

# THE PK MONTHLY

VOLUME 1 | ISSUE NO. 5 | SUMMER 2019



## The Team 501 SUMMER EDITION!

Cover: Last hoorah for seniors and this year's competition drive team and coach.

THE  
POWERKNIGHTS  
ROBOTICS TEAM

Connect with The PowerKnights



## THIS MONTH:

### 501 BANQUET

Team 501 wraps up the 2019 season with our annual banquet. recognize team members and celebrate with good eating!

[Page 2](#)

### SENIOR SPOTLIGHTS

Team 501 recognizes our graduating seniors: David Gibson, Ryan Marchesseault, and Thomas Murray. Good luck at college!

[Page 4](#)

### MAYHEM

Team 501 participated in an offseason event with not just one, but TWO robots, as well as selling some delicious Krispy Kreme donuts to the attendees.

[Page 7](#)

### BATTLECRY 20

Team 501 goes to one of the most prestigious offseason events, Battlecry at WPI, for Battlecry 20.

[Page 9](#)

### ELECTIONS

Team 501 Held 2019-2020 student officer elections. Meet your new team leadership.

[Page 11](#)



**MAIN:** Mentor Adam Martin finishes the night with parting words of wisdom for each of seniors. (Right to Left: David Gibson, Adam Martin, Thomas Murray, Ryan Marchesseault).

## Team 501 Banquet

May 22<sup>nd</sup> | Sawyer's Breakfast and Function Hall, Goffstown NH

Team 501 celebrated our seniors, mentors, students, and sponsors with a banquet, and put an official end to our season. We relished old memories and said goodbye to our seniors while looking forward to the coming season (and incoming team members) with anticipation.

