

Section I

Team Information/Cover Page

985

Kennedy High School Cougar Electric Car Company



Advisor: Barry Wilson Crew Chief: Collin Flannagan

Assistant Crew Chief: Dylan Bower

Battery Lead: Noah Wilson Driver: Rodrigo Sagastume

Documentation: Kaleigh Martin and Elizabeth Severson

Section II

Background Information

Kennedy Electric Car (Cougar Electric Car Company)

Car 985, Class 1

Advisor: Barry Wilson

Contact Information:

School Address

Kennedy High School
c/o Barry Wilson (Advisor)
4545 Wenig Rd. NE
Cedar Rapids, IA 52402

Phone

Barry Wilson (Advisor)
(319) 558-1595 (school number)

E-mail

Advisor Email:

bwilson@crschools.us

Alternative Student E-mail:

cougarelectriccar@gmail.com

Website

www.cougarelectriccar.com

Social Media

Facebook:

Kennedy Electric Car Company

Instagram:

@cougarelectriccar

Electric Car at Kennedy

John F. Kennedy High School's electric car program is called Cougar Electric Car Company. Our school and program is located in Cedar Rapids, which is in east-central Iowa. Cougar Electric built its first car in 1998 to take part in the 1998-1999 race season. The program was originally held as an after-school class, but starting in 2016, it was added to the normal school day. All of the planning, designing, and assembly are done in the shop by students.

In 2001, Iowa governor, Tom Vilsack, awarded the FINE (First In Nation in Education) award. We were one of five K-12 programs in Iowa to receive this award, as well as the first electric car program in the nation to win a prestigious award in education.



Skills

Cougar Electric Company provides an opportunity to learn a variety of soft and Iowa Core skills. Soft skills include problem-solving, communication, and time management. These soft skills as well as the Iowa Core skills below that are learned in the program help students in their everyday lives and their futures.

Iowa Core Skills

- Manage money efficiently by developing spending plans and selecting the appropriate financial instruments to maintain positive cash flow
- Demonstrate critical thinking skills using the appropriate tools and resources to plan and conduct research, manage projects, solve problems, and make informed decisions
- Communicate and work productively with others to increase innovation and work quality
- Adapt to various roles and responsibilities
- Change priorities
- Demonstrate leadership skills, integrity, ethical behavior, and social responsibility while collaborating to achieve common goals
- Demonstrate initiative and self-direction while exploring the ways individual talents and skills can be used for productive outcome in personal and professional life
- Demonstrate productivity and accountability by meeting high expectations
- Listen to establish, maintain, and enhance relationships
- Gain knowledge through problem solvingApply and adapt a variety of appropriate strategies to solve problems
- Understand, analyze, represent, and apply problem (problem solving skills)
- Understand and interpret descriptive statistics

Car History

The 985 is a class 1 car this year. Being a new car, this specific iteration doesn't have a history, but a car has had a version of the 985 number since 1999. Last year was the first year the number was standardized to 985 across every state we race in. Before it was simply the 50 car. We still call it by this old name in the class, but at races and in documentation it is the 985 everywhere we race. The 985 is in its first year under crew chief Colin Flannigan. Colin did not work with the 985 as an assistant crew chief and instead worked on the 983. Further explanation for this can be found on page 29. This is the third year it will be driven by Rodrigo Sagastume, however, this is the first year Rodrigo is the only primary driver. In his first year he was a secondary driver just learning how to race and last year he split driving time evenly with Elizabeth Severson who now drives for the 983.

The following section covers the 985's last iteration's racing record as a class 2 car in the 2019 season.

2019 Season Race Recap

West Point

West Point, Nebraska

April 6th, 2019



985's Awards

1st Endurance

In a thrilling first race of the season, the 985 driven by Rodrigo received 1st in endurance, while the 983 car, driven by John followed close behind, receiving 2nd place. Our pit crew only had two cars to run as our 984 car was unable to race as Nebraska requires drivers to be at least 16 and the only driver for the 984 was 15 during the 2019 season. It was a great first race for three new students: Colin: the 983's assistant crew chief, Elizabeth: a new driver for the 985, and Noah: the batteries lead. Elizabeth didn't drive at this race as she was 15, she did however get to experience her first race and see what it was all about. While Colin was the 983's assistant crew chief during the 2019 season, he took over for the 985 for the 2020 season.

Platteville

Platteville, Wisconsin

April 12th & 13th, 2019



985's Awards

2nd Endurance

We started our Wisconsin season strong at a chilly race at Platteville. This was the 985's new driver Elizabeth's first time behind the wheel at a race. The race went smoothly and the 985 walked away with 2nd endurance to go with the 983's 1st endurance and second overall.

