

Panoz Motor Sport History

Don Panoz founded the Panoz Motor Sport Group in 1997, laying the groundwork for nearly two decades of highly successful international endurance sports car and open-wheel racing efforts.

It began when Panoz commissioned and campaigned the Panoz Esperante GTR-1, the first successful front-engine prototype race car in more than 30 years of racing. The Panoz GTR-1 with its 6.0-liter Ford-based V8 engine competed in international endurance racing in various forms – including the first modern hybrid race car – from 1997 to 2003. From 1997 to 2002 Panoz Le Mans prototype race cars won eight endurance sports car championship races.

The Panoz Motor Sport Group also fielded successful teams racing the Panoz Esperante GTLM, a racing version of the Panoz Esperante GTLM two-seat sports car. Built specifically to compete in the GT2 class at the 24 Hours of Le Mans and in the American Le Mans Series (ALMS), it featured a naturally aspirated stock Ford V8 block bored to 5.0 liters with custom crank, rods, pistons, and a heavily massaged intake manifold and produced about 500 horsepower.

On April 17, 2005 Panoz scored its first win with the new car when the No. 50 Panoz Esperante GTLM piloted by Bill Auberlen and Robin Liddell beat the Porsche 911 of Timo Bernhard and Romain Dumas in the No. 23 Alex Job Racing Porsche 911 GT3. This ended the seven-race Porsche win streak that began at Infineon Raceway in 2004.

Success continued in 2006 when the No. 50 Multimatic Motorsports Panoz Esperante GTLM driven by David Brabham, Scott Maxwell, and Sébastien Bourdais won GT2 class at the 54th Mobil 1 Twelve Hours of Sebring. The pinnacle of Panoz Motor Sport's success with this car occurred at the 2006 24 Hours of Le Mans when Team LNT won the GT2 class in the No. 81 Panoz Esperante GTLM race car. Drivers Lawrence Tomlinson, Tom Kimber-Smith and Richard Dean completed 321 laps and finished one lap ahead of the No. 83 Seikel Motorsport Farnbacher Racing Porsche 911 GT3-RS. Here's Panoz reminiscing on this historic win:

<http://bit.ly/1kwU5KU>



In 2006 the Panoz Motor Sports Group won the GT2 class at the Mobil 1 Twelve Hours of Sebring and the famed 24 Hours of Le Mans with the Panoz Esperante GTLM race car.

Panoz also succeeded in open-wheel racing. Panoz G-Force cars won the famed Indianapolis 500 race in 1997, 2000, 2003 and 2004 with drivers Arie Luyendyk, Juan Pablo Montoya, Gil de Ferran and Buddy Rice, respectively.

The Panoz G-Force chassis was used in the Indy Racing League from 1997 to 2006 and was one of two chassis platforms allowed by the IRL (the other being from Dallara). The Indy 500-winning Panoz G-Force cars were powered by engines from Oldsmobile, Toyota and Honda.

Panoz DP01 Champ Car

Panoz and Élan Motorsports Technologies developed The Panoz DP01 race car for the 2007 Champ Car World Series season as a replacement for the aging Lola chassis.

Designers engineered the race car to be less dependent on front and rear wings, with about 60 percent of its 5,500 lbs of downforce at 200 mph coming from the underbody aerodynamics. It used the same Cosworth XFE 2.65-liter turbocharged V8 as the Lola that produced about 950 horsepower, yet overall the car was about 100 lbs lighter. Cars weighed about 1,550 lbs and could go from 0-60 mph in 2.2 seconds and 0-100 mph in 4.2 seconds. The approximate top speed was 240 mph.

The official unveiling took place at the 2006 Champ Car Grand Prix of San Jose on July 28, 2006. Its public debut with on-track demo laps took place on Sept. 24, 2006 at the Grand Prix of Road America. The race debut was on April 8, 2007 at the Vegas Grand Prix where Team Australia's Will Power won the pole and the race in the DP01.

