

Electronic Spectrum Management

2020

Astrapi Corporation

The supply of communication bandwidth is limited, the demand for it is not. Yet Warfighters need more. That's why commercial and defense network operators spend billions to acquire spectrum rights and build infrastructure to meet the demand. Astrapi licenses our proprietary Spiral Modulation into the modems, radios, smart devices and sensors that serve those capacity constrained networks. Astrapi has eleven U.S. patents issued, a CRADA with the Naval Information Warfare Center and a Beyond Line of Sight radio license with SSCL. We were awarded an AFWERX SBIR, received over \$2.8 million in private investment and \$1.1 million in NSF grants.

2019

High-speed Digital Communication in Nearly Zero Bandwidth

From cell phones to satellites to weapon controls to monitoring sensors to materials and personnel management, demand for high-speed digital communication is outpacing bandwidth availability and capability. Currently, high-speed digital communication relies on compression or filtering technology, which trades speed for capability and, as result, limits potential for growth of satisfactory yet high-speed digital communication. ZBW's patented phase-reversal technology - as opposed to filtering or compression - will permit high-speed digital communication in nearly-zero bandwidth, resulting in exponentially increased capability. For example, 100 or 1,000

(* = Poster Board is available upon request)

communications could take place in bandwidth now occupied by 1.