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# March/April 2023

#### **About the Cover**

Dr. Ulrich L. Rohde, N1UL, emphasizes the importance of knowing what type of noise to look for when using signal generators for measurements. N1UL uses Harmonica Simulator (Ansoft) to predict both the AM and FM phase noise of oscillators. He duplicates the details of the actual circuit in the simulator model, and at 144 MHz looks at the three critical offset values: 1 kHz, 10 kHz and 100 kHz. N1UL shows the measured AM and FM phase noise of LC VHF, and 14 MHz oscillators. Measurements additionally show the currently best possible performance of a 1296 MHz oscillator.



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**Perspectives** Kazimierz "Kai" Siwiak, KE4PT

**AM and FM Noise in Oscillators** Dr. Ulrich L. Rohde, N1UL

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**Make-Do Ham Interferometer to Determine Elevation Angles of Arriving RF Signals** 

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