



Media Advisory



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For Immediate Release |

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New one-of-a-kind laboratory to feature unique capabilities, equipment

DETROIT ARSENAL, WARREN, MI — The U.S. Army will lead the way in producing safer, more efficient and more high-powered ground vehicles in the future with the construction of the Department of Defense's Ground System Power and Energy Laboratory (GSPEL).

The U.S. Tank Automotive Research, Development and Engineering Center (TARDEC) in Warren, MI, will host an official groundbreaking ceremony Aug. 17. Army, government and industry leaders will be on-hand to commemorate the event.

The GSPEL will be a one-of-a-kind research and testing laboratory complex. Eight different labs will be housed in the 30,000 sq. ft. facility and they will serve as the cornerstone for the Army's next generation of power and energy initiatives. The facility will provide scientists and researchers with the ability to integrate hybrid-electric (HE) and fuel cell technologies into advanced military vehicles.

TARDEC worked with the Southwest Research Institute (SwRI), an independent, nonprofit applied research and development organization in San Antonio, TX, to develop the demanding equipment and facility specifications necessary to make the GSPEL a reality.

A state-of-the-art piece of equipment to be installed in the GSPEL is AeroVironment's AV-800 Power Processing Unit. The unit, delivered to TARDEC in June, is the highest power level power processing unit in the United States. The AV-800 uses power from a grid to test batteries and vehicles, and is capable of returning energy back to the grid at more than 90-percent efficiency.

The amount of energy generated by the system makes it ideal for testing the Army's next-generation fleet of HE manned and unmanned tactical vehicles. The unit is also used for assisting with the development of stationary devices, such as grid connected batteries and fuel cell systems by simulating application-specific load profiles.

As both the Army and the automotive industry look for ways to improve fuel efficiency and reduce energy consumption, TARDEC is poised to become a national leader in energy security and the development of HE technology for ground vehicle systems.

"As the Nation's laboratory for advanced military automotive technology, TARDEC is at the forefront of developing tomorrow's automotive solutions," said Michael Bissonette,



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AeroVironment's Senior Vice President and General Manager, Efficient Energy Systems. "This new system will enable the development of high-powered electric automotive solutions, representing an important new capability for TARDEC and for the electric transportation industry."

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An AeroVironment technician tests an AV-800 prior to delivery for TARDEC's new GSPEL one-of-a-kind research and testing laboratory complex. The GSPEL will provide scientists and researchers with the ability to integrate hybrid-electric and fuel cell technologies into advanced military vehicles. TARDEC will host an official groundbreaking ceremony Aug. 17 on the Detroit Arsenal in Warren, MI. (AeroVironment Courtesy Photo)

TARDEC is the Nation's laboratory for Ground Systems Integration to ensure U.S. Soldiers continue to be the best-equipped and most lethal, survivable and sustainable fighting force on Earth. For additional information or to schedule an interview with a TARDEC leader or subject-matter expert, please contact Bill Dowell at (586) 574-6683, william.dowell2@us.army.mil.

Follow us on twitter at http://twitter.com/TARDEC_PAO.

As a reminder, TARDEC is participating in the first Ground Vehicle Systems Engineering and Technology Symposium (GVSETS) to be held Aug. 18-20, in Troy, MI. The National Defense Industrial Association (NDIA) Michigan Chapter is hosting the event to engage government, industry and academia participants in active working sessions to learn about the latest developments in ground vehicle systems engineering and technology for warfighters, and to learn what technical capabilities are being sought in the private sector. If you would like to attend please email to the above address as well. For more information about GVSETS, please go to: <http://www.ndia-mich.org/gvsets.php>.