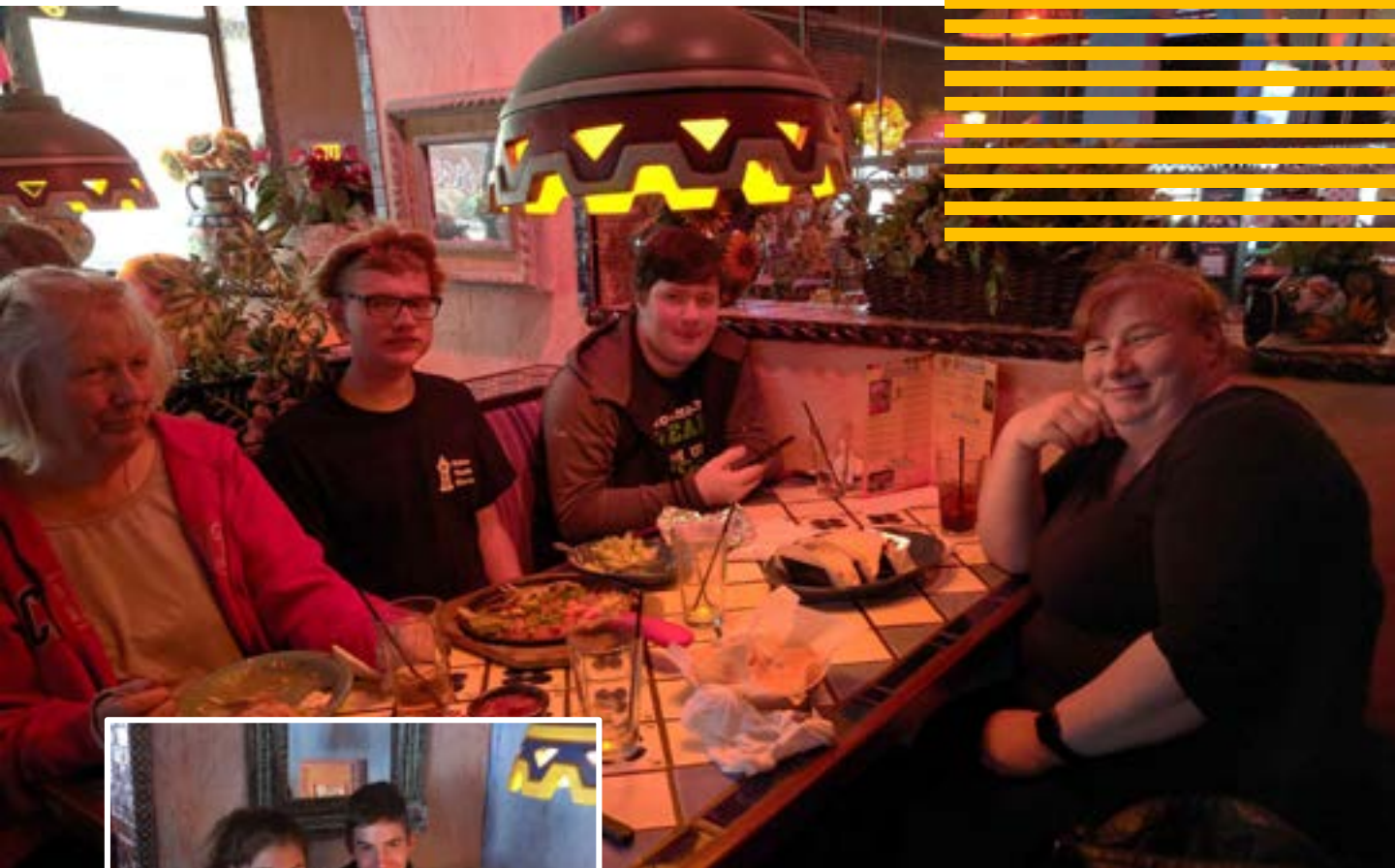


**TOP:** Outgoing President Ryan Marchesseault and his mom accepting sponsorship plaque for the Marchessault family donation.

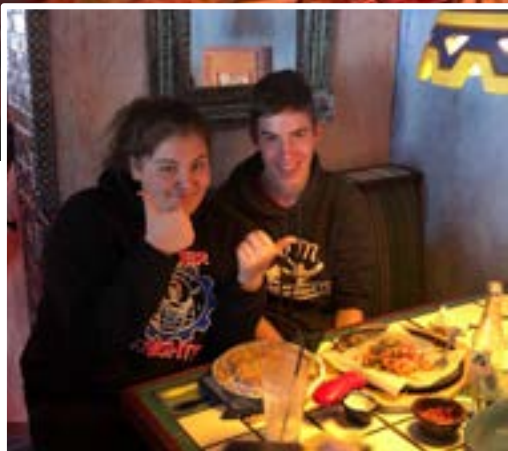
**MIDDLE:** Stu Lewin, Steering Lead, Mentor and donor accepting his plaque on behalf of Stu, Sam and Lexxie.

**INSET:** Sponsor thank you plaques for Louis. P. Cote Inc. distributed at the banquet, .





One of our students brought his friend to enjoy the food at Margaritas with us.



PICTURE: Some 501 team members enjoying the food at Margaritas.



## Margaritas Fun-Raiser

May 15<sup>th</sup> | 1037 Elm Street, Manchester NH

Margaritas Mexican Restaurant in Manchester hosted the PowerKnights monthly restaurant fundraiser for May. Nearing the end of a long season, tacos and nachos were just what was needed. We ate some really great food and raised some money for the team. Fun all around!

We made just over \$160 from the fundraiser, and the money was well worth it – the food was delicious! Thanks to Margaritas for hosting us!

We aim to continue our "Fun"-raisers with other restaurants over the summer. Stay posted!

