



# ARRL International DX CW Contest 2017 Results

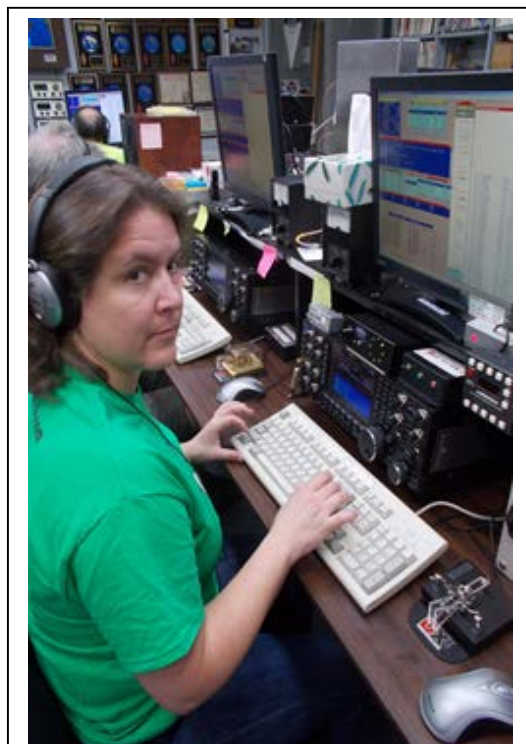
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There are so many factors that contribute to a successful contest that are beyond the control of its sponsor. Solar conditions, weather, and competing events both in Radiosport and in popular culture can make or break the levels of participation. In the worst years of poor solar conditions and propagation on the high bands, dwindling qso counts are further reduced by the sound of headphones being ripped off the ears of frustrated operators as they throw in the towel. And although many of us will heed the advice of W3LPL and diligently attempt to improve our low-band antennas, that strong desire to venture north of the 40 & 20 Meter doldrums will stay with us. Luckily for us, this year we still had a little wind in our sails.

## Participation and Conditions

As the contest season raced down the back slope of Cycle 24, several of the major HF contests fell victim to worsening solar conditions. But there was good fortune for the 2017 ARRL International DX CW contest and the propagation gods took mercy on its participants who submitted nearly 4000 logs with over 1.5M contacts to many DX locations around the world. 130 DX entities outside of the continental US and Canada were represented over the weekend and made up just over 50% of the total number of logs submitted. Over 1600 logs were received from W/VE stations and all but two of the multipliers, NU and NT, were represented this year. Many stations noted that participation seemed up from years past and although the hard numbers show an ever so slight decrease in participants, it may have been the better than expected conditions that made activity seem so good.

While we weren't quite at "no meters like ten meters" conditions and those playing in the lower power categories might have been questioning their sanity more than usual, there were plenty of contacts made over the weekend. As K9CT said, "What a nice surprise! Conditions were good despite the SFI, A and K index. You just got to get on and operate and see what happens." In fact, many stations reported that despite the forecasts, they were quite pleased with conditions. Comparing scores between this year and last certainly tells the story of the sub-optimal propagation more accurately, but the level of activity seemed high enough to keep many entrants in the game for what felt like a successful contest and to help steer the mantra of the post-contest reports that conditions were surprisingly good.



*Sandy, DL1QQ, made the trip from Germany to Western Pennsylvania so she could operate the 80-meter position at K3LR. Sandy and band-partner Phil, K3UA, made 959 QSOs in 104 DXCC entities on the band over the weekend! (Photo by NØAX)*

## Records

Worsening conditions on the high bands can certainly have some interesting effects on the contest records. Operating as FY5KE in French Guiana, Larry, F6FVY, was concerned that his small margin over the current DX Single Band 20 Meter record wouldn't survive log checking. After the dust settled inside the log checking machine, he had secured the new record, beating the last one set over 20 years ago at the beginning of Cycle 23. Several continental records also fell this year in the single band categories. 4M1K with YV1KK at the helm broke the record for Single Band 80 Meters in South America and TA3D inched past the former Asia record for Single Band 40 Meters. YL2KL boosted the D4C SOULP record for Africa by just shy of 1M points above their previous continental record set back in 2009.

