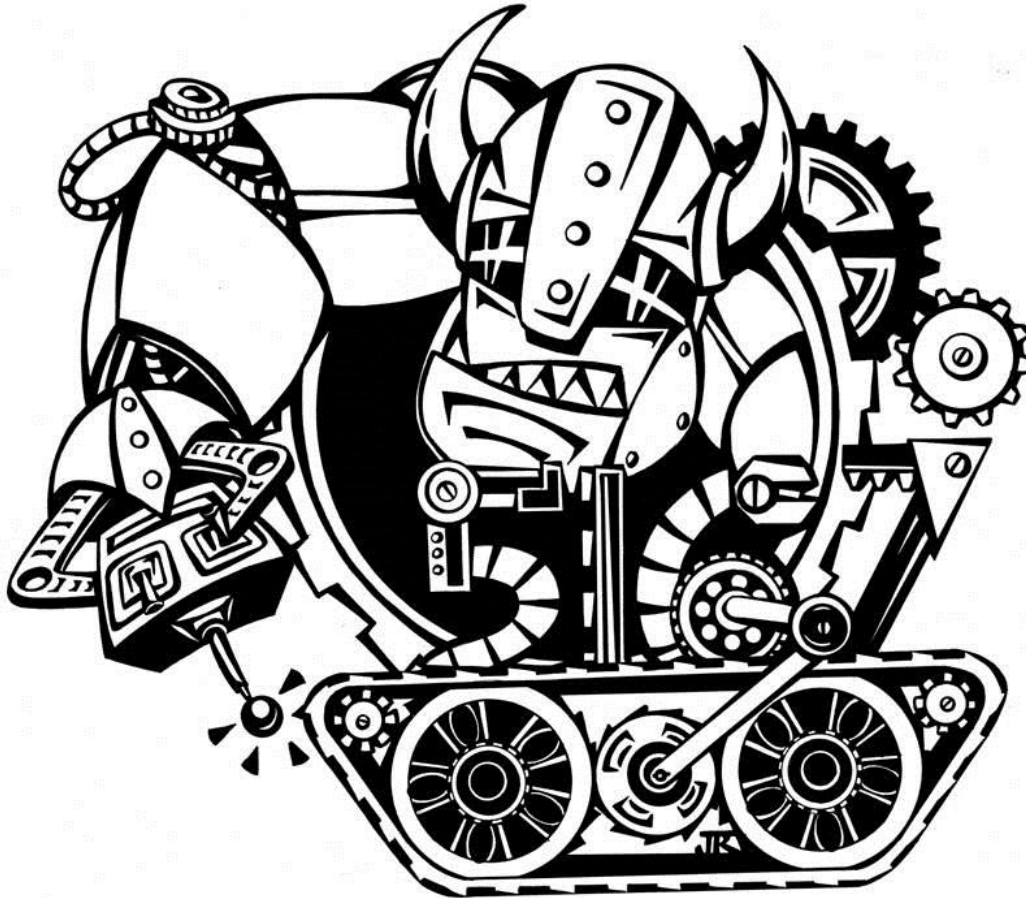


Team: Vi-Bots

FRC 5167

Marysville High School

Marysville, MI



Artist: Joanie Roehl, Art Teacher at Marysville High School

Mission Statement:

The mission of the Marysville High School Robotics Team is to promote Science, Technology, Engineering, and Mathematics by creating a positive and engaging learning environment for student team members. The MHS Robotics/FIRST program applies the experience and knowledge of today's experts in the fields of Engineering and Technology in order to help guide tomorrow's leaders with the skill sets required to be successful in the 21st century.

Website: www.team5167.weebly.com

What is FIRST Robotics?

"To transform our culture by creating a world where science and technology are celebrated and where young people dream of becoming science and technology leaders."

Dean Kamen, Founder



Mission

Our mission is to inspire young people to be science and technology leaders, by engaging them in exciting mentor-based programs that build science, engineering and technology skills, that inspire innovation, and that foster well-rounded life capabilities including self-confidence, communication, and leadership.

<http://www.usfirst.org/aboutus/vision>

What is FIRST Robotics?

FIRST (**F**or the **I**nspiration and **R**ecognition of **S**cience and **T**echnology) provides opportunities for students to learn science, technology, engineering and mathematics related skills and apply these to a real-world engineering scenario with industry level standards. Students work with professional mentors to design and build a robot capable of completing complex tasks identified by FIRST. Each team has 6 weeks to design, build and test their robots before they head out to competitions around the world. At the competition, teams must use teamwork, gracious-professionalism®, and communication skills, in order to work together successfully to compete with randomly chosen alliances.

