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Buggy Racing at Carnegie Mellon University



Recognized as one of Ford Motor Company's Premier Schools, Carnegie Mellon University (CMU) of Pittsburgh, PA is getting geared up once again for its Annual Buggy Sweepstakes that occurs every April during Spring Carnival. Current students, staff, administration, friends, family, and alumni all assemble around the Frew Street back hills for the big race to begin.

Three hundred sixty five days, sometimes seven days a week, morning, noon, and night practices ... all in preparation for the grand event; several competing organizations around campus take time out of the year to design and build small human-powered vehicles known as buggies to compete in the 2015 Annual Buggy Sweepstakes as pushers hit the gym to increase their strength, endurance, and speed for tackling the hills. A full team on average consists of buggy drivers (5 feet tall or less), pushers, mechanics, flaggers, timekeepers, videographers, and more.



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There are a great number of backgrounds represented on every competing team, but not limited to, with the production of a buggy, including Mechanical and Electrical Engineering, Math, and the Sciences. The Buggy world remains extremely hip to the newly innovative ideas present to date to ensure the buggies are equipped with the latest wheel technologies, mechanical functionality, aerodynamic techniques, and of course cosmetic appeal. The captivation of a buggy being pushed into a free roll and achieving the shoot as it quickly approaches the finish line is what drives the excitement forward.

As a proud Alumni Member of Spirit Racing Systems (SRS) and former Women's A-Team Hill 1 Push Captain, I am a first-hand witness of the Buggy experience and I absolutely love it and I am sure you will too.

As a proud alumni member of Spirit Racing Systems (SRS) and former Women's A-Team Hill 1 Push Captain, I am a first-hand witness of the buggy experience and I absolutely love it and I am sure you will too. Also, as a Ford Engineer, it is only right that I encourage the teams to "Go Further."

Article courtesy of Elisha N. Clayton-Urquhart, Warranty Commodity Engineer/Ford Motor Company



Women in Racing visit the 2015 North American International Auto Show

Every February the North American International Auto Show comes to Detroit with all the new vehicle models to present to the public before you can buy them. This year there was a special debut for the new Ford GT high performance supercar and the Women in Racing were there to get a glimpse of history unveiled. Why is this in a class by itself? This technology features Ford's innovative spirit showcasing the ultra-efficient aerodynamic design, EcoBoost performance and lightweight carbon-fiber construction.

Every bit of it's design is impressive down to the beautiful liquid blue paint. But under the beautiful sheet metal is full power. Six hundred horsepower built into a twin-turbo charged 3.5 liter EcoBoost V6 engine. This is the same architecture as used in the Ford IMSA Daytona Prototype endurance-racing efforts.

The GT build will be limited to 250 units a year making this the most exclusive vehicle ever build by Ford.

As a group event with the Women in Racing, we took in a bit of Detroit with a quick lunch downtown before a peek at all the beautiful vehicles shown in the Motor City annual event. It was a treat!

New 2015 Ford GT Debut at NAIAS



WE ARE DRIVEN

PWN-Women in Racing Tour Watson Racing

The Women In Racing group recently visited the facilities of Watson Engineering to enhance their comprehension and understanding of where, what, and how to design and develop products from concept to reality. Watson was chosen because of its close association with Ford Motor Company and its racing program. This opportunity was very well attended and produced some very favorable reactions.

It is of interest that Watson Engineering has released its own brand of authentic "Watson Racing" products and is proud to be an integral part of the Ford Racing Performance Cobra Jet and Mustang S550, Boss. 302S race car programs and specializes in late model Mustang racing parts along with custom race car builds. After quietly building race cars for decades, 2013 proved to be a ground-breaking year as Watson Racing lifted the veil opening its race shop doors to the world.

- * Watson Racing is a full-service operation
- * They offer their own line of authentic fabricated race parts
- * They are an authorized Ford Performance Parts dealer
- * They are an Edelbrock E-Force Supercharger distributor.
- * Watson Racing offers decades of technical racing knowledge
 - complete race car builds
 - fabrication skills
 - dyno tuning
 - track support

It is important to note that all of these statements are supported by numerous race awards and records.

Watson specializes in late model Mustang racing parts and custom race car builds. Watson Racing is also an affiliate of Watson Engineering that was founded in 1981 in Southeast Michigan. In 2013, Watson Racing became an authorized Ford Racing



Performance Parts Dealer. Watson is now releasing it's own brand of authentic "Watson Racing" products. Previously, road race, drag race and street application parts were only available on new Cobra Jet or Boss 302 Mustang racing cars.

