





## n just a few months' time, believe it or not, the Indianapolis 500 Mile Race will embark on its second century!

It is difficult to comprehend that of all things, an *automobile* race should be able to span a period of 100 years and still be flourishing. And yet, next May 29, the "500" will be conducted for the 95th time, the only interruptions to an otherwise consecutive run having come when the United States was involved in the two world wars.

Perhaps even more remarkable is the fact that this iconic event always has taken place at the very same *venue*, for, while it has certainly changed dramatically in appearance over the years, the drivers of 2011 will negotiate precisely the same 2½-mile path that challenged their forerunners a century ago. In fact, apart from the places where the track passes over the six infield tunnels that have been installed since the facility opened, all of the early surfaces are still there, buried a couple of feet beneath the blacktop of today.

Contrary to a popular myth, the track did not debut with the inaugural "500." By then it was already in its third season. It had opened in the summer of 1909, and the original idea for the facility had been spawned perhaps as many as six years before that. It was the brainchild of an energetic selfmade Indianapolis businessman named Carl Graham Fisher, who had sought a solution to the growing problem faced by the fledgling automobile industry, specifically: "How can we thoroughly test the vehicles we are attempting to sell to the public?"

Inset: History is in the making as the very first Indianapolis 500 is set to begin. At the start are Johnny Aitken in a National, Harry Endicott in an Inter-State, Ralph DePalma in a Simplex and Lewis Strang in a Case.

Overview: The most recent Indianapolis 500, held in May, was won by Dario Franchitti with an average speed of 161.6 mph, nearly 100 mph faster than the first race in 1911.



The founders of the Indianapolis Motor Speedway: Arthur Newby, Frank Wheeler, Carl Fisher and James Allison.

This visionary was the very same Fisher who was shortly to develop Miami Beach and Montauk Point on Long Island, as well as the person who would head up the commission that built the transcontinental Lincoln Highway, linking the East Coast with the West by road.

Up until then, virtually all automobile testing had been carried out on city and county roads, which in many states, including Indiana, were not yet paved. A rutty or muddy dirt road had been fine for testing a turn-of-the-century horseless carriage rumbling along at seven or eight miles per hour, but as potential speeds increased, other alternatives had to be found. For a while, the oval-shaped one-mile horse-racing track at the Indiana State Fairgrounds had proven to be a reasonable venue until it too became outmoded; top-heavy vehicles slewing around the dirt surface were on the verge of tipping over in the corners.

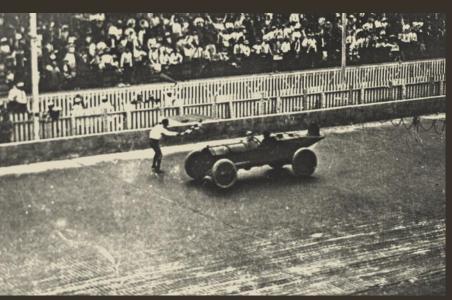
"What we need," thought Fisher, "is a large testing facility, perhaps a huge circle, or at least something with long straights and sweeping turns, something where automobiles can be pushed to extremes in order to determine what their weaknesses might be."

After several different plans fell through for one reason or another, Fisher's dream was finally realized in the fall of 1908, when 328 acres of virtually flat farmland became available some five miles northwest of the city of Indianapolis. Shortly before Christmas, the land was acquired by Fisher and three partners, Arthur Newby, Frank Wheeler, and James Allison. Newby was the head of the Indianapolis-based National Motor Vehicle Company, Wheeler was George Schebler's partner in the Wheeler–Schebler Carburetor Company, and Allison was the man who would later start up the firm that was to evolve into the massive Allison Engineering Company.

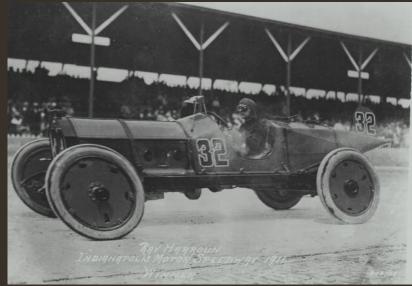
The track suffered through many trials and tribulations in its early days, mainly due to a poor choice of original surface. Had it been allowed more time in which to settle in and harden, perhaps the hastily laid mixture of crushed rock and tar might have proved less troublesome, but oppressive heat and heavy rains made it a gooey mess when the first programs finally were held in August 1909.