Website: www.team5167.weebly.com

Team 5167 Information

Formed: October, 2013

Team Leader: Jonathan Smith, Teacher at Marysville High School.

2016 Team

Student Count: 30

11 - Senior Class

4 - Junior Class

6 - Sophomore Class

9 - Freshmen Class



Mentor Count: 11

4 - Engineers

2 - Electricians

1 - Education Technology Specialist

2 - Teachers

1 - Networking Specialist

1 - College Student Support

Coordinator



Website: www.team5167.weebly.com

2016 Season: Stronghold

To kick off their third year, the team participated in the Season Kickoff at Capac High School on January 9th, 2016. At this event, we attended several workshops designed for team safety, controls, robot design, and team structure. At this meeting, all the teams participating in the FIRST program were given the rules and details of the 2016 game entitled Stronghold. This event began our six week build season which included multiple 12 hour days (often consecutive) and concluded over mid-winter break.



In the 2016 FIRST Robotics Competition game, Stronghold, alliances of three robots each are on a Quest to breach their opponents' fortifications, weaken their tower with boulders, and capture the opposing tower. Robots score points by breaching opponents' defenses and scoring boulders through goals in the opposing tower. During the final 20 seconds of the Quest, robots may surround and scale the opposing tower to capture it.

STRONGHOLD GAME DESCRIPTION (<http://www.usfirst.org/roboticsprograms/frc/2015-game>)



2016 Accomplishments

Southfield, Michigan Competition Site:

- Finished 12th of 39 in the Qualification matches and eliminated in the semifinals.
- Awarded the Team Spirit Award, sponsored by the FCA Foundation.

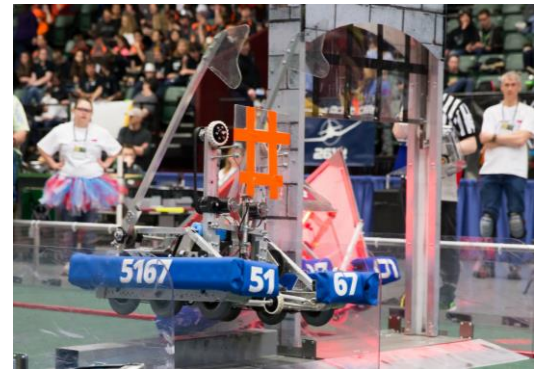


Marysville, Michigan Competition Site:

- Finished 4th of 40 in the Qualification matches and eliminated in the quarterfinals.
- Awarded the Excellence in Engineering Award, sponsored by Delphi.

Grand Rapids, MI – Michigan State Championship

- Finished 51st out of 103.

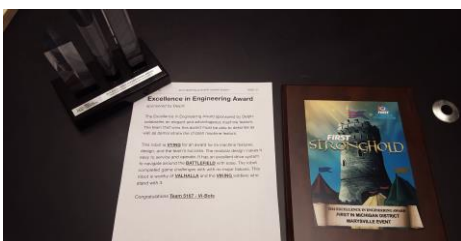
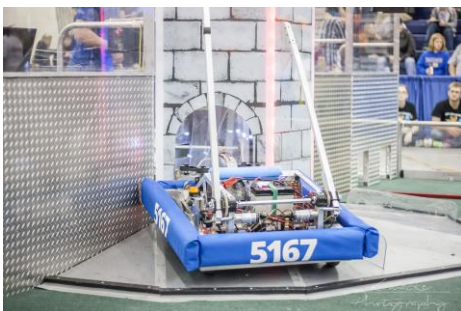
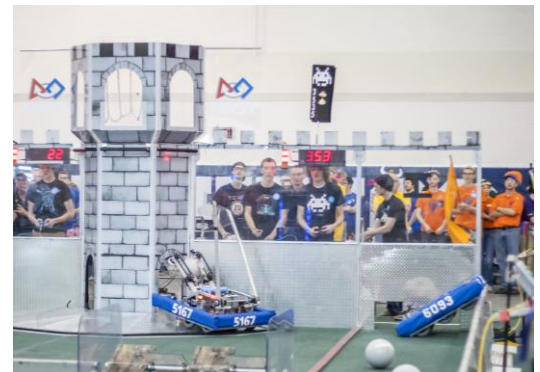


Michigan State FRC Rankings:

- Finished the 2016 Competition year ranked 78th out of 411 Michigan Teams.

