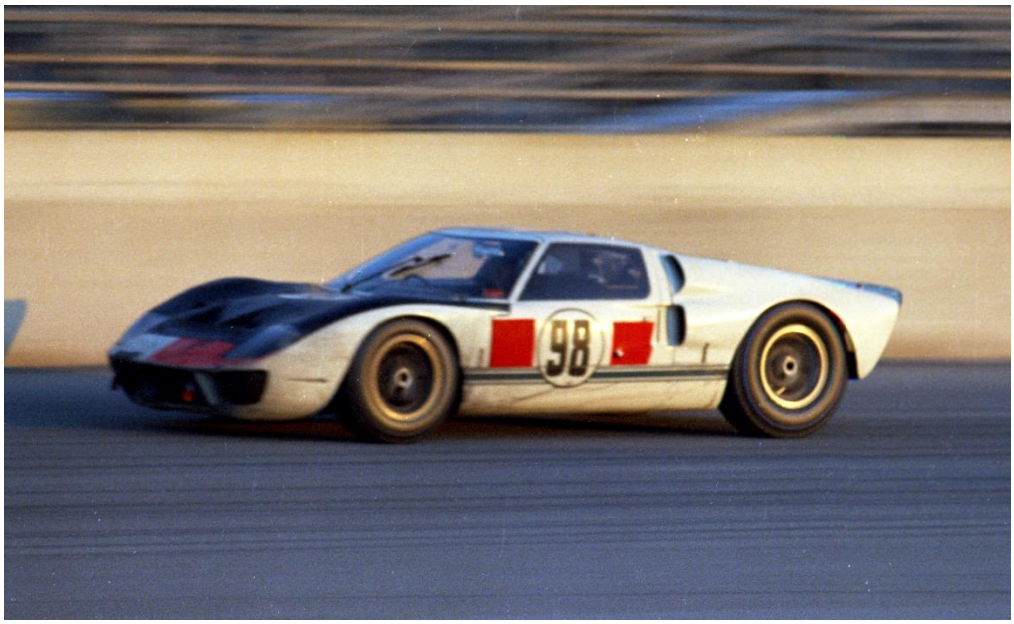

Prelude to Victory

En route to historic win at Le Mans in 1966, Ford scored a big finish at Daytona

A sparsely worded news release issued on May 22, 1963, noted, "Ford Motor Company and Ferrari wish to indicate, with reference to recent reports of their negotiations toward a possible collaboration, that such negotiations have been suspended by mutual agreement."

The flurry of negotiations between the companies had ended. Ford's desire to become a player in performance motorsports remained strong. A month later, the High Performance and Special Models Operation Unit was formed with the mission to design and build "a racing GT car that will have the potential to compete successfully in major road races such as Sebring and Le Mans." The unit's resulting work, the GT Program book, circulated internally on June 12 and contained the initial design concepts for the GT40.

Three years passed before the Ford Performance team and Shelby Automotive were able to fulfill Henry Ford II's goal to beat Ferrari at Le Mans. Those three years were filled with hard work and more than a little failure. The 1966 24-hour endurance race in Daytona proved to be the coming-out party for the GT40 Mark II, a car that went on to become an endurance racing legend.

But first the disappointments.

As designed and built in 1963-1964, the Ford GT40s were undoubtedly fast. But endurance was an issue in every race they entered. The suspension let loose in Nuremburg. Despite leading a portion of the race at Le Mans - with driver Phil Hill setting a lap record - the Colotti gearboxes gave out under the strain of

the speed and number of shifts required to complete the loop. All three Ford cars were out of the race 12 hours into the required 24. Further disappointments culminated in a disastrous showing in Nassau in December that left the program in shambles. The decision was made in Dearborn to move the work back to the United States, with Carroll Shelby given operational control and Roy Lunn engineering control.

