

# A History of Karting

By Patrick Childs

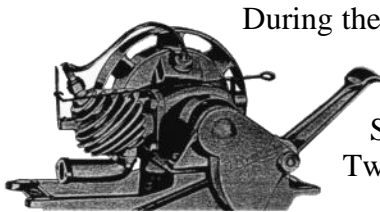
## In the beginning... The Maytag Toy Racers

In 1915, the Maytag Company introduced the Model 43 Washing Machine, powered by a one-cylinder gasoline engine, for farms and homes without electricity. These engines were built for Maytag by the Elgin Wheel and Engine Works, in Elgin, IL. Maytag bought out the Elgin RedeMotor engines in 1916, and renamed them the Maytag MultiMotor. During the early 1920's, as a teenager in Newton Iowa, Fred Maytag, II, the son of the company founder, built a wooden-framed toy racer, powered by a Model 82 MultiMotor. Soon Maytag dealers were making small MultiMotor powered cars for their own children, often styled after the Indianapolis 500 racers of the day, and others also found the MultiMotor useful as a power source for their own home built racers.

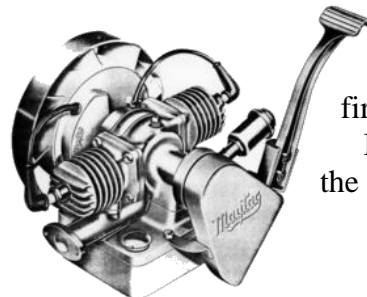
With the onset of electrification, local dealers would exchange new electric motors for the MultiMotors that had been powering washing machines. Many dealers found a convenient method of disposing of their surplus MultiMotors was to encourage the construction of toy racers. Local dealers often supported the MultiMotor powered toy racers, by providing free parades, and holding race events. By 1931 Regional distributors were bringing Maytag national attention to these Maytag toy racers. A Fox Movietone short showed Maytag racers racing and in Salt Lake City's Liberty Park.



In 1932, the Winston Corporation, of Joliet, IL, became the first large scale manufacturer of Maytag powered toy racers. Winston Racers were sold to Maytag dealers and carnivals, as well as to individuals. In early 1933 a group of dealers in Virginia and West Virginia sponsored a series of races using six Winston Racers which were geared to achieve a high speed of around twenty miles an hour, regularly drawing between four and five thousand spectators. Winston Racers became the center of attraction at the carnival rides in the Chicago Century of Progress Fair in 1933. The Maytag News promoted the Winston Racer as a marketing tool for dealers and salesmen.



During the period from 1934 to 1941, the Maytag built 498 Maytag Toy Racers. The were powered by the Model 92 Starting in 1938, they were powered by Twin cylinder.



Company first models MultiMotor. the Model 72



Plans for a Maytag Sidewalk Runabout, from the May 1938 issue of Mechanics Illustrated.



With their production efforts entirely dedicated to supporting the United States war effort, Maytag ceased Toy Racer production at the end of 1941. Maytag continued to build gasoline powered washing machines powered by the Model 72 Twin cylinder until 1952.

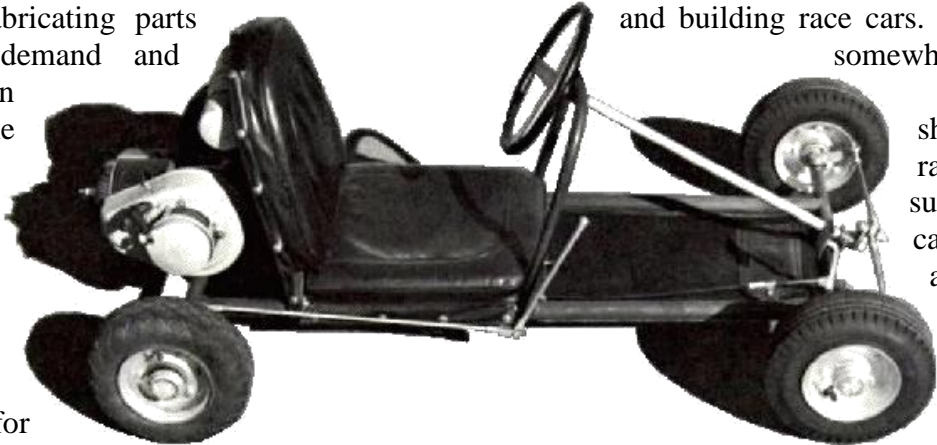
In 1937 a Los Angeles based group of Maytag Toy Racers, wanting to build faster, more powerful, yet safer, steel-framed cars split off to form the origins of what is now known as Quarter Midget racing. After World War II, a new generation of racecars was introduced. Clubs were formed and these organizations instituted standardized safety features to protect the children who participated in the competitions. By the late 1950s, forty companies and many independent garages were building Quarter Midget racing cars.