Back in W/VE there were a few call area single-band records broken as well. K9BGL secured the Single Band 20 Meters record for the 9 area, while N2MF added 100K of breathing room to his previous record for Single Band 40 Meters in the 2 area that he set back in 2006. AB4B in "Sweet Home Alabama" consisted of a new team of operators, but they seemed to work well together as they crushed the former 4 area MSL record by over 1.3M points.

2016 was the first year that the SOUQRP category was recognized and only about half of the DX and W/VE records were filled. This year more participants realized that this category was an option and more blanks were filled with first-time call area and continental records. There were also several scores that beat records established last year. JH3WKE tripled the record score for Asia and here in W/VE, N2CW and K3TW broke the records for area 2 and area 4, respectively.

The big question is how many low-band records will be broken in the upcoming years. Many of the current records for those bands were set in past solar minimums. It is time to start working on those receive antennas.

## Here at Home

This year's contest will certainly be remembered as one that moved the discussion of remote operating and what constitutes "assistance" up a notch or two. As the popularity of remote operating increases and new technologies continue to emerge, especially among the top operators, the ARRL and other contest sponsors will have to make tough decisions about how to apply the current rules and to evaluate them for possible changes. As seen on contesting mailing lists and heard in contest forums, there are strong opinions on both sides of the discussion. What everyone does seem to agree on, is that whether they like it or not, the Radiosport landscape is changing and the sponsors and competitors need to be ready.

The W/VE Top Ten boxes were no strangers to scrutiny this year. After a bit of a shake up in the Single Operator, High Power category and a tough and honorable decision by one of the top ops in the category, Alex, LZ4AX, came out as the winner operating at K3CR from the Penn State Contest Station. Alex's win is mixed with a bit of sadness as this contest was the last from K3CR as the station begins to be dismantled this year. "I really feel fortunate for being able to drive this monster for the last 16 years. After more than a hundred contests, hundreds of tower climbs, countless hours of maintenance work and thousands of miles travelled to get to the station, it's time to say enough and move on."

Jeff, N8II, found his way to the top of the SOLP category, despite having to shut down his station four hours before the end of the contest. Gary, K5KU, who was using only 75 watts, was ahead of Jeff for the first 12 hours of the contest. Jeff pulled ahead after that and despite a serious comeback effort made by Gary on the second day, it just wasn't a match for a Jeff's Sunday afternoon rate hours going back and forth between 15 and 20 meters.

There was no need for photo finish cameras in the Unlimited Categories this year, but there was a familiar call that was back in SOUHP category after a two-year hiatus. After winning the M2 category last year, Rick, KI1G returned to SOUHP to win by a sizeable margin over Bud, AA3B. And although AA3B didn't place first, he must have found solace in coming in second by seeing his neighbor and fellow FRC club member, Chas, K3WW, one call sign below his in the box after Chas beat him last year by a mere 70K points.



*Zev Darack, N2WKS, taking advantage of the unseasonably warm weather this winter to make major repairs to the 80 meter 2*

In the MSL category the battle between N2WKS and W1NY could be watched in near real-time for much of the weekend. For motivation, W1NY configured their logging software to interface with the cqconteset.net live scoreboard and score updates were pushed out in regular intervals. Throughout Saturday, W1NY was the only US or Canadian station listed in the category, so motivation had to be gleaned from the scores of other low power categories.

At N2WKS, Justin, NE2V operated the first 24 hours and Zev, N2WKS, took over around 0012Z. Upon sitting down at the station, Zev checked the scoreboard and realized that they were not listed due to a configuration error in the logging software. After quickly adjusting the settings, he worked frantically to try and close the gap between their score and W1NY. Meanwhile, no one at W1NY had yet noticed N2WKS had popped up on the scoreboard and later in the evening, due to exhaustion, miscommunication, and an alarm misconfiguration, W1NY went silent for several hours in the middle of the night. When Matt, W1MSW, jumped back on in time for the morning EU opening on the higher bands, he noticed that N2WKS was now listed and had 5 more multipliers and the exact same number of QSOS! The race was now on for both teams.

