



# THE NUTS AND BOLTS

## TechHOUNDS Newsletter

# TECHHOUNDS STRUCTURE

With a team of over one hundred people, TechHOUNDS gives opportunities to explore many different STEAM (Science, Technology, Engineering, Art, and Mathematics) fields. TechHOUNDS is broken down into six divisions, each responsible for all work in their field. The divisions are Robot-ops, Electrical, Programming, Construction, Information Technology, and Public Relations. Each division serves as a way to delegate work within our team. There are many different skill sets that the team needs to build a robot. Splitting the team up into divisions helps the students find their interests and improve their skills within that field. The divisions also help develop experiences similar to a real life engineering situation, which can be applied in various careers. In every engineering project there is an expert from each field that uses their skill sets to contribute to the creation or renovation of the product. TechHOUNDS has many things to teach, not only in STEAM fields but also leadership skills, time management, communication, and responsibility. As a team we teach the students how to meet deadlines and communicate together. To finish projects the students must be able to communicate what the problem is and how to fix it, then complete the job in a timely manner. In each project group all students have the opportunity to obtain a leadership role, not only for that individual project but also for the team. The skills students gain from TechHOUNDS will not only prepare them for future TechHOUNDS leadership positions, but also for their daily lives.

**UPCOMING EVENTS**  
**FEBRUARY 27:**  
**STOP BUILD DAY**

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## PHOTOS OF THE WEEK



# TECHHOUNDS 2017 CHANGES

With a new competition year there come new improvements. TechHOUNDS has made many different changes to move forward. The first and biggest change is our build season meeting times. In previous years TechHOUNDS met from right after school until 5:30 PM on Mondays, Wednesdays and Fridays. Then on Tuesdays and Thursdays TechHOUNDS members had the opportunity to stay after school to study at the library, go to other clubs, or get help with school subjects. Then at 5:30 PM the team had the opportunity to go to a team dinner before the meeting from 6:00 to 9:00. The new meetings are on a more consistent schedule being every day after school until 6:30 PM. The recent changes to the meeting times have improved our middle school mentoring involvement. More students are able to go to the middle schools to mentor during the meeting instead of putting more hours into TechHOUNDS. Another reason for the change is to allow students to spend more quality time with their families or catch up with their school work. Linnea Schultz explains the reason the time change has helped her. "It works for me because I get to actually go home and eat dinner with my family. I get to go to The Quirky Feather and do my homework or I can go rock climbing afterwards if I want. It allows me to get TechHOUNDS out of the way so that I can go do the rest of the stuff I have to do instead of only having three hours after school before I have to come back to TechHOUNDS. Now I have an extended period of time to get all of my stuff done," Schultz said. Another change this year has been the addition of two positions Outreach lead and Financial Director. Schultz, Outreach lead, explains her job. "I am in charge of pretty much all of the stuff that happens outside the school. I organize demonstrations and propose new ideas to get us to go out and get involved with our community." The Outreach lead position was added to bring a bigger focus on how TechHOUNDS promote STEM in our community. The Financial Director position was added to organize all of our sponsorships and encourage students to get more sponsors each season. Riley Smith, this year's Financial Director, explains his position. "My job is to make sure the team has enough money to run each season. That includes mainly getting corporate sponsors and training the team members on how to get through that process. I teach them how to get sponsorships and then I confirm that they get the money in on time. Then I make sure that we uphold our end of the sponsorship by putting logos on the website, newsletters, t-shirts, and just making sure the sponsor is represented properly." The new changes this year have improved many aspects of the team and we hope to continue to make improvements to better our success each season.



Linnea Schultz (Outreach lead), Kate Hawkins (Team lead), and Riley Smith (Financial Director)

# DIVISION UPDATES



**CONSTRUCTION** “We are now fully set up with the field besides the airship which is in the process of being built. From the pit side of things the battery box is coming along really nicely, the electrical cart is going well and the secondary pit cart is in the process of getting welded.”



**ELECTRICAL** “We’ve imported components for CAD design. We’ve been working out some problems with motor testers. We are figuring out different ways to hook up a voltmeter on the battery box. We are also teaching new members more so that they will be more comfortable.”



**ROBOT OPS** “We are finishing the gear collector. We are also taking the designs from previous prototypes for the shooter, hopper, ball feeder, gear collector, and turret so we can CAD them for the final robot.”



**INFORMATION TECHNOLOGY** “We are still trying to work everything out on the website and continuing to update the newsletters and photos. We are making really good headway on the scouting system; it’s looking great. We’ve got a lot of good feedback from multiple people.”



**PUBLIC RELATIONS** “We finished the mentor nametags and the locker signs. The locker signs have been distributed and look really nice in the hallways. We are still working on the newsletter, spirit wear, photos, weekly videos, and other miscellaneous projects.”



**PROGRAMMING** “We have begun preliminary robot code as the designs are getting finalized. We’ve worked more on LIDAR, and motor controllers with fancy LCD displays. We have also worked on finishing the vision programming code with infrared technology.”

# GET TO KNOW OUR TEAM

## ROOKIE CORNER



### AUSTIN HARTMAN

#### Why did you join?

I'm interested in programming and statistics. IT allows me to combine those two interests, especially while creating the scouting system.

#### What are your aspirations for the team?

To win as many games as possible and get the best teammates from our scouting system.

#### What have you liked about the team so far?

It's been a great experience. I've enjoyed the team, just getting to hang out every day and do something I love.

#### How did you hear about TechHOUNDS?

I heard about TechHOUNDS through my good friend Jack Engledow

## MENTOR CORNER



### MR. WAIDNER

#### What do you do on the team and what does that entail?

I mentor Robot-Ops and Electrical, and that entails putting up with people like this guy [Abel Kiser] which isn't exactly a hardship.

#### Why did you become a mentor?

I'm retired. I spent a career in engineering and electronics engineering. It keeps my brain active. It satisfies my need to do technical things. Plus it's a great group of people to work with.

#### How long have you been a mentor?

Well, I started in 2014 but I had to take the 2015 season off so this is my third season.

#### What do you hope to teach the kids?

Responsible machinship practice, among other things.



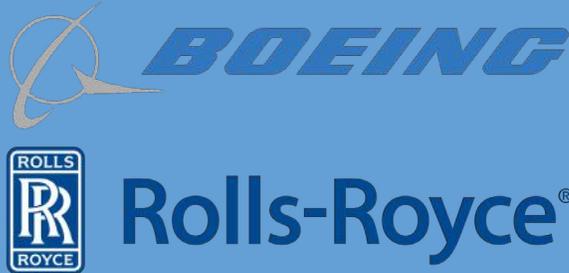
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