Today almost every American born IndyCar and NASCAR driver can say they got their start racing in a Quarter Midget racer.

## Kart #1, a/k/a “little car”, the First Go-Kart

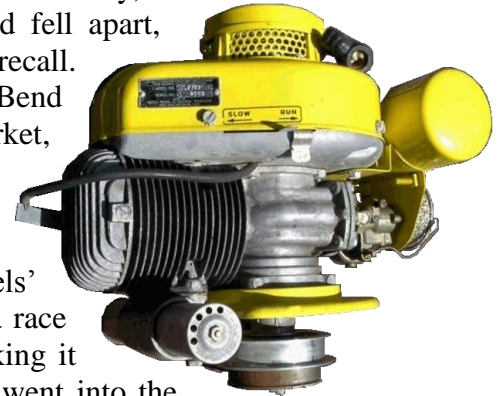
In 1956, veteran hot rodder, Art Ingels, was a race car designer and engineer at Frank Kurtis’ renowned Kurtis Kraft racing car factory, in Glendale, California. During his time with Kurtis Kraft, they would build close to 700 racing cars, with five Indianapolis 500 winners among the 120 specifically built for the great race.

When not working at their regular jobs, Ingels and his long-time friend, Lou Borelli worked out of a small garage, fabricating parts and building race cars. Notably, Art was in high demand and somewhat famous for his artistry in stamping louvers into the sheet metal of hot rods and racing cars. It was during the summer of 1956, when he came up with the idea for creating a “little car” to use in the paddock at the race track. Among the many pieces and parts necessary for building it, would be a small engine.



Kart #1, a/k/a "little car", the original Go Kart

In the mid 1950’s the McCulloch Company came out with a twin, side by side rotary lawn mower, powered by a 2 ½ horsepower, 2 cycle engine, built specifically for their new mower by the West Bend Company. West Bend had been producing versions of this engine, under private label brands, since 1946, establishing an impeccable record for reliability. Unfortunately, for McCulloch, their mower was poorly engineered, dangerous, and fell apart, causing them to cease production and forcing a massive recall. Fortunately, for the yet to be born karting world, the little West Bend 750 engines ran great and there were 30,000 on the surplus market, selling for next to nothing!



In August 1956, Ingels bought one of the West Bend 750s and began to assemble his little car. The difference between Ingels’ creation, and all that had come before, lay in his experience as a race car designer and builder, paying dividends when it came to making it perform. He created the frame using the same steel tubing that went into the racing cars he built, so the resulting chassis was extremely light yet strong enough to withstand his 210 lb body weight. While the basic layout was quite similar to the Maytag Toy Racer, sans bodywork, Ingels machine was built low to the ground, with a wide track for stability and stout enough to carry a full sized adult. The karts of today can easily be seen as descending from Ingels original design. Traction and steering was provided by a set of semi-pneumatic tires

Lou Borelli took on the job of mounting the engine and designing the braking system. He placed the engine behind the seat and used a gravity flow fuel feed from a seat back mounted tank. The 2.5

horsepower West Bend drove the left rear wheel by a centrifugal clutch and chain. A simple scrub brake made it stop.

