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--- For Immediate Release ---

Press Release

SSI awarded Phase II SBIR contract by the US Army (SHIELDS)

North Chelmsford, MA (February 11, 2008) - Scientific Solutions, Inc. (SSI) is pleased to announce that it has been awarded a 2-year Phase II SBIR contract by the United States Army for the development and construction of a "Spatial Heterodyne Interferometer for Emergent Line Discrimination Spectroscopy (SHIELDS)". The Phase II project officially started November 11, 2007, building upon work completed during a 6-month Phase I SBIR contract. This project will develop a camcorder-sized, high-resolution spectrometer capable of detecting chemical, biological, and radiological contaminants and their concentrations on a surface object.

The spectroscopic technique exploited in this project involves the observation of direct sunlight as well as sunlight absorbed and re-emitted from surface objects (such as contaminant clouds). Comparing the spectra reveals information about the type and concentration of contaminants in the surface object. Rapid detection of contaminants is a vital part of battlespace terrain reasoning and awareness.

At the heart of SHIELDS lies the Spatial Heterodyne Spectrometer (SHS) as developed by SSI. The SHS combines the high resolution and throughput of conventional interferometers with ultra-robustness, making it the ideal technology for this particular application. The SHS is particularly robust because it is monolithic with no moving parts - all of the interferometer's main optical elements are fused into a single block.

The handheld SHIELDS unit built in Phase II will operate in real time with 100 times greater sensitivity than that of standard grating-based spectrometers and will provide simultaneous reference frames, allowing for immediate calculation and detection of contaminants. It will be much more robust than conventional interferometers which typically require scanning mechanisms to work at their full resolving power.

The innovative SHS is an enabling technology with broad commercial potential in both United States Government (USG) and private sector markets. In addition to being ideal for terrestrial battlespace sensing, products resulting from the enabling technology developed in Phase II will have a disruptive impact on a variety of markets that require robust, portable, high resolution spectroscopy. In the defense industry, potential applications include gas plume detection, target and anomaly detection, surface material identification, and sensing for biological hazards in orbit as well as in cluttered battlefield and littoral environments. For Homeland Security, the SHS can be used to monitor the spread of various pollutants in an ecological disaster or a terrorist attack.

While SHIELDS is being built specifically for chemical, biological, and radiological defense via terrestrial and orbital remote sensing, the technology developed under this Phase II is also widely applicable to many other applications, including planned and projected NASA missions for the next several decades. The robustness and simplicity of SHS technology makes it ideally suited for use on space-based platforms.

First established in 1982, the SBIR Program reserves a portion of a Federal agency's research or research and development effort for award to small businesses through a uniform three-phase process in which strong emphasis is placed on the ultimate pursuit of commercial applications of SBIR results. The program provides increased opportunities for small businesses to participate in R&D, increase employment, and improve U.S. competitiveness.

SSI formally expresses its gratitude to the United States Army for its continued support.

About Scientific Solutions, Inc.

Formed in 1995 by observational Space, Atmospheric, and Planetary Physicists, Scientific Solutions, Inc. (SSI) specializes in the fabrication of both classic Air-Gap Fabry-Pérot Interferometers and next-generation Liquid Crystal Fabry-Pérot (LCFP) tunable optical filters. In 2003, SSI became the exclusive distributor of Avantes fiber optic spectrometers and related accessories to the northeastern USA. In addition to its award-winning products, SSI provides a range of photonics services including optical system design, spectroscopic consulting, and optical coating design.