

INSIDE TEAM LOSI

FACTORY TOUR

BY RICK HOULE

Can you believe it all began with skateboards? Does the name Veriflex ring a bell? If you know anything about skateboarding, you'll recognize the name as being the manufacturer of some of the world's most competitive boards. Believe it or not, Veriflex skateboards were the Losi family's first mass-produced item many years before they manufactured their first RC-related product.

The Team Losi story is a rich history of

pride and of a family's drive to enjoy life. This drive has resulted in their name becoming instantly recognizable in the radio control racing world. Losi's contributions to RC racing are numerous. In the process of growing, they have introduced many firsts to the hobby. Things like real rubber tires, an internal diff that's adjusted from the outside, and color-coded shock oils are just a few of the innovations that have become standards in the industry.

When you look at the actual time frame, you realize that the Losi's have only been producing cars about four years. The JR-X2 and JR-XT have become two of the most successful RC cars in the world in a very short time — a feat only previously accomplished by Associated's RC10.

A fifteen-minute drive north of Los Angeles lies the fast-paced San Fernando Valley. Reseda Boulevard runs right down the center of the valley. It's not there



Here's the brand new LXT truck in an exclusive first look. In its initial time out, the production models swept the Lake Whippoorwill Championships in Florida.

any more, but one of the world's first skateboard parks, the "Skater Cross," was in operation for a few years on the boulevard during the late 70s.

Gil Losi Jr. was one of those young and fearless teenagers grabbing mega-air with his custom-built skateboard at a time when skateboarding achievements were celebrated with grand banquets. Pops was even voted "Skateboard Coach of the Year" at one of these grand affairs. The skateboard team, headed up by Junior and brother Allen, including world-renown Eric Grisham, was actually the first Team Losi, and the family began producing their high-quality skateboards sometime in the mid 70s.

The owners of the Skater Cross opened up an RC track on the property and Gil's

Gil "Pops" Losi stands proudly behind each kit produced in his California factory.



Axles, springs and shocks sit ready for bagging, destined for Losi kits. Insert: Parts bins at Team Losi help to speed kit box assembly for the line of Team Losi RC cars and trucks.

father, the legendary "Pops," ran a small retail operation at the track. It was actually Pops who was the first member of the family to race RC cars, (a Sand Scorcher, to be exact). Having raced full-sized, offroad sprint buggies professionally at places like Ascot and Corona Raceway,

Pops was fascinated by this burgeoning segment of radio control. Between the skateboard business and the RC track, the father and sons' team didn't see much of their home in Rialto, a number of miles away. It wasn't long before Gil Jr. decided to

join in on the RC fun, and soon became proficient enough to do some development work for Associated Electronics. (Did you ever wonder what the "L" in RC10L stood for?) After the demise of the Skater Cross, the RC bug persisted. The Losi's next venture



Top: Losi's famous shock oil, in abundance. Above: Just-completed Wet Magnet Losi motors await packaging and shipment to dealers. Left: Team Losi was the first to introduce "real" rubber tires to RC enthusiasts.



Pops and Junior working with CAD/CAM systems.

was another combination skateboard park and RC racetrack called the Rancho Mediterranean Skateboard Park, located in Colton, California. In December of 1981, the family opened the Ranch Pit Shop in Pomona. This facility was unique at the time as being a multi-faceted raceway, incorporating an onroad course, offroad course and retail operation. The success of the Ranch is legendary worldwide, and the facility has set many precedents in the RC racing world. Pops had intended to use the Ranch as a vehicle for retirement, but he is one of those restless souls that just can't sit still for too long.

The RC craze was gaining momentum in the early 80s and Pops' love for the miniature racing machines grew. Pops had some experience in manufacturing and marketing via his Veriflex operation and his previous employment with the Muskin Corp., a company that produced such items as gas-powered mini-bikes, three-wheelers, toy trucks, etc. Gil Jr., on the other hand, became quite prolific at designing and modifying his own RC cars to keep up with the demanding tracks popping up all across the land. Not satisfied with the availability of parts and quality of the existing cars at the time, Pops and Junior made the groundbreaking decision to develop and manufacture their own racing machines, shortly after young Gil won the Japanese National Championships in 1987. The rest, as they say, is history.