The first test was conducted on Baxter Street, which included a 100 yard straight, followed by a very steep hill which ended with a sharp climbing turn to the left. Upon finding the small engine was not up to carrying Art's weight all the way up the hill, Lou removed the engine and performed what would be known as the first 'tune-up' in karting history.

They took the "little car" to the Pomona sports car races in September and drove it around the paddock, where it was seen by Duffy Livingstone, who was there racing his infamous Eliminator Tihsepa Mark II. Livingstone, whose homebuilt hot rod often won against Ferraris, Maseratis, and Porsche Spyders, was smitten by Ingels' creation and asked if he could copy it. As he had no interest in profiting from his invention, having built it solely as something he could have fun with, Ingels gave him permission.

### **Kart Racing Begins**



The Rose Bowl parking lot in 1957

Of course, as soon as there were two of the "little cars" the first races were destined to happen. Originally, Ingels, Borelli and Livingstone would meet at the Rose Bowl parking lot, in Pasadena, joined by friends and interested bystanders, as they set up some impromptu racing and fun events. The idea of the "little car" as an inexpensive little fun racer caught on and other hot rodders began building their own "little cars", making their own "refinements" to Art's original design.

As the racers natural demand for speed increased, some began to appear with multiple engines. Roy Desbrow, who co-owned GP Mufflers with Livingstone, created his outrageous Drone Special, using a surplus engine that had been designed to power radio controlled drones aircraft. The "big" 15 cubic inch, opposed twin-cylinder, produced 9 hp, and plenty of tire smoking torque.

In 1957, Don Broberick, was an attorney practicing in Pasadena, who raced sports cars and flew acrobatic planes, when he was first introduced to karting at the Rose Bowl parking lot. He purchased Desbrow's powerful Drone shortly thereafter. During the late '57 and early '58 seasons, Don's skill in

driving and the meticulous care he gave to his equipment kept him a consistent winner. Not to be outdone, Don's wife Marlene was also a force to be reckoned with whenever she got behind the wheel.



1958 advertisement for the Go Kart 400

Soon demand was created by those who wanted to race, but hadn't the knowledge to design and build their own "little cars". Livingstone and Desbrow saw this demand early, and together with Bill Rowles, formed a company to manufacture them. It should be noted that their new associate, Rowles, a surplus materials salesman, had happened to be sitting upon a few thousand or so of the inexpensive surplus West Bend engines. When the time came to name their product, Lynn Wineland, a commercial artist and fellow racer, came up with the name Go Kart. In 1957 the Go-Kart Manufacturing Company was founded, selling \$129 "Go Kart 400" kits by mail order out of the GP Muffler shop. For his part in naming the product, Wineland earned a \$2 royalty from every kit sold, and was soon able to buy a house with his take.

Being an attorney, as well as an accomplished racer and mechanic, Broberick not only knew how to put a formal organization together, but he could also write technical regulations that could govern the competition. Patterning the rules and bylaws after the Sports Car Club of America, he and twelve other club members formed an organization under name Go Kart Club of America, which has now become known as the International Karting Federation, or IKF. Once organized, they went looking for a place to set up a road racing circuit, eventually securing the palm tree lined May Company Shopping Center parking lot, in Covina, California.

The Go-Kart Manufacturing Company was rapidly joined by other manufacturers, so the American Kart Manufacturer's Association was formed to monitor quality control and protect the interests of the GKCA. The United States Karting Association was also formed in an attempt to become the United States Auto Club (USAC) of karting with representation of the manufacturers and kart clubs in one group and providing a source of liability insurance.

