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Chaparral, Chevrolet Innovate – and Win

One never knows when or ence of racing cars, said Lyons. where inspiration will strike.

When racers Jim Hall and Hap Sharp founded Chaparral Cars in 1962, "Few could have guessed how they would shake up the conformities of the racing world and fundamentally change it,"

said GM spokesman Chad Lyons. Through pioneering applications of aerodynamics and aerospace technology, and a partnership with Chevrolet partnership with Research and Development, Chaparral Cars advanced the sci-

Chaparral also triumphed on the track over well-established sports car companies from

around the world, said Lyons,

using Chevrolet horsepower.

It was that spirit of innovation that inspired the Chevrolet Chaparral 2X Vision Gran Turismo (VGT) concept race car developed for the Vision Gran Turismo project. The Vision project celebrates the 15th anniversary of the PlayStation racing game,

"Gran Turismo," by inviting man-

ufacturers to give fans a glimpse into the future of automotive design.

The concept car debuted at the Los Angeles Auto Show Nov. 19. Gamers will be able to race the Chaparral 2X VGT following the release of an online update for Gran Turismo 6 during the holiday season.

"Jim Hall and Chaparral blended the art of racing with science in an unprecedented way, chang-

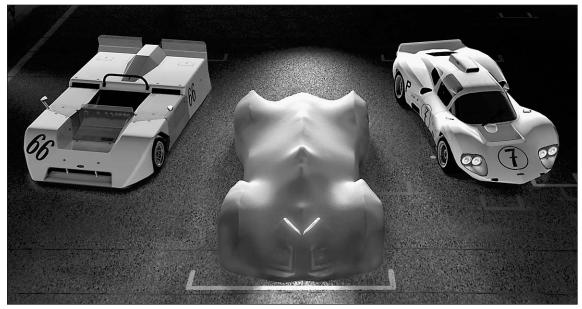
CONTINUED ON PAGE 3







Grace Lieblein



A wrapped version of the new Chaparral 2X VGT is flanked by the 2J, left, and 2E racing designs of the 1960s.

'These Moves Fortify GM's Leadership Team' - Barra

General Motors has made a series of leadership changes.

According to GM spokesman Pat Morrissey, the changes are being made "to continue our evolution into a stronger, more customer-centric organization.'

CEO Mary Barra said, "We understand that we have to earn our customers' trust and loyalty, and that every interaction matters. The vehicle purchase is just the start.

"We intend to earn customers for life by delivering exceptional quality and customer care, and these changes put us on a path to achieving that."

Alicia Boler-Davis, currently senior vice president, Global Quality and Customer Experience, is named senior vice president, Global Connected Customer Experience.

In addition to her current customer experience responsibilities, she will assume responsibility for the Global Connected Consumer organization, which includes OnStar and its call cen-

Boler-Davis will continue to report to Barra.

Under Boler-Davis' leadership,

CONTINUED ON PAGE 5

'I Believe the Industry Needs to Rethink the Way Cars Are Made and Sold' – Bill Ford Jr.

Ford Excecutive Chairman Bill can make greener, more fuel-effi- people and greater global pros-Ford Jr. recently told a group in cient vehicles. This reduces Dubai, "My great-grandfather once said that before he invented the Model T, 'If I had asked people then what they wanted, they would have answered, 'faster horses."

It was Ford's way of explaining his breakdown of Ford's plans for the future at a special meeting of the Dubai Chamber of Commerce on Nov. 19.

Ford said he believes the car industry needs to rethink the way cars are made and sold. adding that the industry is big enough to make a difference in the world and is loaded with talented people.

greenhouse gas emissions and Ford said he believes within his lifetime there will be truly green transportation.

But the industry faces another problem out of its control - population growth, Ford said.

"And we will be living more closely together," Ford said. 'Some reports predict that by 2025 more than half the world's population will live in megacities of 10 million residents or more.

'When we look at population growth in terms of vehicles, the problem becomes even more pronounced. Today, there are about one billion vehicles on the These individuals, Ford said, road worldwide. But with more

perity, that number is expected to double, and possibly double again, by 2050. This will create 'global gridlock' on a scale the world has never seen before."

Ford said Dubai is aware of the problem and even though it's increased the number of paved roads by a factor of 50 percent, population growth isn't a problem that can be "paved away."

"We are seeing global gridlock everywhere," Ford said. "In Beijing, for example, the average driver has a daily five-hour commute. A couple of years ago, China also was the location for what many are calling the worst



CONTINUED ON PAGE 6 Bill Ford Jr. talks about industry's future to Dubai businessmen.

Brand new 1954 Plymouths and DeSotos are taken through the paces at the then-new Chrysler Proving Grounds in Chelsea, Mich.

Three proving grounds across the

by Jim Stickford

As the saying goes, the more things change, the more they stay the same. At least that's the case when it comes to Chrysler's Chelsea Proving Grounds, which opened on June 16, 1954.

