

Military Vehicle High Performance Capabilities (MVHPC)



The Military Vehicle High Performance Capabilities Program (MVHPC) serves as a link between the U.S. Military and the rapidly changing technologies of the commercial motorsports industry. The motorsports industry faces many of the same challenges as the U.S. Military in developing and operating wheeled vehicles. MVHPC will evaluate lessons learned and technological solutions developed by the commercial motorsports industry that are potentially beneficial to the U.S. Military, and deliver options to the US Government for possible integration into military vehicles.

Program Structure:

MVHPC will work to determine performance gaps in military vehicles (those included in this project are listed to the right) by compiling lessons-learned documentation from the military and surveying those who operate and maintain these vehicles.

MVHPC will also identify companies in the commercial motorsports industry that are able and willing to provide or adapt existing technology to address the identified gaps. MVHPC will identify capabilities of the motorsports industry partners so the government may identify companies that can help meet its vehicle challenges and sustainment requirements.

Additionally, MVHPC will present innovative technologies and capabilities that do not directly address the issues identified in the gap analysis, but may prove useful to the DoD military vehicle enterprise in the future.

Benefits:

Applying existing, proven motorsports industry technologies to military vehicles can result in performance and survivability benefits to the nation's warfighters while also providing an economic benefit to the motorsports industry. Lives will be saved and our warfighting capabilities enhanced through the faster implementation of improvements made possible by taking advantage of the motorsports industry's products and technologies.



About The IDB:

The Institute for Defense and Business is a 501(c)(3) N.C. non-profit research and education institute located in Chapel Hill, North Carolina. The IDB was established in 1997 by the state of North Carolina and the University of North Carolina at Chapel Hill as an independent legal entity. It has a self-perpetuating board of directors chaired by former N.C. Governor James G. Martin.

Military Vehicle High Performance Capabilities

Vehicles:

- High-Mobility Multipurpose Wheeled Vehicle (HMMWV)
- Internally Transportable Vehicle (ITV) (Growler)
- Medium Tactical Vehicle Replacement (MTVR)
- Logistic Vehicle System Replacement (LVSR)

Common Performance Gaps:

- Fuel efficiency
- Top speed for up-armored vehicles
- Braking systems
- Suspension systems
- High-strength/low-weight armor
- Climate control
- Power trains
- Vehicle safety

MVHPC Program Office
Institute for Defense & Business
1430 Environ Way
Chapel Hill, NC 27517
919.969.8008
www.mvhpcp.org
mvhpc@idb.org

