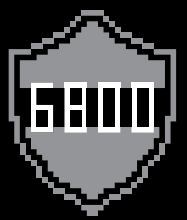


THE VALOR OBSERVER

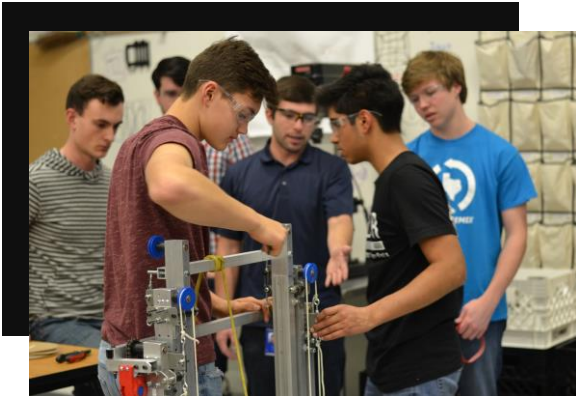


Build-Season Week 5
Monday, February 10th, 2018



Our Lift Set-Back

This week, Valor ran into two major problems with the robot's lift system. The steel axles we were using completely and utterly bent when we rose the various stages of our lift. The axles bent inward which proceeded to loosen the chain and cause it to fall off. That caused the lift to destabilize. Second, the method we were using to tension the chain was poorly designed to the point where it would cause the chain to bunch up. In order to fix these issues, Valor changed out the steel axles for 0.5 steel roller axle, which was stronger than the pervious axles. Then we changed out the chain for a high strength string which was easier to tension and fix when something broke.



Keep up With Valor on our Social Media!



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<https://www.youtube.com/viperbotsvalor/>

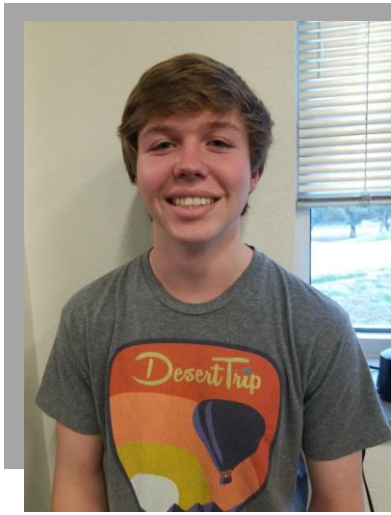
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For more information about how to get involved, [Click Here!](#)



FIRST® Robotics Competition

Student Spotlight



James Hofstadler
Above Chassis Sub-Team



It's super fun to have moved into FRC because we're able to expand the skills and experiences we've learned in the past to a whole new level. Working on the chassis is cool because it's the heart that everything else is built around. I'm excited to go to competitions and see what other teams have come up with!

Adam Busch
Controls Sub-Team

Being apart of a rookie team is really special because we get to set so many precedents for future members of Valor to follow. The best part about the controls team is getting to work with all of the other sub teams so all the components can come together smoothly. I'm most excited to see what other teams have been able to create in these 6 weeks!



Meet the Mentor



Marya Unwala
Business Operations

I've been doing FRC for 8 years now. I started in high school with team 2583 out of Austin, Tx. I graduated this semester with a degree in Finance from the University of Texas at Austin. Despite being a non-engineering major, FIRST has opened up a whole host of opportunities for me. This ranges anywhere from job opportunities to having a nationwide network of friends.

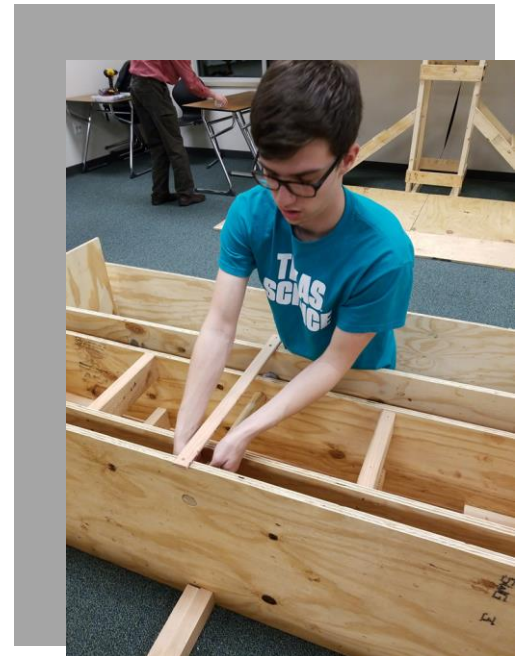


Sub-Team Updates

Object Collection Device (OCD)



This week manipulator team redesigned and is currently building a completely new manipulator that is entirely side roller based, we CADed all parts and assembly before hand to triple check that it would work first time, as of right now we are working with 25 chain, but will switch to belt as soon as possible, part of our team revised our current lift gearbox to a much lighter version without sacrificing much power



Above Chassis



This week we switched some of chain to a strong spear gun string. This string has a tensile force of 1050lbs and is lighter than the chain we currently had. After switching them out, we tested and found that the axles we had were way to weak for what we were doing. This led us to go get stronger axles for the future.