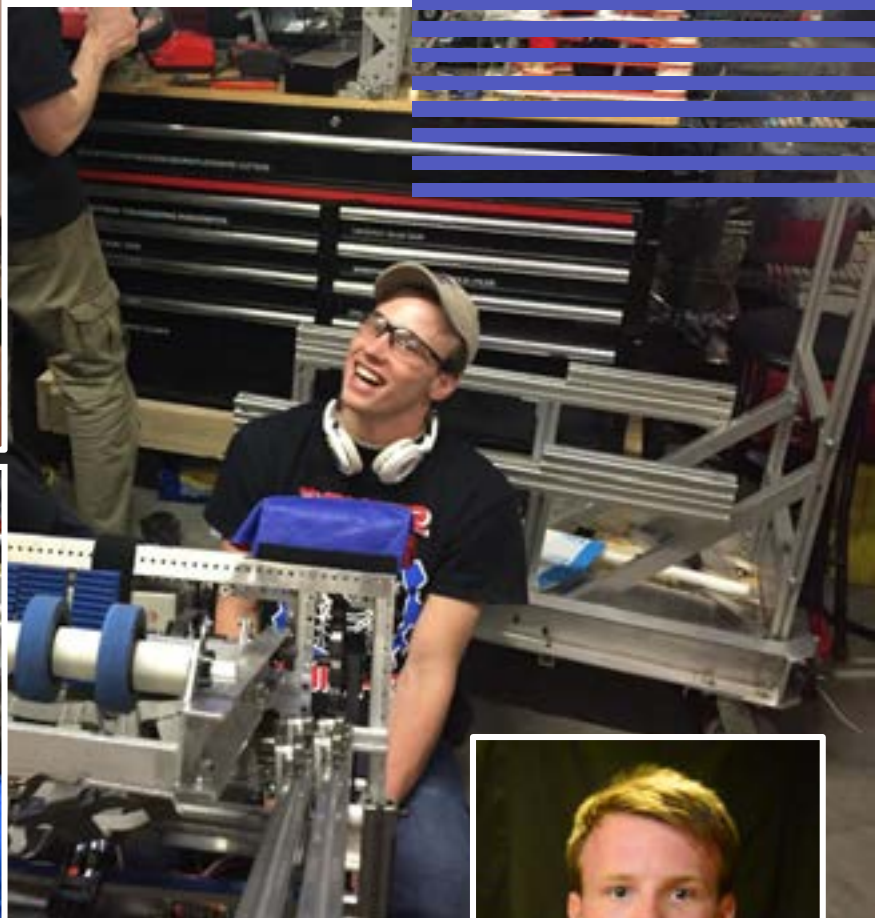


**TOP:** David demonstrating the lift at an all-team meeting.

**MIDDLE:** David sporting his signature suspenders and shorts celebrates a key win during UNH Event.

**BOTTOM:** David installing our "Ludacris" speed gear box and motors.

**MAIN:** David working in the pits at 2019 District Champs



## SENIOR SPOTLIGHT

# David Gibson



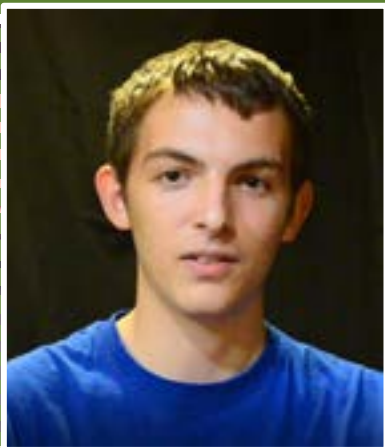
David Gibson will be leaving his legacy on the team in many ways. A 4-year member who has served as team president, team captain and drive team captain along with being a prolific build captain, While at Goffstown, maintained a 4.0 GPA and will graduate 28<sup>th</sup> in his class. David also played 4 varsity sports: Soccer, Football, Wrestling, and Lacrosse. He plans to continue wrestling in college.

His next stop will be WPI, where he plans to triple-major in Robotics, Electrical Engineering, and Business. He is planning to start his own robotics firm after he gets his degree.



David's favorite memory is sophomore year (all of it), and he leaves behind his characteristic words of wisdom: "If you're not doing something, find something to do."