The Losis tried to realize their dream with the help of such giants as Associated and Kyosho, but they were destined to do it alone. It was lean times for the family as they had to hock much of their worldly possessions to finance this risky venture, but they were dedicated to their dream. Conviction like this doesn't come from nowhere and I asked Pops what it was he wanted from all of this effort. "Two things," he said. "First I want to go to a race track and hear people say that my products are

the best and that we care about racers. Second, I want all of the people who have worked with me from the beginning to do well in life." You just can't lose with an attitude like that.

Through all of these anxious times, the family had a strong stabilizing figure. Pops' better half, Janet, went along with all of her husband and son's activities, "just for the ride," as she explains it. Today she controls the company's purse strings as secretary of the treasury, and keeps all of their financial matters in order. Janet says she really enjoys the company's ventures and all of the people involved in the hobby.

Team Losi became a separate entity from the Ranch and began operations in an 8,000-square foot industrial building in Chino, California. The manufacturing firm's first endeavor was the JR-X2, an offroad car (a version of Junior's Japanese National Champs car), that featured a revolutionary five-link, rear-suspension configuration. The JR-X2 was an immediate success against the stranglehold on the competition that the RC10 was enjoying at the time.

Pops never thought they would ever use up all of the space in that first building but it wasn't long before they outgrew it. They moved into their current 26,000 square-foot building in December, 1990, and it is already showing signs of bulging at the seams.

In a tour of the plant, I was struck with a sense of cohesiveness among all of the employees, no matter whether they worked in the plush offices up front or in the busy factory in back. All of the equipment used on the premises are state-of-the-art. A large balcony overlooking the plant is an R/C racer's dream. It is up there that the factory team's personal pit areas reside. At any given day you may find the likes of Jay Halsey, Jack Johnson, Jon Anderson, Ron Rossetti or Junior himself, cranking on their rigs or looking out over the factory while contemplating the next major race.

As with any new venture, it wasn't all a cakewalk for the Losi. Early manufacturing problems taught the industrious team that they were going to have to keep on their toes if they were going to stay in the game. It wasn't design flaws that plagued the team, but rather the materials used by some of the outside contractors Losi was working with at the time. This situation has led to the company's religious-like preoccupation with quality control that is a major part of the operation to this day. Research and development also became a prime focus for the group. Even after they would exhaustively work the bugs out of their designs, further research would show them an even better way to make a part or component. Today the company relies on a battery of computers with Autocad and Cad-cam systems to help them work the weak points out of components before they're actually produced. To be exact, their main computer frame is a series 486 IBM that does everything but predict the next World's Champion.