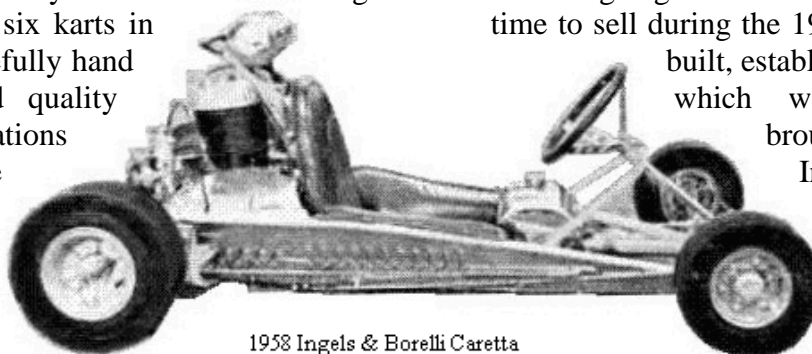


July 1958 Rod & Custom issue

Though interest in go karting was building at phenomenal pace, it was still virtually an unknown sport, outside of Southern California. That is until Spencer Murray, a writer from Rod & Custom magazine who had become a regular at the Rose Bowl parking lot races, brought Marv Patchen, an advertising manager with Peterson Publishing, Co. (publisher of Rod & Custom), to the recently organized GKCA races in the May Co. parking lot. Shortly thereafter, they put together the blockbuster July 1958 Rod & Custom issue, featuring 6 separate articles about go karts, which ignited interest across the United States and around the world.

Art Ingels had continued to work for Kurtis Kraft, though Kurtis had declined the opportunity to start commercial production of his karts, based on the already great demand for their racing cars. After deciding he had seen enough of others profiting from his original idea, he left Kurtis Kraft and his friend Lou Borelli quit his job at Standard Oil, to found the Ingels & Borelli Kart Company, which would become the first to manufacture high-quality completed karts. Putting in equal sums for overhead costs and materials, they worked together in the same garage in which the first kart had been built, to complete six karts in time to sell during the 1958 Christmas season.

Each kart was carefully hand built, establishing a reputation for craftsmanship and quality which would become their hallmark. Innovations brought to endurance racing via the Caretta kart are responsible for Ingels & Borelli in large part we know it today. In 1959, as demand for Go Kart kits quickly overwhelmed the



1958 Ingels & Borelli Caretta

small GP Muffler shop operation, a new Go Kart Mfg. facility was built on a five acre plot in Azusa, California. The new facility included a test track, designed by new partner Don Broberick, which had a straightaway that would allow the karts of the period to reach speeds approaching 60 mph, along with long sweeping bends, some tight turns and a high bank turn. Don continued with his activities in course design with many of the top tracks in the country. Another new partner, Jim Patronite, was the company's accountant, who later formed Azusa Engineering, which has been a leading karting industry component supplier since 1960.

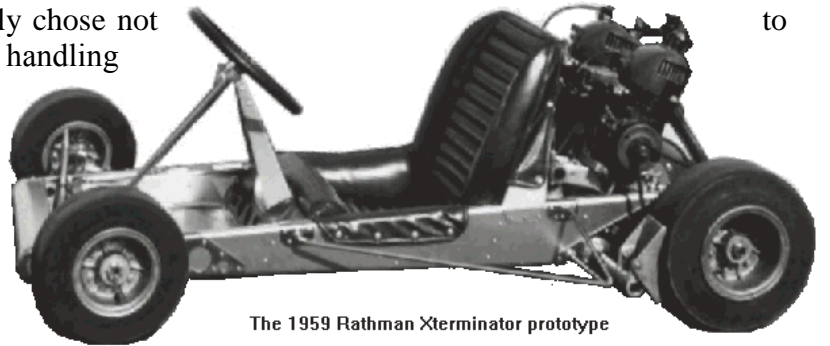
In July of 1959, the GKCA put on its first "Grand National" event at the Azusa track. With that initial championship event, came interest from the first of what would be an increasing number of established motorsports greats, which further helped to legitimize karting as a sport.

Apparently Frank Kurtis had a change of heart, because in 1959 he was credited with the design of the Wildcat kart made by Percival in Des Moines, whose prototype karts were tested by Indianapolis 500 winner Rodger Ward. A year later he was marketing his own Kurtis Kart, equipped with four wheel torsion bar suspension, similar to his successful Indy Cars.