Chrysler Racks Up 60 Years of Tough

(EDITOR'S NOTE: This is the fourth in a series of articles on Big

Test Challenges

According to Chrysler historical records, at the time Chelsea opened in Michigan, it was heralded as "the newest, largest and most advanced of all automobile

CONTINUED ON PAGE 2

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Death Toll at 33 From GM Ignition Switch Defect

By TOM KRISHER AP Auto Writer

DETROIT (AP) – The deadline for victims of crashes caused by faulty General Motors ignition switches has been extended for a month as the death toll rose to 33.

Kenneth Feinberg, who is administering GM's compensation fund, announced last week that the deadline has been extended until Jan. 31, 2015.

In a web posting, Feinberg said he has determined that 33 death claims are eligible for compensation by the fund. That's up from 32 the week before.

GM came under fire last week because the family of a Connecticut woman who died in a 2003 crash had not been notified that her crash had been linked to a faulty switch, even though GM knew for years. The family's lawyer and a U.S. senator called on GM to extend the deadline beyond Dec. 31.

Feinberg said in a statement that the extension is being done out of an abundance of caution, even though many efforts have been made to reach owners of 2.6 million Chevrolet Cobalts, Saturn Ions and other small cars that have been recalled due to the defective switches.

He said notices about the compensation fund have been sent to nearly 4.5 million current and prior owners of the cars.

GM said in early November that it has reached the family of Connecticut mother Jean Averill, who died when her Ion crashed into a tree. Averill, 66, of Washington, Conn., was one of 13 people that GM originally thought had died in crashes caused by the faulty switches.

Averill's family didn't know that GM attributed her death to the ignition switch until told by a reporter from *The New York Times* earlier this month, said Bob Hilliard, the family's lawyer.

For 11 years, the family believed that Averill suffered a stroke while driving, causing the crash, Hilliard said.

GM's insurance company denied the family's claim for damages in 2004, he said in a statement.

"The entire time, GM, as its proven habit, covered up the truth," Hilliard said.

The ignition switches can slip out of the run position and cause engines to stall. That can disable power steering and brakes as well as the air bags.

In the web posting, Feinberg said he had received a total of 217 death claims.

He rejected 31 claims, determined that 77 were "deficient," and 27 remain under review. Forty-nine were submitted with no documentation.

Feinberg has received 1,888 injury claims, and 72 have been deemed eligible so far.

The fund began taking claims on Aug. 1.

Chrysler Track Racks Up 60 Years of Tough Test Challenges

CONTINUED FROM PAGE 1

proving grounds in operation, covering 3,800 acres of the most difficult terrain man can devise."

In a 1994 press release celebrating the 40th anniversary of Chelsea, Chrysler officials wrote that the "core of the Chrysler Proving Grounds remains as it was when it was dedicated on June 16, 1954 – an 8.4-mile endurance road, a 4.7-mile oval track and 2.23 miles of straightaways.

"However," the press release continued, "much has been added since then to the complex. Today (1994), more than 200 test procedures are performed over the 45-mile network of paved, gravel and dirt roads that duplicate conditions found in the United States, Canada and Mexico and in the varous laboratories."

According to Chrysler records, Chelsea came about after World War II, when Chrysler conducted "an exhaustive land search in southeast Michigan for a site for its first modern proving grounds."

When the facility was first opened in 1954, diverse brands such as Chrysler, Plymouth, Dodge and DeSoto were tested there. Since then, some brands have been dropped – Plymouth and DeSoto – and some have been added – Jeep and Ram.

Over time, technology improved and testing standards changed, said Sue Cischke, executive engineer for Chrysler Proving Grounds and Durability Testing in 1994.

"We're still proving what the customer will find when they drive our vehicles, but in accelerated time," Cischke said. "We have more sophisticated ways of measuring. We have more extensive testing and our schedules are accelerated and on rougher roads."

The result, she said at the time, is "durability testing 1990s style, and that means a whole new level of error-proofing that was not possible in the 1950s."

Records show that when the proving ground was first open, its creation required the largest private earth-moving contract ever in the state of Michigan up to that time.

Dedicated in 1954, its roads and facilities have been improved and expanded continually to keep pace with product offerings and testing techniques.

The Chelsea Proving Grounds contains over 100 lane-miles of on-and-off-road test surfaces. Durability and Reliability testing is conducted year-round in labo-

ratories and on specially designed roads.

In addition to test roads and surfaces, the Chelsea Proving Grounds also offers impact testing, emissions and fuel economy testing.

The site's Vehicle Dynamics Facility is an 18-acre paved surface to evaluate steering, suspension and braking characteristics at speeds up to 100 miles an hour.

The facility also offers 7, 15, and 32 percent grade roads to evaluate hill climbing and service brakes. Additional grades of 20 and 30 percent are dedicated to parking brake and parking sprag testing.

Chelsea's repaved Oval Test Track has six lanes, is 4.7 miles long, and is conducive to speeds in excess of 200 mph. It has Neutral Steer of 130 mph in the sixth lane in the turns. This track is used for collecting data on highway and city-type driving. It is also used for endurance, engine cycling, brake, transmission, rear axle performance, fuel economy, and engine temperature.

