



# Braking News

Volume 3, Issue 1 / January - March, 2006

## A WORD FROM THE PRESIDENT

The last three months have been a whirlwind of activity for me. My personal project is the Helicron, which is still in the workshop. It is looking pretty bare at the moment with the engine and front axle removed. In the next few weeks I will begin to reassemble the car and probably have it ready for testing on the coldest day of the year. I'm on a deadline with this restoration, as the Helicron has been invited to the Amelia Island Concours d'Elegance in March. It will be competing in the "Alternative Power" category and I'm certain it will attract a lot of attention.

October 1 was Mechanics' Day and the museum staff enjoyed meeting with many of the local mechanics. Several contests were set up. One challenging contest was "What is this part?" Everyone enjoyed the special day, behind the scene tours, and giveaways.

Susan and I spent two weeks in France in October. (We spent a couple of days in Holland visiting the people who restored the Citroen GS Biroter for us.) A week was spent on the rally along the Rhone River. After the rally, we drove to southwest France to spend a day with Monsieur Claude Gueniffey and his family. Claude is the most knowledgeable person there is regarding propeller-powered cars. Claude built a 1/3 scale replica model of a 1919 Leyat. Lane Motor Museum was very fortunate to acquire this model. It is amazing how accurate the details are. I spent several hours in a parking lot learning how to drive it.

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## In This Issue:

**Jeff Takes A Ride In A 1940 Fieseler Storch**

**Bill Pryor Drives the Targa Florio - Part 2**



Above: Jeff & Monsieur Christian Ravel with the 1940 Fieseler Storch. Below: Jeff & Monsieur Claude Gueniffey with a model of the 1919 Leyat.



## A WORD FROM THE CURATOR

As we approach 2006, we begin our third year as a Museum. In that short time, the collection has doubled, as has our staff! We have seen a steady increase in members and guests, and the publicity the collection generates is astonishing. We continue to search for rarely seen, historic, and unusual vehicles to add in the coming year.

New arrivals this past quarter include: 1938 Citroën 11 Berline Gazogene (converted during the German occupancy of France to run on coal rather than gas); 1975 Citroën GS Biroter (Citroën's attempt at a rotary car); 1948 Davis Divan (a 3-wheeled American car that has been on Jeff's "wish list" since he began collecting cars); 1971 Fiat 500 Formula Race Car (single seater racer), 1950 Panhard Dyna Junior (a postwar economical, stylish sports car); 1932 Tatra T-54 (front engine, air cooled, Czechoslovakian car. We rallied this Tatra in England this summer); 1950 Tatra T-57 (Tatra's attempt at an affordable car for the public); and 1980 BFG 1300 motorcycle (with a Citroen GS, 4 cylinder, air cooled engine).

The fall months were busy with shows and events before we turned our thoughts to the holiday season and family.

We took a variety of cars to the All British Car and Motorcycle Show in Franklin, TN, sponsored by the Nashville British Car Club. The museum display offered a selection of vehicles which included: Leige, Matra D'Jet 5, McQuay-Norris Streamliner, MG TF1500, Morgan, Peel P-50, and Tatra T-87.

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***Left: Jeff and Susan enjoying the countryside while rallying in France in this 1963 BMW 3200S.***

*...Curator, Continued from pg. 1*

The 1967 Morris Mini-Minor Traveller took first in class. This “mini” woody station wagon brought smiles and laughs to all.

The 1938 BMW 320 cabriolet was shown at Euro Auto Festival in South Carolina—one of the largest displays of classic European automobiles in the United States. We were honored when this stunning silver convertible won the Crowd Pleaser Award.

Jeff and I rallied through France in a 1963 BMW 3200S. There were approximately 15 teams participating in this Dutch rally. It was quite a challenge interpreting the Dutch instructions through the French countryside. But the weather was beautiful and the scenery through the Rhone Valley was spectacular. We made new friends on the rally and were quite surprised to learn one rallier from Holland had visited the museum.