FIRST World Championships – St. Louis, MO, USA

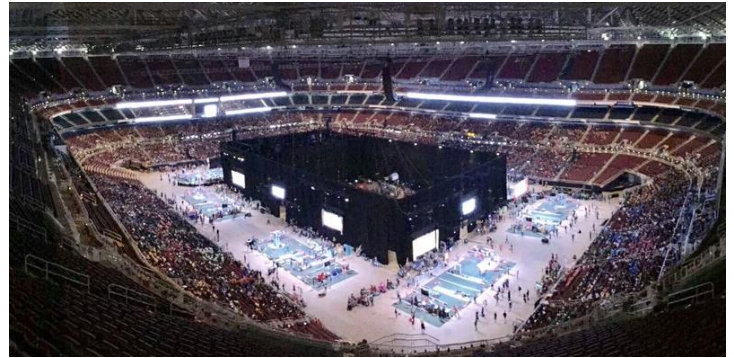
- 600 FRC Teams from around the World.
- Finished 35th of 75 in the Carson Division.



Website: www.team5167.weebly.com

2016 Worlds Events

After a successful year of districts the 2016 Stronghold season, the Vi-Bots had accumulated enough points to earn a trip to the Michigan State Championships in Grand Rapids, MI. After three days of play with the top teams in the state, we were able to secure a position 51st out of 103 teams playing at the Delta Plex Arena in April of 2016.



Upon the completion of the tournament, we learned that we were 2 spots away from qualifying for the Worlds Championship in St. Louis, MO. The team had the chance to meet Governor Rick Snyder and also the Chairman of the Board for FIRST Robotics, Don Bossi.

Several days after our return from Grand Rapids, we were contacted about the possibility of going to Worlds due to spaces that had become available. With the help of some of our sponsors, (an Anonymous Donor, Anthony Essian, Russell Electric, QCS, Genisys Credit Union, Blue Water Controls, and Wilkie Brothers), friends and family, and a GoFundMe.com account, we were able to raise enough funds to help our team go to Worlds within 4 days! Thank you to all that helped and contributed to our teams' opportunity to participate!



In St. Louis, we competed in a field of 600 teams from the USA, Canada, Mexico, Brazil, Turkey, China, and Australia. The teams were divided into 8 divisions. The Vi-Bots were able to obtain a 35th out of 75 position in Carson Division. After tallying the scores from all the teams at the FIRST World Event, the Vi-Bots had an unofficial rank of 272 out of 600 in the competition. While in St. Louis, the students were able to interact with students from all over the world, visit the Arch of St. Louis, recreate the Dred-Scott court trial in the actual court room, taste the local cuisines, and attend a St. Louis Cardinals baseball game on FIRST night.



Mentors

The mentors on our team have had years of experience in their fields of expertise and have taken time out of their busy schedules to help teach our students valuable skills.



Sometimes, the students become the teachers!



Website: www.team5167.weebly.com

How has the robotics program affected me?

I've learned from being a part of the robotics team was that anything can happen. Being part of a team (Vi-bots) that may fall short of achieving greatness (Nationals) but has many other enjoyable learning experiences as there was much to do, is way better than being on a team that wins every competition they compete in but shows no sportsmanship and valuable teaching lessons for their students.

- Erik Koppel, 2nd Year Student - Graduated

It has affected me in many ways I have made new friends on the team, my communication and social skills have improved since I joined the team I have learned life skills like teamwork and patience and I have learned so many things about engineering and I would like to go into mechanical engineering after high school.

- Adrian Dickens, 4th Year Student

I enjoyed learning CAD because I got a chance to work with something useful that I may use in the future. There are a lot of jobs you can do and it is just an overall fun atmosphere.

- Treyton Bostick, 3rd Year Student

I continue to be amazed by the ability of our students to make key decisions about our program and their ability to implement those decisions successfully. I am proud of the fact that our team empowers our students to lead, design, and compete and that our mentors play a supporting role.

- Kit Hard, Former Mentor

It has made me a better teacher / and communicator.

- Andrew DeVigilli, 1st Year Mentor,
Former Student Member

Couldn't be happier seeing my son excited for a program at school!!! The mentors, teachers, and students have been so accepting of him. He has learned so many important skills.

Parent

2014 and 2015 Robots

2014: Aerial Assist

Name: Elizabeth

Design: Our robot's design consisted of two arms which would rise to 8 feet high in order to block the opposing alliance's ball.



2015: Recycle Rush

Name: Flux

Design: Our robot's design consisted of a chain driven fork-lift system with movable arms to capture various sized totes and recycle containers.