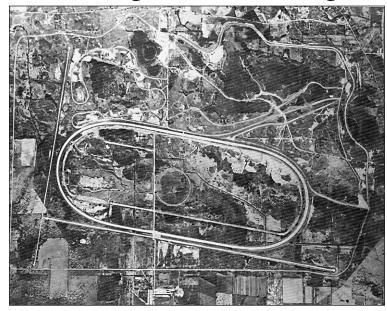
The Chelsea concrete trough is 250 feet long and 12 feet wide. It's used to validate body sealing, fascia retention, water ingestion, and electrical component function in the engine compartment.

The site's Durability Test road surfaces are constructed of concrete, asphalt, gravel, stone, Belgian block and other rough surfaces for determining reliability and durability. Test surfaces range from low amplitude/highspeed to high amplitude/lowspeed events for maximum durability test acceleration rates.

These roads are used for evaluation of steady state handling through a variety of cornering radii at a wide range of vehicle speeds. Testing consists of both subjective and instrumented events designed for sub-limit and limit evaluations.

Chrysler records stated that changes to the facility since its opening have been prompted, in part, by "government regulations, the advent of computers, an increased emphasis on customer satisfaction and the continous search for improved quality"

The emissions laboratory was added to conduct tests to support the development and government certification process. Test vehicles are driven on chassis dynamometers according to standardized driving cycles. Along with duplicating on-the-road conditions, both temperature and humidity are controlled within a specified



Aerial view of Chrysler's Chelsea Proving Grounds as seen in 1954.



Various tests helped Chrysler determine quality of its 1954 products.

range. Vehicle exhaust is collected to analyze.

Chelsea also has an impact testing building that houses an impact simulator, which can simulate a passenger car striking a solid barrier at 70 miles per hour.

The facility's wind tunnel is used to test full-size cars and trucks for engine cooling, underhood temperatures, air conditioning performance, wind noise and aerodynamic design. Wind velocity in the tunnel simulates speeds of up to 120 miles per hour on full-size vehicles and 150 miles per hour on 3/8-scale models. Temperatures can be con-

trolled to 120 degrees fahrenheit. Since 1954, roads have been added. In most cases that means making them more rugged in order to test the durability characteristics of vehicles. These endurance road networks encompass a full range of road surfaces from smooth asphalt to gravel to severely rough surfaces simulating off-road conditions.

These added road networks consist of a variety of turns, curves and grades built to duplicate different types of public roads. So, conditions include built-in bumps, dips and ripples meant to induce high stress as a way of testing vehicles' suspensions, bodies and tires. There are even two gravel roads with washboard bumps, chuckholes and sharp turns.

Another big change introduced since 1954 was the addition of computers to collect and analyze data obtained during vehicle



COVERS THE TECH CENTER AND THE IMMEDIATE AREA **NOVEMBER 24, 2014**

'Our Latest Small Block Engines Help Our Customers Save Money,' Says GM Marketing's John Fitzpatrick

When it comes to trucks, customers place dependability near the top of the list.

And when it comes to truck engines, more than 100 million engines' worth of continuous improvement and trillions of miles support the Chevrolet Silverado V6 and V8's claim to delivering on that requirement, said John Fitzpatrick, Silverado marketing manager.

"Silverado is from the family of the most dependable, longestlasting full-size pickups on the road," he said. "Our latest generation of Small Block engines help customers save money at the pump with engines that have been improved and by real-world experience."

GM spokesman Tom Read said a lot of potential customers don't know what these engines can do. But the word is getting out, and not just by GM.

Just look at the December issue of Hot Rod magazine," Read said. "This engine platform, which is doing quite well in the marketplace, made the cover."

So, Read said, it becomes important to let people know just how the technology in the engine pays off in terms of both performance and mileage.

"I am talking about things like direct fuel injection technology and active fuel management systems – also known as cylinder deactivation technology," Read

"That's when the engine auto-

to V4 when it's appropriate. under light loads, making the What people have to remember is that these engines are all new with new manufacturing systems. And all the engines, no matter what version you buy, have this technology.

"There's no 'up level' option with these engines. All the technology comes as part of the standard suite of technology no matter what truck customers buy, and that's pretty cool."

The 2015 Silverado offers a trio of EcoTec3 engines with advanced fuel-saving technologies, enabling customers to choose the performance and fuel efficiency that best meets their

The three engines are:

• 4.3L V6, 285 horsepower, 305 lb.-ft. of torque, up to 24 mpg EPA highway;

• 5.3L V8, 355 horsepower, 383 lb.-ft. of torque, up to 23 mpg EPA

• 6.2L V8, 420 horsepower, 460 lb.-ft. of torque, up to 21 mpg EPA

The latest Small Block engines are ideally suited to Silverado and to the tough jobs that pickup customers do every day," said Jordan Lee, global chief engineer and program manager for Small Block engines.

