ARRL 10 Meter Contest 2016 Results

Participants enjoyed highlights during a challenging, low-sunspot year.

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While participants experienced the challenge of a low-sunspot year for this event, there were plenty of highlights. If you knew what to look for and were in the right place at the right time, there was much fun to be had. The 2016 ARRL 10 Meter Contest took place on Saturday and Sunday, December 10 and 11. Saturday UTC time was exciting — full of wonderful and ever-changing band openings.

Contacts and Strategies
Of all the contacts reported during the contest, 70% were from Saturday. Multiple operators mentioned that when the band was open, it was really open. Contesting “rate junkies” reported high contact rates during these openings. Bob, K2DRH, reported rates above 150 contacts per hour from 2000 to 2200 UTC. Mike, N7MH, operating at the W6YX station, found conditions even better. He reported a couple of hours above 200 contacts per hour on his way to a 1st place US and 2nd place worldwide finish in the Single Operator, Mixed Mode, High Power category. Justin, K9MU, experienced a peak 10-minute rate of 258 contacts per hour. He said, “It was the most fun I had in a long time of radio contesting.”

Other operators reported that even when the band sounded dead, it really wasn’t. They just needed to call CQ as an advertisement that the band was open. Tom’s, N2CU, experience was typical. He said:

On Saturday, I was calling CQ to a mostly dead band when Texas, Arkansas, Louisiana, and Oklahoma suddenly started booming in around 1400. I worked 34 of them in short order. The same thing happened at 2150 when Illinois became the go-to state. I got 25 [stations] in the log quickly.

As longtime contester Bob, K3EST, said, “The 10 Meter Contest teaches you a lot about propagation.”

Under conditions when “spotlight” propagation is common, what operating strategies work? Generally, you have to actually sit in front of your radio, listen, and then — even if you don’t hear anything — call CQ in case the band is open and everyone else is just listening. Looking at a computer screen interfaced with a spotting network may not do the job. If you want to apply technology to assist you, the most useful hardware will be a panadapter or band scope tied into your own radio and antennas.

Calling CQ can often lead to being called with a surprise contact. Every year, there are a handful of DX operators who spend most of their time “searching and pouncing.” When that little spotlight of propagation from your station washes across them, they give you a call. During 2016, V51VJ, VP8NO, 9J2BO, TZ5XR, A31MM, and V55DX all received mentions of being logged by unsuspecting stations. One typical story is from Mike, VE9AA, who said, “Fairly early on Sunday morning, I was run-
The CW5W team is all smiles after another winning effort. Front to back are Claudio, CX4DX; Wilder, CX6DRA, and Jorge, CX6VM. Missing from the photo is Alain, CX5UA. [Jorge Furest, CX6VM, photo]

Additional Analysis and Records

This year, I took a deeper look into typical 10-meter propagation through a two-step process. The first step is to construct time-lapse videos of every contact reported in the lower 48 US states. Then, using these maps, I was able to see three typical propagation methods that occur during the 10 Meter Contest: long-distance F2 propagation, regular sporadic E, and double-hop sporadic E. You can watch the videos here: Day 1 — vimeo.com/213927084, and Day 2 — vimeo.com/213927356.

New Records

There were no new records set at the world, W/VE/XE, or DX entity level during the 2016 contest. However, there were multiple records set for individual entities, W/VE divisions and sections, and XE states. You can check out all records, including the new ones, at www.arrl.org/contest-results-articles, and all of the propagation analysis at www.arrl.org/contest-results-articles.

How many more years will these lists go unchanged? The upcoming solar cycle minimum is projected to be in 2019 – 2020. It likely will be 3 years after that until solar conditions will go unchanged. The CW5W call sign is familiar to many ARRL 10 Meter Contest participants. CW5W’s regular participation, strong competitive drive, and booming signal out of Uruguay makes them an entry in many logs. In 2016, their commitment once again powered them to first place worldwide in the Multioperator, High Power category. Jorge, CX6VM, is the leader of this team. Here is his story of the contest:

Winter weather had done a number on the 10-meter arrays, and the ARRL 10 Meter Contest was fast approaching. Our long-term goal of using two radios on the band — one on CW, one on SSB — would have to wait until next year. One by one, the 10-meter antennas were pulled off the towers, repaired, hauled back up the towers, and correctly aimed. The stacks for US east coast/Europe and US west coast/Japan were up again, and working.

The contest was fast approaching, and few friends had committed to coming to CW5W to work it. A contest date too close to the holidays and too many activities related to work/family/children reduced the team even more. A week before the contest, only Wilder, CX6DRA, and Claudio, CX4DX, had confirmed their participation. The defense of our 2015 Multioperator, High Power category win was in doubt.

The contest started with poor propagation. Contacts came slowly. Our strategy was to ask every contact to work us on the other mode if they were a needed multiplier — we didn’t know if we would ever hear them again. As the contest continued, we had a nice time chatting with friends, eating good food, and monitoring our competition. We believed our strategy was correct and had great faith in our multiplier total, taking into account the poor propagation. Good friends, good food, good competition! After comparing notes with our competitors after the contest and checking 8830scores.com, it looks like our strategy made the difference — we were 30 multipliers above our nearest competitor! I’d like to thank the operators that have come to El Mangullo over the years, knowing how far the station is from their homes.

Perspective of a South American Powerhouse

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At this point last year, the National Oceanic and Atmospheric Administration’s (NOAA) Space Weather Prediction Center’s forecast for 10.7-centimeter solar radio flux during the 2016 contest was 90. For the 10 Meter Contest, flux is everything. A lot of it generates good propagation, while too little flux means less propagation. Unfortunately, this solar cycle decayed faster than forecasted, and actual flux during December 2016 was closer to 70, which is really low — almost as low as it can get. Depending on the source, minimum radio flux is stated as being in the 64 – 67 range.

Essentially, in 2016, we just about hit bottom. Unfortunately, the forecast for the 2017 contest is pretty much the same.

Remember that, even in 2016, there was fun to be had by being in the right place at the right time, and using your creativity and knowledge of propagation and operating modes. There were a few periods of traditional F2-layer ionosphere refraction that some operators enjoyed with very high contact rates. There were long periods of sporadic-E ionization encountered by even more operators. An enterprising group made contacts via meteor scatter.

My prediction is that these same opportunities will exist during the 2017 con-
test. You will have to work for your contacts though, just as you did in 2016. An ability to operate CW will become more important for Mixed Mode entries or those Single Operators interested in maximum contact totals. CW is a much more effective emission mode in times of marginal contacts. Searching out other propagation modes than traditional F2-layer ionosphere refraction are going to be key for those seeking top scores, meeting your personal goals, or just having fun. Have patience to find path openings that may exist for only minutes over the whole weekend rather than hours on end. Meter scatter is etherated in nature, with the path open for just a few seconds.

Finally, remember that if everyone just dead band, try calling CQ for a while. The key to a successful operating strategy in 2017 will be as much to catch those opening that may exist for only minutes over the whole weekend rather than hours on end. Meter scatter is etherated in nature, with the path open for just a few seconds.

Even if you encounter a seemingly

dead band, try calling CQ for a while. The key to a successful operating strategy in 2017 will be as much to catch those opening that may exist for only minutes over the whole weekend rather than hours on end. Meter scatter is etherated in nature, with the path open for just a few seconds.