Lane Motor Museum and Nashville RBI (Reviving Baseball in Inner Cities) joined forces for “Platter Up! Fine Food and Fun Cars.” This food and wine event at the Museum featured tastes from countries represented in the collection. Over \$12,000 was raised for this not-for-profit organization that provides disadvantaged youth an opportunity to learn and enjoy the game of baseball.

On Veterans Day we honored veterans and current members of the military. The 1960 “Mighty Mite” jeep was highlighted that day as was the Citroën DS20 painted as an American Flag.

During this season of giving, members were honored with a Members Appreciation Day. There were new cars on the floor for their viewing. More importantly, it was a time for us to thank them for their support in our mission.

Lane Motor Museum partnered with the U.S. Marine Corps Reserve in their annual Toys For Tots toy drive. Free admission to the Museum was offered in exchange for a toy. On December 16, a convoy of Museum cars delivered the toys to the warehouse for distribution to needy children in the Nashville community.

Our Motoring Miniatures Exhibit was on display from November 25 to December 31, 2005. Two display cabinets are filled with models representing cars in the collection. A scavenger hunt is offered to see if guests can find the full-size version of some of the miniatures. If you didn’t have a chance to see the display this year, there is a chance we will bring it back next year.

All of us here at Lane Motor Museum wish you a happy, healthy, and prosperous new year!

*Susan Lane  
Curator*

## HOW I GOT TO THE TARGA FLORIO, PART 2 (continued from last quarter's newsletter)

***That's it. I'm famous. The headlines will read 'MOSS KILLED IN SICILY, WITH ARUTUNOFF, PRYOR.'***

Moss was still talking when the car touched down. With no hesitation in talking, he flicked the wheel hard right setting up a lurid broadside down the hill, grabbing first gear along the way. Once even with the bridge, he floored the gas pedal and we shot through. He continued to chat idly as he snapped it sideways again coming off the bridge and fishtailed up the next hill, still talking, calm as you please.

***Why was I worried? This is STIRLING MOSS.***

For one day only, the road was closed to public traffic so drivers could practice unimpeded. When I got to the end of the four-mile flat straight along the coast, I checked my mirrors. Nothing. I could focus all my attention on the high-speed gentle bends ahead. I was feeling quite secure until a car blasted past me like a rocket. It appeared to be leaping from hillcrest to hillcrest and was out of sight in seconds. Worst of all, it was a Mini Cooper, a tiny sedan with ten-inch wheels.

When I pulled into the pits, I got out and said to Toly, "I'm quitting. I don't belong here."

"Why?"

"I just got blown off the road by a little Mini Cooper."

"Which one?"

"That green one right over there."

"Oh, that's Paul Frere and Sir John Whitmore's TwinnyMini. It has two engines and is faster than the GTO Ferraris, but don't worry about them, they can only go two laps on a set of tires."

That evening, Moss was in the hotel parking lot. He came over and said "I watched you through the camera optics in the mountains today. You were bloody quick, mate."

Then came race day, ten laps, 447 miles. The 2½ liter class had several other Flaminias like ours, plus two impressive factory-entered special lightweight Lancias driven by professional veterans. I was to start. Cars were lined up single file by displacement – little ones in front – going off at 30-second intervals. We were gridded last of the 2½ liter cars. Directly behind me was the first of the big bore monsters – a GTO Ferrari with "Argentina" painted across its nose – obviously a Latino maniac.

***What the hell am I DOING here?*** When I was flagged off, I wasn't trying to catch the car ahead, I was running from that crazed Argentinean.

If his Ferrari ever passed me I never noticed, I was way too busy running for my life. I must have passed several cars, I don't remember. Anyway, I had managed to improve our position fairly respectably when I came in for gas and a driver change. Toly took over and roared off. I was so excited, I leapt up onto the pit apron and bumped my head on an overhead concrete beam. Even small scalp wounds bleed a lot, and I suppose I looked pretty dramatic around the pits with my head bandaged and the front of my blue Pirelli driving suit soaked in blood.

Toly finished the race. We came third in class, beaten only by the Lancia factory prototypes, and might have done better but Toly ran out of gas. Spectators siphoned gas from their cars to get Toly going again.