"We give customers the power and torque of a full-size truck engine when they need it, then use Active Fuel Management and other advanced technologies to seamlessly shift to four-cylinder matically shifts from a V8 or a V6 operation when the truck is most of fuel efficiency."

Silverado's EcoTec3 engines are direct descendants of the original Small Block Chevy V8, and benefit from more than 60 years - and more than 100 million engines' worth - of continuous improvement.

"Small Block engines have been used, abused, modified and raced in almost every type of car and truck imaginable," said Lee. "Our engineers are able to draw on that experience to build stronger, more efficient, more dependable engines for Chevy truck customers."

The latest Gen 5 Small Block engine has endured tough testing, including a grueling performance durability procedure, where it was subjected to a highspeed/high-load torture session that simulated full-throttle blasts.

With simulated transmission shift points inserted during the high-load test, the engine cycles non-stop between peak torque and peak horsepower for hundreds of hours - the equivalent of thousands of miles.

Testing on the Gen 5 Small Block that contributes to the legendary durability of the modern Small Block engines include:

• Severe thermal cycle testing, which quickly cycles the engine between extreme cold and hot coolant temperatures to validate the durability of engine components such as the head gaskets, exhaust manifolds and more.

• The "hot scuff"

which a brand-new engine - or "green" engine to the engineers – is run at wide-open throttle with no break-in period, helping test critical engine parts such as bearings, piston ring sealing and bore scuffing.

 Active Fuel Management validation, which cycles the engine in and out of the cylinder-deactivating feature hundreds of thousands of times at a variety of engine speeds to ensure the performance and durability of its unique valve lifters.

2015 marks the 10th anniversary of Active Fuel Management (AFM), the cylinder deactivation technology that improves fuel



PAGE 3

5.3L V-8 EcoTec3

economy in trucks by seamlessly switching to four-cylinder mode to help save fuel during light-load driving.

Introduced in 2005, it is currently available on the 2015 Chevrolet Silverado, Tahoe, Suburban, Camaro and Corvette.

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CONTINUED FROM PAGE 1

ing the sport forever and inspiring a new generation to experiment with aerodynamics and unconventional materials," said Mark Reuss, GM executive vice president, Global Product Development, Purchasing and Supply Chain.

"His race cars were fourwheeled physics projects that proved innovation – and a strong Chevy race engine - could drive you to the winner's circle.'

GM's Advanced Design Studio, with input from Hall, designed the Chevrolet Chaparral 2X VGT concept.

"It will serve as an example of what our designers are capable as 240 pounds of downforce at of when they are cut loose, no holds barred," said Ed Welburn, vice president of GM Global Design. "A fantasy car in every sense of the word."

The first Chaparral was a conventional, front-engine race car, built by Dick Troutman and Tom Barnes in 1961, said Lyons. In 1962, Jim Hall and Hap Sharp who had purchased one of the original Chaparral racers formed Chaparral Cars. Inc., and immediately began the design and construction of Chaparral 2, a mid-engine car with an aerospace-inspired semi-monocoque fiberglass chassis.

It was powered by a 327-cubicinch Chevrolet small-block V8 engine and would later incorporate an innovative torque-converter

In its first race at Riverside in 1963, Hall qualified the Chaparral 2 on the pole position and set a track record in the process. In 1964, he won the United States Road Racing Championship (USRRC) and, in 1965, the Chap-

the racetrack, winning the prestigious 12-hour race at Sebring upsetting historically dominant international teams.

Chaparral Cars soon partnered with Chevrolet Research and Development to help develop the pioneering methods and materials Hall envisioned. The partnership also spawned groundbreaking vehicle data acquisition technology.

In 1966, Chaparral introduced the radical 2E race car for SCCA's Can-Am series. With a large, high-mounted wing to produce downforce, it represented a milestone in aerodynamics applied to race cars, providing as much 100 mph.

Phil Hill and Hall scored a 1-2 finish that year at Laguna Seca. A year later, the Chaparral 2F, a high-winged coupe built for World Championship Endurance competition, set the fastest lap in five of the season's eight races.

Hall's pursuit of handlingenhancing downforce, which allowed a race car to enter and exit corners faster - while ensur-

arral 2 scored its biggest coup on ing high-speed stability on the straights - reached its zenith in 1970, with the introduction of the radical Chaparral 2J.

> In addition to a thundering Chevrolet big-block V8 engine, it featured a separate motor to drive a pair of fans that exhausted air beneath the car, essentially producing suction-derived downforce.

> The Chaparral 2J's unconventional, fan-driven downforce system was as effective as it was controversial. In four races, it grabbed three pole positions and then it was banned by the race series' sanctioning body.



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Challenger Hellcat on Way to Dealerships

The wait is over.

The highly anticipated new 2015 Dodge Challenger SRT Hell-cat started shipping to Dodge dealerships across the United States in early November, said Chrysler's Design & Motorsports spokesman Dan Reid.

