2329 to 2149 (2.24 points per QSO for K6UFO compared to 1.66 for S51A) but the Americans, who operated the K6MTU station remotely, couldn't come up with enough multipliers to win.

Said Mark, K6UFO "We spent the weeks before the contest getting everyone familiarized or refamiliarized with accessing and controlling K6MTU, the WriteLog and DigiRite software, how to change bands and control the antennas, rotators, etc... We spent the last couple of days before the contest in more intensive practice. Our pre-contest log had over 770 FT8 QSOs in the log!" Looks like that training paid off.



K6UFO @ K6MTU (Left to Right) Kevin K6TD, Tom ND2T, Mark K6UFO, Dave WD6T and Ed W0YK) placed 2nd in Multi-Two

Finishing third, but not without some difficulty, was UZ2I (UT2II, UT2IV, UY2IF, US1ITU, UR0IM and US2IR) with 253,432 points. Val, UY2IF, explains "Unfortunately, at the beginning of the test, there were problems with signal decoding, but this problem was quickly resolved. In the middle of the test, the amplifier broke down and we worked with low power." Congratulations to the team for staying focused after adversity stuck.



UZ2I (Left to Right) Vic US2IR, Val UY2IF, Alex US2ITU, Leo UT2II & Vic UT2IV placed 3rd in Multi-Two

#### Multi-Multi



ZW5B won Multi-Multi with a new world record (left to right) Atilano PY5EG, Luciano PY5KD, Peter PY5CC and Heitor Antonio PU2TIB

The Brazilian team ZW5B (PY5EG, PY5KD, PU2TIB and PY5CC) blew away the competition for the third year in a row by winning Multi-Multi with a new world record of 1,438,120 points on 1514 QSOs and 229 multipliers. K1SFA (K1MK, K1NZ, K1SFA, K1TTT, K2IW and W1TO), in a tremendous effort while operating the K1TTT mega-station in Massachusetts, finished second with 994,479 points despite making more than 600 QSOs more (2121 total QSOs) than ZW5B. The Americans just couldn't overcome the distance advantage of the Brazilians. ZW5B averaged twice as many points per QSO with 4.1 compared to 2.0 points per QSO for K1SFA. BY1RX, in their first year entering the contest, placed third with 216,125 points on 811 QSOs and 133 multipliers. The Chinese team also averaged 2.0 points per QSO. In 4th was DLOPPP (DLOPPP DL8OBF DO7RD DO4FD DL5OCR and DK5ED) with 167,700 points to take the top spot in Europe.



BY1RX was 3rd in Multi-Multi (left to right) - Xu Gang BD1KV,Yuan Ying BG6BHA,Niu Yong BH3DHE, Liang Lichao BH1GC



The main tower for DLOPPP @ DL8OBF who placed 4th in Multi-Multi

## Final

This year we have 27 plaque winners and we would like to thank all the sponsors. There are several plaques still available for next year since some previous sponsors will not be with us. We would like to ask anyone wanting to sponsor a plaque to let us know. Check out the plaque page at https://ww-digi.com/plaques.htm for available slots. Sponsorship for a plaque is \$65 US. Email plaques@ww-digi.com for more information. Your help is greatly appreciated.

After three years, we are confirming much that has been learned the first two years. Distancebased scoring goes a long way in "leveling the playing field". Although it's not perfect, geographic disparity is great reduced.

We know FT4 was developed for contesting, yet FT8 is the workhorse for score in this contest due to the value of distance between QSO partners.

This contest has the potential for casual operators, not explicitly "in the contest", to be worked for credit. However, the popular FT convention of dispensing with the Grid Square exchange

and sending only the SNR exchange eliminates this possibility for CQing contest stations. Thus, it behooves contesters to only answer CQs of non-contesters where the Grid Square is in the CQ message. Contesters should not call CQ themselves in the daily FT sub-bands because many of the respondents will be non-contesters who reply only with their SNR. The non-contester's rationale is that the QSO time is reduced but, of course, the QSO ends up being zero points for the contester without the received Grid Square exchange.

When it comes to logging, the FT modes inherently eliminate call sign and exchange busts. The only significant errors in logs are NILs. FT contest NIL rates are 5-6% while CW/SSB/RTTY contest NIL rates are only 1-2%. This is unlikely to change because the predominant FT software, WSJT-X, automatically sequences to a second, redundant '73' message. Many operators have therefore decided this message is required before logging the QSO, while others follow the long-standing convention in CW/SSB/RTTY contesting where it is ignored. The station not logging the QSO thereby creates a NIL in his QSO partner's log, resulting in no scoring credit plus a one-QSO scoring penalty for the QSO partner.

The contest will take on a new look once 10 and 15 meters become fully available to us. Scores will greatly improve and the fun factor will increase. Be sure to join in next year on August 27-28, 2022.



Ajaya, VU2DED, 8th Place Single Band 20M Low Power



Dercel, XQ3SK operating as CB3R placed 7<sup>th</sup> Single Operator All Band Low Power



Daniel, CM2DAH, 4th SB40 QRP

Vlado, E76BV, 3rd SB80 LP



Rusmani, YB7HMB, 8th Place SB 40M LP