## SENIOR SPOTLIGHT

# Ryan Marchesseault

Ryan Marchesseault was on the business team as well as build team, and served as president this past season. He plans on attending Elms College in the fall for Accounting and getting into a business career.

Ryan will graduate towards the top 100 of his class with a 3.0 GPA. He fondly remembers his favorite part of the season, the final assembly of our modular robot. While on the team, Ryan gained both confidence in public speaking and effective presentation skills as well as management skills.

Ryan's favorite memory is getting 9<sup>th</sup> place at the NEFIRST District Championships his first year on the team in 2017. His best advice is to just help out – building a robot in six weeks isn't as easy as it sounds.



**MAIN:** Ryan getting ready to watch the action from the driver's station at recent event

**TOP:** Ryan displaying our team call # for Robot #2 practicebot. 9985 at Mayhem

**MIDDLE:** Ryan accepting an award for our senior recognition at the banquet.

**BOTTOM:** Ryan and his dad, Leo Marchesseault, president of the Booster club working out some design details for the robot.



MAIN: Thomas sitting in the stands with the rest of the team.

## SENIOR SPOTLIGHT

# Thomas Murray



Thomas Murray is the most senior student from Manchester West High School on the team. He is 18, a 4<sup>th</sup>-year student on the team, and will graduate 40<sup>th</sup> in his class with a 3.7 GPA. He will be attending New England College to major in Environmental Science and Sustainability.

Thomas joined the team by inspiration from a teacher participating in the West STEAM program. When on the team, he not only learned mechanical skills and CAD, but also how to be more social and come out of his comfort zone.

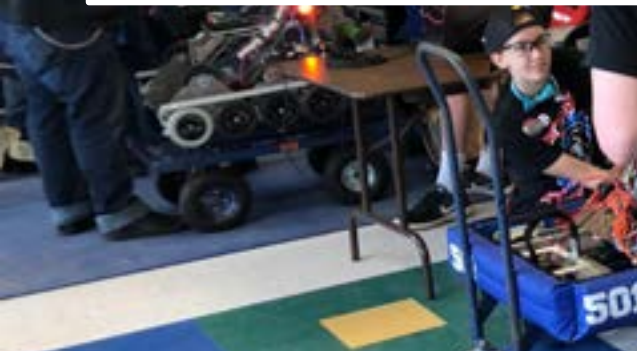
Thomas fondly remembers deconstructing old robots and his best advice is always remain organized, and speak up if it's something you're passionate about.

TOP: Thomas sorting a LOT of robot wheels.

MIDDLE: Thomas watching a demo of mechanical operations during our visit to iRobot Corporation.

BOTTOM: Getting in the holiday spirit as we walk down Manchester Christmas parade where Thomas hands out blue candy canes.





**TOP:** Two robots side-by-side and 2 pits too.

**MIDDLE:** 501B Robot getting carried to the field for the start of

**BOTTOM:** 9985 (501B) drive team setting up for another match with out alliance partners.



**MAIN:** No - You are not seeing double. There are actually 2x 501 robots side-by-side. We got the chance to run a second robot at Mayhem.

## Mayhem in Merrimack

June 1<sup>st</sup> | Merrimack High School, Merrimack, NH

FRC 501 competed in Mayhem, an offseason event in Merrimack hosted by Team 166, Chop Shop. In addition to our normal robot, Team 501 got to compete as Team 9985 with our practice robot.

The day was tons of fun – our second robot ending up having a higher overall score than our primary robot! – and the rookie team members all took a turn at driving and learning how to handle competition.

Team 501 sold Krispy Kreme donuts at the event and was able to share \$166 of the proceeds of with team 166: Chop Shop.