When the remaining cars arrived at Shelby's Los Angeles workshop in December, Ken Miles, Shelby's developmental driver, got to work on them. Miles discovered that the initial design settings had been lost. When he reset the suspension to the original settings, performance increased substantially. The team tested aerodynamics using a Ford Aeroneutronics-installed computer, as well as with the old-school method of taping yarn to the vehicles on both the track and in the wind tunnel. The team soon discovered that the airflow was worse than imagined. They gained up to 79 horsepower as Shelby America engineer Phil Remington rearranged ducting to change airflow. Additional changes included lighter-weight fiberglass to replace heavier aluminum and steel, wider magnesium wheels, and a hundred other modifications. Suddenly, the GT40 not only looked like a racing car, it performed like one.

The first event of the year was the 12-hour race in Daytona, and for the first time, the Fords completed an endurance race taking first and third, with a Shelby Cobra (running a Ford engine) sandwiched in between. The 1965 season was off to a good start. After a second-place showing at Sebring, the cars were shipped to France for testing at Le Mans during the time trial weekend in April. The Ferraris dominated the time trials, while the Ford team scrambled to make modifications to the cars, experimenting with different engines and gearboxes.

Back in Dearborn, Roy Lunn and his team had a new version of the GT40 ready for testing. Ford had been working to develop and perfect a 7-liter 427-cubic-inch engine. Lunn and his team worked an engineering marvel to outfit the mid-engine vehicle with the large engine while retaining aerodynamic integrity. Miles and Remington flew from Le Mans to Dearborn to test the car at the Romeo track. Just before lunch, Miles took over the development driving, spoilers were added and modified, and speeds increased until Miles hit 210 mph on a straightaway. When Lunn asked for opinions, Miles said, "That is the car I want to drive at Le Mans this year."

With only four weeks until the race, the team prepared two of the cars with the 427 engine (called the GT40X) and the others with the existing 289 engines that were already racing in Europe. During the practice laps, the 427 set the lap record at 3:33, almost five seconds faster than the Ferraris. Miles' wish

was granted when he and Bruce McLaren teamed up to drive one of the GT40X cars. Despite setting the lap record, the race was an unmitigated disaster. Preparing the cars on such a short timetable led to costly mistakes, and none of the Ford factory cars even completed the first half of the race.

Ford made the strategic decision to focus its energy on perfecting a car with a 427 engine. Ford Engineering, Shelby American and Holman & Moody joined forces to fully develop the 427 GT40. Hill and Miles continued to race and modify the car, and by mid-September had made enough changes to the body, suspension, fuel system, and brakes that the new model, now designated the Mark II, was ready for wind tunnel testing. One of the changes called for using a heavier gauge metal, which increased weight and stress on the brakes. Miles continued testing a short-nosed body style, which added eight mph to the car. The team finally felt they had a winning car, although the brakes and gearbox remained concerns. Interestingly, the Mark II only used a four-speed manual transmission, as the bigger engine put out so much torque that a five-speed gear box was considered unnecessary.

The initial race of the year was at Daytona, which was increased from 12 hours to 24 hours. The unusually cold day, even for February, brought with it frost warnings. Ford fielded five teams, three under Shelby and two under Holman & Moody, including one with an experimental automatic transmission. Ferrari did not enter any of its factory cars but was represented by several cars under its North American Racing Team. The Ford vs. Ferrari challenge was in the air. The GT40 Mark II was the class of the race, claiming four of the top five places. The No. 98 car driven by Miles and Lloyd Ruby led from the beginning and was easily the winner with an eight-lap cushion. The countless hours Miles had spent with the GT40 Mark II paid off with Ford's first 24-hour endurance victory. Miles continued his road testing on the chassis of that winning car, P1015, and drove it again at Le Mans in 1966 with Denny Hulme as his co-driver.

The Daytona victory set the stage for the battle in France, when the GT40 Mark II raced down Ferrari for the first time in Europe with a 1-2-3 sweep at Le Mans.