The race car was so capable that three-time and defending Champ Car champion Sébastien Bourdais driving the No. 1 McDonald's Cosworth/Panoz/Bridgestone broke the existing track record at Mazda Raceway Laguna Seca with a time of 1:05.880 (122.295 mph). Ricardo Zonta in the Toyota F1 race car set the previous record (1:06.309) in 2006.

The DP01 retired from championship racing after the sale of Champ Car to the Indy Racing League, which used its own spec formula based around a Dallara chassis. The Grand Prix of Long Beach in April 2008 was the last race where all participants used the DP01 and in essence was the Champ Car finale.



Panoz race cars won the Indy 500 in 1997, 2000, 2003 and 2004. Panoz also created the DP01 (below) for the 2007 Champ Car World Series season.



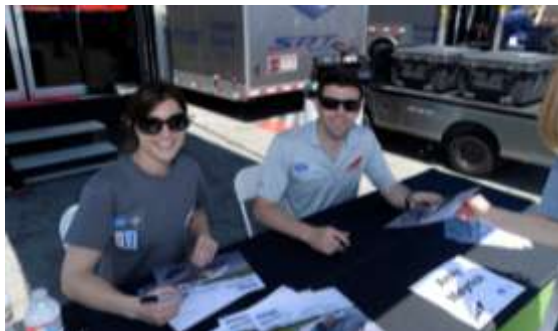
The Rebirth of North American Endurance Sports Car Racing

The creation of the Panoz Motorsport Group coincided with Panoz's dream to preserve and expand endurance sports car racing in North America and build upon its grand racing history dating back to the late 1940s. He created the American Le Mans Series (ALMS) endurance racing championship with its "For the Fans" mantra and an international European-style racing flavor. He grew ALMS into an internationally recognized race series and rewarded the loyal sports car racing fans and brought thousands of new fans into the fold.



Those fans flocked to famous U.S. road racing circuits like Road America, Sonoma Raceway, Lime Rock Park, Mazda Raceway Laguna Seca, Mid-Ohio Sports Car Course, and Virginia International Raceway. Panoz also purchased, invested in and resurrected three significant and historic road racing circuits: Canada's Canadian Tire Motorsport Park (formerly Mosport International Raceway), Florida's Sebring International Raceway (home of the legendary Mobil 1 Twelve Hours of Sebring), and Road Atlanta.

An ALMS favorite was a 10-hour/1,000 mile endurance sports car race modeled after the famous 24 Hours of Le Mans and called the Petit Le Mans. Founded in 1998, it became one of the largest car races on earth and for years and was the finale of the ALMS season with heavyweight teams from Audi, Porsche, Corvette Racing, BMW Motorsport, Penske Racing and Dyson Racing. A partnership with L'Automobile Club de l'Ouest (ACO) allowed teams to earn automatic entries for the 24 Hours of Le Mans, which helped grow the series international standing.



Aerial views of Sebring International Raceway, Canada's Canadian Tire Motorsport Park, and Road Atlanta, which is home of the Petit Le Mans, one of the largest car races on earth. ALMS was proud of its "For The Fans" mantra.



The First Modern Hybrid Race Car – The 1998 Panoz Esperante Q9 GTR-1 Hybrid

Very few know that Panoz created the first successful hybrid race car, the 1998 Panoz Q9 GTR-1 Hybrid, affectionately known as “Sparky.” Like today’s hybrid race cars, the Q9 featured a combustion engine paired with an electric motor to help drive the car and had a regenerative braking system to recharge its batteries. The Panoz Q9 had a 6.0-liter, front mid-engine aluminum block, overhead valve Ford V8 engine mated to a six-speed sequential Panoz/X-Trac gearbox mounted between the rear wheels.

