



FCC Form 442 EXHIBIT Number 5

Necessary Bandwidth Description

The bandwidth for the HF UWB pulse generator was selected by the Department of Defense government program management team and Multispectral Solutions, Inc. The wide bandwidth signal was selected because it includes the entire High Frequency (HF) spectrum band from 3.0 – 30.0 MHz.

One goal of the research program was to demonstrate the ability to create a pulse in any part of the HF spectrum. By developing the transmitter device to operate over the entire 27 MHz wide HF band, the technical risk of design and development of future narrower band transceiver systems will be minimal.