Throughout Sunday, W1NY tried desperately to catch up with N2WKS, but just couldn't get the multipliers and contacts they needed to close the gap in the scores. Whether it was propagation, operating skill, station design, or a combination of all, the W1NY team just couldn't keep the same pace and in the end, N2WKS had established a healthy lead of over 200 QSOS and 30 multipliers.

## Around the World

"The goal of 8P5A is to win contests." That was the opening statement of Tom, W2SC's presentation at this year's Hamvention Contest Forum and Tom is no stranger to winning contests. However, due to work commitments, Tom had been unable to participate in the ARRL International DX CW contest for a decade. That all changed last year, when he returned to the contest and beat the competition by nearly a million points and set the new DX record in his category using a technique that some refer to as Dueling or Alternating CQs. This year he was back again, but the competition wasn't going to give up so easily.

600 miles to the west, Nate, N4YDU, operated from Kam, N3KS's, station T15W located in Bijaqua, Costa Rica and was 8P5A's main competitor during the contest. Nate also planned to use the Alternating CQs method of operating, but this would be his first time in a major DX contest: "I prepped for it for several



*Nate Moreschi, N4YDU, doing a final run through at T15W, just moments before the contest begins. The station, located in Bijaqua, Costa Rica, is on the north slope of the Tenorio Volcano. [Kamal Sirageldin, NK3S, photo]*

months using the DXLOG and MorseRunner combo. While I felt prepared after months of practice, I was still a bit unsure of myself.” That added additional stress before the contest, but fortunately “testing on Thursday proved to be successful while running pileups on two bands. As the contest got closer, I began to get more anxious, but I was really ready to get the show started.”

After the contest kicked off at 0000Z on Saturday, both stations started up without any glitches. Although it was his first time alternating CQs, by the end of the first hour Nate had established a lead in the total number of QSOs over Tom. “When it was time to start, the pileups immediately started and I was off and running in full dual pile-up mode. After about 30 minutes I began to relax and got into a very solid groove.” Tom felt that he too had a favorable start with a couple of good hours on Saturday, but that activity seemed to be down a bit this year.

As with every competition, participants are forced to make difficult decisions in the heat of the battle and many times in a state of extreme exhaustion. Nate had planned to operate throughout the entire 48-hour contest, but was also concerned about keeping up the level of concentration required to operate two radios at once. His concerns became a reality on the second night when he found his mind wandering and unable to concentrate. Although his rate was still decent, he decided to take two 90 minute breaks that night. In contrast, Tom had no zero contact hours during the contest and although he had successfully regained a slight lead by hour 24, it was during Nate’s breaks that he established a significant lead. Nate made a very strong comeback effort in the final hours of the contest, but it wasn’t enough to catch up. After log checking, Tom won the category with 3 fewer multipliers and 141 more contacts than Nate.

I recently spoke to Nate and Tom about strategy and the nature of the Single Operator category. Nate told me that, “I do regret taking a pair of 90 minute breaks the second night, especially the first one because rates were fairly good. However, my mind was wandering and operating was simply a struggle.” Looking back on the decision, he tells me he would have taken shorter breaks or maybe spread them out over both nights of the contest. “Not knowing what the competition is doing keeps the excitement up.” He remembers, “getting a few mults in a short period on the second day and literally fist-pumping with excitement thinking that could be big in terms of standings.” Tom, on the other hand, stressed that it’s critical to set goals for the second day to help ensure that you don’t lose ground to the competition. He also mentioned that to help get through the psychological stress that comes with operating alone during a 48-hour contest that he focuses on working as hard as he possibly can, so that when the clock strikes 0000Z at the end of the contest, he can enjoy that feeling that everything is over and he has done his best.



