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## **Wideband HF Channel Availability – Measurement Techniques and Results**

Abstract:

The U.S. MIL-STD-188-110 HF Data Modem standard has recently been updated to include the definition of wideband HF data modes. These modes occupy bandwidths from 3 up to 24 kHz and provide user data rates from 75 to 120000 bps. As the higher data rates occupy more bandwidth than the traditional 3kHz HF SSB allocations there is a great interest in channel availability in the already crowded HF spectrum. The HF Industry Association (HFIA) has authorized a working group to examine this issue, develop unified measurement and analysis techniques, and collect measurements worldwide. This paper will provide an overview of the updated MIL-STD, discuss the developed measurement and analysis techniques, and provide some preliminary results.