

STA File #: 1488-EX-ST-2017

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Date: 10/6/17

Sonitus Technologies

Exhibit A: PURPOSE AND BACKGROUND

Background	Personal Area wireless communication system "Sonitus ATAC" uses very low power non-propagating Near Field Magnetic Induction to communicate between user's head and receiving antenna around neck. This system interfaces with commercial mobile transceivers for RF communications.
Reason for STA	Authorization to use commercial mobile radios in VHF/UHF (50-500MHz) for USSOCOM T&E exercise: USSOCOM TE-18-1, SOF Combat Swimmer/Diver and Human Performance
Purpose of Operation	Test/evaluation of Sonitus ATAC integrated with radios operating in VHF/UHF for ground, boat and diving exercises.
Mobile Radios/Transceivers	Harris AN/PRC-152A Thales AN/PRC-148 (J/F 12/07365/6) Experimental: Sonitus ATAC low power NFMI
Frequency Ranges	Antenna 1: VHF/UHF used on Harris and Thales radios We are applying for one frequency in each of the following ranges to conduct testing for ground, boat or diving operations. 50 – 100MHz (FM) 130 – 180MHz (AM, FM) 250 – 300MHz (AM, FM) 300 – 400MHz (AM, FM) 400 – 500MHz (AM, FM) Antenna 2: The Sonitus ATAC system transmits at 10.579MHz using very low power NFMI.
Frequency Tolerance	Antenna 1: The assigned frequency within each frequency range has a very high frequency stability, based on the radio manufacturer. Harris 152A quotes +/- 2.5ppm. Antenna 2: The Sonitus ATAC has a carrier frequency tolerance of up to 1%.