Stout

Menomonie, Wisconsin

April 26th & 27th, 2019



985's Awards

3rd Endurance

2nd Handling

2nd Overall

The Cougar Electric car team was finally at full force, with Stout being the 984's first race and the first with live telemetry up and going. The team had a great race with the 983, 984, and 985 cars placing 3rd, 2nd, and 3rd respectively in endurance. Additionally, the 985 received 2nd place for handling and 2nd Overall.

Autobahn

Joliet, Illinois

April 28th & 29th, 2019



985's Awards

2nd Endurance

3rd Handling

1st Overall

Straight after Stout, the team headed to Autobahn. Unfortunately, inclement weather created a slippery track, and the 984 had a lot of fun spinning out! Our cars sat out of the first heat because of the weather. Despite the rain, the 985 had a great run taking 2nd in endurance, 3rd in handling and 1st Overall.

Wayne

Wayne, Nebraska

May 4th, 2019



985's Awards

1st Endurance

2nd Braking

1st Handling

1st Design

2nd Documentation

1st Season Overall

The team had a fantastic showing at the Nebraska Championships. The 985 swept the race, with a 1st in handling, design, and endurance, along with a 2nd place in braking and documentation. The 983 also had a great race bringing in a 1st place in documentation and braking, a 2nd place in design and handling, and a 3rd place in endurance. The 985 and the 983 won 1st place and 2nd place for the overall season, respectively.

Berlin

Marne, Michigan

May 10th, 2019

Unfortunately, we weren't able to make it to Berlin, and therefore any Michigan races in the 2019 racing season. The scheduling of the championship races were too close together. The Saturday before we had the Nebraska championships in Wayne and the following Monday was the Wisconsin championships at Road America. We were mainly concerned with the fact we would only have one down day in-between Berlin and Road America for any repairs we would possibly need to make before the Wisconsin championships. Ultimately, we decided to play it safe and not risk not having enough time to prepare for the Wisconsin championships as we focus more of our racing season in Wisconsin than in Michigan.

Road America

Elkhart, Wisconsin

May 13th & 14th, 2019



985's Awards

2nd Braking

3rd Handling

The Cougar Electric Car team had a successful Wisconsin Championship race, despite multiple mishaps. During the 4th heat alone, the 985 caught air and broke a tire, the 983 caught on fire, and the 984 spun out. At the end of the day the 983 received 1st place for handling, the 984 received 2nd place for design and 1st place in endurance, while the 985 received the 3rd place in documentation and 2nd place in braking.

Hawkeye Downs

Cedar Rapids, Iowa

May 18th, 2019



Hawkeye Downs is our home race that we put on every year. Iowa runs classless meaning our lead acid battery cars are being placed with lithium ion battery cars for endurance. Because of this we don't expect much award wise in endurance and use Iowa races as learning experiences for our race team and students who normally can't attend races. Due to a limited number of car seats and funds to pay for hotel rooms, typically only six to ten students are able to be a part of the race team. A local race allows machinists, aerodynamics, graphics, documentation, promotions, and non-lead battery and telemetry students to experience racing. These students got to see what their hard work looks like in action and we still snagged some awards with the 983 placing 2nd in handling and the 984 placing 2nd in braking.

Prairie

Cedar Rapids, Iowa

May 19th, 2019



A rainy day in Cedar Rapids marked our last spring race of the season. The team faced many tribulations, as all three of the cars experienced mechanical difficulties. The 985 experienced losing its chain multiple times, causing it to pit, along with a faulty set of batteries. Prairie doesn't give out any handling or braking awards, only endurance awards. None of our cars revived any awards, however the 983 car, driven by John, unofficially received 4th place. Given that Iowa doesn't have classes we were very proud of this placement.

La Crosse

West Salem, Wisconsin

October 7th, 2019



985's Awards

1st Endurance

The final race of the 2019 season and our only fall race was a great opportunity for new team members to learn about racing. Two new students were looking to become assistant crew chiefs: sophomore Matthew Morrow for the 983, and freshman Ross Finneman for the 985. This was a race of firsts for the 985 with it being Ross's first race and the 985's crew chief Colin Flannagan's first time driving. We had a great race and finished 1st in endurance for class 2.