In fact, the very first event ever held at the Indianapolis Motor Speedway had already taken place on June 5, 1909, at a time when work on the surface of the gigantic  $2\frac{1}{2}$ -mile rectangular track had barely begun. The tireless Fisher had been able to convince the officials of the Aero Club of America that the 224-acre infield would be the ideal location for sending off the contestants in the inaugural U.S. National Balloon Championships.

Even after several postponements, the racing surface was still far from ready when it was decided to press ahead with two



Ray Harroun wins the inaugural Indianapolis 500 for the local Nordyke & Marmon passenger-car firm, driving a purpose-built racing car equipped with what is very likely the very first rearview mirror ever used on an automobile.



Harroun's Marmon "Wasp" is on display at the Indianapolis Motor Speedway Hall of Fame Museum. His use of a rearview mirror created controversy before and after the 1911 race, but his win was ultimately allowed.

This 1933 Clemons-engined "Wonder Bread Special" with George Barringer at the wheel is now owned by Pat Phinny of Carmel Valley and is here at the Pebble Beach Concours today.

days of motorcycle racing on August 13 and 14, and then three days of automobile racing a week later.

On Friday, August 13, the track experienced a dubious first: its first complete rainout.

The motorcycle races were rescheduled for August 14 and 16 (there would be no Sunday racing

until 1974), but so many of the riders refused to participate that the opening day's activities were abandoned after seven of eight events and the Monday card never took place.

A week later, a series of 18 automobile races over a three-day period (ranging in length from 5 to 300 miles) was planned for stripped-down passenger cars—entered by their manufacturers—for the purpose of helping the discerning public decide which might be the ideal vehicles for *them* to go to the downtown showrooms and purchase. A series of accidents—some with tragic outcomes—marred the activities, leading to the termination of the marathon 300-mile finale at 235 miles.

Within a matter of days, plans were in motion to completely replace the inadequate surface. After considering several alternatives, hefty 10-pound street-paving bricks were settled upon, and by the second week in December, no less than 3,200,000 bricks had been shipped in from the western part of the state, laid in a bed of sand and "fixed" with mortar, leading locals to nickname the track "The Brickyard."

A trio of multiday automobile racing events were conducted during the summer of 1910 (over the holiday periods of Memorial Day, Independence Day and Labor Day) in addition to a weeklong air display featuring flights by a number of aircraft, including several belonging to the Wright Brothers. One of the planes, piloted by Walter Brookins, climbed to a height of 4,938 feet, which for a short time rated as the world record for altitude.



While one of the days in late May drew an amazing 50,000 people, attendance over the July 4th weekend and the two-day Labor Day meet was considerably less, leading the organizers to determine that perhaps *too much* racing was being offered.

It was decided that for the following Memorial Day just one automobile race, but one of epic proportions, would be presented. Seeking something that would last the duration of a typical day's program, it was determined that a race of 500 miles would fit the bill. A huge purse of \$25,000 was posted, of which \$10,000 would go to the winner.



The start of the 1922 Indy 500 with Jimmy Murphy, the eventual winner, in Duesenberg Murphy Special #35 and Harry Hartz, the second place finisher, in Duesenberg #12. The Duesenberg Murphy Special won both the Indianapolis 500 and the French Grand Prix at Le Mans in 1921.



Captain Eddie Rickenbacker, who earned the nickname "Fast Eddie" participated in the 1912, 1914, 1915, and 1916 Indianapolis 500s and set a speed record of 134 mph while driving a Blitzen Benz at Daytona Beach. In 1927, he purchased the Indianapolis Motor Speedway.

On May 30, 1911, a special Marmon racing car, nicknamed "The Wasp," built in the Indianapolis-based factory of Nordyke & Marmon, won the first "500" in a time of six hours, 42 minutes, at an average speed of 74.602 mph, with Marmon engineer Ray Harroun and long-distance expert Cyrus Patschke sharing the wheel.