**MAIN:** Isabelle Steger and Cameron Miles enjoying Krispy Kreme Donut sales duty. That's a lot of donuts.

## Mayhem in Merrimack

June 1<sup>st</sup> | Merrimack High School, Merrimack, NH

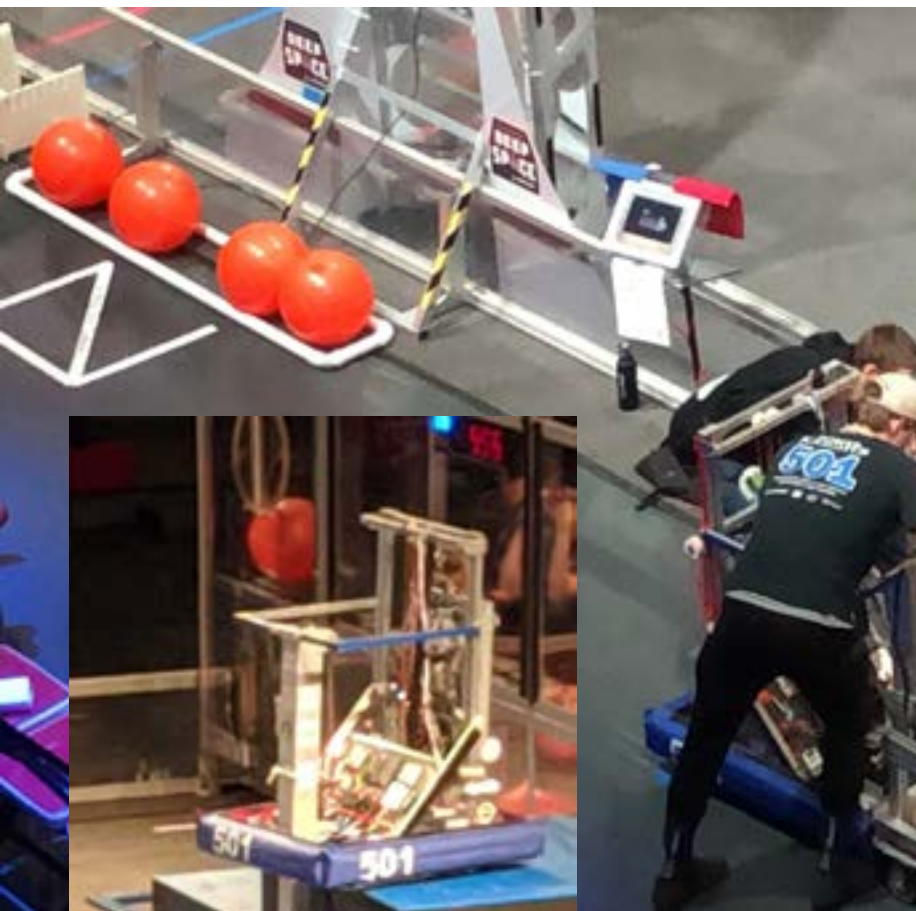
Team 501 also worked with Host team 166 to be able to extend a krispy Kreme fundraiser sold Krispy Kreme donuts at the event and was able to share \$166 of the proceeds of with team 166: Chop Shop.

**TOP:** Our out-going president happily displaying his modified team t-shirt to represent our second team.

**MIDDLE:** 9985's drive team. (or 501B, practice bot

**BOTTOM:** The Nuclear Football of Robots. Our new portable driver station





MAIN: Team 501 PowerKnights loading up the robot for another match.

## BattleCry 20

June 7<sup>th</sup> - 9<sup>th</sup> | Worcester Polytechnic Institute, Worcester, MA

Our second offseason of the year was back to WPI for Battlecry, in its 20<sup>th</sup> year. There was a STEM event going on at WPI at the same time that students were able to enjoy, and Woodie Flowers himself was at the competition.

The barbecue was absolutely terrific – so good that the drive team almost missed the first after-lunch match! Sadly, Team 501 wasn't able to sustain their position in the Round Robin order to go on to finals, but it was a lot of fun and a great way to end the year before the summer.



