



SOFWERX



TEAM
WERX

Amplifier Repeater Prize Challenge

05 July-10 Sept. 2018

Operational maneuvers in subterranean and dense urban settings will increase as populations migrate to urban environments and threats increasingly derive from unpredictable sources. Therefore, it is critical to develop rapidly deployable, affordable, lightweight measures that extend the range of radio frequency systems. Current solutions are economically unrealistic for widespread use, are relatively bulky, often proprietary, and are significantly degraded in subterranean or dense concrete environments.

SOF operators have a need for rapidly deployable, interconnected repeaters that can transmit and receive a 1775-2250 MHz range of RF energy that may include near-real time video, audio, and modulated digital data messages. The system of interconnected repeaters should be easily extendable by inserting additional repeaters.

Judging Criteria

- Universal RF Repeater handles all possible waveforms, modulations, and frequency hopping in the range of 1775-2250 MHz
- Economical/disposable/consumable: cost should be minimal so an operator can effectively abandon repeaters if required
- Multiple repeaters can be linked together to communicate around corners and around dense obstacles
- Low-power, battery operation that can run on a single charge for hours in harsh environments

Challenge Winners

- 1st Place -- RadioBro Corporation -- \$10,000
- 2nd Place -- Titus Innovations Inc. -- \$7,500
- 3rd Place -- Don Gilbreath -- \$5,000