Dodge and SRT received more than 4,500 orders for the new 2015 Dodge Challenger SRT Hellcat in just the first five days after orders opened in September.

Those 707-horsepower muscle cars are now leaving the Brampton (Ont.) Assembly plant where they were built and making their way to Dodge customers across the country.

"The introduction of the new 2015 Dodge Challenger SRT Hell-cat has ignited the general market's interest in the muscle car segment," said Tim Kuniskis, CEO of Dodge and SRT brands. "The reaction from our customers and the general public has been beyond even our positive expectations, and we will work to build a Challenger Hell-cat for every customer who wants one."

The 2015 Dodge Challenger SRT Hellcat is the fastest muscle car ever with a National Hot Rod Association-certified ¼-mile elapsed time of 11.2 seconds at 125 miles per hour (mph) with stock Pirelli P275/40ZR20 P Zero tires. With drag radials, the ¼-mile run dropped to just 10.8 seconds at 126 mph.

Reid said the Hellcat name comes from the Navy fighter plane that flew during World War

"It's something that the powertrain guys have been doing lately – naming vehicles in development after fighter planes," Reid said.

"Then the marketing people heard the name and it took off from there.

"It's been a very successful vehicle that has gotten us a lot of positive press attention. In the first few days it was available, we received about 4,500 orders. It will be hitting the dealerships in December."

The fastest muscle car ever is also the most powerful muscle car ever, thanks to the Challenger SRT's Hemi Hellcat, Reid said, which delivers an unprecedented 707 horsepower and 650 lb.-ft. of torque. The 6.2-liter V8 is also the first factory-built supercharged Hemi.

Equipped with Chrysler's segment-exclusive TorqueFlite eight-speed automatic transmission, Reid said, the new Challenger SRT Hellcat has earned an EPA highway fuel-economy rating of 22 mpg. The Challenger SRT Hellcat with the new-for-2015 six-speed manual transmission earns an EPA highway rating of 21 mpg.

In addition to the horsepower, the new 2015 Dodge Challenger SRT Hellcat has been redesigned and totally reengineered, Reid



2015 Dodge Challenger SRT Hellcat

Ford Recalls 2004-05 Ranger Pickups with Takata Air Bags

DETROIT (AP) – The death of a pregnant Malaysian woman in a car crash involving a faulty air bag has led to another U.S. recall, as the auto industry struggles with a widening problem across the globe.

Ford Motor Co. agreed to recall more 2004 and 2005 Ranger small pickup trucks after the crash in Malaysia because their air bags are similar to the one that caused the woman's death, the National Highway Traffic Safety Administration said Nov. 14

More than 12 million vehicles have been recalled worldwide because of a potentially deadly problem with air bag inflators made by Japanese auto parts supplier Takata Corp.

At least five deaths and multiple injuries have been linked to the problem, which occurs when air bags inflate with too much force and blow apart metal canisters, sending shrapnel into the passenger compartment.

After the July 27 crash that killed the Malaysian woman and her unborn baby, NHTSA began looking into air bag inflators made at a now-closed Takata factory in LaGrange, Ga., south of Atlanta.

Takata told the agency the plant made the single-stage inflator that went into the woman's 2003 Honda City small car. It was not used in any U.S. vehicles, according to a NHTSA memo released last week.

But Takata said some Rangers got a similar inflator. In discussions with NHTSA, Ford agreed to recall the pickups to replace the driver's air bags. Complicating matters, many of the same pickups already were under recall for the passenger air bags made by Takata. The Rangers are the only U.S. vehicle with inflators similar to those used by Honda in its City model, the agency said.

It was unclear how many Rangers are covered by the additional recall, but NHTSA said about 25,000 still are in use in the U.S. A Ford spokeswoman said she was not aware of any air bag incidents involving Rangers.

The pickups are among 26,000

vehicles that Ford added to its list of recalls for the air bag problem, bringing its total to about 85,000.

NHTSA said it is investigating Takata air bags that are more than a decade old, regardless of where they were manufactured. The company also has air bag plants in Mexico and Washington state.

In addition to the NHTSA investigation, Takata is being probed by the U.S. Attorney's Office in Manhattan and a federal grand jury in New York. Company executives are also scheduled to appear before a Senate committee on Nov. 13.

All of the recalled Ford vehicles are in high-humidity areas of Florida, Hawaii, Puerto Rico or the U.S. Virgin Islands. Takata has said airborne moisture can cause the air bag propellant, ammonium nitrate, to burn too fast, shattering the metal canisters.

Other Ford vehicles involved include 2005 through 2008 Mustangs, 2005 and 2006 Ford GTs. Spokeswoman Kelli Felker said the company is investigating one complaint to NHTSA of an injured Mustang driver.

In an Oct. 30 complaint, the owner of a 2007 Mustang wrote that in August, the car crashed into the rear of another vehicle at 35 mph. "The air bag deployed with abrupt force and a metal fragment dislodged, causing injury to the driver's leg, which required medical attention," the complaint said. Car owners who file complaints with NHTSA are not identified.