Such was the impact of the victory that Marmon passenger car sales skyrocketed, leading to the firm's retirement from racing, its mission accomplished.

For 1912, the purse was doubled to \$50,000, with \$20,000 (plus additional accessory bonuses) posted for the winner. So even at this early stage, the "500" was already firmly established.

The Fisher–Allison group sold the track in 1927 to another headed by World War I flying ace Captian Eddie Rickenbacker, who actually had been

a "500" driver (and throughout 1916, a partner in a racing team with Fisher and Allison) before he ever learned how

to fly an aircraft. Rickenbacker, in turn, sold the facility in November 1945 to a Terre Haute, Indiana, businessman named Anton Hulman Jr., and 65 years later, the track remains in the hands of Tony Hulman's family.

Another amazing fact—especially in this day and age—is that the track has always been privately owned. There has never been any tax money sought, and in fact, even offers from local government to provide tax breaks have been politely declined.

The bricks of 1909 have long since been covered over with asphalt, much of that process having taken place in stages between 1935 and 1939. Approximately 630 yards of the main straight continued to be of exposed bricks, as a nostalgic link with the past, until that, too, was finally covered over in October 1961. Since then, the new surface of asphalt has featured a strip of the old bricks and mortar to mark the start/finish line. The "500" has continued to survive through the decades—even through the Great Depression of the 1930s. As previously stated, it has been suspended only during the two world wars. Total prize money jumped by leaps and bounds following the track's acquisition by Hulman, the 1946 record of \$115,450 paling next to the \$506,575 of 1964.

Only six years after that it doubled to \$1 million, then to \$2 million in 1982, \$5 million in 1988 and \$10 million in 2002. It has since exceeded \$14 million, with the record for

the winner's share topping \$3 million in 2009—a far cry from the \$14,250 amassed by Harroun and Patschke for the Marmon team in 1911.

It did not take very long for the track's original intent to become somewhat circumvented; automobile manufacturers began leaving the scene as more and more racing car specialists entered the field. But the track did continue in its role as a sort of automotive laboratory,



The year 1961 was the final year in which the greater part of the main straight was still composed of bricks and mortar. On the pole (right) is Eddie Sachs in an upright A. J. Watson-designed Offenhauser-powered roadster, while next to him are Don Branson and Jim Hurtubise in Quin Epperly-built cars, in which the 4-cylinder "Offy" is placed on its side in order to achieve a lower center of gravity. Cars with engines placed behind the driver were about to change everything.

with numerous products being tested there over the years in attempts at improving the breed. Carl Fisher saw lap speeds of 88 mph being turned during practice in 1911 and, with one of his typical "over-the-top" predictions, suggested that 100 mph might not be that far away, with speeds eventually to exceed 120. During practice for the 1996 race (the most recent year in which turbocharging was permitted) Dutchman Arie Luyendyk virtually doubled that estimate with an unofficial lap of just under 240!

Through 2010, a total of 734 different drivers have started in the "500" (not all of them taking the green flag, however, because prior to 1930, the race was started with a red flag). A total of 67 have emerged victorious, with 17 of those winning more than once. Three drivers, A.J. Foyt, Al Unser and Rick Mears, have won four times each.

The Indianapolis 500 has been much more than a race. It has endured the decades as a bona fide *event*, a *happening*. It has woven itself into the fabric of millions of lives over the last century. Many within the gigantic crowd at the Brickyard probably attend no other automobile race during the year, but they are devoted to this event; attendance by an individual over a total of 40 years probably ranks as the *average*, with very likely half of the people on hand being able to claim at least that. For millions upon millions more, it has been an annual family tradition to listen to the radio broadcast in their homes or at a picnic, while others watch the proceedings on television.

And still it goes.

So, happy 100th birthday, Indianapolis 500!

Donald Davidson, the Indianapolis Motor Speedway's historian, is believed to be the only full-time salaried historian for any race track in the world. A member of the Speedway's worldwide radio network continuously since 1965, the British-born raconteur was inducted into the Auto Racing Hall of Fame in May 2010.