The next evening, during the lengthy awards dinner and ceremony in Palermo, trophies were passed out to a long list of famous drivers. Near the end, Toly and I got a trophy for something or other... I think it was for traveling the longest distance to get here. Imagine our surprise when we got the only standing ovation of the evening. It seemed like everyone in the room shook our hands.

We finished that season in Europe, competing in all the World Manufacturers' Championship races except Le Mans, because our entry was late, but we ran at Spa-Francorchamps in Belgium, the Nürburgring in Germany and some lesser events at Brands Hatch and Silverstone in England (arranged by our new friend, Stirling Moss). The same teams and drivers were at all the races so we became friends with my heroes.

Toly and I attended the Turin Auto Show In 1973. The new Lancia Stratos, with a Ferrari V6 Dino engine, was on display. The attendants recognized us. One said "You are Arutunoff and Pryor! You brought much glory to Lancia in the Targa Florio. We have only one Stratos, but we would be honored if you will drive it anywhere you wish and return it whenever you please." Things like that are why I was so delighted to see Jeff Lane's 1932 Lancia DiLambda Dual Cowl Phaeton.

Toly and I campaigned the Flaminia a few more times in the United States, including a couple of outings in the 24 hour race at Daytona. I can't recall the last time the old nail ran in anger, but Toly still has it. Ghosts haunt cars too. Maybe one day he'll appease them and fix it up for another go, in the Targa Florio Storica.

*Bill Pryor  
Lane Motor Museum Member  
and Freelance Auot Writer and Reviewer*

## Calendar of Events January - December 2006

<b>Friday to Sunday, January 6-8</b>	<b>Frosty Wheels - Held at the Williamson County Ag Expo Park in Franklin, Tennessee.</b> Lane Motor Museum will showcase two vehicles during this event.
<b>Sunday, February 5</b>	<b>Free Admission for Super Bowl Sunday!</b>
<b>Saturday, March 25</b>	<b>VAROOM...Start Your Engines!</b> Enjoy Motoring Madness and experience the sights, sounds and smells of the engine! Every half-hour we will start a different engine.
<b>Saturday, May 6</b>	<b>Microcar Drive at Lane Motor Museum.</b> 30-mile drive to Seven Points Park on Percy Priest Lake. Microcar show on Museum grounds. Drive will begin at 11:00 a.m. Gymkhana course. All vehicles must be registered. Cost is \$25.00 per person and includes lunch.
<b>Friday, May 19 to Sunday, Sept. 18</b>	<b>Innovation &amp; Engineering Excellence: "Behind The Iron Curtain"</b> Special Lane Motor Museum exhibit featuring Czechoslovakian cars. Discover the history of these unique and advanced vehicles rarely heard of outside of the Iron Curtain.
<b>Saturday, May 20 at 5:30 pm</b>	<b>Member Reception.</b> Special night to honor members of Lane Motor Museum. Refreshments will be provided.
<b>Friday, June 9</b>	<b>Family Fun at Lane Motor Museum! - Can Cars Really Drive On Water?</b> Special children's tour, coloring contest, demonstrations, and car crafts on this fun day!
<b>Sunday, June 18</b>	<b>Dads Get In Free On Father's Day!</b> Special vehicle rides and demonstrations celebrating Dads! Vehicle rides available to those 18 and older.
<b>Friday, July 14</b>	<b>Family Fun at Lane Motor Museum - Can Cars Really Fold In Half?</b> Special children's tour, coloring contest, demonstrations and car crafts on this fun day!
<b>Saturday, July 29</b>	<b>Magic of the Machine!</b> Celebrate the magic of the automotive with open hoods, behind the scenes tours, and demonstrations.
<b>Saturday, Sept. 9</b>	<b>Race Car Day!</b> Special activities around our competition cars. Demonstrations by SCCA driver Jeff Lane and you can sit in an actual race car. An IRL car acquired by Lane Motor Museum will be featured.
<b>Saturday, Nov. 11</b>	<b>Free Admission for Veterans and Active Military!</b>
<b>Friday, Nov 24 to Friday, Dec. 15</b>	<b>Toys For Tots "Drive"-2.</b> Lane Motor Museum will collect toys for Toys For Tots and deliver them to the Marines in our special vehicles on December 15, 2006
<b>Saturday, Dec. 9 1:00 p.m. to 3:00 p.m.</b>	<b>Member Holiday Reception.</b> Refreshments provided.



