



2014 Competition Season Review

Formula SAE Michigan

May 14-17

Michigan International Speedway, Brooklyn, MI

The 2014 season has presented us with many challenges. A rocky start to our season meant a late start to our design period. Despite the setback, we were able to produce a complete, running car prior to our departure for competition. Though F2014 began with doubts, they were quickly cast aside once we were able to test our newest racecar before we departed for the north. We were the most prepared for competition that we have ever been when we left for Michigan and Canada on May 12th.

We arrived at the Michigan International Speedway an entire day early, which allowed us to take advantage of the early Fast Track Registration. By registering early, we were able to save time on the first day of competition and get to the safety gear check and technical inspection early on in the day. We cleared all four tech rounds (visual inspection, tilt, noise, and brake) by the close of the day, and avoided waiting outside during much of the poor weather.

Day 2 brought more wind and rain, but with it, success. Team members participating in Cost, Presentation, and Design made their cases before the judges, and came out on top. Our most complete Cost report and Real Case Scenario preparation brought in 28th place. The previously successful Presentation scored 13th after a thorough round of judging. And finally the Design team barely missed Design Finals, placing 37th after a 5-way tie for 10th and a 22-way tie for 15th.

The dynamic events began with Skid Pad and Acceleration in the morning of Day 3. After drivers Chris Smith and Gary De La Rosa set some solid runs in both events, the team returned to the paddock to setup for Autocross in the afternoon. Drivers Trey Moore and Mateusz Malinowski put us in the top half of the field, which set the team up for an afternoon run time in the Endurance event on Day 4.

Endurance, which is the most challenging and stressful event of the competition, loomed on Day 4. The day began smoothly, and we even took the opportunity to use the practice track to finalize setup prior to our start time. During the Endurance event, our car lost stability in a corner which resulted in a broken steering linkage. We had to retire from the event and join a long list of cars unable to finish Endurance. Overall, our scores in both the static and dynamic events landed USF Racing in top half of the field at 50th place out of 109 teams from around the world.

Repeating past seasons, we travelled to Kettering University in Flint, MI, to share shop space and knowledge with our friends there. The Formula SAE® team at Kettering has always been welcoming to our team, offering us showers, laundry facilities (much appreciated), as well as tools and machines. The guys and girls at Kettering helped to prepare us for Formula North, just a few days after Formula SAE® Michigan. After completing minor repairs, we set off for Kitchener, Ontario, Canada to visit our Silver sponsor, Miltera Machining Research Corp., who had also machined a replacement steering adjuster for F2014 overnight. We can't thank Miltera enough for their willingness to help us in our time of need. Their quick machining and warm hospitality were just what we needed to get our heads in the game for Formula North.

Formula North

May 22-25

Barrie Molson Center, Barrie, ON, Canada

We again took advantage of early registration at Formula North, held at the Barrie Molson Centre in Barrie, Ontario. We used our head start on Day 1 to get an early spot in line for technical inspection. We were again able to complete all aspects of the inspection and dynamic tests on the first day.

We had our game faces on again for another rainy and cold Day 2, where our team dominated the static events. Out of 20 teams in attendance, we placed 4th in static events with scores of 4th, 2nd, and 5th in Cost, Presentation, and Design respectively. Once again, we placed just outside of Design Finals.

The weather cleared for Day 3, which presented great track conditions for Skid Pad, Acceleration, and Autocross. After retiring from Formula SAE® Michigan, it was decided that we would run F2014 without the aerodynamics package for Formula North. Unfortunately, we had difficulties establishing an aggressive setup for the car without the aero package. Drivers Chris Smith and Michael Ramos recorded respectable times in the two morning events, and Trey Moore and Mateusz Malinowski battled dirt, holes, and bumps on the Autocross course. Their times placed us near the beginning of the Endurance event for Day 4.

Day 4 did not bring us more luck. After 11 kilometers on the Endurance track, we successfully made it through the daunting Driver Swap, where many teams must retire their cars from the event. Just a few laps later, however, the engine in F2014 began to overheat and we again had to retire from Endurance. Our dynamic scores combined with 4th place in the static events landed us at 14th place overall. We want to thank Brown & Miller Racing Solutions for supplying us with replacement hoses for our very warm engine on such short notice. BMRS and BMRS Wired have been great supporters of the Formula SAE® program and they believe in the FSAE spirit!