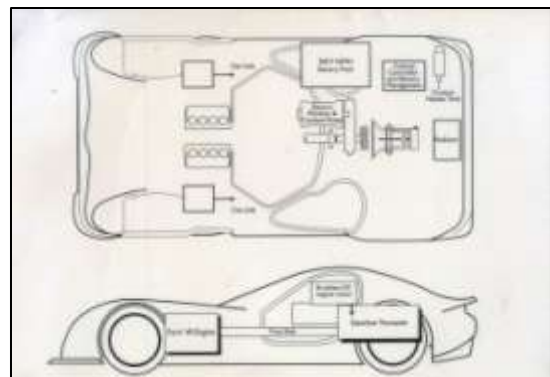
This conventional technology was supplemented by an oil-cooled, permanent magnet, brushless Zytek DC motor/generator powered by a Varta 300-volt, 260-cell nickel metal hydride (NiMH) battery pack. It provided on demand 30 percent of the approximately 650 horsepower produced by the hybrid power unit.

A microprocessor-based Panoz-Zytek unit integrated power generation for maximum efficiency. It evaluated the driver's power demand and selected the proper gasoline engine/electric motor combination to meet the requirement. The electric motor's linear response also improved acceleration out of the corners. Under braking with its 15-inch carbon disc brakes, the powertrain controller converted the electric motor into an alternator during deceleration and used the energy created to recharge the battery pack. This single enhancement increased braking efficiency, reduced pad wear, and extended battery output.

All was placed in a carbon-fiber monocoque wrapped by an elegantly purposeful, high-downforce body with an eye-catching prism paint job. The race car weighed just over 2,400 lbs.

Truly ahead of its time, this environmentally friendly race car produced competitive power without an equivalent increase in fuel consumption, an advantage both racers and consumers could understand. The Panoz Q9 GTR1 Hybrid finished second in its class at the inaugural Petit Le Mans in 1998 and paved the way to today’s hybrid race cars that benefit from much better and lighter battery technologies that simply weren’t available in 1998. For example, today’s hybrid racers have batteries that are about 75 percent lighter than the Q9’s batteries.

Today the car resides in the Panoz LLC headquarters. Here is a video of Panoz sharing Sparky’s history: <http://bit.ly/1oHuqBv>



1000km of Nürburgring, 2000

On July 9, 2000 the No. 1 Panoz LMP-1 Roadster S driven by Jan Magnussen and David Brabham won the 1000km of Nürburgring, beating both the BMW and Audi factory teams.

The Nürburgring race was the fourth round of the 2000 American Le Mans Series season and a rain-soaked affair. The Panoz LMP-1 Roadster S with its front-mounted 600-plus horsepower 6.0-liter V8 from Élan Power Products led most of the race in part due to tire strategy. Just 30 minutes into the race the team switched to intermediate rain tires rather than full wet tires adopted by the other teams. This enabled the Panoz team to stay on the track while others had to pit for new tires when the track started to dry.

The No. 1 Panoz started third on the grid with a qualifying time of 1:29.103. The Audi Sport North America No.77 Audi R8 driven by Rinaldo Capello, Allan McNish and Michele Alboreto and the No. 78 Audi R8 and driven by Frank Biela and Emanuele Pirro qualified first and second with 1:27.938 and 1:28.540 lap times, respectively.

Magnussen crossed the finish line in the No. 1 Panoz, which completed 185 laps and finished about 90 seconds ahead of the second-place No. 45 BMW Motorsport BMW V12 LMR that started fourth on the grid with drivers J.J. Lehto and Jörg Müller. The No. 78 Audi R8 came in third and three laps behind the winning Panoz.

It was a great race day for Panoz with its prototype taking two of the top five positions. The No. 2 sister Panoz LMP-1 Roadster S driven by Klaus Graf, Johnny O'Connell and Hiroki Katou started sixth and finished fourth.

Today the car resides in the Panoz LLC headquarters in Braselton, Ga.

2000 1000km of Nürburgring: <http://bit.ly/1q01KFI>
In-car lap at Le Mans video: <http://bit.ly/TnU9VO>



The Panoz Spirit of America LMP-1 Roadster S

The Panoz prototype LMP-1 Roadster S race car wore a range of liveries. A fan favorite was the Spirit of America paint scheme.