# Curious Car of the Quarter

## The Fiat Nuova 500

First, I need to explain something. Fiat made the 500, in one form or another, off and on, from 1936 to 1998. Sometimes called the Topolino (1936-1955), other times the Cinquecento (1991-1998), we will concern ourselves today with the Nuova 500, or simply, the 500, produced from 1957 until 1975.

The Nuova 500 was the successor to the much loved original 500, AKA the Topolino, or “little mouse”. Developed by designer Dante Giacosa as a sibling car to the already in-production 600, the 500 was introduced not at a major auto show, but in a parade of 500s down the streets of Turin, Italy in July, 1957. While outwardly similar in appearance to the bigger 600, the 500 differed by using a two-cylinder air-cooled engine, mounted in the rear of the car. This 13HP unit was a first for Fiat, as previous cars had all used water cooling.

While the Bambino, as it was known, was warmly greeted at its introduction by both the public and the motoring press, sales lagged behind expectations. In late 1957, at the Turin Motor Show, Fiat introduced two “new” models. Both the Economica and the Normale used a slightly uprated motor of 15HP (!). The Economica was essentially the original version with a bit more power, while the Normale included such niceties as operable windows, an upholstered rear seat, and a full length canvas roll-back roof.

1958 saw some racing successes, most notably placing 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> in class at the 12 Hours of The Nurburgring. The Sport model was immediately introduced to capitalize on this success, and it did not disappoint. Both sales and performance were brisk. The 479cc engine was enlarged to 499.5cc, and with a bigger cam, larger valves, and more carburetion, the Sport boasted 21.5HP. That may still not sound like much, but this was a 43% increase in power! The Sport was also outwardly distinctive, with a solid roof, gray body and a wide red stripe down each side.

Building on the success of the Sport, the next major model came along in 1960 - again hearkening back to an “original” 500 name, the Giardiniera, an estate or station wagon. By laying the engine over on its side, and employing a side-hinged door, a large and easily accessed cargo area was created. Later in 1960, the Sport was discontinued, to be replaced by the 500D. This new 500 enjoyed several detail changes, such as a reshaped fuel tank (resulting in more trunk room) but most importantly it made the 499.5cc engine standard, albeit detuned to 17.5HP. The D remained in production until 1965, and was replaced by the 500F. The F was again outwardly different, being the first Nuova 500 to use front-hinged doors, unlike the so-called suicide doors of its predecessors. In 1968, the more refined Lusso model was added. Boasting upscale trim treatments both inside and out, it was notable on the exterior by the addition of tubular bumper overriders, or “bull bars.” More and better upholstery throughout were joined by the welcome addition of a fuel gauge!

The final version of the 500 was the 500R, introduced in 1972, and built concurrently with the new (replacement) Fiat 126. Using the same 594cc engine and floor pan of the 126, the 500R was a much more modern car in many respects, yet looked the same as earlier models. The R also sported the new corporate logo, different wheels, radial tires, and other minor changes. Production ceased in 1975, with over 3.6 million Nuova 500s produced.

The 500 was as recognizably Italian as the VW Beetle was German, the Citroën 2CV was French, or the Austin Mini was British. It was also as big a part of Italian society as its contemporaries were in their respective countries.

Not only was the 500 a People’s Car in every sense of the word, it was also the basis for dozens of models produced by other Carozzeria. The whimsical Ghia Jolly was a car designed for the sunny Mediterranean resort and yacht market -an open car with surrey top, no doors, and wicker seats - and davit hooks to lift it aboard the yacht!

