



# Braking News

Volume 4, Issue 4 / October- December, 2007

## A WORD FROM THE PRESIDENT

It has been a fun-packed summer of car events for Lane Motor Museum. Magic of the Machine on July 28 featured the LARC crushing two Volkswagen micro buses. Greg Coston and I were concerned that the buses would be too high and just get pushed by the LARC instead of being crushed under the wheels. This fear proved to be true as on the first attempt, the buses just slid along the parking lot. David Yando repositioned the buses and Greg gave the LARC a little more speed on the second attempt. This resulted in the buses being crushed under the wheels, and a third attempt flattened the vehicles to about 6" high. Spectators were treated to some souvenir hunting of crushed VW parts after the performance. This year's Magic of the Machine event also featured demonstrations of both propeller-powered vehicles and rides in selected cars throughout the day.

The Museum was honored with a visit from Claude Gueniffey, President of Les amis de l'Helica Society, his wife Annie, and son Thomas. Claude is the world's leading authority on propeller-powered cars. He spent a week here and had the opportunity to drive our two propeller-powered cars. We are hopeful that he can return in the future.

On August 11, the Museum hosted "Three-Wheel Wonders!" We were able to feature rides in many of our three-wheeled cars including the Davis and Messerschmitt. We also gathered ten different three-wheeled cars and showcased these cars in the Museum.

**In This Issue:**  
Rallying the Tatra T-12 "Targa Florio" through Europe.



*Above: Susan Lane with the 1936 Panhard Dynamic X76 at Meadow Brook Concours d'Elegance.*

*Below: Jeff Lane with Mr. Hinner, owner of Ecorra - the company that built the "Targa Florio".*



## A WORD FROM THE CURATOR

Another summer filled with car shows is behind us. Lane Motor Museum continues to showcase unique vehicles across the country, allowing an even greater number of car enthusiasts to enjoy rarely seen automobiles.

Charles Gould holds an annual Microcar Meet in the Boston area. This gathering brings together many obscure microcars on the lawn of the Larz Anderson Auto Museum. For the first time outside the Museum, attendees could view our Peel P50 and Peel Trident together. As National Public Radio had recently aired an episode on microcars in general and Peels in particular, the crowd was delighted with this rare opportunity.

This summer brought our first invitation to the Meadow Brook Concours d'Elegance. Our 1936 Panhard Dynamic X76 was featured in the Pre-War European class. This stunning car embodies the show's mission, "The Art that Moves Us. A Celebration of the Power and Beauty of the Automobile."

As members of the Tatra Register UK, we try to attend this club's annual rally. This event was our opportunity to unveil a recreation of the Tatra T-12 "Targa Florio" racecar. This Czechoslovakian car was driven to an 1100cc class victory by Karl Spomer after completing 3 laps of the grueling 67 mile course in 1925. The driving tour through the beautiful Warwickshire countryside was the perfect setting to "break-in" this amazing racecar.

After rallying three days in wet weather, Jeff and I spent a leisurely week traveling across Europe in a rented car in order to prepare ourselves for the 110 Year Nesselssdorf Rally.



*President continued on page 7*

*Curator continued on page 2*

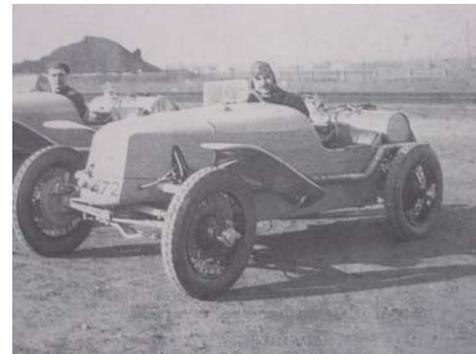
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**Above: Jeff & Susan Lane driving the recreated Tatra T-12 "Targa Florio" through the Warwickshire countryside.**

**Above right: The "Targa Florio" at Burton Dassett County Park, G. B.**

**Right: A photo of the original "Targa Florio" circa 1925.**



### ***A word from the Curator continued...***

This is an event offered every 10 years to highlight cars built in Nesselsdorf, what is now Tatra automobiles. We found ourselves rallying with 100 Tatras from Vienna, through Brno, to Koprivnice in the Czech Republic. The "Day of Tatra" held at the Tatra facility brought together over 200 Tatra cars, trucks, military vehicles, and thousands of people. We were offered a special tour of the Tatra plant guided by Ing. Vitezslav Hinner, owner of Ecorra, who spent nearly 15 years working for Tatra before starting his own restoration business. Mr. Hinner and his colleagues have been instrumental in building such an exact replica of the Targa Florio racecar.

