MOVING TARGET
INSIDE THE GREEN SOLO MACHINE

TWO STEP
SUPER TOUR HITS TEXAS

MAY 11 $4.99

VOLUME 69 NUMBER 5

SportsCar

Official Publication of the Sports Car Club of America

SCCA Sports Car Club of America

HOT NEWS
THE 2011 RUNOFFS SCHEDULE UNVEILED!
P12

WINNING IN PRO RACING'S MX-5 CUP TAKES

RAW TALENT

CHECK YOUR EGO AT THE DOOR

ROCK N ROTARY

Jeff Kiesel brings music to the masses through his job at Carvin Corporation, but on the weekends, it's a high-revving rotary that's music to his ears

BY **JASON ISLEY** PHOTOS **PHILIP ROYLE**

When he got his start in Solo competition, Jeff Kiesel jumped right into the deep end of the pool, competing in E Modified with his three-rotor Mazda RX-7. His next entry into the Solo world is perhaps what he is best known for: the beautifully crafted full carbon fiber bodied B Prepared Mazda RX-7 that he piloted to what would be BP's final – and Kiesel's first – Tire Rack Solo National Championship in 2006.

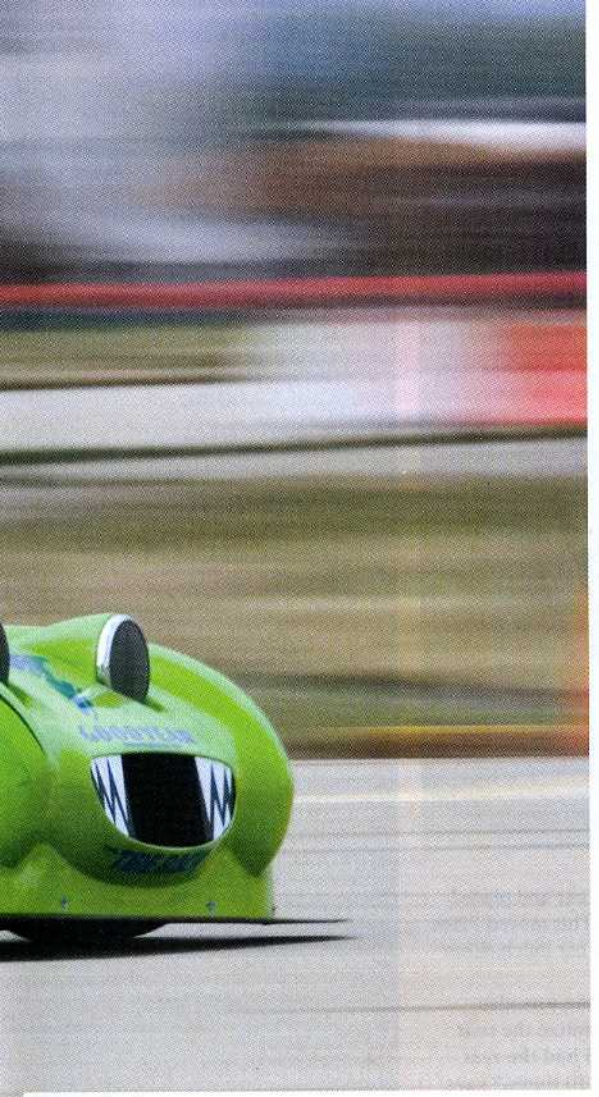
It was about this same time that Kiesel started looking for a new challenge – and that challenge came in the form of a 1958 Austin Healey Bugeye Sprite. Strangely, this project brought him full circle, back to where it all started in EM. Going from the Mazda RX-7 platform he was so familiar with to the Austin Healey is a bit of a leap, but packed under the hood was the rotary power plant that he was intimately familiar with.