TOP: Another Successful Level 3 HAB climb for 501 as referee watches our elevator post inch back into the lift mechanism.

BOTTOM: Even Mentors get into meeting Woodie! Mindi Charles and Stacey Edgar, happy to meet the "GP" Man himself.



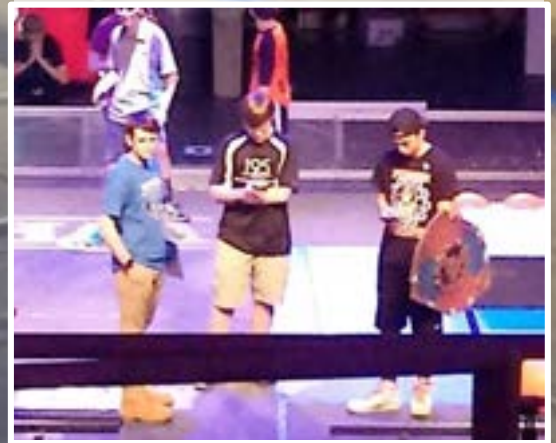




**MAIN:** Team 501 Drive team member pauses to take it all in towards the end of the day.

**TOP:** Team 501 with alliance partners 1073 The Force Team and 195 CyberKnights

**BOTTOM:** Emily and Jackson Charles were able to meet Woodie Flowers at BattleCry and talk about the difference FIRST has made to them.

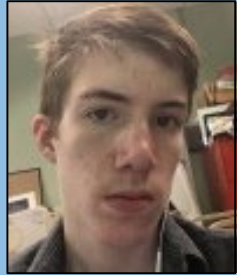






**Paige McNamara**  
**President**

*Overall team leader/  
captain. Runs team  
meetings & liaison with  
mentors, steering &  
boosters.*



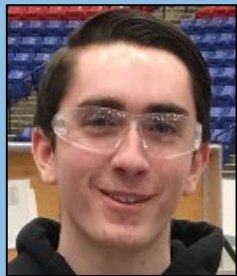
**Tad Hagner**  
**VP, Robotics**

*Technology Lead, drives  
game strategy, robot  
design, CAD, assembly &  
build, and programming.*



**Caleb Hagner**  
**VP, BizOps**

*Runs team operations  
including development of  
overall business plan  
fundraising, sponsorships,  
budget, and finance.*



**Garrett Cote**  
**VP, Process & Safety**

*Focus on team processes  
and quality, manages  
student training and  
learning and acts as team  
safety captain.*



**Isabelle Steger**  
**VP, Outreach**

*New role focused on the  
mission of FIRST, liaison for  
community service,  
Recruiting, Charity, and  
Sprit/Branding*



**Matthew Gleich**  
**VP, Communications**

*Manages communications  
including newsletter, emails,  
social media and internal  
messaging, and tools.*

