

**IT'S A FOORD?**



# "Old 999," the cantankerous rail that launched Henry Ford and Barney Oldfield, gave birth to a land speed record, an American legend, and an automotive empire

by Griff Borgeson

**M**OST AUTO ENTHUSIASTS have some awareness of the existence of an ancient, stark, ungainly Ford product known as "999." Few realize its significance in the world history of the automobile.

It was Barney Oldfield's first ride, thus launching a legend. It brought together the three great giants of the Ford saga: Henry himself, Childe Harold Wills, and Charles E. Sorensen. It was the first car in America to break the mile-a-minute barrier on a closed course. It was the first American car to shatter

to build a business around this idea. As he girded for the third effort, he shelved his long-range plans in favor of an immediate one: recognition by public, industry, and capital.

In that burning period of the American automobile, success in speed competition was the best key to quick acceptance of a product. Ford had already made a fair mark in racing his own one-off machines. He was, in fact,

unbounded. So, as the new race cars neared completion, Cooper sent for Oldfield to drive these most formidable of machines.

Oldfield merely watched the cars during their first try on the old Grosse Pointe one-mile dirt track. They overheated miserably when they ran at all, and the general conclusion was that Ford and Cooper had wasted a good deal of time, effort, and money. Ford was utterly disgusted. He unloaded both machines on Cooper, who was forced to buy Ford's shop machinery as part of the deal. Then Cooper, Oldfield, and



the World's Land Speed Record. These performances by old "999" won immediate, worldwide fame for its builder — and more important, attracted the investment capital that made possible the whole Ford empire.

Ford, of course, had the vision of the light, inexpensive people's car. By the spring of 1902, he'd failed in two tries

*Barney Oldfield, fresh from bicycle race tracks, couldn't drive before he got onto the dirt with Old 999. He later developed a fierce grimace (left) and a penchant for setting records (above — Grosse Pointe).*

one of the leaders of Detroit's early speed cult. This time he set his sights on building the fastest car in the world and, with the collaboration of 22-year-old C. H. Wills (later FoMoCo's chief engineer and famous metallurgist), he created what clearly was the most powerful race car ever built in America. Sorensen (later to become the industry's genius of production) built its patterns.

The new race car project was partially financed by a former big-time bicycle racer, Tom Cooper. Two identical cars were built, one for Cooper and the other for Ford. Cooper, meanwhile, had a fearless bicycle racer on hand named Barney Oldfield. In the spring of '02, Cooper turned Oldfield loose on a motorcycle and found his courage still

mechanic Spider Huff retired with their booty to Toledo, Ohio, where they worked day and night to make the new machines raceworthy. This was done with hours to spare before the historic Grosse Pointe race of October 23, 1902. One car, painted yellow, was christened "999" after the world's rail-record locomotive of the Empire State Express.

Up to this point, Oldfield (although he had slaved as a mechanic) had never driven a car of any kind, and had ridden in one only twice. But in practice at Grosse Pointe, he quickly proved

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himself faster than either Cooper or Huff, and he picked "999" in the decisive Manufacturers Challenge Cup race over a five-mile distance.

Ford panicked at the prospect of this rank novice risking his life and Ford's reputation, and begged Oldfield to leave the chore to more seasoned hands. But Barney was unmoved, and proceeded to blow off the best competition in the nation, covering the five miles on dirt in five minutes, 28 seconds. In later life, Oldfield recalled this as his most memorable race, gave Ford credit for putting him in business, and gave himself credit for putting Ford in business.

Although the cars ran as Cooper Specials, Ford lost no time in advertising their success. Only Oldfield seemed able to drive them well, and the car-driver combination improved steadily. On December 1 in Detroit, Barney got the mile record down to one minute, 1.2 seconds. On May 30, 1903, at Yonkers,

in America needed room to unwind. He contemplated the existing LSR — 77.13 mph, set in 1902 by Augiers in a French Mors. He knew, given an adequate straightaway, that "999" could easily beat this, and he looked for an appropriate course. This proved to be the frozen surface of Lake St. Clair, northeast of Detroit, just off the shore of Anchor Bay.

Ford, then 40, was determined to break the LSR himself at the controls of his own machine. He arrived at the base of operations with his wife, 10-year-old Edsel, and mechanic Spider Huff. He hired a gang of farm workers to scrape a 15-foot-wide track over four miles of ice, through the snow, and to spread cinders on the course to give his thin, bald tires some semblance of bite.

On January 8, 1904, Huff cranked up "999," leaped to the floorboards beside the driver, and the high-g geared, slow-revving rail clawed its way over the horribly bumpy surface. Conditions were so rough that foot control of the throttle was impossible. Huff had to crawl forward and hold the throttle wide open

these racing laurels Henry Ford rested.