*Seen here relaxing, the P40R crew took the top spot for DX Multioperator, Two Transmitter. L to R Michael Wetzel, W9RE, Dan Street, K1TO, Scott Jasper, NE9U, and Ron Feutz, KK9K [Scott Jasper, NE9U, photo]*

To win a category, doing one’s best just has to be better than the station you’re competing against. This was not a problem this year for John, W2GD operating at his P40W stomping grounds. After setting the DX SOQRP all-time record last year, John decided to turn up the power a bit in the DX SOULP category. This was the 30-year anniversary of John first operating ARRL DX CW from Aruba and he celebrated by completely crushing the competition with a 3.3M point margin. Although John reports that he did take advantage of the light 10-meter openings that were better for stations like his further south in the Caribbean, that he too is embracing our place in the solar cycle. “OK, time for us all to accept and adapt, this is the new normal for the next few years ... suck it up and build bigger low band antennas!”

Aruba was also represented at the top of the DX M2X category by P40R. Ron, KK9K and Scott, NE9U, expanded their regular operator list this year

to include Dan, K1TO and Mike, W9RE. “Each of us have our strengths and formed a great team, with Ron as driver/cook/low-band antenna guy, Scott as network expert, Dan as tower climber and Mike as jack of all trades.” Their competition, KP2M, made up of George, K5KG, Phil, KT3Y, and Ken, N9VV, was in the lead for the first 16 hours of the contest, but once those 10-Meter openings that were unique to stations further south started up, there was no stopping them from overtaking the lead and holding it for the remainder of the contest

Let’s hope those photo finish cameras weren’t put away, because they were certainly needed for the battle for DX MSL between V3T and VP2MVV. With less than a 4K point difference between their claimed scores, the two teams must have been wondering if V3T would stay on top. In the end, accuracy and a sheer number of QSOs would prevail and V3T would win the category with their Field Day style setup near the Guatemalan border.

## Getting It Right

One of the key factors in making it to the Top 10 table is accuracy and it can mean the difference between first and second place. But accuracy is not just a goal for the call signs listed in the Top Ten. It’s also one of the easiest and least expensive ways for casual operators and those new to contesting to improve their scores.

How do you determine your accuracy in a contest? The answer is in your Log Checking Report or LCR, which can be found by logging into the ARRL website and visiting <http://www.arrl.org/contest-log-checking-reports>. ARRL provides this report for logs submitted in most contests that it sponsors. The report contains a list of every error found in a log from cross-checking with logs submitted by other entrants. Studying the report after the contest can help you determine some of your operating weak points and areas where you can work to improve your copying skills. Your overall accuracy during the contest is quantified by your “error-rate” which is the percentage of contacts in your log with an error (after duplicate contacts are removed.) The smaller the error-rate, the more accurate your log is and it provides a great metric to try and beat next year.

## Accuracy Leaders

So how accurate can one be? Although it might be hard to believe, there are some operators who turn in a perfect log, also known as a “Golden Log,” that has no detectable errors. Of course, achieving this with a log that contains only 10 contacts is not that large of a feat, but the Top Ten Golden Logs will have hundreds of contacts. This year the top Golden Log went to EA5YU with 575 contacts.

Top 10 Golden Logs (Error Rate 0 %)		
Call	QSOs	Category
EA5YU	575	SOHP
W0VM	433	SOHP
DJ9AO	400	SOUHP
W7YAQ	388	SOHP
N3OUC	366	SOULP
AB1J	364	SOULP
AI2N	344	SOUHP
G4IIY	305	SOUHP
W4IOP	266	SOLP
AA3TT	265	SOLP

