April 2023 Frequency Measuring Test

There will be two transmitting stations for the April Frequency Measuring Test (FMT) — W8RKO in Ohio and K5CM in Oklahoma. Transmissions will be made on 40 and 80 meters (in that order). The FMT will start with a "call up" by K5CM at 0300 UTC April 21 (Thursday evening in North America). If the scheduled frequency is busy, transmissions will be on frequencies close to the published frequency, so be prepared to tune.

Measure the transmitted frequency and report your results at **http://fmt.arrl.org**. Results must be submitted by 0200 UTC on April 24, at which time they'll be published on the website. Stations submitting measurements within ± 1 Hz for all transmissions from K5CM or W8RKO will be listed in the "Green Box" in the results.

The call-up frequency may not be the same exact frequency as during the key-down measurement period (it may shift as much as ± 10 Hz). Although the call up is scheduled to start at a specific time, both stations will try to start earlier. Every effort will be made to start key down at the published time. The key-down period will be 1 minute.

K5CM

40 meters near 7064 kHz
03:00 Call up
03:03 Key down
03:04 End 40-meter run

W8RKO

40 meters near 7065 kHz
03:15 Call up
03:18 Key down
03:19 End 40-meter run

K5CM

80 meters near 3598 kHz
03:30 Call up
03:33 Key down
03:34 End 80-meter run

W8RKO

80 meters near 3599 kHz
03:45 Call up
03:48 Key down
03:49 End 80-meter run

New Products

New Antenna Technology

A new antenna technology for VHF/UHF, developed by UpSide Down Antenna Company, promises to be a breakthrough in RF communications. It effectively doubles the capacity of any VHF/UHF repeater.

Termed the UpSide Down Antenna, or USDA (not to be confused with the United States Department of Agriculture), the technology replaces the existing antenna at a repeater site. It utilizes a special network (see Figure 1) that combines the upright and inverted RF signal arriving at the repeater and uses the existing transmission line. The USDA only responds to an upright or inverted signal and rejects the opposite signal. The manufacturer states that the isolation (rejection) between the two signals is in excess of 60 dB.

To use the USDA system, you only need to hold your handheld radio in an upright or inverted position. When calling another station, try the call in the upright position. If there's no response, invert the radio and try again. The manufacturer states that the handheld radio must be held within ± 45 degrees of the upright or inverted position for the antenna to perform as designed.

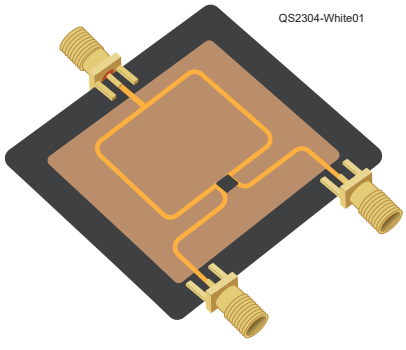

Figure 1 — The interior view of the USDA combining network. The USDA is specially priced for the month of April.

With this new technology, two simultaneous conversations can be carried on without any interference with each other.

At the present time, this technology is only accessible to users of handheld devices, as the radio can be physically rotated. A company spokesman stated that they're in the process of designing a USDA for mobile and base station applications.

— Terry White, VE5TLW, was first licensed in 1998 and holds basic, CW, and advanced qualifications. He enjoys SSB, the various digimodes, and contesting. Terry has 311 DXCC entities confirmed. For more than 45 years, he worked in telecommunications, specializing in microwave, RF, and their respective antenna systems. Terry can be reached at ***twhite@sasktel.net****.*

Strays

Amateur Contact Log Software Offers VOTA Help

Version 7.0.7 of *Amateur Contact Log* by N3FJP Amateur Radio Software is now available. Upload your Volunteers On the Air (VOTA) logs to ARRL's Logbook of The World for points. If you're operating one of the event's W1AW portable stations, there is an FAQ at **www.n3fjp.com/news/news2014-03-24.html** to help you log effectively as W1AW/X. For help in finding VOTA points, download the VOTA Watch List at **www.n3fjp.com/vota.html**, so *Amateur Contact Log* can notify you when operators on the list are spotted or contacted.