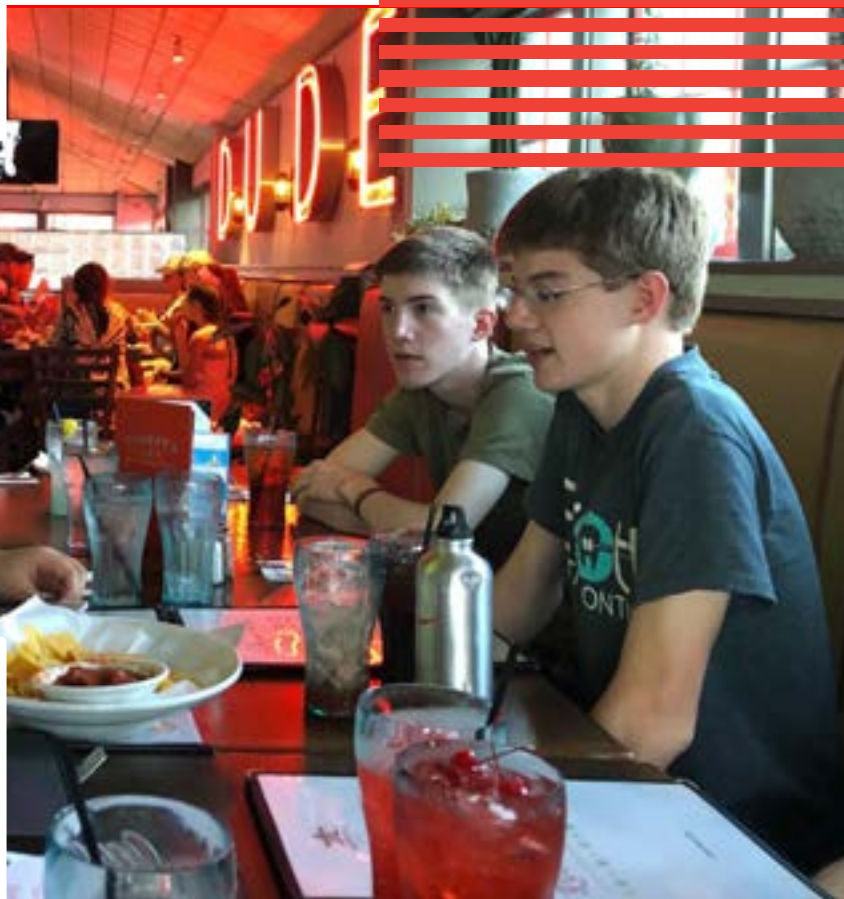
*Congratulations!*

## 2019-2020 Student Officer Elections

June 20<sup>th</sup> | Goffstown, NH and Manchester, NH

Congratulations and welcome this year's student officers for the 2019-2020 season. Team 501 held student officer elections via electronic voting this year using [electionrunner.com](https://electionrunner.com) and had amazing participation/turnout.

A Big thanks to 2018-2019 Officers, Ryan Marchesseault (President); Shawn Stewart (VP, Robotics); Paige McNamara (VP, BizOps); Garrett Cote (Safety Captain) and Caleb Hagner (Communications).



Newly elected student officers took the opportunity to have their first "Meeting/Dinner" at the fundraisers.

## Doing Their Fair Share

June 26<sup>th</sup> | 1050 Bicentennial Drive, Manchester, NH

Shorty's Mexican Roadhouse was kind enough to provide a place for Team 501's June fundraiser.

The food was great, and our newly elected student officers were able to have their first meeting that night at the restaurant. A lot of team members and supporters were able to show up to chow down for the team. We certainly hope we'll be back for more! Some mentors even made it for both lunch AND dinner!

**SHORTY'S**  
★ ★ ★  
**MEXICAN ROADHOUSE**

**TOP:** Shorty's Mexican Roadhouse is located at 1050 Bicentennial Drive in Manchester.

**MIDDLE:** Ryan Edgar clearly mesmerized by the Aztec chicken fingers

**BOTTOM:** A unique design, Shorty's Fair Share program works by having customers drop their receipts in a basket on the host table to support the fundraiser.



## KEY DATES

### 2019 OFFSEASON EVENTS

- SEP** | NH Governor's Cup
- SEP** | Ben & Jerry's Social
- SEP 9** | New Member Movie Night
- SEP** | Restaurant Fun-Raiser
- OCT** | Beantown Blitz
- OCT 20** | Pumpkin Regatta
- OCT 26** | RiverRage 23
- NOV 6** | Battle of the Bay