Lane Motor Museum has been a part of the Keeneland Concours d'Elegance since its inception. This year Manager David Yando attended in our absence to show the 1938 Georges Irat, featured with other "Sports Classics Through 1959." Billed as "A Showcase of Thoroughbred Horsepower," this fast-growing concours is well on its way to being a top-rated event. And, it's practically in our own backyard.

The Glenmoor Gathering of Significant Automobiles offered a selection of Alternative Powered vehicles. Our 1938 Citroën Berline 11 Gazogene coalburner was included with other electric, steam, battery, and solar powered vehicles. Several attendees shared stories of seeing cars in Germany after WWII that were converted to run on burning wood.

The last show of our season will be the Hilton Head Concours d'Elegance and Motoring Festival. This is the Museum's first invitation to this show, and we have been invited to display the Peel P50 and Peel Trident in a microcar class. This should be another fun opportunity to educate the public about these orphan micros from the Isle of Man.

I invite you to help us celebrate the 4<sup>th</sup> Anniversary of Lane Motor Museum. On Thursday, October 18 we will showcase 4 special cars that have each been honored with an invitation to participate in prestigious concours this past year.

**Susan Lane  
Curator  
Lane Motor Museum  
[www.lanemotormuseum.org](http://www.lanemotormuseum.org)**

## Delivery Room - New Arrivals at Lane Motor Museum



### 1982 Hobbycar B612

Introduced at the 1992 Paris Motor Show. Great for off-road or on the water. This amphibious vehicle is also equipped with 4-wheel drive. A total of 62 were made in France from 1992-95.



### 1951 Iota 350 Sports

Built by Iota Sports Cars of Britain and possibly the first monocoque sports car. The 500cc rear engine sits in the sleek sheet aluminum shell. Two were built in 1951, only this prototype remains in existence.



### 1966/7 Peel Viking Sport

One of only 24 built by Peel Engineering Company on the Isle of Man. Based on Mini running gear with a fiberglass body. This is one of seven known to exist. It joins a Peel P50 and Peel Trident, already part of our collection.



### 1942 Peugeot VLV

Approximately 350 were built in France during 1942 before Peugeot was forced to turn its plant over to German war production. Powered by an electric motor supplied by four 12-volt batteries. Top speed 20 MPH; range 50 miles.



### 1959 New Map Solyto

Manufactured in France from the early 1950s to 1963. Powered by a 2-stroke engine; 3 speeds and no reverse. The steel body came in a van or camper version. This canvas topped delivery van joins a steel topped camper at Lane Motor Museum.



### 1972 Velorex 435-0

Powered by a Jawa engine and sold to Eastern Bloc countries. Rarer than the 3-wheeled Velorex Oskar, approximately 1,300 of these 4-wheeled vehicles were produced in Czechoslovakia from 1971-73. Manufacturing and design problems rendered it unable to compete with the popular Trabant.

## Keeneland Concours d'Elegance

There is a world-class concours right in our own backyard, and you may not even know it. Lexington, KY has long been renowned among horse breeders, but the city is quickly becoming known also for its Keeneland Concours d'Elegance, a multi-day event attracting the cream of the automotive crop.

In only its fourth year, this 100 car, invitation-only event attracts significant cars from all over North America, from Brass Era cars such as the 1903 Marr and 1911 Ann Arbor to the Future Classics like the Ford GT and the Maserati GranSport Spyder. Arranged on the expansive and shaded lawn in front of the Keeneland Barn and Library, each class was well displayed in large, outwardly facing circles. With lots of room between cars and groups, there was no feeling of being overcrowded as at so many shows. (This also favors the photographer!)



