



AVRC OVERVIEW

The Advanced Vehicle Research Center (AVRC) is a Service Disabled, Veteran-Owned Small Business (SDVOSB) established in 2001. The AVRC supports research and commercial activities directed at reducing our nation's dependence on foreign oil.



Facilities- AVRC completed construction of a new 16,000 square foot engineering center in the Cyberpark in Danville, Virginia in 2009. The building includes a research lab where our current Department of Energy research is conducted. Other research activities are done in one of our several large (1,600 square foot) bays capable of housing vehicles from passenger cars to busses. The building also contains our facilities for fabrication and prototyping. AVRC has an adjacent 60+ acre off-road course area being developed to accommodate requests from military and off-road manufacturers. This Military Off-Road Testing Site (MORTS) is adjacent to the AVRC facility. MORTS will also be used to design and test electric, hybrid, flex-fuel and autonomous robotic vehicles for government and military contracts.

Staff- Business planning and development is done by Executive Director, Mr. Richard (Dick) Dell Sr. Research Technician David Beard has more than 25 years of experience in electric vehicles and advanced composite materials. Our program manager, Richard Dell Jr. is specialized in technology transfer, intellectual property, research and communications. Our senior scientist, Dr. Yimin Gao, is the co-author of the definitive text: "Modern Electric, Hybrid Electric, and Fuel Cell Vehicles, fundamentals, theory and design". Other AVRC staff members have significant experience in manufacturing, vehicle conversion, automotive technology, marketing, software, and web development.

AVRC ACCOMPLISHMENTS

Research- Currently our major research project is the development of the rolling Laboratory for Rapid Application Testing (LabRAT). Supported by the Department of Energy, this configurable vehicle chassis is a fully functional platform capable of being run on a chassis dynamometer for performance evaluation and drive cycle testing. The ability to benchmark different drive-motors and energy storage systems will shorten development time for electric vehicles and is an invaluable tool for AVRC in designing and testing new electric vehicle designs.

University relationships- AVRC partners with, and supports our local Universities including NCSU and Virginia Tech. Our joint research has yielded real and demonstrable results.

Client Base- AVRC's client base includes 12 major utility companies on the East Coast from New York to Florida. AVRC also holds a GSA contract on the GSA Low Speed Vehicle schedule. As a Service Disabled Veteran Owned Small Business, AVRC is eligible for Federal contract set-asides under multiple categories.



Grants and Contracts- AVRC has successfully won and managed contracts and grants from the US Department of Energy for Research, the National Alternative Fuel Training Consortium for curriculum development, and the National Aerospace Development Center for Strategy and Workforce Development. A great deal of our work is online at www.avrc.com, but a few links are provided below as well.

Research & Development: http://www.avrc.com/AVRC_Design_and_Build_H2MG.pdf
Strategic Planning: http://www.avrc.com/NADC_AVRC_Strategic_Plan_v19.pdf
Curriculum development: http://www.avrc.com/presentations/AFT_AVRC_Nash_brochure.pdf

AVRC is interested in global partnerships to advance technology leadership and commercialization.

COMMERCIAL WORK

Commercial Vehicle Conversion



Commercially, AVRC has completed over 130 plug-in hybrid Prius conversions. We have also done several Ford Escape conversions. AVRC now has additional suppliers for plug-in conversions on the Prius and Ford Escape. Other models are under development.

RESEARCH & DEVELOPMENT

RAPID APPLICATION TEST BED

Funded by the Department of Energy, this program is an Electric Vehicle laboratory test platform for rapid application development of new electric and hybrid drive-trains, engines and energy storage devices.



AREAS OF EXPERTISE

Our primary areas of expertise include;

- Energy Storage Systems
- Electric and Hybrid Vehicle Design and Construction
- Strategic Planning
- Large Project Planning and Management
- Alternative Fuel Vehicles
- Education and Workforce Development

NAICS codes: 541330 Engineering Services, 541380 Testing Laboratories, 541611 Gen. Management Consulting

GSA Contract Holder: Contract # GS30F0021W (under name TGI-USA) AVRC can supply vehicle charging stations and Low Speed Electric Vehicles through our GSA contract. **AVRC DUNS #: 125425082**

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