2020 Racing Schedule

Despite our team being known for racing in five states across the Midwest, this year we will most likely only be racing in the three states due to scheduling issues. Traditionally our team races in Wisconsin, Illinois, Iowa, Nebraska, and Michigan. As of now, our team is scheduled to race Wisconsin, Illinois, and Iowa, with a possible race at the Berlin Racetrack in Michigan on May 8th. Additionally, this will be our teams first time racing at the Fox Valley race in Wisconsin.

Race	Location	Date
Stout	Menomonie, WI	April 17 th & 18 th
Platteville	Platteville, WI	April 24 th & 25 th
Autobahn	Juliet, IL	April 26 th & 27 th
Fox Valley	Appleton, WI	May 1 st & 2 nd
Berlin	Grand Rapids, MI	May 8 th
Road America	Elkhart Lake, WI	May 11 th & 12 th
Hawkeye Downs	Cedar Rapids IA	May 16 th
Prairie	Cedar Rapids, IA	May 17 th

April 2020

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
					Stout	
19	20	21	22	23	24	25
					Platteville	
26	27	28	29	30		
Autobahn						

May 2020

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
					Fox Valley	
3	4	5	6	7	8	9
					Berlin	
10	11	12	13	14	15	16
	Road America					Hawkeye Downs
17	18	19	20	21	22	23
Prairie						
24	25	26	27	28	29	30
31						

Teams

Our full program includes ten individual teams a student can join. The ten do not include driving, as drivers also have another role in the program they perform during class time. These ten teams fall under three categories: Mechanical Engineering, Electrical Engineering, and Promotions. Within these ten there also traveling and non-traveling teams. Electric Car is a class that is offered during the school day along with being an extracurricular activity. Not every student who is a member of the class travels with the team to races. The travel team consists of the students that regularly attend races. The bare minimum for the travel team has six students: three crew chiefs and three drivers. We usually have at least one parent accompanying us to races so we can bring along assistant crew chiefs, the batteries lead, and the telemetry lead. The latter two may also bring assistants, but the assistant crew chiefs and the batteries lead receive priority. Other students who do not travel also get to experience racing as it is required for student in the class to participate at the race we host every year at Hawkeye Downs. Non-traveling teams are integral to the overall program, but do not have a job to do during races.

Mechanical Engineering

Crew Chief

Crew chiefs are the leaders of the class, each assigned one car and typically one assistant crew chief. They are in charge of putting all the individual parts together into a working car. They oversee and participate in the designing, building, wiring, and fixing of the cars. This year we are exploring more cooperation and teamwork across the three cars in our program. In years past crew chiefs have exclusively worked on their cars. This year, while a single crew chief is still responsible for their car and the ultimate authority on their car, all three crew chiefs are helping with the design and construction of all three cars. Before, our program really only had crew chiefs helping each other with repairs at races, but now they are helping each other in the classroom. At races, crew chief are responsible for making sure the car passes inspections, performs to the best of its ability during heats, and they hand any repairs that need to be made mid-race or in between heats. Through communication with the driver during the endurance heats, crew chiefs use battery information given to them by the batteries team to pace the car. Crew chiefs are all in all responsible for the success of their assigned car for the season. This is the 983's crew chief John's second year in the role.



Assistant Crew Chief

Assistant crew chiefs are the apprentices of the crew chief of their assigned car. While they are not responsible for any the crew chief's duties, they help in all areas of designing, building, and racing. Assistant crew chiefs are typically training to eventually take over as crew chief for the car they are apprenticing with, however this year we've had a few deviations from that rule. The first irregularity was last year's assistant crew chief for the 983 taking over as the crew chief of the 985. This was because the 985's crew chief graduated without a replacement secured. The second deviation is due to the limited number of freshmen interested in mechanical engineering. The 984's crew chief this year is a sophomore with a sophomore assistant crew chief. As these two will be graduating at the same time, the current assistant crew chief won't take over the 984 car. Instead a younger student will need to replace the current 984 assistant crew chief within the next two years so the 984 is not taken over by a student who didn't have the opportunity to apprentice. This is the 985's assistant crew chief Dylan's first year in the role.