The series of recalls worldwide involve 10 automakers – including Toyota Motor Corp., Nissan Motor Co. and General Motors Co. – in various nations such as Japan, China and European countries. About 8 million of the recalls are in the United States.

There are about 37.8 million vehicles with Takata air bags on U.S. roads, according to NHTSA documents.

Takata CEO Shigehisa Takada apologized for the problems with the air bags in a statement issued Nov. 13, saying his company was determined to prevent further problems.



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'These Moves Fortify GM's Leadership Team' - Barra

CONTINUED FROM PAGE 1

said Barra, GM has reshaped its global quality strategy, how the company interacts with its customers through call centers and social media, as well as the use of predictive tools and modeling.

Aligning all customer-facing centers under single leadership will enable more consistent customer care and deliver improved efficiency, the GM CEO said.

Grace Lieblein, currently vice president, Global Purchasing and Supply Chain, is named vice president, Global Quality, and will report to Barra.

Under Lieblein's leadership, GM has set the foundation for more productive supplier relations, based on greater collaboration, dedication to quality fundamentals and a focus on mutual success, which has been recognized by the supplier community as a model for the industry. Lieblein, Barra said, has extensive experience in manufacturing, vehicle engineering, purchasing and global markets.

With her diverse technical expertise, steeped with a customer-facing perspective, Lieblein is well-positioned to accelerate GM's progress in vehicle quality," Barra said.

Steve Kiefer, currently vice president, Global Powertrain, is named vice president, Global Purchasing and Supply Chain. Kiefer will report to Mark Reuss, executive vice president, Global Product Development, Purchasing and Supply Chain.

He will continue to build on the progress Lieblein established with suppliers, Barra said. Kiefer's extensive leadership experience in the supplier community and strong technical expertise will be key as GM continues its efforts to reshape how the company and its suppliers work together, partner for mutual success, and deliver greater value to customers.

Dan Nicholson, currently executive director of Powertrain Embedded Controls, is promoted to Global Powertrain vice president, assuming Kiefer's responsibility and reporting to Mark Reuss. Nicholson's broad-range global experience in quality, powertrain development, engine calibration, and controller and software integration are especially valuable as embedded controls and software increasingly are being applied to sophisticated engine and drivetrain systems. A replacement for Nicholson's current role will be named

Mary Chan, vice president, Global Connected Consumer, has elected to leave GM to pursue other opportunities, but will remain with the company through the first quarter of 2015 to assist Ken Morris, and grew up knowwith the transition and the 4G ing many of the great labor lead-LTE production launch in China and Europe.

Under Chan's leadership, GM has made great strides in vehicle connectivity, with the largest in-



Steve Kiefer



Dan Nicholson

vehicle 4G LTE deployment to date in the industry, Barra said. GM's 4G LTE offer was recognized by Popular Science Magazine with its "Best of What's New 2014" award.

"Strong brands, top quality and an unsurpassed overall customer experience are essential ingredients to winning in the ever-competitive auto business. And that's what we intend to deliver to our customers," Barra

"As vehicles and mobile technology become increasingly integrated, GM's focus is on delivering an exceptional fully connected vehicle."

As the company pursues its efforts to become the most valued auto company in the industry, Barra said, these moves fortify GM's senior leadership team, adding further diversity in perspective and experiences.

All of the moves are effective immediately.

Labor Historian Comes to Warren

Bob Morris, author of "Built in Detroit: A Story of the UAW, a Company, and a Gangster" is coming to the Civic Center branch of the Warren Public Library on Thursday, Dec. 11, at 6

Librarian Kathleen Faba said Morris is the son of labor leader ers of Michigan and will talk about the history of the labor movement in the state.

Space is limited. To reserve a spot, call 586-574-4564.



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PEP QUOTES BY PHONE OR EMAIL:

Industry Needs to Rethink Ways Cars Are Made - Ford

CONTINUED FROM PAGE 1

traffic jam ever: an 11-day, 150kilometer tie-up. And even while cars are getting cleaner, a traffic jam with no emissions still is a traffic jam."

The solution to this problem, Ford said, isn't more of the same.

The industry is building smart cars, Ford said, and these vehicles will get smarter.

But there's also a need to build smart roads, smart parking, smart public transportation systems and more - and there is a need to connect them all using wireless telecommunications.

"Why?" Ford asked. "Because when you link the vehicle to the world around it, you begin to attack global gridlock.

"To keep traffic moving, we need an integrated transportation network that uses real-time data to optimize personal mobility on a massive scale."

The era of the connected car has already begun, Ford said. Vehicles now come with hi-speed wireless connections that will, in the future, enable vehicles to communicate with other cars and with infrastructure built into roads.

