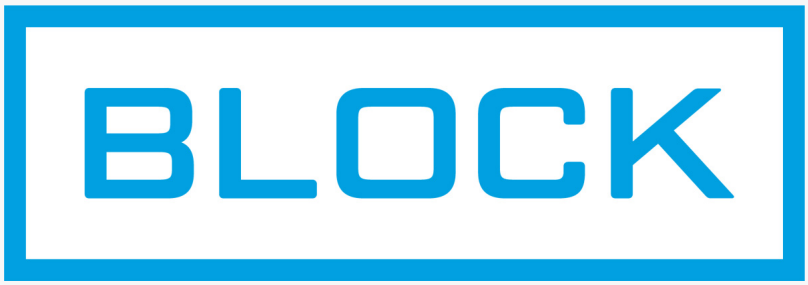
# Block MEMS Receives Contract from IARPA to Detect Aerosolized Chemical Threats

*Block MEMS, LLC has been a awarded a Phase 1 contract under the Pursuing Intelligent Complex Aerosols for Rapid Detection (PICARD) program funded by IARPA.*



Block Engineering

SOUTHBOROUGH, MA, US, May 30, 2024 /EINPresswire.com/ -- Block MEMS, LLC, a leading supplier of laser-based chemical detection systems, has been a awarded a Phase 1 contract under the Pursuing Intelligent Complex Aerosols for Rapid Detection (PICARD) program funded by the Intelligence Advanced Research Projects Activity (IARPA).

The overall purpose of the PICARD program is to develop a system that detects and identifies toxic substances in aerosol forms from a distance, without contact. Many threats including Chemical Warfare Agents (CWAs), Non-Traditional Agents (NTAs) such as Novichok, and pharmaceutical-based agents such as fentanyl, can be formed or encapsulated into aerosols for dispersal. Such aerosols are particularly difficult to detect because they have a wide variety of physical characteristics and chemical complexity.

Block MEMS is a worldwide developer of quantum cascade lasers (QCLs), which make up the core laser technology for this PICARD effort. Block is part of a team effort working on PICARD headed up by SRI International. Block's next generation of QCLs with increased power and beam pointing stability enable the standoff detection of aerosol threats.

Chairman and CEO of Block, Daniel J. Cavicchio, Jr, said: "We are happy to be again working with IARPA, who previously funded Block's QCL development under its SILMARILS program. IARPA focuses on solutions to high-risk problems, and we are proud to have been chosen for the PICARD program."

The PICARD program involves two phases of development over 3.5 years. Block's efforts are being conducted at the company's headquarters in Southborough, MA.

About Block MEMS

Block MEMS and its affiliate Block Engineering are leading suppliers of Quantum Cascade Laser-based products. With over 15 years of experience developing and manufacturing mid-infrared QCL systems, Block's technologies are used in the transportation security, defense, critical infrastructure protection, medical device, and health care industries. Block's QCL lasers are ruggedized for integration into a wide range of applications, including trace-level standoff detection of explosives and narcotics as well as wide-area detection of toxic gases and chemical warfare agents. Block incorporates its QCLs into chemical detection systems for safety and security applications, and supplies its QCLs to OEM partners worldwide. For more information on Block, please visit https://www.blockeng.com.

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