

Robo-Lions

Pre-Kickoff / Holiday / Fall Issue September - December 2013

ISSUE 20

FRC Team 2199 **OFFSEASON COMPETITIONS 2013**

By: Bridget D. and Coralie M.



FRC Team 2199's Robot the John S. Jr. In Position for Scoring in High Goal!

Fall is the Off Season for FRC Team 2199 "Robo-Lions" with a variety of low cost events to compete in. The first of these is the Battle O' Baltimore (BOB) which occurs in September each year and is hosted by the Baltimore Area Alliance BAA of FRC Teams which the Robo-Lions belong too. This year the BOB was held at Boy's Latin School on Saturday September 21st. The Off Season is really like the Pre-Season in professional football where new players get to show off their stuff. Sophomore Matt O. made his debut as #1 Driver at the Battle O' Baltimore with freshman Bobby E., Jude F., Bryce H., and Drew W. debuting at Human Player, adroitly feeding Frisbees into our Frisbee throwing robot. Sophomore John S. also debuted as the On Field Coach. Team 2199 made it as far as the semifinals along with BAA alliance partners Team 3149 "Absolute Zero Electricity" and Team 686 "Bovine Intervention" before meeting alliance headed by Full Court Shooting Team 225 Techfire. Although 2199's 3-stage blocking system was able to block 225's Frisbees, our robot was pushed out of blocking range by one of 225's partners with a lower torque drive system.

The second Off Season event this year was Brunswick Eruption held in New Brunswick, NJ on Saturday November 9th. This event is famous (our infamous) for its "Evil Sundae" contest which features an actual ice cream sundae festooned with less edibles including hot chili peppers, egg plants, and raw eggs to name just a few. Freshman Kieran J. bravely represented the team in this category making a good initial start before being unable to continue, but bravely avoided the use of the complimentary "barf bag". The team also did well on the field going 4-2 in qualifiers and making it to the quarterfinals. Junior Erika F. made her debut as Human Player and Abi F. was the On Field Coach. The team was also in the running for the prestigious Hoku (Hawaiian for "Star") for overall best team but came up just a bit short.

FIRST Robotics
Competitions
(FRC) combine
the excitement
of sport with the
rigors of science
and technology
to provide
students a "realworld
engineering"
experience.

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FRIGHT NIGHT

CRAFT FAIR

By: Abi F.

By: Chris M.

This October 25th and 26th, the Robo-Lions, as one of Freedom Area Recreation Council's (FARC's) Travel Teams, put together quite a show for Freedom Fright Night, a horror-themed walk through the woods. The Robo-Lions created the "Chop Shop", which included test subjects, all sorts of sinister looking power tools, and plenty of bloody plastic body parts. Abi F. the team's Vice Captain really outdid herself as proprietor of the Chop Shop, sporting a blue "uni-brow" on the 2nd night of the event. The team really enjoyed frightening the multitudes of small children that passed through their exhibit, as well as many of the parents. Team members also built a full scale model of the blue Police Call Box from the popular TV show "Doctor Who" for the event. This was capped off with a terrific exhibition of our Frisbee tossing robot.

Freedom Fright Night is a key fundraising event for FARC with 30% of team sales supporting FARC's new fields and facilities. The Robo-Lions were happy



Jude F. as the "Joker" and Matt O' at Freedom Fright Night

to provide soft drinks, hot cocoa and other beverages for sale!

On November 23rd FRC Team 2199 manned a table at the Liberty High School Craft Fair. The team sold student made crafts, such as scarves, jewelry, holiday ornaments, and engineering themed coat pegs. Creating those goods gave students an opportunity to bond as a team with a "Crafting Night" filled with paint and endless glitter. In addition to the student crafts, the team sold FIRST energy efficient light bulbs, promoting the team's green initiative to the public.

Team members had the opportunity to display the 2013 robot, explaining the function and history of the team. Although the robot had to stay stationary in the building for safety, many of people at the craft fair recognized the team from the local newspaper.

Events like this allow the team to meet many new people and make more connections in our community.

FREEDOM ELEMENTARY LEGO NIGHT

By: Bryce H.

On November 6th the Robo-Lions were invited to Freedom Elementary School for Lego Night which was held from 5 to 7:30 PM. Before setting up, members of the team talked to elementary school kids about their Frisbee throwing, pyramid climbing robot. One of our mentors, Mrs. Young and the FLL lead at the Elementary school talked to the kids and their parents about Jr. FLL (Jr. FIRST Lego league) and FLL (FIRST Lego League.

