Team 5172: Bringing Their News to You

2018 Team 5172 Student Members

Seniors Jaustyn Dahl Jorden Hendrickson Robert Hlucny Emily McLean Carly Mekash Kaiya Novacek Jonathan Peterson Pratt Amy Stauffenecker Kyle Stenberg Emily Tarala Chloe Vanderport Kristy Williamson

Juniors Makenna Burslie Isabella Brockhouse Cammi Cain Dylan Heggedal Chelanne Kostrzewski Payton Waage Toby Wilson Sophomores•Aubre Berg•Zachary Clark-Solom•Aaliyah Creekmoore•Gage Creekmore•Ella Koebernick•Landon Kvien•BreeAnna Novacek-

Piper Sondreal Kyle Stauffenecker Max Utter Bryton Wappula

Freshman Thor Anderson Olivia Brazier Denton Burkel Ryan Hlucny John Novacek Christian Wahl

Upcoming Events

- January 25th 50/50 at GBB vs KCC at 6:00
- February 15th Concessions at BBB vs WAO at 6:00
- February 20th Memory Mates
- February 20th Stop Build Day at 11PM
- March 1st-3rd Great Northern Regional at the Alerus in Grand Forks, ND
 - March 29th-31st 10,000 Lakes Regional at Williams Arena in Minneapolis, MN

Sponsor Team 5172

Sponsoring a FIRST Robotics team is hard to beat when it comes to charitable giving and community involvement. When sponsoring a FIRST team, you are giving money and support to an organization that supports the growth and development of science and technology, while getting kids ready for the future work force using problem solving, teamwork, and ingenuity. Each year, Gator Robotics needs to enlist sponsors to keep the program competitive. Your sponsorship would fund our robot build, safety program, community outreach, and event competition. If you are interested, please feel free to contact a member of Team 5172 or Mary Anderson at mlanderson@greenbush.k12.mn.us or (218) 782-2232 Ext 211 for sponsorship information or to set up a meeting with members of the sponsorship team.

Keep Informed - Informational Websites: FIRST Robotics: http://www.firstinspires.org/ Team 5172 Gator Robotics: www.5172gators.org Chief Delphi: www.chiefdelphi.com (forum based communication on various topics) Blue Alliance: https://www.thebluealliance.com (site to watch competitions, see statistics and history of all FIRST teams)



Team 5172: Bringing Their News to You

Defeating the Boss

Each alliance, which has three different teams, has three ways to help defeat the boss:

*Owning the scale or switch. Ownership occurs when the scale or alliance's switch is tipped in their favor. Robots collect and deliver power cubes to gain ownership.

*Playing power ups. Alliances exchange power cubes for power ups. Power ups provide a time advantage during the match.

There are three power ups that can be played: Force, Boost, and Levitate.

*Climbing the scale tower. Robots work together to climb the scale tower to face the boss.



Robots operate independently following preprogramed instructions for the first fifteen seconds of the match.

Alliances score points by: *Reaching their own autonomous line *Gaining ownership of the scale or their switch **Teleoperated Period**

Operators take control for the final two minutes and fifteen seconds of the match.

Alliances continue to score points by:

*Gaining ownership of the scale or their switch

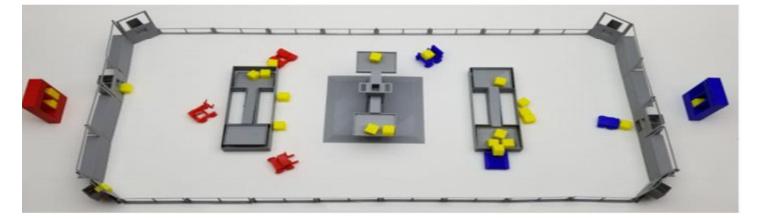
*Delivering power cubes to the alliances vault

*Using power cubes for a timed advantage

*Parking on the scale platform or climbing the scale to face the boss

FIRST POWER UP the 2018 FIRST

Robotics Competition game, finds our teams trapped in an 8bit video game! Teams use power cubes to defeat the boss.



The alliance with the highest score at the end of the match defeats the boss and wins!



Team 5172: Bringing Their News to You

What Are We Up To?

Do you ever drive down Main Street and notice GMR students slipping and sliding while running from business to business? Well, if you are wondering, they are going around for sponsorship. Students work from after school till supper time, freezing out in the Minnesota cold trying to collect money for our team. Aside from sponsorship, team members have been busy taking on many different tasks that need to be done.

Creative and artsy students have been designing posters Freshman Ryan Hlucny is excited to build and proto put on lockers. They also made bag tags to put on our luggage for when we go to competitions. The team established the button design and soon team members will Simple though, it may seem this year's First Robotic be busy making the buttons. One of those creative and artsy students, Issie Brockhouse made a sign for Mrs. Anderson's classroom door, an open/closed sign made for students to know if there is build that night. We had a team of students brainstorming ideas for a Sip & Sign party we will be hosting later on this season. Also, if one comes to the school, he or she will notice a robotics bulletin board that has information about this year's game.