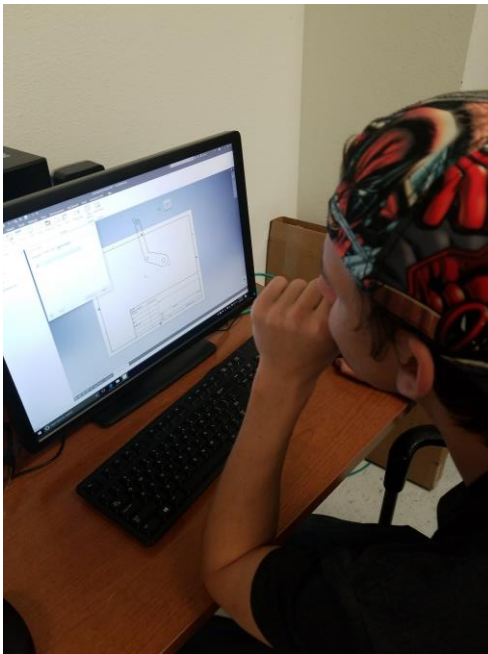
Controls



The controls team worked on the sensors required for the lift so we can begin to program a full autonomous by this weekend. Outside of the control system, we have divided up into other sub teams to begin prototyping different collection systems just in case our current design doesn't work come bag day.



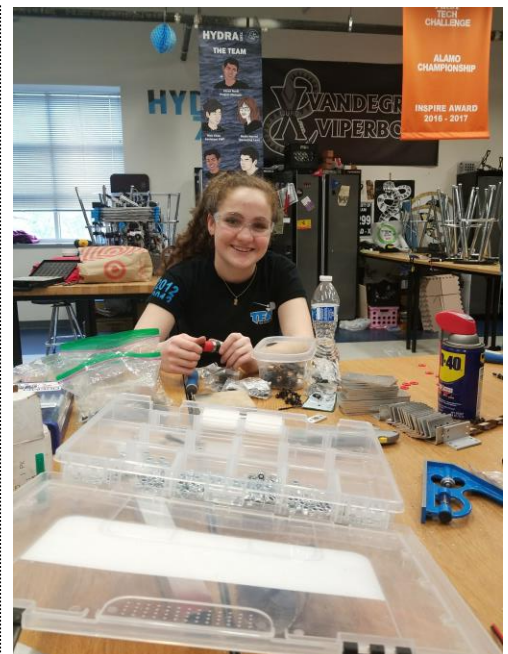
Pictures of the week:



Valor Says Thank You

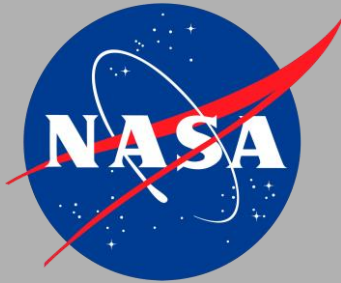
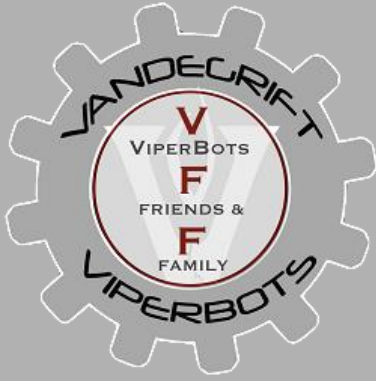
To: Mr. and Mrs. Kind for their help in building and setting up the field and flag!

To: Mrs. Joyce Hofstadler for making us amazing cake on the weekends

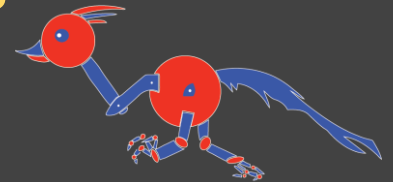


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