



HAZMAT ROBOTICS

Lake Highland Preparatory School

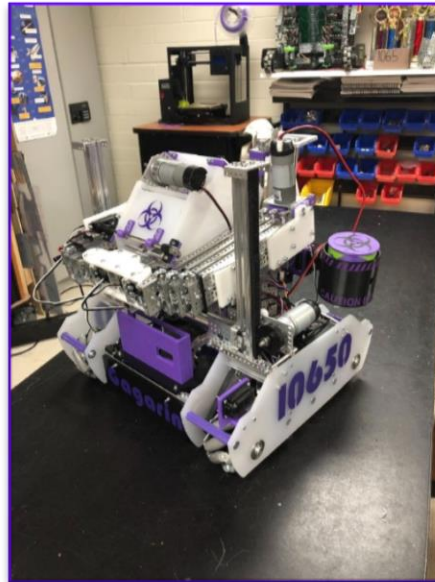
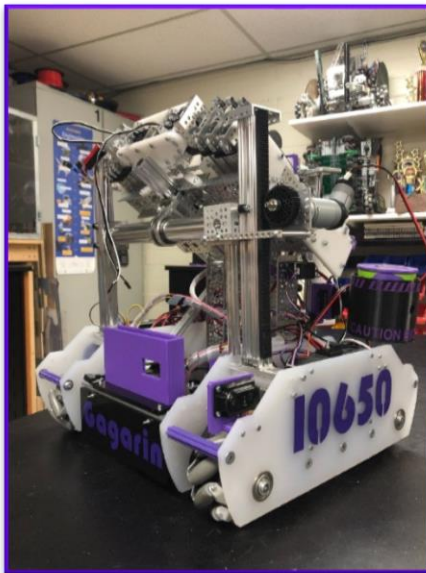
We are Hazmat Robotics: Biohazards Division. We felt that it was important to give you some background of who we are as a team and explain how your sponsorship will be used within our team.



WHO WE ARE:

We are Hazmat Robotics: Biohazards Division, a fourth-year robotics team at Lake Highland Preparatory School located in downtown Orlando, FL. Our team consists of 15 hardworking students, ranging from grades 9-12. We compete within an organization called *FIRST* (For Inspiration and Recognition of Science and Technology). We build upon these fundamental values of *FIRST* by incorporating science, technology, engineering, and math into everything that we do. Hazmat takes part in one of four levels of competition in *FIRST*, being First Tech Challenge, or FTC, which includes aspects of building, programming, and business.

OUR ROBOT:



CURRENT AWARDS/ACHIEVEMENTS:

2017-2018 League Champs: Winning Alliance Member

This award will be given to the winning Alliance represented in the final match

2018-2019 Meet 1: 3rd Place Robot

2018-2019 Meet 2: 2nd Place Robot

2018-2019 Meet 2: Highest Match Score of the Day

2018-2019 Meet 3: 1st Place Robot

2018-2019 League Championship: 1st Place Robot

2018-2019 League Championship: Winning Alliance Captain

2018-2019 League Championship: 1st Place Design Award

The Design Award is presented to Teams that incorporate industrial design elements into their solution.

2018-2019 League Championship: 2nd Place Promote Award

The Promote Award is given to the Team that is most successful in creating a compelling video message for the public designed to change our culture and celebrate science, technology, engineering and math.

2018-2019 League Championship: 3rd Place Innovate Award

This judged award is given to the Team that has the most innovative and creative Robot design solution to any specific components in the FIRST Tech Challenge game.

2018-2019 Florida State Championship: 2nd Place Promote Award

THROUGH HAZMAT, STUDENTS HAVE THE ABILITY TO:

Explore their career interests and expand upon what they are passionate about. One of our goals on Hazmat is not just doing well at competitions but to allow students to truly explore their personal interests. Although we are a robotics team, we also focus on other things such as business skills, finance, photography, design, public speaking, and outreach. Every part of our team must work together for things to run smoothly and efficiently. A goal of Hazmat is to prepare students for the real world through establishing skills such as teamwork, problem solving, and collaboration with outside teams/companies. Being on Hazmat has inspired team members to have a passion for robotics, engineering, and computer science that they hope to pursue in the future.

On top of working with robots, our team also understands the importance of giving back to our community. This past season, our team participated in 11 community service events, our most notable being Go Baby Go! where we modified five electric cars for children with mobility issues. We strive to make a difference in our community in any way that we possibly can.