Although the Concours itself lasts only for one day, the supporting events make for a nice long weekend for the participants. Thursday's Bourbon Tour, Friday's Black Tie Gala, Saturday's Concours and evening Hanger Bash all offer opportunities to meet other enthusiasts and have a fun time in

varied surroundings doing so. Sunday's Tour d'Elegance sends the cars on a 70 mile Kentucky tour, with lunch at the Governor's Mansion and beautiful Bluegrass scenery along the way.

**Above: A crowd gathers around Lane Motor Museum's 1938 Georges Irat - on display at Keeneland Concours d'Elegance.**



**Above: 1968 Howmet Hornet Turbine - one of David's favorites at Keeneland.**

Benefiting the Kentucky Children's Hospital and Public Radio station WUKY, Keeneland has already exceeded their goals every year – in 2006, they were able to donate \$50,000. Substantial underwriting by such major sponsors as CITI Smith Barney, Porsche, Lamborghini, Audi, AAA South, and Keeneland Racetrack certainly goes a long way to meeting those goals, but the organizers also actively pursue local car clubs to be part of the show. All around the perimeter of the Concours grounds are areas set aside for Porsche, BMW, Mustang, and Ferrari Clubs, among many others. Each Club is given a donation jar and asked to fill it, with the proceeds tallied and a representative "horse" on a "racetrack" shows how each Club's donations build throughout the day. This year over \$6,000 was raised just by the Club Paddock Challenge alone!

Lane Motor Museum's 1938 Georges Irat Roadster was in the Sports Classics to 1959 class, along with several other noteworthy entries. The class-winning 1950 Healey Silverstone was stunning, as was my favorite of the group, a Seafoam green 1954 Triumph TR-2. With only 100 cars and over 6 hours to see them, you'd think there would be plenty of time to see and do everything. Alas, I am certain that I missed many cars, because I kept going back to see cars like the 1968 Howmet Hornet Turbine, the 1972 McLaren M8F, and the 1906 Auto Car Runabout with its drip-drip-drip carburetion. The featured marque, Jaguar, offered plenty to see, as did walking through the Club and spectator areas – when's the last time you saw a Ferrari F40, an F50, a Porsche Carrera, and a Maserati Khamsin all in the same parking lot?

**David Yando  
Museum Manager**

## Down History Lane

I will always remember my Mom telling me she was going to "tan my hide" for doing something wrong and of course I knew that meant a good ole spanking was at hand and that she meant serious business! What I didn't know back then was what "tanning my hide" actually meant, nor did I know that the tanning of hides produces leather which is a serious business and is one of the oldest products of world commerce and trade with an origin dating back to the cave dwellers. I'm sure glad she didn't actually tan my hide because I would have to be dead in order to be tanned!

Produced by man due to necessity, leather is an early environmental management example of how Man first learned to use and recycle; utilizing all the waste products from the animals they killed to eat, or had to kill in order to keep from being eaten themselves. Man found uses for leather as shelter, clothing, and also as what could be considered the very first form of rapid transit, the shoe. Shoes allowed man to wander further into the world and brought about the beginnings of our civilization.

**Down History Lane continued on next page...**

The whole world needed leather, which today is a luxury item in automobiles, but back then it was *the* standard in transportation because all you had to go anywhere in were your shoes and clothes.

Of course as time went on, humanity desired more mobility so the horse was domesticated and leather was used for the reins, bridles, and saddles for the horse. Later, leather would be used as gasket material, fan belts, seating surfaces, and more in all forms of transportation. As the automobile industry grew out of its infancy, the carriage business began to slow down and the use of leather shifted to car interiors which provided the leather industry with another vehicle to outfit - continuing its legacy as one of the world's oldest products.

Leather is one of the few ancient products that have continually been fashioned into a form that has benefited the transportation of humanity along with wood, glass, metal, and rubber. All of these products have played a role in the advancement of civilization and commerce. Although the procedure of tanning leather continues and thrives, the application and use of leather in vehicles has become less common due to the popularity of synthetics, fabrics, and plastics. Leather continues to cruise down history lane with no signs of stopping.