Above: The 1963 Offenhauserengined A. J. Watson ran at the Brickyard four times between 1963 and 1966. It is shown here with owner George Lyons and creator A. J. Watson.

Right: This Bardahl-sponsored Kurtis Kraft 500 B driven by Jimmy Davies placed third in the 1955 Indianapolis 500. It is at Pebble Beach today with its current owner Bill Akin.

Below: In perhaps the most sensational finish of the "500," Sam Hornish Jr. comes from behind to overtake and beat 19-year-old third-generation "rookie" Marco Andretti in the final few yards of the 2006 classic.







## Saving Jim Clark's Indy-Winning LOTUS FORD

Over the impressive 100-year history of the Indianapolis 500, thousands of cars have competed at the Brickyard. To celebrate its centennial, we've invited a fine representation of former Indy race cars to our show field—everything from the 1911 Marmon "Wasp" that won the inaugural race to the 1972 McLaren "Sunoco Special." We extend our thanks to the owners, particularly the Indianapolis Motor Speedway Hall of Fame Museum, for working with us to make this celebration a special one.

Preserving or conserving a historic race car is no easy task. While on the racing circuit these cars often live a hard-knock life. They are driven hard and accidents happen—and even when accidents are avoided, parts are often swapped out as



One of the two pit stops that Jim Clark made during the race. The Wood Brothers, wearing their NASCAR Ford uniforms, swarm over the car, and Colin Chapman in a dark shirt surveys the scene. The tires laid out were never used as the car ran the whole race on one set of tires.

racing formulas change or technology improves. After a car's primary racing career has ended, any desire to save it raises a multitude of questions: How much of the car's history will be preserved? Will it be restored to a given point in time? Will the car continue to be driven—or even raced—and if so, what must be done to make it safe?

The Henry Ford Museum has just freshly conserved one of the most significant race cars on our show field—the 1965 Lotus 38 "Powered by Ford" that Jim Clark drove to victory, transforming racing. The first rear-engined racer to win at Indy, this car will eventually be featured in the Museum's new permanent exhibit focusing on Racing in America.

After its Indy win, the Lotus 38 never ran another race. Instead Ford Motor Company took it on the show circuit, then eventually donated it to the Museum, which determined to do a thorough

conservation treatment in 2009. The challenge of conservation (as opposed to restoration) is to do as little as possible while doing all that is necessary to preserve a car indefinitely.

Just as the creation of this car was a collaboration between Ford and Team Lotus, its conservation has been a team effort, involving the Museum, which owns the car; Classic Team Lotus, the restoration shop run by Colin Chapman's son, Clive; and Racecar Restorations, the Indianapolis shop run by Walt Goodwin. Together, they sought to return the car to running condition and to its race-day appearance.

Clives's shop dealt with corroded steel bulkheads, replaced missing internal fiberglass pieces, replaced incorrect reproduction windscreens, replaced incorrect fasteners, and most disturbingly, discovered cracks in some of the suspension parts. Because the Museum wants to be able to demonstrate the Lotus-Ford, duplicate suspension components have been made; these will be replaced with originals when the car is on exhibit. Similarly, a duplicate



The Lotus 38/1 has just been restored at Classic Team Lotus workshops at Hethel, opposite the Lotus Cars factory,

leather steering wheel and vinyl upholstery have been in placewhile Henry Ford Museum conservators treated the fragile, worn leather of the original wheel. A repaint during the car's show years had done away with the original supplier decals, but photos in the archives at the Indianapolis Motor Speedway Hall of Fame Museum enabled those decals to be duplicated.

Many post-race accounts indicated that the race-winning 4-cam Ford V8 went back to the factory, but conservators found that the numbers and markings on the engine matched up with United States Auto Club records, indicating that the original engine was still in place. Walt Goodwin found it to be in surprisingly good shape (the race-winning oil was still in the system!), and he replaced only rings, gaskets, some fasteners, and a badly corroded magnesium engine pan. In February 2010, the Ford's thunderous exhaust note rang from Walt's dyno.