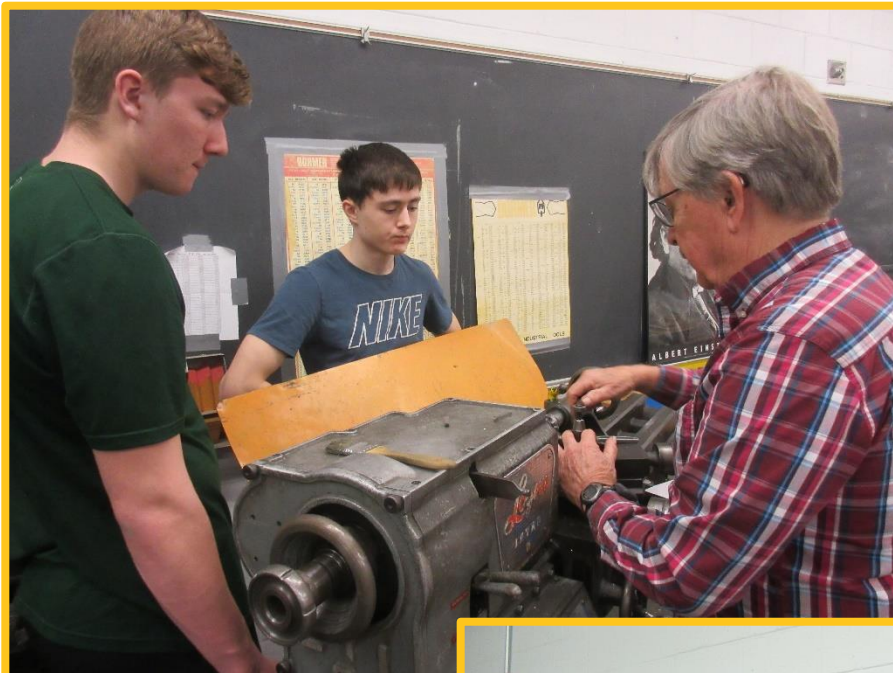
Mechanical Engineer

Mechanical engineering is both an overhead descriptor for multiple jobs, and its own job. Mechanical engineering students assist in the construction of the car and generally work with a specific car. In class they have a very similar job as the assistant crew chiefs, but unlike the assistant crew chiefs they do not travel with team to races and are not training to become a crew chief. We don't typically have students that are general mechanical engineers, but this year we have two because of student's high interest in construction and mechanical engineering. There is no lead for this team as mechanical engineers work under crew chiefs.



Machinist

Our machinists work with the lathe and mill to make custom parts for our cars like our back axles and spacers. Both machinists this year are new to the job, but not the program. We typically have older students train the incoming team members, but this wasn't possible for machining this year, so our advisor Barry has been given that responsibility. Given that both team members have limited experience, neither has labeled 'lead' and the team instead works under Barry's leadership. This is a non-traveling team.



Aerodynamics and Design

The aerodynamics and design team use wind tunnel data from the 1/10 scale models they make of our cars to advise the crew chiefs of the design of their car. They are either telling the crew chiefs where to make their car more aerodynamic, or if the crew chief is making a new car, which parts of other cars to copy and what parts to do differently. Members are not a part of the traveling team and do their work exclusively in class. The current lead is Jesse Hempstead.



Electrical Engineering

Batteries

The batteries team is responsible for maintaining and caring for our batteries and deciding how to pair them for racing sets. To get data, they run a series of tests using our dyno, a device we use to simulating driving to see how the batteries run down. They use this data to designate 'A', 'B', and 'set-up' sets and create battery curves that tell crew chiefs where voltage should be at different times during races to make sure the car can run for the entire heat. While batteries are in protective storage to extend their life, the batteries team is in charge of trailer maintenance. They clean, organize, and make any necessary repairs to the team trailer we bring to races. Noah Wilson is the batteries team's lead and is typically the only batteries team member that travels. If there is space available an assistant may accompany the travel team as well. At races battery team members make sure batteries are on chargers or maintainers, decide which car gets which set of batteries, and are general helpers that can provide another set of hands to help with any repairs.



Telemetry

Telemetry is in charge of the communication pathways between the drivers, the crew chiefs, and the batteries. They work on the system that relays the batteries' volts and amperage during races to both a display in the cockpit of the car and to the crew chiefs in the pits. The main goal of the team this year is finding a way to allow both the driver and the crew chiefs in the pits to see battery and amperage information instead of relying on verbal communication. This team sometimes travels; at races the telemetry team makes sure their system is working and tries to fix any issues with the hardware or software that may arise. The current lead is Brian Stubblefield.