**Jimmy Carter**  
**Gift Shop Manager**

### Take a brake or two...

Working on old cars sometimes opens up new perspectives to the sacred cow of progress, especially working on those from the oddball side of the road, and we have quite a few of that kind here in the Museum. They often feature things that big manufacturers nowadays want to sell you as big news.

Like the Hotchkiss-Gregoire: cast aluminum unibody, independent suspension on all four wheels, full aluminum engine, front wheel drive and an air drag coefficient of 0.26, better than any car in production at the moment, all this made in 1951. And you think: Audi space frame, eat your heart out! Or the Citroën Gazogène, a CV11 Traction Avant from 1938 with coal gas generator, which heats up (not burns) coal to produce methane gas as an alternative fuel to propel the car. This method was utilized in World War II, when fossil fuel was scarce. And which today is very en vogue again in biogas power plants, only that they use wood chips instead of coal.



**Above: 1951 Hotchkiss-Gregoire.**



**Above: 1917 Harley Davidson J engine that will power a replica Leyat Helica.**

But when one of these mechanical wonders rolls into the workshop you soon realize, no matter how innovative a car is, here in the real world brake jobs are always dirty jobs. Wheel cylinders seize on classic cars like on every ordinary vehicle and brake fluid is always nasty when it's dripping from leaking brake lines or rusted reservoirs. I can tell that because the Gregoire, the Citroën Gazogène, and also the amazing Tatra T-603 all had issues in the stopping department. This shed a light on the other side of oddball engineering, where at first glance clear and easy tasks like taking off brake drums become major problems, because it's absolutely not apparent how in the world they come off. Manuals are either not on hand, or miss exactly the page with the exploded view of the hub assembly. And sure enough I didn't want to break stuff like the rare and fragile drums of a Gregoire. So I surfed the all knowing Internet for a small hint in shape of a drawing or photo or a telephone number of someone who knows. But soon enough I lit up the good old torch and grabbed a big puller and even bigger wrench to yank that stubborn drum off it's taper.

When all that grimy mess became too much, I tinkered with the 1917 Harley Davidson J engine, that soon will power the replica of a Leyat Helica. The vintage V2 came as an incomplete basket case, with parts from several different engines. Disassembling and research for parts became an archeological excursion into American mechanical history, but by December the engine hopefully will be ready. Another distraction from brake dust and frozen adjusters was the Peel Trident, which got a new shifter assembly and more precise swing arm bearings to tame the beast's rather non-existing straight-line stability.

**Calendar of Events**  
**October 2007 through December 2007**

**Exhibit: Hold Your Horses: The History of the Deux Chevaux**

**Dates: Now through October 29, 2007**

Featuring France's most popular car - the Citroën 2CV. View various 2CV chassis from a stock 1954 Ripple Bonnet 2CV, a 2-engine Sahara, a rare Hoffmann convertible, up to a present day 2CV chassis based Burton.

**Exhibit: Nissan Z Cars Exhibit**

**Dates: October 11 through July, 2008**

Explore Nissan's revolutionary rise in the sports car market from the 1969 240Z to the 25<sup>th</sup> Anniversary 300ZX. Included is the 1974 260Z owned by Mr. Yutaka Katayama, President of Nissan Motors North America and known as "The Father of the Z Car." Nissan Z Cars are part of the Nissan North America Heritage Collection.

**Event: 4<sup>th</sup> Anniversary of Lane Motor Museum**

**Date: Thursday, October 18, 2007**

Help us celebrate the 4<sup>th</sup> Anniversary of the Museum as we feature 4 concours Lane Motor Museum vehicles!

**Event: Free Day for Veterans and Active Military**

**Date: Sunday, November 11, 2007**

All veterans and active military get in free on Veterans Day! Don't miss our display of military vehicles representing the U.S., Austria, Czechoslovakia, Germany, Switzerland, and the U.S.S.R.

**Event: Day After Thanksgiving**

**Date: Friday, November 23, 2007**

Join us for special tours and vintage vehicle rides (vehicle rides for adults only).

**Event: Member Holiday Reception**

**Date: Will take place in December. Date and time: TBD.**

Join us for a fun-filled day celebrating our members.