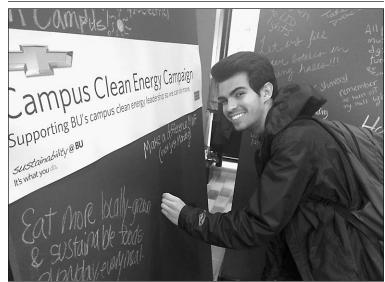
"These are all problems that we are tackling today. But we also need to look to the problems of the future," Ford said.

"Many developed nations are facing an issue called the 'gray dawn,' with aging populations and the average age increasing. It has significant implications in several areas, such as the resources required to provide care and to get the elderly to where they need to be. Elderly people feel the loss of independence when they can no longer drive."

But what if autonomous driving could extend the driving life of the elderly? Ford asked. What if this technology, he said, could enable them to maintain the personal freedom that comes from

"Imagine how that could improve their quality of life, and reduce some of the dependency on caregivers," Ford said.

technology evolves, we must push ourselves to look for new opportunities to solve bigger issues. This is the next challenge before us.'



College students suggest ways to reduce carbon footprints.

Chevrolet Supports Colleges In Climate Change Battle

Call it giving the old college

Chevrolet is purchasing carbon credits worth up to \$5 million to help 11 colleges across the U.S. pay for energy efficiency-

based carbon reductions. And, Chevy is retiring the carbon credits to benefit the climate instead of using them to offset the emissions of Chevrolet vehicles or operations.

As part of its initiative to reduce 8 million metric tons of carbon from being emitted – the equivalent to the annual carbon reduction benefit of a mature forest the size of Yellowstone -Chevrolet during the last four years has supported U.S. communities in aggressively reducing their carbon footprint, said GM spokesperson Sharon Basel.

Campuses for the first time can access funding from the U.S. carbon market to fuel their largescale energy efficiency efforts toward even greater progress, effectively using carbon performance methodologies Chevrolet developed to make money via their greenhouse gas reductions that result from energy efficiency, Basel said.

"As we kept inching closer to our carbon-reduction goal, we wanted to support colleges going above and beyond to help combat climate change, and open the door for other companies to contribute to such campus clean energy projects," said Greg Martin, GM executive director of Sustain-

"This helps ensure campuses can continue to receive funding from companies' carbon purchases long after Chevrolet completes its carbon-reduction initiative next year."

Before now, cash-strapped campuses struggled to invest in efficient building equipment or renewable energy systems to reduce their carbon load on the atmosphere, Basel said.

The effort by GM helps colleges save money on utility bills and engage students on how they too can help lead a clean energy future. Basel said.

Student leaders from Southern Oregon University spearheaded the securing of Chevy funding and are running an energy conservation campaign to engage students in the university's conservation efforts.

Boston University student interns helped lead their campus through its certification process, and convened a broader social media conversation on the importance of clean energy.

"With its groundbreaking carbon-reduction initiative, Chevy has built a clean energy legacy by showing how the voluntary carbon market can be leveraged to help finance lasting change," said Verified Carbon Standard CEO David Antonioli.

"It's now incumbent on more forward-thinking companies to continue this important work to ensure that the campus clean energy program will one day reach every student and every campus."

Industry Leaders Seek Drivers' Privacy

WASHINGTON (AP) - Nineteen way for vehicle-to-vehicle comautomakers accounting for most of the passenger cars and trucks sold in the U.S. have signed onto a set of principles they say will protect motorists' privacy in an era when computerized cars pass along more information about their drivers than many motorists realize.

The principles were delivered in a letter Nov. 13 to the Federal Trade Commission, which has the authority to force corporations to live up to their promises to consumers.

Industry officials say they want to assure their customers that the information that their cars stream back to automakers or that is downloaded from the vehicle's computers won't be handed over to authorities without a court order, sold to insurance companies or used to bombard them with ads for pizza parlors, gas stations or other businesses they drive past, without their permission.

The principles also commit automakers to "implement reasonable measures" to protect information from unauthorized access.

Many recent-model cars and light trucks have GPS and mobile communications technology integrated into the vehicle's computers and navigation systems. Information on where drivers have been and where they're going is continually sent to manufacturers when the systems are in use.

Consumers benefit from alerts sent by automakers about traffic conditions and concierge services that are able to unlock car doors and route drivers around the path of a storm.

The National Highway Traffic Safety Administration is also working with automakers on regulations that will clear the

munications. The technology uses a radio signal to continually transmit a vehicle's position, heading, speed and other information.

Similarly equipped cars and trucks would receive the same information, and their computers would alert drivers to an impending collision.

"As modern cars not only share the road but will in the nottoo-distant future communicate with one another, vigilance over the privacy of our customers and the security of vehicle systems is an imperative," said John Bozzella, president of Global Automakers, an industry trade associa-

The automakers' principles leave open the possibility of deals with advertisers who want to target motorists based on their location and other personal data, but only if customers agree ahead of time that they want to receive such information, industry officials said in a briefing with reporters.