His "999" was a pace setter in design and performance, and was the most radical expression of the then-new trend toward cars stripped of every conceivable non-essential. Of particular interest today are Ford's anticipations of recent dragster characteristics.

One of these was his startling abandonment of rear suspension. The frame simply rested on the rear axle bearings, permitting the elimination of (among other things) driveshaft U-joints. Another was his choice of a locked rear end, his rejection of conventional differential gearing. Still another was his deletion of the transmission in favor of direct drive interrupted only by a simple, wooden-block clutch. Finally, although "999" was originally fitted with a large radiator, Ford got rid of this for his LSR runs and used merely transfer pipes and a small water tank.

One of the starkest features of the car was its steering, which would undoubtedly be thrown out by any racing technical committee today. It used no reduction gearing... only a system of rods which linked the wheel steering arms with a vertical steering column topped by a 28-inch-wide cross-arm with vertical handles at each end. This far-from-precise mechanism, subject to the gyroscopic forces of huge, 36-inch wheels, made "999" one of the world's most impossible cars to steer. Only Oldfield had the reaction time, delicacy of touch, and brute strength to control the car tolerably well on a closed course. For his LSR runs, Ford at least rigged a wheel in place of the rudimentary cross-tiller steering.

The engine of "999" was ahead of its time in being one of the first en bloc engines in the U.S., as opposed to those having individual cylinders or pairs of cylinders bolted to a common crankcase. "999's" four cylinders had a tender bore and stroke of seven by seven inches, for a total displacement of 1080 cubic inches. It developed about 70 hp and, with its 1.5-to-1 overall gearing, was good for 90 mph at 860 rpm. The lower half of the engine's crankcase (like the rear axle bevel drive) was wide open, but this driest of sumps was given some protection from dust by a belly pan.

As originally designed, the engine used its low-in-the-block camshaft only to work the exhaust valves and for actuating a commutator which switched current to a separate coil for each cylinder. The intake valves were "automatic," meaning they were opened by cylinder vacuum and closed by feeble springs. During Oldfield's heyday with the car, an exposed overhead camshaft was used to operate the intake valves, but this heresy was removed by Ford before his LSR onslaught. Carburetion,



Restored to semi-original form and now resting in the Ford Museum, "999" has radiator from Oldfield period, atmospheric inlets from earlier era. Frame is metal over wood.

he pruned this figure to 60 seconds flat — then, on June 15 at Indianapolis, he electrified the nation by clocking a mile in 59.5 seconds — the first mile under a minute on a closed dirt track. On July 4, at Columbus, Ohio, he got the mile down to 56.4 seconds, and on the 25th, back at Yonkers, he set a new all-time record for the closed distance of 55.8 seconds.

At that point, Winton hired Barney away from Cooper and Ford. Ford reacquired "999's" red twin from Cooper. He had a fantastic plan in mind, one which would send the Ford name ringing around the world.

If Henry Ford wasn't the original dry lakes racer, he certainly was one of the first. Speed record attempts in the U.S. up to that time had mostly been made on dirt horse tracks. But Ford knew that the most powerful car ever built

while Ford managed to steer as best he could.

This resulted in a fantastic 36-second ET through the measured mile — a cool 100 mph — but the AAA timers weren't yet on hand. When AAA did arrive on the 12th, Ford and Huff repeated the performance, this time with an ET of 39.4 seconds, or 91.37 mph. Neither driver nor mechanic wore goggles, they could barely see, were almost frozen to death, the car slewed violently from side to side on the narrow course. When Ford hit the kill button, he slid 5/8-mile before throwing the car into a spin. This maneuver flung clouds of snow over the deck of a schooner frozen solidly in the ice at the far end of the course. Not only had Ford smashed the record he was aiming at by 14 mph, he also topped a new LSR record of 84.73 mph set by Arthur Duray in France. And on



(ABOVE) Henry Ford Sr. set LSR in Jan., 1904, by personally driving Old 999 over Lake St. Clair ice. This run netted an international record, clocking out to ninety-one miles an hour.

(RIGHT) Ford (standing) and Oldfield were instrumental in making each other's reputations. Though they only hoped it at the time, both had fortunes riding on the low-revving "999."

(BELOW) Bullet atop block is fuel tank; water tank replaced radiator. All gears were exposed, as were camshaft and differential driving cogs.



such as it was, consisted of a 2¼-inch fuel pipe that fed a single mixing valve which, in turn, fed all four cylinders.

One of the "999s" was totally wrecked in Milwaukee when only a few years old, and Ford's LSR machine found its way back to Tom Cooper. It then passed through several barnstormers' hands until, about 1912, it came into the possession of one Dana Burke of Santa Monica, California. Burke restored it partially, but soon sold it to William L. Hughson, pioneer Ford dealer in San Francisco. Hughson restored the car to perfection and eventually turned it over to the Ford Museum, where it now rests.

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