Promotions

Promotions

Like mechanical engineering, promotions is both an overhead and its own team. Promotions is an outreach team that communicates with both the public and sponsors. Members run our social medias (Facebook and Instagram) and maintains our website. These are used as ways to get the word out about our program, keep in touch with parents and former students, and to give sponsors an idea of what the program does. The team communicates with sponsors to secure donations to keep our program running. They also make or organize all sponsor thank-yous. This is not a traveling team, but the team does post race results on our social medias and website using pictures and information from travel team members. This year there are no students whose sole job is promotions; the responsibilities of the promotions team are split between members a variety of different teams. Our social medias are managed by our advisor Barry and telemetry lead Brian Stubblefield, the website and sponsor thank-yous are run by the documentation team, and sponsor communications are handled by Barry, the documentation team, and batteries lead Noah Wilson. With there not being any full-time members, this team does not have a lead.

Documentation

The documentation team is responsible for making the documentation books and monthly log books that are submitted for scores that add to each car's overall season points. Due to the lack of a dedicated promotions team, the documentation team also handling sponsor communications and running the program's website this year. In years past the documentation has an assigned a car to each member to write about with a lead approving final copies, this year the team is working collaboratively on all three car's books. Even with this new system there is still a team lead, this year's being Kaleigh Martin. The documentation team does not travel.



Graphics

The graphics teams makes the graphics with both a Roland vinyl sheet cutter and by hand cutting. The graphics are used for the cars, the travel team trailer, team t-shirts and sweatshirts, and promotional materials. Any graphics that are not sponsor logos the team also designs. Along with making t-shirts and sweatshirts the team manages all parts of the ordering process and are in direct contact with customers. The graphics team lead is currently Rodrigo Sagatsume.



Drivers

As previously mentioned, drivers are not only drivers. Driving doesn't have any class duties, just racing duties. Because of this, the driver's other job is not typically one that is a part of the travel team. Although in past years we have had some overlap like crew chiefs that also drove their car. We don't have any overlap like that this year. Drivers also fill this role outside of races themselves, participating in practice laps, maneuverability runs, and braking practice on weekends when we can use the empty school parking lot. They also attend events to either tell people about driving and the program or to drive in parades or demonstrations. This year we only have one driver per car for a total of the three drivers. The 985's driver is Rodrigo Sagatsume who is also the graphics team lead. There is some questionability around Rodrigo being eligible to drive due to issues with grades so some planning has begun on what will happen if Rodrigo isn't able to race. The car is not being directly built to Rodrigo, however it will still fit him. Instead the car is being built around the 983's driver Elizabeth Severson. This creates its own issues since Elizabeth can't drive two cars at once. Elizabeth's measurements are closer to the average student in the class than Rodrigo's are, so the car does not necessarily need to be driven by her either. This leaves us with three things that can happen if Rodrigo is unable to drive. The first option is that Elizabeth will drive the 985 and the 983's crew chief will drive the 983. The second option is that the 985's crew chief, Colin, will drive the 985. The final option is that another student in the class who has not yet been determined will drive. None of these are things we would like to have happen, but the last option is the best of the three since we prefer to have our crew chiefs in the pits and not behind the wheel.

985 Team Members

985 Crew Chief

Collin Flannagan



This is sophomore Colin's second year with the program. Last year he was the assistant crew chief for the 983, but took over as the crew chief for the 985 this year. Last year's 985 crew chief graduated without a replacement lined-up and the 983 crew chief still had another year with the program. Due to this, we moved Colin to the 985 so the car wouldn't be taken over by someone who didn't have the opportunity to apprentice. In the future he would like to become an engineer.

Quote: "I don't know what to do with my hands."

985 Assistant Crew Chief

Dylan Bowers



This is freshman Dylan's first year in Electric Car. He is one of three Dylans in the program this year. In the future he'd like to become a mechanical engineer.

Quote: "You signed your life away, right?"

Driver and Graphics Lead

Rodrigo Sagastume



Senior Rodrigo is the graphics lead and the drivers for our 985 car. He has been a part of the program all four years of his high school career. In the future he would like to join the police force.

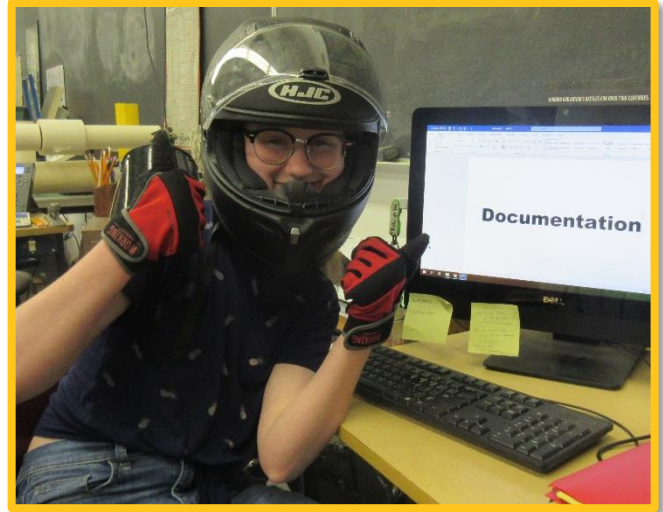
Quote: "If you're not first you're last."

