The Virginia Tech Applied Research Corporation (VT-ARC), a private non-profit corporation affiliated with Virginia Tech, was established in fall 2010. VT-ARC has offices in Northern Virginia and Blacksburg, Va. It extends the impact of Virginia Tech’s basic and scholarly research enterprise by identifying and solving complex problems commonly associated with applied research and development. The corporation seeks to develop innovative solutions to complex national challenges. The corporation draws upon the extensive breadth of multi-disciplinary skills found within Virginia Tech, the Virginia Technology Corridor, and the National Capital Region to establish cross-discipline teams capable of addressing the multiple issues associated with complex national challenges.

Focus Areas

Intelligence: Intelligence is the business of looking outward at the world with an attitude of alertness and an ability to recognize danger. Whether the intelligence originates from imagery, signals, or electronic communications from technical, societal, or human sources, VT-ARC possesses both a depth and a breadth of understanding to respond to complex intelligence challenges through the application of innovative solutions.

Technology thrusts include advanced multi-source data processing and analysis; cross-domain information sharing; technologies to support counter-intelligence, sensor development and integration; and behavioral characterization technologies.

Cyber and IT Systems: As our reliance on the Internet and information technology continues to grow, so also does our national challenge in securing these technologies for the benefit of society. Computer science, electrical engineering, software development, information science, sociology, political science, law, and international relations all have an influence on cyber and information systems. Adding to the complexity are competitive principles of free and open access contrasted with privacy, property ownership, and telecommunications regulatory constraints.

Technology thrusts include cyber security strategies, policies, and technology assessment; cyber security technology development; supply chain and trusted computing; information assurance; wireless communications; IPv6 network operations and research; modeling and assessment; identity management; and integrated operations.

National Security: The security of a nation provides assurance of liberty, the general welfare of the people, and the opportunity for commerce. Threats can come from nation states or individuals seeking to disrupt or destroy.

Technology thrusts include threat capability analysis, advance technology warfare systems, autonomous systems and technologies, counter-terrorism technologies, power management, geospatial information, weapons of mass destruction security, and informatics and large data exploitation.

Mission Statement

The mission of the Virginia Tech Applied Research Corporation is to extend the impact of Virginia Tech's research and development expertise through developing, managing, and performing applied research under contract with government and private sector clients, thereby supporting innovative applications of science and technology and technical assistance to enhance global competitiveness.