TEAM ALUMNI:

Hazmat Robotics: Biohazards wants to grow as a team, but what is more important is the growth of the members. We are proud of each of our alumni and know they will use the values that they have learned from *FIRST* in everything that they do.

Bryan Fu- Mechanical Aerospace (University of Florida)

Michael Glushakov- Computer Science (Duke)

Diane Xie- Computer Science (New York University)

Shae Carroll- Environmental Science (University of Central Florida)

Rachel Horvat- Biochemistry (University of Florida)

Jenny Xie- Computer Programming (University of Florida)

Armaan Shaikh- Neuroscience and Psychology (University of Florida)

Pj Hughes- (University of Southern California)

COSTS OF RUNNING A TEAM:

There are many costs associated with running a *FIRST* team such as robot parts, team apparel, transportation to and from competitions, and team spirit related items.

This season, our robot's full cost was \$2,328.55 Our mechanical team worked almost non-stop all season to make this year's robot the best in our team's history. We have utilized CAD (computer-aided design) this season to strictly plan out exactly what parts would be needed for our robot's advanced mechanisms before ordering or building with them. On top of using CAD for planning, we have used it to create custom parts that are unique to our team. This cuts down on costs of specific parts and allows us to be more creative in our design process. Our robot takes up most of our budget as a team, but money also needs to be allotted to other parts of the season.

As we continue to advance in competition, the cost of travel increases with it. This past season, we made it all the way to our state competition which was held in Jacksonville. Our team was able to earn enough money to completely cover the costs of all of our necessities at the actual competition, but we are hoping to cover more costs next season such as transportation and meals.

At competitions, we want to show our Hazmat pride by decorating our work area with décor and information related to our team. In the past we have effectively decorated our pit, but this season we aspire to leave a lasting impact on other teams and judges at the competitions by creating an interactive *FTC* game using a software called Synthesis. This past season we were able to make a custom banner, stickers, buttons, and handmade necklaces. We had a wonderful pit area at states, but we know we can always improve. We know that our Hazmat branding can shine at competitions with just a little bit of help!

OTHER CONTRIBUTIONS:

Because *FIRST* is about more than just robots, 10650 is also interested in learning more from trained professionals (such as you!) to act as a mentor to assist and teach in the following areas:

MENTOR NEEDS	ROLE DESCRIPTION
Marketing	Assist with team marketing and creating a team business plan
Finance	Help students manage and raise team funds
Mechanical	Give tips to new builders
Programming	Work with students to learn the best ways to program the robot for competition
Public Speaking	Volunteer to watch and judge presentations before competitions to help improve speaking skills

Everyone on 10650 would like to use the skills they learned in *FTC* in their future endeavors; we greatly appreciate any mentoring you can give us.

Company specific sponsorships are also valuable to us. Any donations including specialty products, tools, machines, building materials, etc. that can be used to improve our workspace and robot are greatly appreciated. Our team is heavily design and engineering based, and donations

such as these are just as beneficial to us as monetary funding. Our team is especially interested in improving the setup that we have for 3D printing and 3D design of all types.

HOW WE CAN HELP YOU:

Your sponsorship will be a key part of our season which is why we will make your company a key part of our team. To show our gratitude for your company's sponsorship, we will:

- Write a page about your company's generous donation in our teams engineering notebook, which is read by dozens of judges throughout the season.
- Put your logo on our sponsorship page of our team's website.
- Display your company's logo in our pit area at every competition we attend.
- Print your company's logo onto the back of our team shirts.
- Create a sticker of your company's logo to place directly onto our robot.

As we progress to local, state, national, and even international level competitions, your logo will travel with us. *FTC* also records and broadcasts some of its higher-level competitions on an international streaming service called *Twitch* which means that your logo will be seen by thousands of people throughout our ensuing season. We also have many social media pages where pictures of our robot, and your company's sticker, will be posted frequently.

CONTACT/PAYMENT INFO:	
Checks Made Out To	Lake Highland Preparatory School
Memo Line	Upper School Robotics Team
Address	901 Highland Ave. Orlando, FL. 32803
Website	hazmatrobotics.weebly.com
Email	hazmat10650@gmail.com
	Please send a high-resolution photo of your logo to this email

On behalf of every member of Hazmat Robotics: Biohazards, thank you for your interest in our team and we hope you decide to become part of the Hazmat family.



Twitter: @ftc_hazmat10650
Instagram: @ftc_hazmat10650
YouTube: Hazmat Robotics: Biohazards