This livery debuted in March 2002 as the new look for the Panoz Motor Sports team for the 2002 American Le Mans Series (ALMS) season and ushered in a new aero package for the Panoz prototype that featured a front-mounted 600-plus horsepower 6.0-liter V8 from Élan Power Products. Panoz LMP-1 Roadster S chassis 005 ran as Spirit of America No. 50 (No. 11 at the 2002 24 Hours of Le Mans) and chassis 007 wore Spirit of America No. 51 (No. 12 at Le Mans).

Once again Panoz Motor Sports turned to veterans Jan Magnussen and David Brabham – the drivers who won the 2000 1000km of Nürburgring – to drive No. 50. Four American drivers – Bryan Herta, David Donohue, Bill Auberlen, and young test driver Gunnar Jeannette – drove No. 51. Both cars debuted at the 50th annual Mobil 1 Twelve Hours of Sebring.

No. 50 finished third at the 2002 ALMS race at Mid-Ohio on June 30, 2002 and scored an overall win at the very next ALMS race. On July 21, 2002 Magnussen and Brabham won the inaugural Cadillac Grand Prix held in the nation's capital. Racing on a Washington, D.C. street course, they beat the No. 2 Audi R8 driven by Rinaldo Capello and Tom Kristensen and the No. 1 Audi R8 raced by Frank Biela and Emanuele Pirro. The significance of the red, white and blue Spirit of America car winning in Washington did not go unnoticed by the crowd. You can watch the race and hear the fan reaction here: <http://bit.ly/1yFX4dc>

Chassis 005 won at Mid-Ohio in 2001, finished second at the ALMS race at Mosport that same year, finished third at the 2003 ALMS race at Mosport, and achieved 22 top-10 finishes in 32 LMP-class races from 2000 to 2003. The No. 51 car scored five top-10 finishes in eight races in 2002.

Today car No. 50 resides in the DeltaWing Technologies and Élan Technologies showroom.



The Heart of the Panoz LMP-1 Roadster S

The Panoz prototype LMP-1 Roadster S race car was unique in the prototype class because of its powerful V8 positioned in front of the driver. Don Panoz first revisited this configuration in 1997 when he commissioned and campaigned the Panoz Esperante GTR-1, the first successful front-engine prototype race car in more than 30 years of racing.

The engine was based on the reliable 302 Ford and developed by Élan Power to be one of the most capable sports car race engines in the world. It went through a comprehensive development program with every aspect developed to compete at the highest levels of international endurance racing. The engine scored four wins over the mighty factory Audi R-8 team and scored its best finish of fifth overall at the 24 Hours of Le Mans. The last specification was the Élan 6L8LMP1.

The engine featured a Ford racing aluminum block; CNC machined, prototype sized roller cam bearings; Bryant Racing ultra light custom crank shaft; custom Carrillo rods; structural sump with a five-stage lobe-style dry sump system; CNC machined Ford C3 cylinder heads; valve train developed in conjunction with Comp Cams with a net valve lift approaching .800"; Bosch 2.9 fuel management with EPP calibrated, cylinder pressure/crank phase based, active detonation control; and a carbon fiber intake manifold with two injectors per cylinder phased in/out for different conditions. The engine produced 640 horsepower and 550 lb-ft of torque (depending on restrictor) and provided a 25-race-hour service life.



The DeltaWing – Racing into the Future

The DeltaWing racing project began in 2009 as a proposed replacement for the Dallara IR03/07 racecar platform for the 2012 IndyCar Series season.

Ben Bowlby, working for Chip Ganassi of Ganassi Racing, proposed the DeltaWing® architecture, a highly aerodynamic and lightweight design that requires less engine horsepower and displacement than traditional designs and offers team owners significant cost savings. Ganassi created Delta Wing LLC to further its design and engineering.