"Google may want to become an automaker, but we don't want to become Google," said Mitch Bainwol, president of the Alliance of Automobile Manufactur-

The possibility of ads popping up on the computer screens in cars while drivers are behind the wheel worries some safety advo-

"There is going to be a huge amount of metadata that companies would like to mine to send advertisements to you in your vehicle," said Henry Jasny of Advocates for Highway and Auto Safety. "We don't want pop-up ads to become a distraction.

Sen. Edward Markey, D-Mass., called the principles "an important first step.

"I will call for clear rules – not

voluntary commitments - to ensure the privacy and safety of American drivers is protected," Markey said in a statement.

Industry officials say they oppose federal legislation to require privacy protections. But Marc Rotenberg, executive director of the Electronic Privacy Information Center, said legislation is needed to ensure automakers don't back off the principles when they become inconvenient

"You just don't want your car spying on you," he said. "That's the practical consequence of a lot of the new technologies that are being built into cars.'

Chinese Firm to Open Facility in **Madison Heights**

LANSING, Mich. (AP) - A Chinese automaker subsidiary is establishing a Detroit-area headquarters that's expected to generate \$15 million in investments.

The Michigan Economic Development Corporation said Nov. 19 that the new STEC USA facility in Madison Heights will add 176

The Michigan Business Development Program has awarded the project a \$700,000 performance-based grant.

STEC USA plans to establish a headquarters and manufacturing operations in an existing facility that will include research and development, warehousing and assembly.

STEC USA is a subsidiary of Shanghai Automotive Industry Corporation. The STEC USA Shanghai-based parent company produces power window regulators, electronic horns and other electronic parts for China's auto





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by Jim Stickford

Raytheon Professional Servic-(RPS), a subsidiary of Raytheon Company in partnership with General Motors, last week received a 2014 Automotive Training Managers Council

(ATMC) National Excellence in Training Award.

award recognizes The Raytheon for its innovative approach in transforming the training solutions of GM to ensure their dealership technicians are thoroughly trained to fix increasingly complex vehicles right the first time and deliver an exemplary customer service experience.

"The ATMC National Excellence in Training Award is a coveted award because it is judged and decided by our peers in the automotive training industry," said Dave Letts, RPS vice presi-

"Over the last 15 years, the RPS team, in partnership with GM's training leaders, has turned GM's technical training program into a model for other global organizations by aligning it to the company's key business challenges and continually adapting and evolving it to their needs."

In the United States alone, GM has more than 4,300 dealerships with approximately 29,000 technicians, said Raytheon spokesperson Nathalie Bloomfield.

Every year, she said, these technicians undergo additional training to ensure their technical skills and overall knowledge keep pace with the increasing number of sophisticated technologies applied across all vehicle systems in new GM models.

"GM is dedicated to seeking innovative ways to design our cars and adopt the latest technology,' said Mark Miller, director of GM Dealer Service and Warranty Op-

"As our vehicles become more technologically advanced, ensuring that our technical training program is best-in-class is critical to our success."

In 2014, RPS introduced more innovative delivery methods to make training for GM technicians accessible anytime, anywhere, speed-toincrease and competency.

Innovations included: Per-Support Objects formance learning (post-training GM TechTube minders); (YouTube-like videos for GM technicians); and immersive

Japanese Execs Nailed for Fixing Parts Prices, Bids

COVINGTON, Ky. (AP) - Arrest warrants have been issued for a pair of Japanese automotive parts executives charged in northern Kentucky with conspiring to fix prices and rig bids of bearings.

A grand jury in Covington handed up the charges against Hiroya Hirose, an executive at NSK Ltd., and Masakazu Iwami, an executive at Jtekt Corp.

The U.S. Justice Department announced Nov. 14 that the pair worked to fix the prices of bearings sold to Toyota Motor Corp. and Toyota Motor Engineering & Manufacturing North America Inc. in the United States and elsewhere from 2001 and through July 2011.

Hirose was a group sales manager in NSK's Mid-Japan Automotive Department Office. Iwami was a section manager, then general manager, in Jtekt's Toyota Branch office.

Prosecutors say the charges are part of an ongoing investigation.

Raytheon Awarded for GM Technician Work Boot Camps on specific subjects.

The ATMC annually recognizes outstanding or innovative training programs designed for the automotive and truck industry. which makes receiving the award so satisfying, Bloomfield

Developing training programs has become even more important than ever, Bloomfield said, because cars have changed so much in the past few years.

And with so many new models coming out with new technology, she said, it's vital that dealership technicians are kept up to date with the best repair techniques.

'The speed of getting information out is important," Bloomfield said.

"So we've had to develop new ways of sharing information.

"Today, people want knowl-

edge available to them 24/7.

"So we have had to come up with ways to educate in a way that information is available when technicians want it.

"And we have ways to make it available how they want it.

With today's smart phones and tablets, technicians can now receive information direct-

Bloomfield said that when people hear Raytheon, they usually think defense industry, but RPS has been a training company for many years.

"We're one of the tops in our field," Bloomfield said.

'So it may sound overly confident to say this, but we weren't surprised to receive this award. We were proud to get it because it comes from industry experts, and that means a

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