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Cadillac VP: Concept Elmiraj Has Streamlined Design

Cadillac last week unveiled the Elmiraj Concept Car.

Cadillac officials say the car showcases a new vision for luxury driving and the top of the brand's expanding range.

"Cadillac is fueled by the creativity of our designers, led by Ed Welburn," said Bob Ferguson, senior vice president, Global Cadillac. "Elmiraj provides a look inside the Cadillac Studio on how we envision performance and luxury for the next generation of luxury drivers."

A modern update to the classic format of a two-door grand coupe, Ferguson said the Elmiraj is a pure expression of streamlined design and engaging rear-wheel drive performance.

GM announced that the Elmiraj is 205 inches in overall length, and is a four-seat coupe. Taking up from where the memorable Ciel Concept left off, Elmiraj is a statement of pure luxury and performance with a purposeful character and proportion, Ferguson said.

The concept advances Cadillac's philosophy of dramatic design and performance, and its commitment to lightweight, agile cars, Ferguson said. It's constructed with chassis and structural elements of an ongoing Cadillac vehicle development project slated for future production. This new vehicle architecture, said Ferguson, expands the brand's commitment to lightweight RWD performance, exemplified in the ATS sport sedan and the all-new and elevated 2014 CTS launching this fall in the U.S.

Elmiraj is powered by a 4.5-liter twin turbocharged V8 delivering an estimated 500 hp. The engine takes the baseline technology from the new Cadillac Twin Turbo V6 featured in the upcoming 420-hp 2014 CTS Vsport edition, and expands it to the classic performance format of a V8 engine.

"Elmiraj advances Cadillac's provocative modern design and performance, contrasted with bespoke craftsmanship and luxury," said Mark Adams, Cadillac design director. "It explores performance driving, as well as how we're approaching elevating the Cadillac range and new dimensions of Art & Science philosophy."

With a heritage of imaginative designs, said Ferguson, Cadillac approaches concept cars as a method for projecting design for-

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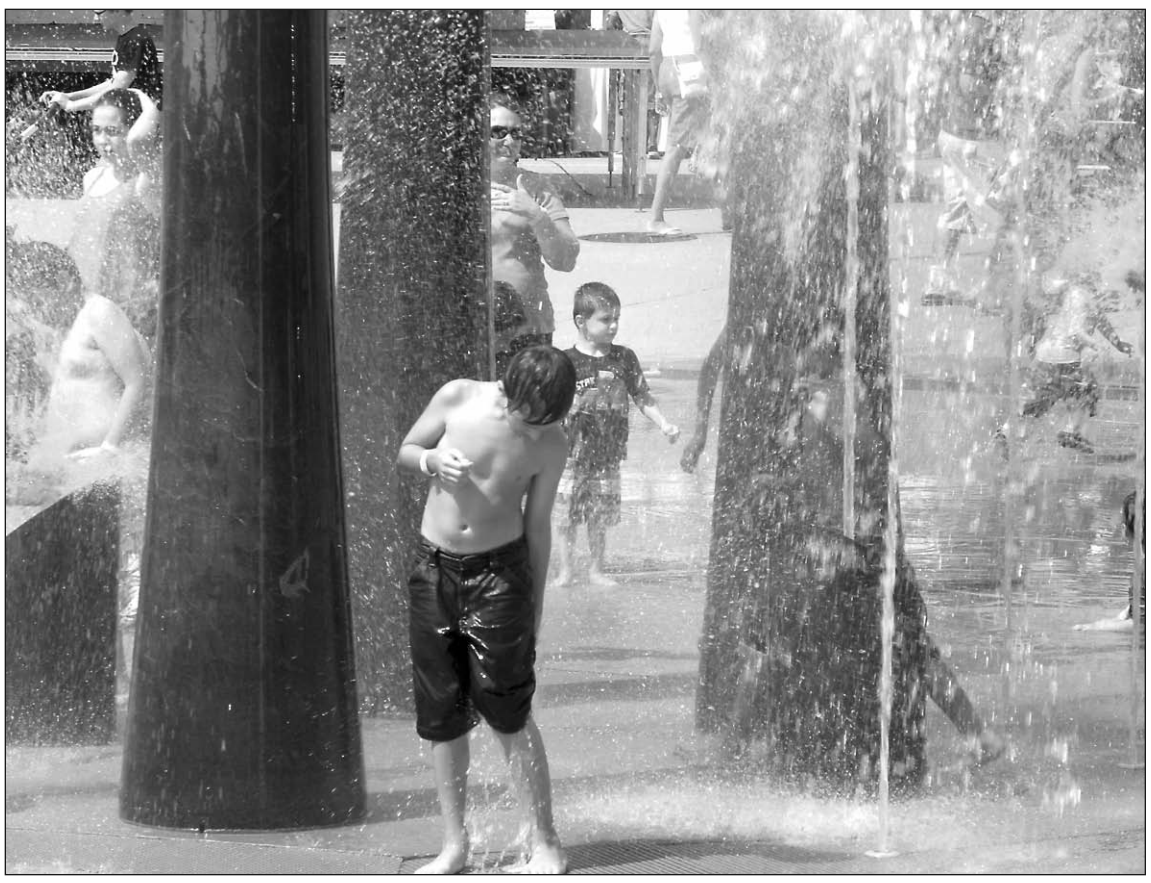

Birthday Bash attendees got to cool off in Warren's fountain park during the city's four-day celebration.

Warren Celebrates City's 56th Birthday

The city of Warren's Birthday Bash got off to a rousing start on Aug. 22 thanks to warm and sunny weather.

Those who turned up on Thursday got to enjoy sunshine, carnival rides, pig races, dogs catching frisbees and bingo.

