

Spectral Labs Capabilities Summary for BSTC

Spectral Labs Incorporated (SLI) is an Employee Owned Small Business located in San Diego, California that began doing business in 2009. Since 2009, SLI has grown to include over 20 technical staff members who have significant experience in technologies related to border security. Spectral Labs is dedicated to being a world class innovator of practical solutions to problems encountered by programs of importance to our National interest. Spectral Labs commits to endeavor in every way possible to ensure that the reliability and quality in our products and services exceed our customers' expectations.

SLI has three divisions which match its core business areas as follows: 1) The Engineered Products Division focuses on production of equipment for the US Navy, the Defense Logistics Agency, and others. SLI has a wealth of manufacturing experience for military applications with strong MIL spec environmental testing capability and an ISO-9001:2015 certification to back it up. 2) The Special Projects division of SLI is presently focused on a program titled "HiRIS" refreshing the Vehicle and Cargo Inspection Systems (VACIS) deployed at our Nation's borders to enable CBP officer the ability to take radiographs of cargo passing into the United States. 3) The Technology Development group of SLI focuses on various R&D projects ranging from training software product development, to specialized high energy gamma detectors for CT applications, to the development of a dosimeter uniquely capable of accurate measurement in the vicinity of a nuclear detonation.

The HiRIS program mentioned previously serves SLI's mission to provide the Government with solutions which present a cost benefit and improve the security of our Nation. This program is an example of Spectral Labs supporting border security initiatives—the program is funded through DHS-S&T, with the developed product serving CBP. The HiRIS program also illustrates SLI's capability in sophisticated electronics design which can operate with high duty cycles under extreme environmental conditions.

Spectral Labs has strong competence in the areas of system engineering, electrical/mechanical designs, software and firmware development, MIL-STD testing and full-scale production on DoD contracts. We are experienced at creating test plans and procedures for conducting MIL-STD-810 and MIL-STD-461 testing. SLI employs System Engineers, Electrical Engineers, Software Engineers, and a Mechanical engineer, in addition to scientists and management personnel to support various programs. In addition, an expert staff of software engineers, Unity developers, and artists support training software development. SLI staff have strong experience in engineering solutions for radiation detection and XRAY imaging, in addition to very strong systems engineering experience, particularly for radiation detection equipment.