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From the Editor

The Evolution of Remote Contesting

Welcome to this special mini-edition of *NCJ* as we shift our production schedule by one month (the next issue will be August/September and bi-monthly from there). This mini-issue focuses on a single topic, remote contesting.

The first *NCJ* mention of a remote contest entry was Danny Eskenazi, K7SS, in 1996, remotely operating K7XX, which had been engineered by NØAX and KG7GA. An *NCJ* article about N5OT's remote contest operations came out in 2006, and editorials by Carl Luetzelschwab, K9LA (2006), and Al Dewey, KØAD (2008 and

No One in the Shack as Station Logs 4200+ Contacts in ARRL DX CW Contest

The six-person group operating as K3TN in the recent ARRL International DX Contest (CW) may have made Amateur Radio history by mounting the first completely remote-controlled multioperator contest effort. The scattered K3TN team worked via the Internet through the station of Jack Hammett, K4VV, on Catoctin Ridge in Northern Virginia. All of K4VV's operating positions were vacant over the February 21-22 weekend, because the operators were elsewhere. One participant even managed to operate during the contest from *two* states -- Maryland and Florida.

"No one was in the K4VV shack for the entire contest!" said Mike Lonneke, W0YR, who took part in the contest via K4VV from his own shack in Virginia. Two other operators were in North Carolina. "Perhaps this is a new category -- Totally Remote (TR)." Lonneke said 3-minute timers at the remote-capable positions allow FCC requirements to be met.

Note the absence of chairs in the K4VV shack. The station can be operated remotely as well as on site. [Photo courtesy of Mike Lonneke, W0YR]

The "Team K4VV" contingent made 4224 contacts and logged 556 multipliers for a claimed score of more than 7 million points -- not a

A snowstorm prompted K3TN and his teammates to operate K4VV completely remotely during the CW weekend of the 2015 ARRL International DX Contest. It was reportedly the first contest operation in which no one was actually at the remote station. [Contesting history photos courtesy of John Pescatore, K3TN]
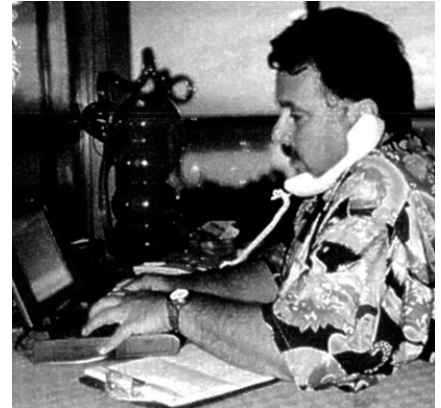
2010), endorsed the concept, with warnings about following licensing and station control regulations.

By 2010 or so, Remote Rig boxes came out from SM2O (Microbit) and showed up in W7PRC's distributed MM entry in the short-lived "Extreme" category in the 2012 CQ WW SSB. *NCJ* started to have regular feature articles on remote contest stations, such as the two-part series by Rick Hilding, K6VVA, on his "Locust Peak" remote (very remote) station and articles by Ron Lodewyck, N6EE, in January 2012, and Mike Lonneke, then WØYR, in September 2013.

I was part of the first fully remote multi-multi during a blizzard that hit 3-land during ARRL DX CW in 2015, adding a Remote Rig/K3 position to the all-software remote positions at K4VV that Mike, WØYR (now W4RN), had set up.

K3TN made the MM top ten that year. Since then, Mark Aaker, K6UFO; Gerry Hull, W1VE, and others have advanced the state of the art of remote contesting and many multi-ops have advanced the state of the practice by supporting mixes of local and remote operators to solve the long-standing problem of staffing. Today, it is common to see a good chunk of the multi-op top ten including some level of remote operation.
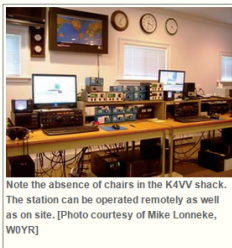
There are still some who feel that if anything using the internet is involved, it isn't really amateur radio. But as the TS-480 showed 20 years ago, and Flex and the Elecraft K4D are showing today, if you make it easier for a ham to operate a powerful station, contest participation and total QSOs go up – especially

A very early example of remote contesting. Danny Eskenazi, K7SS, used a laptop and a telephone to remotely operate K7XX during the September CW Sprint in 1996.

during pandemics and from HOA communities!

The only bits of controversy still remaining are global amateur service regulations becoming harmonized and stabilized around inter-country remote operating and a variation of the "guest op at superstation" concern voiced over 50 years ago, as the Remote Ham Radio "pay for air time" or "being loud as a service" model raises the hackles of some. However, rental vacation stations have been available and in use for many, many years under the "guest op" model, including payment.

This special mini-edition of *NCJ* focuses on different ways of implementing state-of-the-practice remote contest operations, and some of the issues of using mixed local/remote op combinations in multi-op environments. If you have a story about your own approach to, or experience in, remote contest operation, send it in for consideration for a future issue of *NCJ.*