"I bought the car in May of 2006 from Scott McQueen," said Kiesel. "Scott built the car in 1990 and it had a two-rotor, non-turbo motor in it originally, then he switched to a three-rotor, non-turbo motor. He had several suspension [and] chassis changes over the years and was able to pull in three EM National Championships [1997, 2001-'02]. Scott would have had a few more, [but] the car was notorious for breaking [on the high-grip, bumpy concrete]. Also, he did not own rain tires. So providing the car did not break and it was dry both days, he finished at the top."

Buying a car with a proven track record made the transition back to EM an easier one, as Kiesel could focus on tweaking the car to his liking, knowing he had a good foundation to start with.

"I started running the car in September of 2006 after Nationals," said Kiesel. "My first project was to strengthen the weak areas of the car. I talked to Scott a lot that first year and I asked him things like: What areas would you address to make it stronger [and] what things would you change to make the car faster? I also did body work on the car and painted it the lime green color right before 2007 Nationals. The first year I ran it at Nationals, the car was pretty much how I bought it from Scott. I only did a few minor things like spring rate changes and some setup changes, [and] tuned the motor a bit better as well."

Most people would be more than satisfied with jumping into a new car and winning a championship, especially considering the car's



extensive pedigree. But not Kiesel. The 2008 season brought big changes for the little car.

First up was a new power plant. Out came the three-rotor, swapped in favor of a lighter two-rotor fitted with a turbo. This setup dropped 100lbs from the car, and improved low-end torque. The new engine was now bolted to a custom Jerico 4-speed transmission. The transmission was built by Taylor Race Engineering, and features no tail-shaft, making it very compact and light.

Wanting to narrow up the car, Kiesel next went to work on the suspension, relocating all of the pickup points and installing a set of Ankeny Racing Enterprises Penske shocks to help aid mechanical grip.

While all of this work made the car quicker, it was another change that really helped the drivability. "The biggest change that has helped me the most was switching to Goodyear Tires," says Kiesel. "The car not only got faster it was much easier to drive. The car was consistent all the way through every turn and felt really good for the first time ever."

The results of these changes were a pair of Solo National Championships, as both Jeff and his wife, Shawn, took EM and EML.

With two consecutive titles in the bag, Kiesel took it relatively easy in the shop preparing for the 2009 season. A dry sump oil system made it possible for the car to be lowered further and a new carbon-fiber rear body section made working on that end of the car easier.

One reliability issue that had plagued the car was breaking axles. "We had an issue breaking an axle every five to six events," says Kiesel. We got Mike Maier [of Maier Racing] involved and had him switch the car over to a full floater rear end." A full floater is where you have a wheel bearing that handles the lateral load – this relives the axle to handle forward bite and not both.

Much like in previous years, Kiesel's hard work paid off with another championship.

Preparation for the 2010 season made the previous years looks like child's play. "I spent over 260 hours in my shop engineering, designing and laying out the motor relocation," says Kiesel. "Not only did I move the motor, I moved everything to get the balance just right. I made Styrofoam mock ups of every part. The goal was to get 40/60 [front to rear] weight balance and move all the weight between the wheels."

To help achieve the weight balance goal, Kiesel moved the engine back 10 inches and two inches toward the passenger side. The purpose of this was to help maximize the massive Goodyear Formula Atlantic tires Kiesel had chosen for the car. These tires, measuring 20x9.5x13 up front and 23x13x13 in the rear, are wrapped around equally massive Bogart Racing Wheels, 13x10-inch fronts and 13x14-inch rears.

"These tires are designed for [Formula Atlantic] cars that weigh around 1,400lbs and have 40/60 weight distribution with only around 560lbs of weight on the nose," says Kiesel.

Other steps were taken to help further reduce the load seen by the front tires. A narrow Ron Davis radiator was installed, 12-inches farther back than the previous unit, and lighter carbon-fiber front bodywork shaved another 17lbs.

To help reduce the pendulum effect from weight hanging behind the rear axle, the passenger seat was removed and the dry sump system was taken

Jeff Kiesel's Bugeye Sprite packs more attitude than the engineers at Austin-Healey could have ever imagined.