## Defense Leader visits Detroit Arsenal, Tours World Class Labs

November 2021



Honorable Kathleen H. Hicks, Deputy Secretary of Defense, visited Detroit Arsenal on 8 Nov to hear from GVSC experts how current electrification R&D efforts for improving vehicles' mission duration and advanced warfighting capabilities.

Deputy Secretary of Defense Dr. Kathleen Hicks visited the Capabilities Development Command's (DEVCOM) Ground Vehicle Systems Center (GVSC) at the Detroit Arsenal (DTA) on November 8<sup>th</sup> as part of a two-day fact finding tour of climate adaption and energy initiatives with stops in Michigan, Rhode Island, and Connecticut.

Dr. Hicks met with other defense industrial base partners and learned about Army electric vehicle

technology and its potential application to service-level vehicle development, and commercial electric vehicle technology and its application to Defense missions.

While touring DTA and its numerous GVSC laboratory facilities, Dr. Hicks was briefed on mature technologies that can be fielded now to improve operational readiness, such as the Tactical Vehicle Electrification Kit (TVEK). The TVEK is a power generation and energy storage technology that utilizes intelligent anti-idle supervisory controls to reduce fuel consumption by up to 15-25% in tactical wheeled vehicles, depending on how those vehicles are used. Additionally, the TVEK has the ability to export up to 100kW of 600V of DC power and allows a silent watch capability. Dr. Hicks was also briefed on emerging technologies that will improve force modernization, and longer-term technologies that will close current capability gaps for future enhanced-hybrid and all-electric vehicles.

Dr. Hicks stressed the National Security importance of reliable supply chains, manufacturing, renewable energy, and electric vehicle technology throughout her multisite visit. At General Motors Defense, Dr. Hicks drove some of the Army's newest Infantry Squad Vehicles, built from 90% off-the-shelf components, and learned how industry is advancing battery technology critical to defense applications.

The vehicle electrification technologies being developed at DTA will be paramount to success in conflicts against near-peer adversaries on more contested, lethal, and

dispersed battlefields. U.S. forces will be required to maneuver further and operate longer without resupply. Though these capabilities are driven by mission and operational requirements, they also support the Army Climate Strategy by reducing the consumption of liquid fuel and the emission of harmful greenhouse gases.

Mr. Jack Surah, current acting Primary Deputy Assistant Secretary of the Army (PDASA) for Installations, Environment & Energy, visited DTA in September as the Senior Official Performing the Duties of the ASA(IE&E), and was extremely impressed with the installation's facilities and energy initiatives. Reflecting on his trip, Mr. Surash summarized his experience stating, "Very professional team out there at Detroit Arsenal. I look forward to hearing more about their achievements and accomplishments as they close those capability gaps that are so critical to our mission success."

Mr. Paul Farnan, the current Acting ASA(IE&E), has not yet had the opportunity to tour DTA, but was excited to hear about Dr. Hicks making the visit. When asked about his thoughts on the work being done at DTA, Mr. Farnan stated, "The U.S. Army is modernizing systems through cutting edge technologies to prepare for the future. Detroit Arsenal is instrumental in developing cutting-edge technologies that will make modern electrified vehicle platforms more lethal, dominant, sustainable, cost-effective, and supportive of the DoD Climate Adaptation Strategy. These initiatives will allow the Army to remain the world's premier land fighting force in evolving multi-domain, contested operating environments."