Formula SAE Lincoln

June 18-21

Lincoln Airpark, Lincoln, NE

After two weeks of testing at home, we were itching to compete again. The bus and trailer trekked west to Lincoln, Nebraska on a Monday. Much unlike our first competitions, it was a challenge to beat the heat and we were thankful to arrive in Lincoln in the evening. We spent our first night at the campsite reviewing the technical inspection list to make sure the next day would go smoothly.

We showed up early on the first day of Formula SAE® Lincoln and took the opportunity to breeze through registration and take a spot near the front of the line for safety gear check. We were able to pass the static portion of technical inspection on the first try! We packed up and headed back to the campsite to prepare for statics events the next day.

When Day 2 arrived, we gave it our all. We got through Presentation, Cost, and all portions of dynamic tech in the morning which left plenty of time to prepare for our afternoon Design appointment. The car weighed in at 366 lbs and we placed 27th, 26th, and 8th respectively in Presentation, Cost, and Design. We took some time in the late afternoon to practice before packing up for the night and letting our drivers prepare for Day 3.

Changes to the aerodynamics package after Formula SAE® Michigan allowed us to get more performance from our vehicle. Chris Smith and Gary de la Rosa tackled Skid Pad and Acceleration and placed admirably in the middle of the pack. Out of 80 teams, we placed 37th and 51st in the two events. We made several setup changes before Autocross in

the afternoon and took a video of the Endurance course for our drivers to study during the day's lunch break. However, we ran into an issue with the steering system which limited our performance in Autocross. Trey Moore's one clean run placed us in 46th. We didn't like the slip up keep us down. We quickly fixed the issue and began the preliminary setup for Endurance.

We got an early start to Day 4 since we knew we would be entering Endurance in the morning. Our repair of the steering system appeared to be working just fine and we completed our setup and made our way to the fueling station. We were late to our time slot to begin Endurance and suffered an automatic two-minute penalty, but driver Trey Moore consistently set the fastest laps of the day. We made it to driver change without a hitch and Mateusz Malinowski was able to get F2014 restarted and back on the starting line. Mateusz decided to drive conservatively and focus on completing the event. His stint in the car went smoothly until the last few meters of our last lap when the car spun out. Mateusz was able to regain control and go back through the gate before crossing the finish line. We did it! After a long string of bad luck, we finally finished Endurance. We placed 22nd in Endurance and an unprecedented 5th in Fuel Economy that morning and spent the rest of the day relaxing and enjoying the rest of the Endurance event.

Overall, we didn't place where we hoped we would. Having finished in the top 10 teams for the past two years set a high bar for our team. We came home in 22nd place, but we were still happy. Despite our misfortune, we kept our heads up and put one foot in front of the other. In what seemed like an extra reward for our hard work, another bit of good luck came around for us and we were selected to receive free registration and a reserved spot in the Lincoln event in 2015.

Everyone at USF Racing wants to thank all of our sponsors, friends, and families who help us throughout the year, and especially during difficult times. We have some extra special sponsors and friends that we would like to thank for helping us to fuel our team and our bus, Skoolie, across the US and Canada.

Thank you to Rita Staffing, Nathan Hooper, Paul Prince, Pam and Phil LeBrun, Universal Die Services Inc., Brian Karcher, and our Platinum sponsor, Maxi-Blast, Inc. for helping us with the cost of fueling Skoolie!

Extra thanks to Edyta Langer for cooking and freezing nearly 200 home-made meals for us to enjoy!



*F2014 during the Endurance event at the Michigan International Speedway for Formula SAE® Michigan
Photo courtesy of Kevin Krakauer (San Jose State University)*



*USF Racing with Miltera Machining Research in Kitchener, ON.
Miltera machined replacement parts of F2014 overnight after a steering clevis broke at Formula SAE® Michigan.*



*F2014 during the Autocross event at Formula North
Photo courtesy of Mitchell Gleason (Formula North)*



*F2014 and Trey Moore during the first half of Endurance and Formula SAE® Lincoln
Photo courtesy of USF Racing Alum Andrew Tanasescu*



*The USF Racing team
Photo courtesy of USF Racing Alum Andrew Tanasescu*