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**Low-Volume Production Product Lifecycle Management
2005 Management Briefing Seminars
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Thanks, Brett. I had the privilege of speaking here at the Management Briefing Seminars two years ago. It's true what they say: Time flies when you're having fun.

I've heard people say that Bob Lutz has the best job at General Motors, but I beg to differ. I get to run the GM Performance Division, which we created about three years ago to help build a new generation of GM performance vehicles. So I get to spend a lot of time in some pretty great cars and in some pretty cool places. [Video clip of MR at Nürburgring] When I say this is a fast-paced job, I mean it – literally.

Later this month, two million car enthusiasts from across the U.S. and abroad will fill 16 miles of Woodward Avenue in suburban Detroit for the annual Dream Cruise.

We'll see plenty of vintage GM performance cars like Corvettes, the Chevelle SS, John DeLorean's GTOs, Camaros, Bunkie Knudsen's Bonneville, some great Cadillacs, and probably even a few of the Buick Grand Nationals that my father had a hand in.

While these heritage vehicles are wonderful to look at and a blast to drive, the success of the GM Performance Division will be measured by our ability to create a new generation of performance and specialty vehicles. These cars and trucks must succeed in a very different business and regulatory environment than that of the 1960s and '70s. And they will have to appeal to a whole new generation of customers, many of whom were but a twinkle in their parents' eyes back when GTOs and Chevelle SSs ruled Woodward Avenue.

There are 800 people in my organization working on production car and truck programs, as well as our high-performance vehicle and halo vehicle programs. Our work encompasses virtually every segment and seven of our brands.

As fun as our work is, however, we're expected to pay our own way to the party: In 2004, the GM Performance Division sold nearly a quarter of a million units at a substantial profit

We will truly know we have succeeded when the fantastic vehicles we're building today – vehicles like the Pontiac Solstice, Saturn Sky, the Cadillac V-Series, Saturn Red Line series, the new Chevy SS models and others – take to the streets for the 2000-TWENTY-five Dream Cruise.

Today I'm going to talk about what I believe are the key enablers of our success:

- * First, our unique expertise in quickly bringing low-volume vehicles such as the Solstice and Sky to market;

- * Second, our commitment to restoring GM's rich performance heritage and validating it through some exciting racing programs;

- * And lastly, our ability to build credible, low-volume performance variants from high-volume platforms, such as the Chevy Cobalt and TrailBlazer, Saturn Vue and Ion, Pontiac Grand Prix, and Cadillac CTS, STS and XLR as well as on the full-size truck program, with the very successful Cadillac Escalade ESV Platinum.

Almost every carmaker builds performance vehicles. What is unique about GM is an organizational structure that emphasizes integration. The GM Performance Division isn't a separate, skunkworks-type operation like the performance teams at some other companies. It is fully integrated into our global vehicle development organization, the same organization that develops our core vehicles.

The Pontiac Solstice roadster, which we're shipping to dealers this week, is a result of that integration. One of the most-anticipated new car launches I've witnessed during my GM career, it is a textbook example of how a vehicle designed from the start to be produced in small quantities can profitably bring an element of 'cool' to a brand and serve as its halo.

Like the annual summer solstice that represents a turning point in the seasons, Solstice represents a turning point for Pontiac and in some respects, GM, insofar as the way we do things.

Tomorrow, my colleague Jill Lajdziak, General Manager of Saturn, will talk about how the Sky – also based on GM's new rear-wheel drive compact performance architecture – is already revving up the excitement at that division. Opel and Vauxhall will get a similar roadster variant based on the same components set which will be exported for sale in Europe. This ability to create a trio of compelling new roadsters at very affordable price points is the payoff for a lot of hard work by GM's global vehicle development organization.

At GM, we have a technical, precise term for a business process we use when we need to get something done quickly and efficiently. It's called "GoFast."

I can tell you that with Solstice, we definitely went fast.

At the beginning, Solstice went from idea to concept in 14 weeks, the fastest metal running concept car this industry has ever created. To further speed development, the same team that designed the concept also designed the production architecture for the Solstice, Sky and Opel/Vauxhall variants.