**Event: Toys For Tots "Drive" III - Help us fill up a military truck!**

**Friday, November 23 through Thursday, December 13, 2007**

Bring in an unwrapped, new toy and receive one free adult admission pass good through the end of the year. This is the third year that Lane Motor Museum will be involved with the U.S. Marine Corps Toys For Tots foundation.

*The Great American Race made an overnight stop at Lane Motor Museum on Monday, July 2nd. We welcomed over 70 vintage vehicles on their way to Anaheim, CA. and approximately 1,000 people were on hand to welcome these vehicles to Nashville.*

*Thanks to one of our volunteers, David Applebaum, for capturing these great shots of the event!*



Join us for the  
4th Anniversary of  
Lane Motor Museum  
on Thursday, October 18, 2007 as we  
celebrate 4 concours LMM cars!



*Above: 1938 Citroën Berline 11 Gazogene - part of the LMM 4th Anniversary 4 concours cars display.*

*Below: 1946 Hewson Rocket - will also be featured on October 18, 2007.*



**Lane Motor Museum is proud to be a member of NAAM (National Association of Automobile Museums).**

**We look forward to hosting the 2008 NAAM/SAH (Society of Automotive Historians) Conference, April 2 - April 5, 2008 in Nashville!**

**Additional information will be available soon!**



## Owner's Manual

Have you read the owner's manual cover to cover for your daily driver? Probably not, and I can't blame you. They are dreadfully boring. My wife's latest car and the newest car we have owned (2000 model year) has a manual that checks in at 196 pages. The first eight pages are disclaimers and safety warnings, things that really make for a page turner. All general operations are covered, even mundane things like refueling. However, before delving into the intricacies of twisting the fuel cap to remove and inserting a fuel nozzle attached to a working fuel pump, there is a warning advising you to turn off the engine. And after the pertinent information is passed along it is followed by not another warning but three more warnings. I never considered refueling to be terribly dangerous but maybe I should take out more life insurance because I do it quite often.

"Judging by the car you have chosen, you are a motorist of a special breed, and you are probably no novice when it comes to automobiles." Although it could have been written by a fortune cookie scribe, it is actually the opening line to the owner's manual for the Porsche 911. Flattery will get you everywhere and praise like this certainly entices one to read on looking for more atta-boys. I know it makes me feel better every time I drive the car, but then again maybe the car is just that good. Unfortunately the truth is the rest of the manual is informative technically, but is a boring read.

Some manuals get really technical, way too much so for the average owner. Take for example the 85 page jewel from Alfa Romeo for the 1977 Alfetta. I love the details but I wonder how many owners would want to check the timing of their injection pump or even know that the car has an injection pump. But if they did, this great little manual covers it with helpful illustrations. For the real "Do-It-Yourself" owner, the three step process for retorquing the cylinder head nuts after reconditioning the head is covered. That is impressive, as is the 6 page engine diagnostic chart. But the best feature of this manual is a 13" x 19" foldout wiring diagram at the back of the manual. You'll need a magnifying glass and a straightedge to follow all the tiny lines, but at least the information is there. Maybe Alfa realized the electrics might be a problem (and they have been) so they tried to help exorcise those minor electrical gremlins.

I wish there were owner's manuals for all the museum's cars. They would come in useful when a car starts acting strange. Is the engine supposed to turn itself off at a stop? Normally the answer would be an emphatic "No!" followed by a visit to Master Restorer Greg for help. But in the case of the Honda Insight the manual advises it is perfectly normal for a given a set of criteria. This odd behavior is maximizing fuel economy and is officially known as "Auto Idle Stop." The rest of the 260 pages are filled with dire warnings of how you will be killed by airbags or electrocuted by the high voltage circuit that makes the car a hybrid and helps deliver that fabulous fuel economy.