Website: www.team5167.weebly.com

2016 Sponsors

The Marysville High School Robotics Team would like to thank our 2016 sponsors!
With your support, we had a very successful year!

Platinum Sponsors:



Gold Sponsors:



Silver Sponsors:



Website: www.team5167.weebly.com

Blue Water Area Robotics Alliance (BWARA)



2016 FIRST Robotics

Formed in 2014, the Blue Water Area Robotics Alliance (BWARA) is a group of FIRST Robotics teams in St. Clair County area working together to further STEM education and careers. The alliance is composed of 26 different teams (10 FRC Teams, 6 FTC Teams, 5 FLL Teams, and 6 Jr.FLL)* working at all 4 levels of FIRST Robotics. The school districts represented in the alliance consist of teams from:

Algonac
Capac
Cardinal Mooney
East China (St. Clair)

Marysville
Memphis
Port Huron
Richmond

St. Clair County 4H
Yale

* Note:

FRC – FIRST Robotics Competition (High School Level)
FTC – FIRST TEC Challenge (Middle School Level)
FLL – FIRST Lego League (Upper Elementary Level)
Jr. FLL – Junior FIRST Lego League (Lower Elementary Level)

Website: www.team5167.weebly.com

Sponsor Benefit Information

Vi-Bots team 5167 greatly appreciates both financial and in-kind donations in support of our team goals. As a “thank you” to our sponsors we offer the following recognition for the levels listed below:

Silver - \$10-\$499

- Letter of Appreciation and Picture
- Website recognition (logo included for businesses and organizations)

Gold - \$500 - \$1999

- Letter of Appreciation and Picture
- Website recognition (logo included for businesses and organizations)
- Logo displayed on our T-Shirt and Pit Area Banner
- Robot and Team members available for 1 promotional event

Platinum - \$2000 +

- Letter of Appreciation and Picture
- Front Page Website recognition
- Logo on Robot
- Large Logo Pit Area Banner, and T-Shirt
- Robot and Team members available for 1 promotional event
- Commemorative Gift

To Sponsor Vi-Bots Team 5167 Please make checks payable to:

Marysville Public Schools (please put Robotics Team on the memo line)
and send to:

Marysville High School
Attn: Jonathan Smith
555 E. Huron Blvd.,
Marysville, MI 48040.

Please include the completed Sponsorship Information page included in this packet.

Website: www.team5167.weebly.com

Sponsorship Information

Marysville High School Robotics Team
The Vi-Bots - 5167
555 E. Huron Blvd.
Marysville, MI 48040

Team Contact: Jonathan Smith
Phone: 810-455-6072
Email: jsmith2@marysvilleschools.us

Business Name: _____

Contact Person: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Phone: (_____) _____ Email: _____

Business Website: _____

(Please Print or type so that we can accurately include your information)

Please make checks payable to:

Marysville Public Schools
Memo Line: Robotics Team

Thank you for your support!

Amount Donated: \$ _____ Check # _____ Cash _____

Material Donation:

Your generosity is truly appreciated and will be put to good use!

Website: www.team5167.weebly.com

2017 Budget Information

Robotics Budget for 2016-2017 Season	
<u>Projected Expenditures:</u>	
<i>FIRST Entry Fees:</i>	
2017 District Competitions (2 sites and Kit of Parts)	\$5,000.00
2017 State Registration Fee:	\$4,000.00
2017 Worlds Fee	\$5,000.00
<i>Robot:</i>	
Materials and Parts:	\$5,000.00
<i>Structure(Aluminum)</i>	
<i>Motors</i>	
<i>Sensors</i>	
<i>Hardware</i>	
<i>Tools:</i>	
<i>Needed Tools and Replacements:</i>	\$500.00
<i>Saw Blades</i>	
<i>Drill Bits</i>	
<i>Drills</i>	
<i>Food - Competition Sites:</i>	
Competition Sites Food (States)	\$300.00
<i>Team Signs and Promotions</i>	
Robot Signs	\$350.00
Team Sign	\$150.00
Button Materials	\$200.00
Team T-Shirts	\$450.00
<i>Electronics / Technology:</i>	
New RoboRio	\$450.00
Planetary Gear Boxes and Accessories	\$1,000.00
Pneumatic Systems	\$1,000.00
<i>Miscellaneous Items:</i>	
Miscellaneous Items	\$750.00
Support for the Middle School Jr. Vi-Bots	\$200.00
Scholarships for College/Camps	\$1,000.00
Support for the Jr.FLL Startup	\$200.00
Total:	\$25,550.00

Website: www.team5167.weebly.com