Autobianchi made several 500-based cars, including the Bianchina, the Cabriolet, and the Panoramica, an upscale wagon. Moretti had a very attractive and sporty Michelotti-designed Coupe, while Steyr-Puch added larger, more robust drivetrains to their variants. Giannini came out with an economy version of the 500 (why?) using a small 390cc engine, and later introduced an electric powered version. Ferves took the 500 engine, suspension bits from the 600, and created the Ranger, a 2 or 4-wheel drive “truck” favored by fire departments and utility companies, while the tuning firm of Abarth took the platform in a different direction - the race track. The Abarth 595 and 595 SS saw power eventually climb to 32HP, and speeds exceed 78 MPH.

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Later all-out race versions saw speeds in excess of 100 MPH! Abarth enjoyed a long relationship with Fiat and was absorbed into the huge conglomerate in 1971.

Lane Motor Museum has examples of many of the Fiat Nuova 500 series cars and their associated models in the collection - including several coupes, a Giardiniera, a pair of Autobianchis, a Lucertola, and a Ferves 4x4.

*David Yando  
Museum Manager*

## **The Monday Report**

### **30wt. Soup**

Someone once asked me how I managed to work on such a variety of unusual old cars. It just so happened that the person's husband, who had a pretty good grasp of mechanics, was standing nearby, and seeing my look of confusion he intervened; "nuts and bolts" he said. Not a bad answer I thought; as many times as I've been asked that question and fumbled with a reply, he had summed it up in only three words. After all, the cars are all put together using similar logic, could it really be that simple? Could I take the answer and make it mine?

"Nuts and bolts," those words tumbled around in my head for over a year. At times, I've even told myself as I've neared anger with some stubborn machine, "It's just nuts and bolts." But, while I've used those words, I've been unable to make them mine. I'd like an answer that's simple, understandable, and maybe even a little elegant. Something like, "I use the unified theory of auto repair." I like the acronym UTAR, but that just sounds like a confusing version of "nuts and bolts."

I've always been fascinated by how things work, and from an early age I've taken things apart to figure them out. Toys, then cameras, and then cars. But, putting them back together in working order is really the point, isn't it? To this end, time, experience, and maturity have taught me a few simple rules to go by:

If it's broken, it can be fixed.

If someone has put it together, it can be taken apart.

Understand the problem.

Understand how and why the thing works.

Don't break what is not already broken.

Don't get hurt!!!

Experience is an important ingredient, and I don't necessarily mean experience doing the right thing. I remember once working on a man-lift; you know, one of those four wheel jobs with a long boom used in building construction. I can't recall what was wrong with it, but I remember deciding I could make vast improvements to it by messing with the hydraulic valve that controls forward and back movement. Clearly labeled on the valve, it said something to the effect of "don't mess with it," and then they had the audacity to give the name and phone number to have it repaired. A very expensive lesson it was.

I also find an element of competitiveness in what I do. That is, some machines seem to play hide-and-seek with the problems, and I am determined not to lose to some contorted piece of steel, wire and cloth. This leads to a little fuzzy reality in that some machines seem to take on personalities; needy, grumpy, playful, and grouchy are a few words I can use to describe some of the states the machines are in when they get to the shop; being able to identify that state in advance can be very helpful.

So if you take some basic mechanical logic, sprinkle in some 'nuts,' add a little guidance from some hard-learned experiences, have no fear of getting sloppy with dirt and grease and oil, toss in a sprig or two of curiosity, mix well, and viola! 30wt. Soup. How I wish I could have been happy with "nuts and bolts."

*Greg Coston  
Museum Restorer*

## Another Strange Day...

My job is to exercise the collection. And, yes, it is a dream job. And, no, I don't need an assistant. The job has its challenges. Trying to remember shift patterns, figuring out how to engage the starter on some of the older vehicles, and remembering to check the oil, coolant, lights, and license plates on everything going out. And my pockets are always full of keys. Yeah, I know, tough job. Boo-hoo. I learn something from every car I drive and I drive several cars per day. I drove 4 other cars on this day, but these two stood out for their vast differences despite their similarities. The 56 years of engine, chassis, and brake development between these two is starkly displayed after short drives.