My favorite owner's manual, and I have read a lot, is the thin, spiral-bound, color printed manual for the NSU Prinz 4. It is a treat. The Germans must have hired an English marketing firm to write the manual. Hyperbole is normally reserved for just selling, but in this manual, it is used to help you cope with the fact you bought an inexpensive car. "A car door is much more than a steel sheet with a lock in it. As you can see, it is a precision-made mechanism in itself." If you have driven an NSU Prinz I doubt you would consider the door a "precision-made mechanism," not that it is junk, but the Prinz was a car that was made to compete with the VW Beetle so it was made cheaply. The exaggeration continues with the "ingeniously designed switch" on the dome light. Some genius - it is an on/off switch. "The speedometer contains almost a firework display of coloured lights." How exciting! "Everyone knows that Prinz owners are musical and like to keep in touch with the world outside." That could've read: The big hole in the middle of the dash is for a radio if you can afford it. There is a page devoted to push starting the car, perhaps a necessity. And there are two pages of "practical tips." My favorite is number 9: "Night is friend of lovers," they say. If at night you like to sit and have a smoke, you will find the ashtray (including the one in the back seat) more easily if you have stuck a strip of luminous material on it." Saucy stuff.

Owner's manuals are great resources. They are often dry, boring, and overly cautious but sometimes they do entertain. They contain small nuggets of information that would otherwise elude even the most astute car person. Now where is that manual for the Georges Irat?

**James Green**  
**Automotive Prep Manager**



### ***A word from the President continued...***

As Susan mentioned in her column, the Tatra T-12 Targa Florio replica is finished and we were able to use it for the 110<sup>th</sup> Anniversary of Tatra rally. I want to thank Mr. Hinner and the whole Ecorra organization for doing a great job on the car and the help at the rally. The Aerosled (snowmobile) is the next Tatra project that Ecorra has just about completed. It will be finished and ready for testing this winter and, hopefully, next summer the Aerosled will make its way to the Museum.

**Above: A cylinder head for the LARC -  
weighing over 1,000 pounds!**

**Jeff Lane**  
**President**

## Volunteer Corner

*Each quarter, Lane Motor Museum will introduce you to some of our very special volunteers and/or their own special cars. Our volunteers help out on the Museum floor during the weekends, as well as during special events at the Museum. We couldn't do it without their assistance, expertise, and valuable time!*

**This quarter - Wes Duenkel sent us some great shots of his 1983 Mustang Coupe he is restoring. Wes also sent us this great information about the vehicle.**

"It's an '83 Mustang coupe that I got for free. Originally a 2.8L V6 with automatic transmission, I swapped all the running gear from an '85 Mustang LX 5.0L that I had since college. I like doing road racing and open track events, but the body on the '85 had a very rough life before I bought it, so it was easier to build a "serious" car out of a straighter body than it was to fix the old one.



It features a 350-ish horsepower carbureted 302 with all the basic bolt-on goodies and a close-ratio five-speed transmission. The front suspension is road-race spec components with a tubular K-member and coil-over struts. I designed carbon-fiber front fenders for it, since the front is 4" wider and the wheelbase is altered (further forward) to improve weight distribution by a few percentage points (those are not pictured). Mustangs of this vintage suffered from marginal braking systems, so I installed upgraded parts from later-model Mustangs. I designed

and installed the roll cage, and the exhaust runs through the interior of the car to improve ground clearance. Vroom!

It is currently being painted. It will be silver on the bottom half of the car, and dark gray on top. Since I don't have anything with which to tow it, its street legal. I look forward to picking up my son at school with it!"

**Rich Ruth - another volunteer - sent us this shot and great information:**

"Here is a photo of me w/ a postwar Lincoln Zephyr that I just pulled the rear end, driveshaft & spring from at a salvage yard here in Nashville. Now all I need is the Model A Ford to put it into!"

**Right: Rich Ruth and his postwar Lincoln Zephyr.**



**Thank you to all of our volunteers who have been serving as volunteers at the Museum (in no particular order): Aaron Amstutz, Andrew Duthie, Chris Nicholson, David Applebaum, Mark & Vicki Qualls and their children Ryan & Rachel, Bill Coke, Curtis Freed, Rich Ruth, Buzz Hussey, Shelby Smith, Paul Collins, David Poertner and Wes Duenkel.**



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**In the next issue: 2008 Lane Motor Museum calendar of events!**