Lori Queen and her small-car team realized that if GM wanted to profitably build a low-volume, low-investment niche vehicle, we had to have an all-new platform. This gets

away from the traditional high volume tooling strategy and enables profitable low volume vehicles.

We went from math straight to production tooling, eliminating costly and time-consuming engineering and design prototypes. The resulting architecture has a rigid chassis built from hydroformed steel frame rails and stamped steel. It includes high-quality components such as four-wheel independent suspension and four-wheel disc brakes, and is powered by a 177-horsepower version of our race-proven Ecotec four-cylinder engine.

The integration of GM's engineering organization paid off in many ways, large and small. For example, to speed the process of taking Solstice from concept to production, our engineers cleverly used proven, existing components for some interior elements. This reduced cost and time, and helped us hold to a \$20,000 base price.

For example, the HVAC control module was borrowed from the all-new Hummer H3, the seat frames are from the Opel Corsa (with new trim) and some latches and buttons are from the Chevy Corvette. Although the parts come from multiple sources, which further maximizes the cost efficiencies of our global supplier base, the Solstice design neatly integrates the overall appearance so that every component looks like it belongs in the car.

There was no existing GM playbook to use. We had to write it. We think that when you get a chance to drive a Solstice, you will agree that this book has a happy ending.

The creation of production-based performance variants, such as the Cadillac V-Series and Chevy SS models, is another example of the way integrating the performance division pays off for our brands and our customers.

No one knows a product better than the engineers behind it. So part of GM's integration process involves placing program engineering managers on each of the performance product programs. We train them to be Level 3 drivers, capable of driving on Germany's Nürburgring north course. And we set them loose on a whole car very early in their career.

We also assign experts in particular vehicle systems to each of our high-performance programs. That way, they understand what it is like to really push a system – for example, to use a production-type braking system to haul a vehicle down from race track speeds. They can then bring that deeper knowledge back into the mainstream organization.

The goal is to continue to improve our products and to continue to improve the talent inside of GM.

Our director of high-performance vehicles, John Heinricy, plays a dual role as an engineer and a race car driver. John's racing DNA helped him develop the production Cadillac CTS-V and CTS-V race car, two products that have helped restore the luster to the Cadillac brand . . . as well as kick serious butt on the track.

For performance vehicles to have a credible place in our customers' driveways and in their imaginations, they must perform on the track. GM has a rich racing heritage that goes back to the beginning of this company. When your largest-volume division is named for a race car driver, you know it's in your blood.

Many of our Performance Division vehicles already are putting the competition on notice in some important racing programs.

In recent years GM has chosen not to focus solely on the import tuner world. For example, we have set several land speed records at the Bonneville Salt Flats with an American Hot Rod Shop. Using Ecotec crate and performance engines, we have set a range of records using production and purpose-build racing vehicles. Most recently, we posted a very quick 243 mph development run in a Chevy Cobalt SS Supercharged, and we plan to return this summer for an official record run.

We're also going to run Chevy's new HHR at Bonneville this summer.

Additionally, we have four women engineering college interns working on building and racing a 2005 Chevy Cobalt, working with California Street Rods.

This program is a success on several fronts: It shows young, promising engineering talent that GM is not letting up on product development, even during tough times, so it's a recruiting tool. It gives us insight into what young people want to drive. And it also helps us develop an additional California supplier to provide technical support and another connection to the California car culture, in addition to So Cal Speed Shop, whose cars you saw on the previous slides.

We're also partnering with GM Racing on the CTS-V racing program. In our first year of competition, we won our debut race at Sebring in the 2004 Speed World Challenge GT class, and finished the season second in the points. This year, Cadillac is the manufacturers' championship points leader, ahead of both Porsche, Audi and Dodge Viper.

In addition to our professional drivers, our own John Heinricy recently qualified second and finished third in a CTS-V for the Mid-Ohio Speed World Challenge event. His participation in the program is just one more example of how we can transfer what we learn at the track to our performance vehicles and other production cars and trucks.