Specializing in racing parts and race car body modification, chassis tuning, roll cage design, installation, custom calibration, dyno tuning and complete vehicle builds. Watson Engineering has years of experience building 1/4 mile drag cars and road race vehicles. Employees of Watson Racing are skilled technicians and experts in performance parts and Ford turn key race car builds. Watson has manufactured and marketed the Mustang "bolt in roll cage" unlike any other.



Car & Truck Enthusiast, Hether Fedullo

Hether Lee Fedullo admits that she has been "car-crazy since before she can remember". Hether was born a country-mile from Mid-Ohio Raceway. Both of her parents were automotive engineers. Heather loved the "Dukes of Hazzard" and getting up early on Sunday mornings to watch the Formula 1 races. Her desires for the automobile guided her to an internship with Powertrain Research at the Ford Motor Company as part of her High School and Technology program. Needless to say that "hooked her on Automotive Engineering" as her career of choice.

Hether's car passion flourished in college and while earning a B.S. in Mechanical Engineering and B.A. in Foreign Languages-German at Virginia Tech, she became a part of the Formula SAE team beginning with her freshman year and became Team Leader in her senior year. Formula

SAE was her first taste at racing as a participant. Hether's competitive mindset was honed through years of participation in soccer, volleyball, and basketball. Thus, her interest in automotive engineering led to the prospect that she could not ignore. The "race bug" infected her!

After her undergrad, Hether joined Ford full-time as a Powertrain FCG. Hether's last sixteen years with Ford have flown by as a blur of activities that included P/T D&R, P/T, Road NVH, a Master's Degree through Purdue, six months in Aachen, Germany, eight years working at SVT on the Raptor and Shelby, and most-recently as a PDLP participant, having completed her first rotation in Vehicle Dynamics, and currently getting up to speed on her second rotation in Basic Design VI.

The many race highlights include an FCG rotation in Ford Racing, working on World Rally Car and Formula One combustion modeling with a dream-trip to Cosworth for engine testing and teardowns. While working in Aachen, Germany she took advantage of every chance available to her to head down to the Nürburgring for a few laps while innocently exploiting an opportunity to take one lap at the Spa on a Saturday afternoon while spectating at a VW bug race. There were numerous amazing experiences while at SVT including demo rides in Trophy trucks, countless hours of off-road Raptor testing, and laps at VIR in

Shelby's and Focus STs, just to name a few of those opportunities.

In addition to workrelated racing items, Hether has made time for extra-curricular automotive hobbies

as well. As quick-fixes for 'the bug', she has participated in several racing schools, including: the Bondurant 4-day racing program with Formula Fords, Bondurant Shifter Karts, Skip-Barber Formula Dodge, and several local SCCA-sponsored sessions. She's also competed in the 24 Hours of Lemons Races at the Flat Rock, Toledo, Nelson Ledges, and Gingerman race courses and a Chump Car event at Nelson

As far as a racecar to call her own, Hether has none. However, she did purchase a 1978 right hand drive Mini two years ago complete with a roll cage with the idea to race it. However, after the first drive, she loved every vintage inch of it so much that she could not bear defacing the interior of the car to make it race-ready. Thus, it lives in her collection as a back-road Sunday driver and occasional autocrosser. Hether also has a 1931



Ledges.

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Model A Pick-up and a 1970 all-original Mustang that was recently featured in "Mustangs Monthly" and "Old Cars" weekly. When asked "why she doesn't have a race car yet?", Hether would say that these cars were the reason. However, it is not what you think. It was not the time spent maintaining the cars, it was the time and elbow grease, or rather paint, that went into spiffing-up the outbuilding of her new home (which was upgraded before the house!). When that project was recently completed a race-car was imminent until Hurricane Sandy filled her in-law's basement with six feet of water for three days, thereby drowning her father-in-law's 1931 Model A that he's had since he was 18.

That Sandy-Survivor is next-up on the project list (along with completing the house renovations!), so for now, Hether will have to continue analyzing her racecar decision matrix and dreaming about what she'll get...she's always open for conversation on this, so if you have any recommendations, let her know!

While writing this article, Hether was again reminded of all the great Lemons /Chump memories, and would like to acknowledge her awesome team-mates during those five years: Andrew, Dev, Jason, Joe, Joe, JP, Nancy, Nick, and Rick!

Racing and Ford are tops!



Hether Fedullo, Basic Design VI/LBP Ford Motor Company

The Challenger is Challenged

Dr. Audrey was able to drive the Dodge Challenger while in Arizona recently. She said that the "Dodge Challenger R/T offers up a fat domestic muscle-car feel." The 5.7-liter Hemi makes plenty of power, but all of it is used to haul the 2 ton R/T AWD around. And, while winter traction may be improved because of the AWD it precludes a smoky burnout. That is not to say that it doesn't scoot however, "I just thought that it would be quicker."