The day began similar to many others, sitting in traffic on I-24 trying to get to the automotive smorgasbord at the museum. Today I'm in one of my favorites, a Porsche 911. The traffic jam is typical with slowdowns at each on ramp. I barely notice the traffic because I'm enjoying the radio and because keeping up in those brief spurts to 70 and back to zero is easily accomplished in the Porsche. The 911, though eligible for an antique tag in two years, is a thoroughly modern car. The car is quiet, quick, and stylish. It can be a daily driver unlike my next course at the buffet, the 1927 Panhard-Levassor X74.

Some days have themes. I might spend the day driving military vehicles or I might spend the day in only Citroëns or maybe it is time to exercise some of the Italians. Today was not a theme day, not that the cars didn't have similarities. Both the Porsche and the Panhard have six cylinder engines, but the 911's engine is in the rear and the X74's is in the front. The engines also differ in cylinder layout and valve-train. They also vary greatly in the power produced. The power plants are as similar as a Riesling and a Bordeaux.

The Panhard and the Porsche respond differently to being driven only occasionally. The giant pre-war Panhard is the antithesis of the Porsche. While the Porsche will eagerly start up after hiding in the basement for months, the Panhard is not so happy about being ignored and refuses to start without some attention from Master Greg. Once started, the old boy fills the museum with a stinky cloud of smoke. He does seem happy to be rolling again under his own power, though a smelly trail of smoke is left in his wake. The X74 is powerful enough to move its huge body to road-going speeds but there are not many extra horses. And once up to a decent velocity you should plan your stop, because the brakes are just adequate and rely on the strength of the driver's leg since they are mechanical and not hydraulic. Meanwhile, the Porsche's brakes will put you through the windshield if stomped.

Both cars also have two doors and will carry four passengers. The Panhard is more successful in this department because it is very large and has rear hinged doors, which allow for easy access to the spacious seat in the back. The Porsche, on the other hand, has back seats suitable only for newborns. Once ensconced in the luxurious rear seat, passengers in the Panhard will feel like movie stars when they arrive at their destination relaxed and comfortable, while Porsche passengers will unfold stiff legs and comb out ruffled hair.

The day winds to a close as darkness settles and it is time to battle the outbound traffic on I-24. The 911 and the proud Panhard are both tucked away safely waiting for their next spin around town. The tiny Fiat Cinquecento rally car I'm driving winds up to a deafening roar as the traffic clears towards Murfreesboro. Wonder what strange combination of cars awaits me tomorrow? What a job!

*James Green*  
*Automotive Preparation Manager*

**Right - 1927 Panhard-Levassor X74  
and the 1983 Porsche 911 SC.**



## A Word From The President continued from page 1...

As if meeting Claude and his family was not the highlight of our trip, we also had the pleasure of going to Musée Régional de l'Air, a great airplane museum in Marcé. Last January, Claude had discovered this museum has a propeller-powered car. The car was built by a local man named Jean Legeay and named "L'Éclair." After discussions with the Musée Régional de l'Air, Lane Motor Museum was privileged to learn they will loan the L'Éclair to us for a period of seven years. Lane Motor Museum will restore the car (which is missing its powerplant) and put it in running order. While visiting the museum, I had the honor of meeting Monsieur Ravel, the museum's director. Monsieur Ravel generously gave us a tour of the museum and storage sheds. Then I was honored with a ride in a beautifully restored 1940 Fieseler Storch. What a treat to fly in such a rare plane (twenty left in flying condition) by the museum's director! I can't emphasize enough how hospitable Monsieur Ravel was and how beautiful the museum is. I would encourage anyone traveling to France to visit Musée Régional de l'Air, (website –<http://gppa.decollage.org>).

In addition to all the fun activities, work is still being done here. The Martin Stationette has been totally disassembled and we are assessing how much of the wood needs to be replaced. It is certainly proving to be a very interesting vehicle, and I'm sure there are more than a few surprises left for us before this project is complete.

*Jeff Lane  
President*

***Below Left: Toys collected during the Toys For Tots drive fill up the 1948 Crosley.***

***Right: Eric de Widt, Jeff & Susan with the L'Eclair.***



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