With the CTS-v program, we've developed the component set for the next generation CTS including brakes, rear differentials, the gearbox and the next gen small block V8.

Another success story is the performance of the Chevy Cobalt SS Supercharged in the Grand-Am Cup Series ST class, where it won its first two races and is the points leader. The Cobalt SS Supercharged was developed by John Heinricy's team in the Performance Division's High Performance Vehicle Operations. It was tested and developed both at

Nürburgring, Germany, and at GM's Milford Proving Grounds on our race track built specifically to assist in the development of performance automobiles.

Results like these and others will continue to help the Performance Division fulfill its mission of re-establishing GM's performance heritage, while allowing us to build and keep this valuable experience in-house as we develop future products.

Production variants of high-volume vehicles provide an important opportunity for GM to strengthen its brands by bringing performance enthusiasts to the brand, and providing a halo for higher-volume models.

We've done this successfully at Cadillac with the V-Series; Saturn with the Red Line series; Chevy with the SS series and with the SSR and HHR; and at Pontiac with the GXP Performance Series.

At Chevy alone, we'll feature an unprecedented lineup of nine SS production vehicles for '06, including SSR, Cobalt SS, Cobalt SS Supercharged, Impala SS, Monte Carlo SS, Silverado SS, TrailBlazer SS, Malibu SS and Malibu Maxx SS.

Even though many of these vehicles sell at a very competitive price, they all receive significant chassis and powertrain performance upgrades. We won't put a 'performance' badge under the hood of a vehicle unless it performs.

Which is why I'm pleased to share the news that the Cadillac STS-V (469 hp) and XLR-V (443 hp), as well as the Chevy TrailBlazer SS, recently posted record times at the North Course of the Nürburgring – under 8.5 minutes around the track. Incidentally, that record was made with a GM driver. More than 15 of our Performance Division employees are trained to drive at the North Course. Talk about a career in the fast lane!

That means the TrailBlazer SS, with its 395-horsepower 6.0L V-8, is faster than the BMW X5, the only other SUV currently being run there. We think it will be a big hit with both the media and our customers. And, one of those first customers is none other than GM Chairman Rick Wagoner.

The '06 model year also marks the return of a V-8 to the Chevy Impala, in the form of an SS model. The V8 is really important to the heritage of the brand and was something many of our customers asked for. The Impala SS features an all-new 5.3L small-block V-8 that features Displacement on Demand technology and produces 303 horsepower. It is truly a vehicle that can perform on the weekends and go back to commuting Monday morning.

The Grand Prix GXP also features a 303-horsepower V-8 and will join the Solstice in restoring some of Pontiac's excitement.

Another important segment is the tuner market. This is an important market and, for a long time, we had a hard time getting this segment to look at our small cars. This is a crowd that you can't simply wish your way into: You have to earn your way in.

Due to the strength of our land speed records and drag racing programs, we think the Cobalt SS Supercharged, with its 205-horsepower Ecotec, is going to take on tuner favorites like the Civic Si, Focus SVT and Dodge Neon SRT as a much better track car. Customers can buy a SS Supercharged directly from the dealer, but they can also buy a base Cobalt coupe and customize it, using the supercharged model as inspiration through our crate motors we have available.

In an upcoming episode of the popular Speed Channel Show "Street Tuner Challenge," the Chevy Cobalt SS Supercharged takes on the Nissan Skyline GTR (535 hp, AWD) and the VW Jetta GTR – not to ruin the big finish, but we're pretty proud!

Customization will play a big role in another small Chevy, the HHR. We think this will be one of the most customized vehicles in the market. HHR will play a big role at this year's SEMA show, with many performance parts available like our supercharged crate motor, thanks to our integration with our Powertrain, Engineering and with our Service Parts Organization.

With so many opportunities to wow our existing customers and bring in new ones, it's no wonder I believe I have the best job at General Motors.

The next few years are going to be as exhilarating as a run around that track at Nürburgring. The GM Performance team is proud and honored to be playing a role in bringing back the performance attributes that have helped make GM great, and to play a part in creating a whole new generation of GM performance vehicles.

Thank you.

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