We ordered a new polo shirt design this year for team members and are in the process of getting a clothing order ready for anyone who is wanting Team 5172 apparel. It will include a long sleeve t-shirt, crew neck sweatshirt and a jacket.

Safety team members have been making sure students are being safe at all times while working on the robot. They must wear safety glasses and know how to use the tools properly. They also made little first aid kits that the team will give out to the other teams at the competitions. The chairman's committee has begun. They started working on answering the 12 questions and a 10,000 character essay. They have been reflecting on the past five years filled with laughter, frustration and tears. It is unbelievable where we started and the growth that we have had in such a short time.

Build Update

Do you ever wish that you could experience your favorite game in real life? The GMR Robotics build team has been preparing their player (the robot) since January 6, 2018. The team has been brainstorming ideas to tip the scales and put our robot over the top. The team has brainstormed ideas for the chassi, the arms and lift, the mast, the drive, and the size and weight.

gram this year's robot.

"I think it's going to be an exciting competition. Competition game entails a lot of very complex strategies."

Senior Emily Tarala is stoked to teach the younger robotics members.

"(It's) very exciting to see all the younger classmen coming out to the shop."

As you can see everyone is pumped to start making the player come to life, not on a video game screen but on a real robotics field.

Kyle Stauffenecker stated "I am super excited about build season starting. Let's build robots!"



Team 5172: Bringing Their News to You

Swamp Machine

Pancakes or waffles – what is your choice? Team 5172 had a lesson in team building, including having to work with members of the Green Machine to choose between these two breakfast options. Once they had chosen, they had to defend their reasoning to the judges, or the "mentors". Once the winner was chosen, each group received feedback on their argument. The teams found that waffles were definitely the top choice, but the pancake group's argument tipped the scale.

Their reasoning?

The pancakes are aerodynamic, being able to be used as a frisbee, and don't get soggy from syrup sitting in them.

The teams also experienced growth through a building competition where groups of members built the tallest free-standing structure out of spagetti noodles, marshmellows, and a piece of string.

"The spagetti noodles were terrible because they broke so easily. We should have been given wheat based ones so they were stronger," John Novacek said.

Mentor Teresa Hlucny felt that "it was an stressful experience because we were way over aggressive on our height and thinking and it didn't work to a positive end result".

The Green Machine members experienced northern Minnesota at its finest while shooting trap, riding horse, racing four-wheelers, recogonizing a cow versus a horse, and racing at the Greenbush Race Park. Aiden, a kid never having shot a gun of any kind, enjoyed the experience.

"It was a rush when I hit the clay pigeon," Aiden exclaimed.

The teams also were able to climb a steel bin at Mark Melby's and weld what Hector Reese used to make for desk weights for buisnesses. Instead we wrote "Swamp Machine" which was our moto for that weekend. We had great times bonding with Green Machine at Dallagers cabin and at Russ and Mary's house. We did every-thing from playing pranks on each other to cooking breakfast and playing card games.



Team 5172: Bringing Their News to You

Team 5172 Heads South

Have you have ever had a favor repaid to you? We were invited by Team 1816, The Green Machine, from Edina to stay at their mentors and students homes while attending the MRI (Minnesota Robotics Invitational). They planned a great weekend filled with things that are a part of their daily lives. The team met Team 1816 at TJ's Pizza for supper; "It was fun getting to catch up with their team members again after their visit this summer", according to Blake Dallager. The students and mentors then headed to various homes for their overnight adventure. "The home we stayed in had a court in their basement that we got to play volleyball on," according to Cammi Cain, a member of Team 5172, "it was a blast."

Bright and early Saturday morning, the teams were up and off to participate in the MRI. This event was an off-season event to give teams a chance to compete with new members in different positions. Team 5172 had Kyle Stauffenecker and Robert Hlucny in the driver positions with Kyle reassuring mentors John Langaas, Blake Dallager, and Casey Gram that he would NOT drive the robot forward. Driving it forward across the field is dangerous if it hits another robot, the main shaft bends and not intake of balls is possible. Kyle got off the field and said "I'm sorry". The pit crew was able to change out the pick-up shaft and Team 5172 found themselves chosen for an alliance and having Team 1816 chosen with them. They were together able to win the championship. The teams wrapped up the day at Grand Slam with pizza and amusement park. Sunday morning found the teams back to the topic of pancake warrue waffles. They were treated to a large broakfast hefere

versus waffles. They were treated to a large breakfast before heading out to return to Middle River and Greenbush.

Thank you, Thank you, Thank you!

Team 5172 would like to thank the Greenbush Area Community Fund and American Legion Post 88 for their unending support. The BINGO night that you offered to hold for our team was amazing. We cannot put into words how lucky we are to have a support system like you to grow with our team. THANK YOU!