After team members set up the robot, the Frisbee goals and the hanging pyramid the children gathered around the display. Before showing the kids what the robot did, the team asked them what they thought. After the children guessed what it did the robot was turned on. The team demonstrated the robot's hanging abilities, and shot a few Frisbees. The event was packed with kids and parents boding well for the future of robotics in South Carroll County!



CARROLL TECH COUNCIL DEMO

By: Mikey W.

On October 10th 2013 the Robo-lions were invited by the Carroll Tech Council to visit the facilities of the local manufacturer, Land Sea Air (LSA) Autonomy. At the LSA facilities we demonstrated what the robot does, and explained what the FIRST program is. The new facilities of LSA Autonomy are located where the old Knorr Brake facilities were, another team sponsor who has moved to a larger complex in Westminster.

LSA was very excited to demonstrate their autonomous vehicles, which include land and marine offerings and show team members around their facilities. Other Tech Council members showed off their 3-D printer capabilities which was a really big hit with team members!

APPLE FESTIVAL

FLOWSERVE DEMO

By: John S.

By: Abi F.

The Apple Festival was a really fun event. The atmosphere of vendors selling their wares, children playing, and, notably, robots climbing pyramids and shooting Frisbees all contributed to the fall festivities. The Robo-Lions demonstration at the Holy Spirit Lutheran Church was very successful in its core purpose: to educate and interest people in FIRST. Many children were fascinated with the robot and its functions. Perfectly understandable! What's cooler than a close to one hundred pound robot shooting Frisbees at high velocity? What's more, the children's parents also seemed to be interested in our demonstration and before long, people were laughing and cheering as the robot shot volley after volley of Frisbees through the goal, as the Frisbee catcher struggled mightily to grab them all. The Robo-Lions, aside from educating others about FIRST also put on a good show, one that I personally feel contributed to the craft fair as a whole.



Members of the Tae Kwon Do Exhibition Team Posing with the Robot at the Apple Festival!

On October 18th, the Robo-Lions visited the company Flowserve in an effort to facilitate the continuation of our existing partnership with this incredible engineering organization makes large pumps for various uses, which are then shipped around the world.

At their offices in Westminster, the Robo-Lions gave a very well received presentation to a number of Flowserve employees. The management and employees were all very impressed with the team and the students were all very thankful for the opportunity to share all they've accomplished with Flowserve's assistance.

BAA EDUCATION DAY

By: Bridget D.

Every year, Maryland FRC teams meet at the Johns Hopkins University / Applied Physics Lab to run workshops and seminars. Run by the Baltimore Area Alliance (BAA), BAA Education day allows Maryland teams to share resources and information for the promotion of success throughout the state. For the second year in a row, the Robo-Lions gave a pair of presentations in the "Robot 101" section of the event. The first given by Mr. M. was called "Motors 101" and covered everything a rookie or rookie team needed to know about the DC motors used in FIRST Robotics. The second called "Putting it all Together" combines the information on motors, pneumatics, drive systems, and manipulators to give rookies an idea how to translate these ideas into a workable robot design.

FRC Team 2199 — Robo-Lions!



(BAA Education Day Continued from Page 3)

The Robo-Lions and mentors also contributed to the Business, Public Relations, and Mentoring sections of BAA day. Bridget H. gave a presentation on the Robo-Lions two time award winning business plan (Cincinnati 2012 and Richmond 2013) and participating as a Chairman's Award Winning Public Relations Chair in the Chairman's Panel put together by Team 836 "Robobees".

LAI DEMO

By: Bridget D.

On October 28, the Robo-Lions visited LAI International Corporation in Westminster, MD. LAI International is a leading contract manufacturer of precision-engineered finished parts, components and subassemblies for aerospace, power generation, defense, medical, electronics and other advanced technology industries.

LAI is also a key partner of the Robo-Lions providing custom manufactured parts designed by team members, most famously both first and second level climbing hooks for our 2013 robot. We really look forward to working with LAI International in 2014!

INVITATION TO KICKOFF 2014!

From: Robo-Lions

Team Members, Parents, Alumni, Friends, and Sponsors are all cordially invited to the Robo-Lions 2014 Kickoff Event, which will be Saturday January 4th at Wesley Freedom Methodist Church in Eldersburg from 9:30 AM to 1 PM! Lunch will be provided.

The 2014 FIRST Robotics Competition (FRC) Kick-off Event will be simulcast worldwide from FIRST Headquarters in Nashua, NH and all teams worldwide will learn what the new game will be. Thereafter teams will scramble to design and build their competition robots over the course of a 6 week period ending on February 18th "Stop Build Day" when teams will seal their competition robots in a very large plastic bag and will not be able to touch their robot again until their 1st Regional or District Competition. <>

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