Thursday's events were capped off with an outdoor showing of the movie "The Great and Powerful Oz." It was filmed in Pontiac by Michigan native Sam Raimi.

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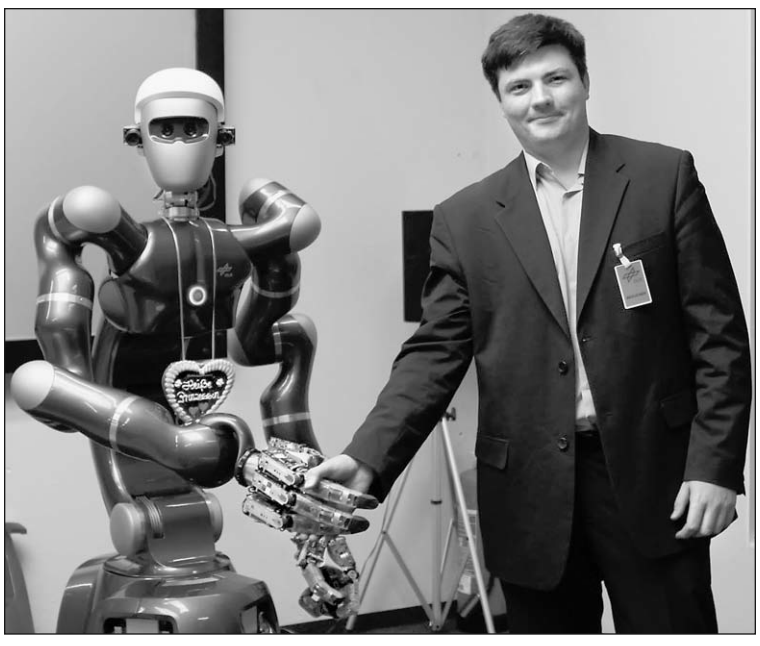

Associate professor Vladimir Mulukha, of St. Petersburg Polytechnic University in Russia, shakes hands with "Justin," a robot used by Ford.

Space Communications Help Ford's Telematics Systems

Ford isn't sending a man into space – it's using robots that are already there.

The Dearborn automaker is utilizing robots sent into the vast reaches of the universe by the Russian space industry to study communications.

Specifically, Ford is researching communications between space robots and Earth to enhance future applications of the connected car communications protocol.

Craig Daitch, Ford's Smart Communications manager, said the research furthers the company's commitment to industry leadership in the development of connected vehicle communications. The research is intended to help reduce traffic congestion and aid in the advancement of emergency vehicle communications methods.

Just one way Ford is making good on this commitment is through the launch of a three-year research partnership with the telematics department of St. Petersburg Polytechnic University in Russia in its association with that country's space industry.

The goal of Ford's relationship with the university is to analyze space-based robotic communications systems for vehicle mesh networks to aid in mobility solutions.

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Protecting the Warfighter with New Systems Is Goal of Defense Technology Symposiums

by Jim Stickford

Times are tough for the military, but the demand for quality vehicles to protect the troops hasn't changed.

That's what makes events like the Ground Vehicle Engineering & Technology Symposium held in Troy last week have more value than ever.

Bruce Huffman, Public Affairs officer for the Tank Automotive Research, Development and Engineering Center (TARDEC) at the Army's TACOM facility in Warren, said events such as the symposium are important.

"This event is for government ground vehicle experts," Huffman said. "It offers them the chance to collaborate with their private sector counterparts and help plan for the future."

Dr. Paul Rogers, TARDEC's director, who spoke at the symposium, elaborated on the importance of interaction between the government and the private sector.

"Our goal at the end of the day is to produce a strategy that changes the way our warfighters fight and change what they experience," Rogers said.

The problem is that the warfighter of today experiences combat much the same way his father and his grandfather did, Rogers said. TARDEC's goal is to develop a strategy and share it with the private sector that looks 30 years into the future.

"Of course, things change and we have to change with them," Rogers said.

But TARDEC has spent the last 12 years supporting the country's war efforts in Afghanistan and Iraq, which is only natural, Rogers said. But it's now time to look forward and develop systems that the soldier of tomorrow can use.

"The ultimate goal is to develop systems of such fundamental superiority that the enemy knows they've lost the battle before it's even begun," Rogers said.

Developing these systems begins with TARDEC coming up with specifications and sharing those specs with private contractors, Huffman said. These contractors can then put their engineers to work developing systems to meet these specs, with the goal of creating newer and better systems that help keep the peace.

A prime example of this, Huffman said, is the Auxiliary Power Unit (APU) project.

The APU was developed by Marvin Land Systems (MLS) at General Dynamics Land Systems' Maneuver Collaboration Center (MC2) in Sterling Heights.

The center is designed to bring They can work closely with government people at the nearby TARDEC and TACOM facilities to develop systems to government specifications.

In this case, the government needed an APU to help the Army's Abrams tanks save fuel, Huffman said.

Many of the tanks' eletronics systems, such as the radio, need power, which the current tank generates by idling – meaning the tank can be burning fuel while standing still.

Huffman said that has resulted in tanks being relatively low on fuel when going into battle. He is aware of incidents in Afghanistan where tanks have had to leave the field of battle to go to the rear to get more fuel.

Paul Rogers

By developing an APU separate from the regular engine system, eletronic systems can remain powered up while the tank isn't moving and the main engine doesn't have to be idling.

This can save a brigade of tanks the equivilent of two tankers of fuel in one day.

The MLS APU works similar to the Chevy Volt's gas engine. When the Volt's battery charge is down, the gas engine kicks in, but it doesn't power the car's drive system, it generates electricity that is used to power the Volt. The MLS APU burns diesel fuel to generate electricity to power the tanks' electronic systems, Huffman said.

This new system can reduce

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