Golden Logs (contined)		
Call	Category	QSOs
WA4MSU	SAH	261
K0RC	SAL	261
JG3FEA	SAL	255
AE1T	SAH	254
DL1RTL	SAH	249
EI8JX	SAL	243
WF5E	SAL	243
DK3CC	S	232
YV50ARV (YV5KG, op)	SAL	229
LY2N	S	220
KW4J	S	216
N0HJZ	SAL	208
OK4DZ	SAL	205
DL1EAL	S	204
IT9RZU	SAL	203
CF3IK	S	203
IK1MEG	S	200
W2UDT	S	200
W4SNF (VE3AYR, op @ VE3AYR)	S	200
AK7O	SAH	198
JR4DAH	S	197
KO4FD	S	195
DL1ATZ	S	189
JE4MHL	S	185
NA7OM	S	181
K5WG	SAH	177
K7AHF	SAH	170
DF7AT	S	169

DJ9RR	SAH	165
DF1LX	SAH	163
AA1AR	SAL	161
SQ6LJV	SAH	160
G4HZV	S	159
SF3A (SM3CER, op)	S	159
OG7F (OH5DA, op)	SAH	159
PA1LEX	SAL	154
AD7XG	S	152
K0KR	S	152
DM7PQ	SAH	150
AD0K	SAL	148
UA0ZAM	S	147
K4GJF	S	147
N0RET	S	147
DG5E (DK2CX, op)	SAH	146
OH6OS	SAH	146
IK0YUO	S	145
JA1QOW	S	144
WB8MIW	S	141
DL2RUG	S	140
DL7YS	S	140
K4HC	SAL	139
DD5MA	S	137
PA0JED	S	135
K2IZ	S	134
PA1FNW	SAL	133
WD1H	S	132
ES5EP	S	131

SE4E (SM4DQE, op)	S	131
YL5T (YL3DQ, op)	SAH	129
NA2CC	S	128
AI4QQ	S	127
JA3DAY	S	125
SC6W (SM6PPS, op)	SAH	125
KE1U	S	124
WQ9T	S	124
YO5CRQ	SAL	120
VA3WU	SAL	119
DL0SLG (DL2JRM, op)	S	115
KV2X	S	115
KC5DCT	S	114
YL2BJ	SAH	113
N4CU	S	112
JA0BJY	S	108
JA1CJP	S	107
JR1NKN	S	104
LY9Y	S	104
OK1DJS	S	103
N5TJ	S	103
W7HJ	S	103
NK8X	SAH	102
CT1ZQ	S	101
SM0LPO	SAQ	101
DM2DZM	S	100
DL5RMH	SAL	100
N4CW	S	100
K7JAN	SAL	100

But Golden Logs and error-rates only tell part of the story. As mentioned earlier, it is important to take log size into account since maintaining a low error-rate while making 1,000 QSOs is much more difficult compared to a low error-rate maintained making 100 QSOs. That is where the Accuracy Leaders Table rewards lower error rates for large logs. For two logs with equal error rates, the log with more verified contacts has a higher index. The following formula is used to calculate the Accuracy Index:

$$\text{Accuracy Index} = \log_{10}(\text{Good QSOs}) + 10 \times (1 - \text{Error Rate})$$

This levels the playing field and provides a much better insight into who the most accurate operators are in the contest.

To see the Accuracy Records and W/VE or DX tables, go here <http://www.arrl.org/contest-results-articles>

### **What next?**

It's been mentioned several times, but it deserves repeating-- this game is heading for the lower bands. Work on those low band antennas, they're worth the investment and will still be there for you when we move out of the trough. That said, and as we saw this year, if your location is lucky enough to enjoy a short opening on the higher bands that has passed up your competition, you must take advantage of it. To do that, one has to be vigilant about checking other bands, but not be swept up in a multiplier chase while the other stations are shoveling QSOs into their logs.

### **See you in February!**

With the HF contest season right around the corner, now is the time to make station improvements and to practice honing your operating skills. Set goals for yourself and don't forget to mark February 17-18, 2018 on your calendar when the ARRL International DX CW contest returns next year.