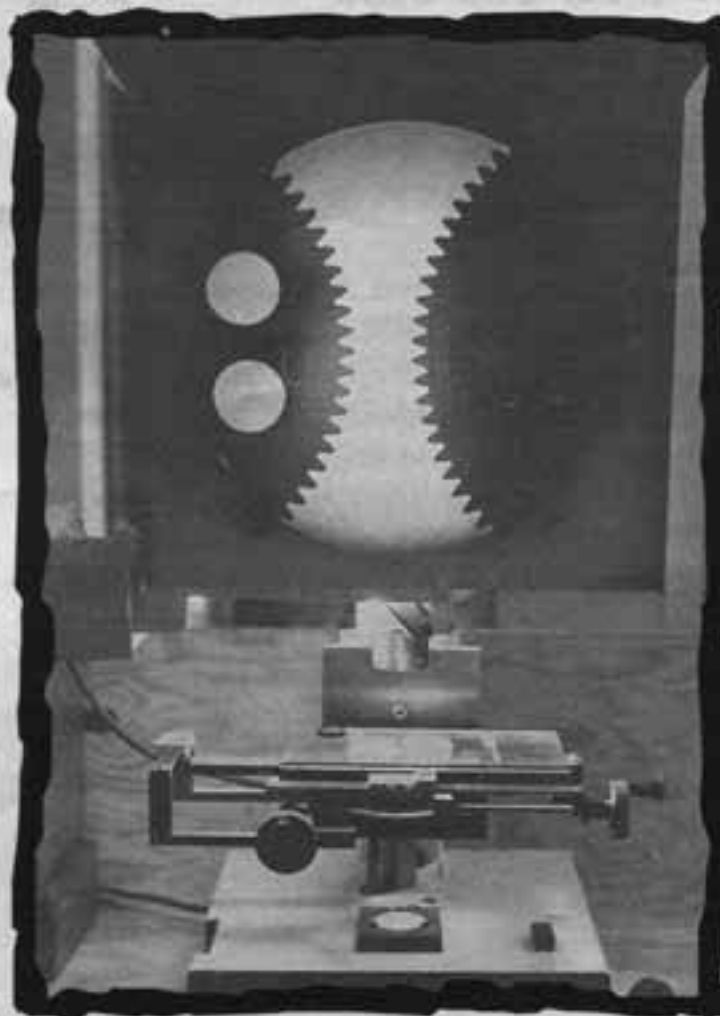
In areas outside of the family's expertise, Losi hires experts in certain fields to fill the gaps. Gary Kyes, an accomplished RC racer himself, was called upon to carry the torch in marketing the conglomerate's products. As VP of Marketing, he has helped the group to realize an annual gross income measured in eight digits.

Clarence Smith, VP of Engineering, was enlisted to guide the company through the myriad nuances of structural engineering. With an extensive background in mechanical engineering, Smith translates the team's visions into hard-core data using computer-aided engineering. This is accomplished by such means as Finite Element Analysis, a computer-aided way of determining mass, weight, stress and breaking points. To put it all in simple terms, Junior comes up with an idea for a

component such as a suspension arm, and the computer creates that component in 3-D. Once they have a computer-created item, they can recreate stress on that item as if it were hit with a hammer or as if that component smashed against a wall.

Kyes and Smith are heavily involved with quality control, and both gentlemen keep a constant vigilance over all of the components machined by outside contractors. One of the ways they accomplish this task is with a device simply referred to as a computerized "Gear Checker" that measures Total Indicator Runout (TIR). This is a device that is used by the aerospace industry and is calibrated on a regular basis. The machine accurately determines how perfectly round a gear is and how well the circumference of that

With high-tech equipment such as this profile meter, the company keeps a constant vigil on quality control.



gear lines up with its center point. During a previous interview, Kyes offered to prove to me that their "tooled" gears were "the finest gears produced by one of the most reputable gear manufacturers (we will refer to them as brand 'X') in the industry." I was invited to go out into the plant and randomly pick some pinion and spur gears from their regular stock to be compared with the gears I brought.

The company boasts that none of their gears has a TIR greater than two hundred thousandths of an inch. Basically, this means that the overall accuracy of their gears do not vary more than that amount. What a surprise it was to see for myself that every single Losi gear we checked did not exceed 1.5. It was uncanny how these gears not only had an extremely low TIR, but the measurements from each batch were closely identical from gear to gear. This close duplication of tolerances is what Kyes refers to as "repeatability." Brand-X gears, on the other hand, all varied greatly, with the lowest TIR being a little over 3, and the highest as much as 8.

It doesn't stop here, though. The company is moving towards the direction of computer-aided machining by use of Cad-Cam systems. Some day they hope to design components on the computer and then feed that data directly to the machines that produce the item.

So why are these guys so successful? The answer is simple. Pride. Pride in producing championship-winning cars and pride in knowing that their products are the best they can possibly make them. When I asked Pops that same question, there was a moment of hesitation as he thought it over. "I don't know if we are successful yet," he answered from behind his huge oak desk in his posh office. "Ask me in another ten years...I should know the answer by then." Believe me, I intend to do just that. •