In July 2010, the IndyCar Series selected the Dallara concept for the 2012 season. Panoz and Ganassi then began plans to take the concept to sports car endurance racing. This was also when the L'Automobile Club de l'Ouest (ACO), organizers of the 24 Hours of Le Mans, proposed to accept a 56th car from anywhere outside of all ACO rules and regulations and any Le Mans-based series providing this vehicle demonstrated the use of green environmental-friendly technology.

Panoz and other American Le Mans Series (ALMS) top officials helped organize discussions between the ACO and the DeltaWing team and in June 2011 DeltaWing was named the inaugural Garage 56 entry for the 2012 24 Hours of Le Mans.

Over the next year Panoz, as managing director of DeltaWing Project 56 LLC, which licensed the DeltaWing® technology from Ganassi's Delta Wing LLC, coordinated the various pieces to advance the project. Dan Gurney's All American Racers began building the revolutionary car in California, and Duncan Dayton's Highcroft Racing joined as the racing team. Michelin became the first technical partner, EMCO Gears and Performance Friction provided gears and brakes, and Nissan agreed to a naming rights and engine sponsorship.

The DeltaWing Project 56 LLC roadster, driven by Marino Franchitti, Michael Krummand and Satoshi Motoyama, raced at the 2012 24 Hours of Le Mans and qualified 29th with a time of 3:42:612. It retired after 75 laps following an on-track incident but recorded a best race lap time of 3:45.737, rivaling some LMP2 teams. It did 11 laps on one 10.6-gallon (40-liter) tank of gasoline, achieving 8.8 mpg (3.75 km/L). By comparison the Audi R18 TDI diesel race car that won the 2011 24 Hours of Le Mans – one of the most fuel efficient racecars in Le Mans history – achieved an average fuel economy of 6.34 mpg (2.69 km/L).

In recognition of its technological achievements, the DeltaWing wins *Popular Science's* "2012 Best Of What's New" and *Autosport Magazine's* "Autosport's Pioneering And Innovation Award."



The original DeltaWing IndyCar concept (above), and the sports car racing versions built by Dan Gurney's All American Racers.



Following the 24 Hours of Le Mans, the DeltaWing roadster finishes fifth overall and completes 388 laps as an unclassified entrant in the 2012 Petit Le Mans endurance race at Road Atlanta. The race winner, Rebellion Racing's Toyota V8-powered Lola B12/60, completed 394 laps. This great showing helped prove that the DeltaWing could compete with technology and not just horsepower, and its formula of half the weight, half the power and significantly less fuel consumption had great merit and potential.



Panoz soon announced the DeltaWing Race Car as a 2013 ALMS season entrant in the P1 class competing in the series' road course events. With Nissan abandoning its sponsorship, Panoz turned to Élan Motorsports Technologies, a Panoz Group engineering and design company, to build a new lightweight 1.9-liter, 350-horsepower four-cylinder turbocharged gasoline engine. A new, eye-catching chrome and red livery is added to reflect its revolutionary character.



The DeltaWing, with drivers Andy Meyrick and Katherine Legge, saw its first race lead when Legge and Meyrick each led the Orion Energy Systems 245 for eight laps at the August 2013 race at Road America in Elkhart Lake, Wis. Legge became the first female driver to lead an ALMS race, and the team finished fifth overall.



By September the coupe version debuted and the team completed the season with a commitment to 2014 and the inaugural IMSA-sanctioned TUDOR United SportsCar Championship. DeltaWing scored an impressive fourth place finish at the 2014 Petit Le Mans.



DeltaWing returns in 2015 as the Claro/Tracfone DeltaWing Racing Cars team competing in the TUDOR United SportsCar Championship. Memo Rojas joins Katherine Legge to share the full-time driver duties, while Andy Meyrick and Gabby Chavez are on hand for the endurance races.

The dedicated and determined team, now led by Tim Keene, continues to post very quick lap times that nearly equal the best, but with about half the weight, roughly half the power and nearly half the fuel consumption.