## UPCOMING EVENTS

### JUL 2019



**7.10 | All Team Meeting (TBD)**  
Full team meeting with student members and parents.



**7.20 | Goffstown Old Home Day (Goffstown, NH)**  
Find us at our Booth and stop by and Say Hello.



**7.23 | FUNDRAISER: Applebee's (Manchester, NH)**  
5-9pm Applebees 2<sup>nd</sup> street.



### AUG 2019



**8.03 | FUNDRAISER: CAR WASH (Goffstown, NH)**  
9am-12pm, Stop by and get your car washed/donate..



**8.14 | All Team Meeting (Manchester, NH)**  
Full team meeting with student members and parents.



**7.20 | Goffstown Old Home Day (Goffstown, NH)**  
Find us at our Booth and stop by and Say Hello.



**7.21 | FUNDRAISER: RESTAURANT TBD (Manchester, NH)**  
5-9pm Announcements via Facebook.

# THE PK MONTHLY

VOLUME 1 | ISSUE NO. 5 | MAY 2019

## EDITOR

Caleb Hagner  
Patrick Steger

## WRITERS

Caleb Hagner  
Patrick Steger

## PICTURES/IMAGES

Patrick Steger  
Kathy Marchesseault  
Nathan Marchesseault  
Stacey Edgar  
(Many Members of the team)



## OUR AFFILIATIONS

Team 501 is proud to be affiliated with the following key organizations that make it possible for our students to participate in FIRST Robotics Competitions (FRC) each year.



For Inspiration and Recognition of Science and Technology is an international youth organization that operates the FIRST Robotics Competition. In 1989, Woodie Flowers and Dean Kamen became the founders of this amazing organization. Their goal was to teach young and inexperienced kids about engineering and technological skills and fields, as a way to get more of them interested. Today the organization includes a total of 7,000+ teams world-wide.



4-H has a long history of supporting robotics programs through 4-H clubs, after-school programs, camps and curriculum. Through robotics, 4-H'ers learn teamwork, problem-solving, critical thinking, engineering and design. The 4-H robotics program inspires young people and develops an early interest in robotics engineering and technology.



Goffstown High School, located in Goffstown, New Hampshire, United States, serves the towns of Goffstown and New Boston. Goffstown High School joined Manchester West High School in 2007 to form an even stronger award winning team. Go Grizzlies!



Manchester High School West, known as West High or West, is a public high school located in Manchester, New Hampshire. What is today our beloved team 501, The PowerKnights! Was first founded in 2001 Go Blue Knights!



PowerKnights Booster Club is comprised of team 501 members' parents and alumni that volunteer their time and skills in order to subsidize travel and lodging costs for FRC competitions as well as helping provide opportunities with the Mentors to teach skills such as engineering, manufacturing, marketing, leadership, safety, business and management.

## THE POWERKNIGHTS ROBOTICS TEAM

FRC501 The PowerKnights Robotics Team, a 4-H Team  
329 Mast Road, Room 101, Goffstown, NH 03045  
[info@powerknights.com](mailto:info@powerknights.com) | [www.powerknights.com](http://www.powerknights.com)



Connect with us through our Website and Social Media @





# SPONSORS & DONORS

501

## GOLD SPONSORS



Underwriters  
Laboratories

STU, SAM  
& LEXXIE

## SILVER SPONSORS



POWERKNIGHTS  
BOOSTERS



BAE SYSTEMS



## BRONZE SPONSORS

THE  
MARCHESSEAULT  
FAMILY

ADAM  
MARTIN



THE  
CHARLES  
FAMILY



## PATRON SPONSORS



ABLE CRANE Service



HEIDI  
JACKSON

## DONORS/FRIENDS

Steger Family  
Laura Miles



David Hagner  
Felicia Johnson

THE  
POWERKNIGHTS  
ROBOTICS TEAM



GOFFSTOWN HS  
MANCHESTER WEST HS

# SPONSORS, DONORS, AND COMMUNITY PARTNERS



Team 501 takes time for a group photo after winning the Entrepreneurship Award sponsored by Kleiner Perkins Caufield and Byers at 2019 UNH NE District Event .

**TEAM 501  
THANKS YOU FOR  
YOUR SUPPORT.**



**THE  
POWER NIGHTS  
ROBOTICS TEAM  
501**