I managed to get just under 17 mpg in a mix of city and freeway driving with some full-throttle stoplight romps thrown in for good measure. After all, one has to have a little fun. And, I did enjoy the ride. The design is about as mean as they come. But considering the price and fuel economy and lack of the ability to get a burnout I came away a little disappointed. I was able to wind it up to a top speed of 142 miles per hour. However, the noise inside the car at that speed was very loud. Braking was adequate as was the ability of the vehicle to remain stable during maneuvering. This Dodge is pulling a lot of weight and I believe the performance suffers because of that fact.



The interior had a lot of passenger and leg room. Other than that it was about what I would expect with a car of this capability. Even though it was all-wheel drive, which takes away from the tail-wagging fun, it's still extremely enjoyable to put the pedal down and feed the Hemi with fuel. It won't loosen up on dry pavement, no matter how much of the throttle I used. Passing is no problem on the expressway and not too many cars will beat this car at a red light.

This Dodge Challenger R/T was equipped with a 5.7 Liter V-8 with AWD and a five speed automatic transmission.

HR Diversity Council and the Professional Women's Network invite Dr. Audrey to be part of the BYKTW Day

Joe Hinrichs Ford President of the Americas stood before hundreds of children and their parent and answered their questions about benchmarking, flying cars and more. At one point he was asked about Ford's fastest car and he asked for help from Dr. Audrey who was in the back of the room. Dr. Audrey replied that it was the Ford powered Indy Cars. These cars have achieved speeds of over 230 mph at the hands of such drivers as Mario Andretti.

It was through this engaging style that Mr. Hinrichs drove home the message that, "This is a great day for us because our extended Ford family is a big part of who we are. It's not just about making great vehicles; it's about taking care of each other." 600 Ford team members and their children were on hand to hear Mr. Hinrichs speak at this year's Bring Your Child to Work Day (BYKTW) held at the Conference and Event Center in Dearborn. The event, sponsored by the HR Diversity Council, included interactive activities, giveaways, prizes as well as lunch. Also on display were several Ford vehicles, including the Ford F-750 TONKA dump truck.



Children also were provided the opportunity to ask Hinrichs' questions following his presentation.

"When you benchmark your cars against the competition, do you ever take your competitors' parts and put them in your cars?"

"Wow, great question! We don't use their parts but we do buy our competitors' cars and test them because we don't have all the answers and we are always learning new things."

Mr. Hinrichs said, "My top priority today is the F-150. Every night when I go to bed, I thank God for my family and the F-150."

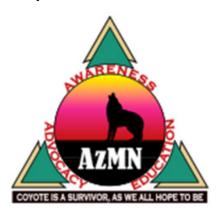
Most of the children asking questions were between the ages of seven and 11 years old, but then a question came from Hinrichs' own 17-year-old daughter Sarah, "How did you gain the success and get to where you are at Ford?" It's because we all work together to get to where we are. If you can help teams be more successful, then you get the opportunity to do that on a larger scale. I've been blessed to do that."

After answering questions, Hinrichs encouraged the children with his final words: "With smart kids like you, who decide to work in STEM (science, technology, engineering, math), you never know where science will take us and our vehicles."



Dr. Audrey said that, "she felt honored to be a part of this event". "I am blessed to be able to share my passion with the families of Ford Motor Company." Ford supplied the Focus race car for the event. Dr. Audrey said, "the children and families loved the car and took many pictures with the vehicle."

Dr. Audrey attends the Annual Myeloma Network Benefit



Dr. Audrey attends this annual event in Arizona to support cancer patients, families and friends. The Arizona Myeloma Network and Fry's Food Stores honor survivors and to remember those who have lost the fight or can't race for themselves. Every year professional athletes and special guests join in this mission to create awareness, education and advocacy for myeloma patients. Multiple myeloma is a complex and often misdiagnosed cancer of bone marrow plasma cells that attacks and destroys the bone. It is treatable, though not curable. yet This event was scheduled for April 12th, 2015 and there is a 5K / 1 mile fun walk/run. Thanks to the sponsors of this event and to Dr. Audrey who continue to support those affected.



Upcoming Events for 2015

Detroit Grand Prix – Free Prix Day - May 29. 2015

Nascar Sprint Cup Series – June 12-14, 2015

Sync 3 Overview Clinic Ford Credit Bldg - June 30, 2015

Thunder Over Michigan - August 29, 2015

Football at Central Michigan University - September 2015

Kart 2 Kart – Indoor Kart Racing - October 11, 2015

Crash Test and Crash Barrier Tour – October 20, 2015

There is more information regarding all our upcoming events on our SharePoint Site.

https://team.sp.ford.com/sites/PWNWiR/SitePages/Home .aspx

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Fast Lane News