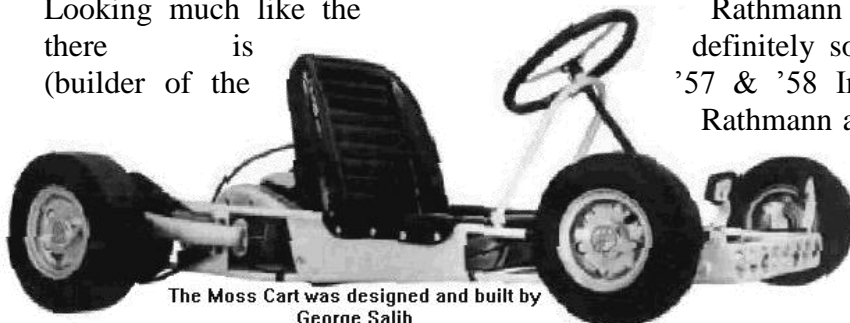
The Frank Kurtis designed, Percival Hellcat Kart

Indianapolis 500 veteran (and eventual 1960 winner) Jim Rathmann constructed the Xterminator, an aluminum monocoque construction prototype kart, powered by a McCulloch MC-10 chainsaw engine, for Don Boberick to race in that first GKCA event in Azusa. Despite testing with a number of tire combinations and pressures, Don eventually chose not to run the kart because he couldn't get the handling sorted out in the short time before the event. A year later, after more R & D testing, Rathmann's creation, driven by 16 year old Bobby Allen, would take the World Championship victory over competitors from six different countries at Nassau in December 1960.



The 1959 Rathman Xterminator prototype

Looking much like the there is (builder of the



The Moss Kart was designed and built by George Salih

Rathmann Xterminator, but built of tubular steel, definitely some similarity in the way George Salih '57 & '58 Indianapolis 500 winning cars) and Jim Rathmann approached the task of designing a racing kart. The adjustable seat back makes it comfortable for anyone, while forward seating position helps in hard cornering.

## **A few footnotes...**

The first kart, "little car", returned to Ingels & Borelli's ownership in 1966, having endured 10 years of racing and fun use, when they accepted it for a \$200 credit as a partial trade-in against a new Caretta kart. In 1968 it was acquired by Karting Magazine founder, Alan Burgess and sent to England, where it is still owned by the magazine.

Duffy Livingstone's infamous Eliminator Tihsepa Mark II, currently owned by noted automotive journalist Brock Yates, recently won a concourse event at Pebble Beach, still painted in its Go Cart livery. (For fun, spell Tihsepa backwards).

It's been cited that as early as WWII and into the early 1950s, Army aircrews in Great Britain would build racers from heavy-duty, motorized bomb carts to stave off boredom.

The original Maytag one cylinder of 1915 was built for Maytag by the Elgin Wheel and Engine Works, until Maytag purchased Elgin in 1916.

In 1905 the Kissel Company of Hartford, Wisconsin began producing small gasoline engines for industrial purposes. In the mid 1930s Kissel was selling their engines to Sears, Roebuck and Company, for use in their own line of washing machines, and selling through their catalog for a variety of general purpose uses, including the Waterwitch outboard engine. In 1942 the factory was sold to the West Bend Company. Beginning in 1947, the West Bend Company produced an outboard motor for West Bend under the West Bend and Shark names, and for Sears, using the Elgin name, the basis of which became the West Bend 750 engine. Into the early 60's variants of that first West Bend engine continued to be popular karting engines. In 1965 Chrysler took over and the small engine was renamed the Chrysler Power Bee. In the 80's Chrysler sold their small engine line to Brunswick, who also owns Mercury Marine. Brunswick then changed the name to US Marine Power Bee. In 1991 Brunswick sold the US Marine Industrial Power Bee line to Wisconsin Oven Corporation who renamed the current company US Motor Power. The US820 industrial engine of today, despite the numerous name changes, is a direct descendant of the original Kissel-built Waterwitch engines from the mid 1930s.