Documentation Lead and 984 Driver

Kaleigh Martin

Kaleigh Martin, a junior, is an avid head of the documentation team along with being the driver for the 984 car. Due to her small stature, her car, the 984, is the smallest within the program. In her free time, she enjoys participating in speech, watching plays, and teasing her younger siblings.

Quote: "The smell of Barry's van brings back memories."



Documentation and 983 Driver

Elizabeth Severson



This is junior Elizabeth Severson's first year in the class, but second year in the program. Last year she was unable to fit the class into her schedule, but still traveled with team as a driver for the 985 and welded cars after school and on weekend work days. This is both her first year in the class and her first year in documentation. She is the youngest of three; both of her older brothers having been a part of Electric Car while they were in high school as crew chiefs. In the future she would like to enter a science field, but has not yet decided which.

Quote: "We *could* steal Barry's umbrella."

Batteries Lead

Noah Wilson



This year is sophomore Noah's second year in electric car as the head of the battery department. He is the self-proclaimed Electrical CEO and Battery Team Commander of the electric car program and takes care of all of the cars' batteries. When his batteries are in between tests and his freshman underlings don't need wrangling, Noah is the "official" documentation team photo model. He also floats between many departments helping out where he can. He enjoys being a member in our school's varsity show choir and bowling when he is not in the shop. After high school he plans on studying to either be a forensic investigator or a CTE certified teacher.

Quote: "Join me Elizabeth, I'm lonely!"

Full Program Team

984 Car

984 Crew Chief



Jakob Davis

Jakob is a sophomore in his second year in the program, who works as the 984's crew chief. He runs a crew of aspiring sophomore assistant crew chiefs to maintain our programs smallest car. He plans on becoming a machinist after high school. In his free time, he can often be found in the shop, or watching western movies.

Quote: "We are now the Cougar Cleaning service! We are done with all those cars!"

984 Assistant Crew Chief

Mathew Morrow



Sophomore Mathew is the 984's assistant crew chief learning under Jakob Davis. He started out under John with the 983 but moved to help with the 984 when it was undergoing it's two major modifications. After high school he would like to become a part of his family's tow truck business.

Quote: "There's hills, hills, and more hills. If you need brakes, you need Jesus."

984 Mechanical Engineer

Avery Walton



Sophomore Avery Walton works as a mechanical engineer as a sort of secondary assistant crew chief. He is apprenticing under Jakob on the 984. His future career goals are a bit up in the air, but one thing is for sure, he plans to work hard at whatever he chooses. Avery really likes ford trucks, as is reflected in his quote choice by Henry Ford.

Quote: "A customer can have a car painted any color he wants, so long as its black"

984 Mechanical Engineer

Anthony Berckes

Anthony is a sophomore who is also a mechanical engineer and secondary assistant crew chief like Avery. He also works under Jakob for the 984. He is new to the team this year and plans to focus on mechanical engineering during his time in the program. He plans on being an electrician when he graduates high school. He lists "I in fact have hair" as his fun fact.

Quote: "Hair is best only on the head"



983 Car

985 Crew Chief

John Tedesco



This is senior John's fourth year on the team. He has been the 983's crew chief for the past two years. Last season John also drove the 983, but we prefer that our crew chiefs are in the pits, so one of the 985's drivers, Elizabeth Severson, has taken over driving the 983 this year. In the future he would like to become a welder or a CNC machinist. His claim to fame within the program was over some confusion this year as to whether he would be the driver for the 983 as his license was suspended. He even included "49 over gets your license suspended" as his fun fact.

Quote: "I hope they take a restricted license."

983 Assistant Crew Chief

Conner Parcel

Freshman Conner is a new addition to the program this year. At first, he explored joining the batteries team, but was recruited to become the 983's assistant crew chief and is poised to take over John next year as the crew chief. He hopes to become a mechanic or a welder after high school. He enjoys building and maintaining 1/10th scale remote control cars in his free time.

Quote: "Task failed successfully."



Machinist

Machinist

Dylan Davis



Dylan is a sophomore who has decided to become a machinist this year. Last year he was on the documentation team and was briefly the 985's assistant crew chief at the beginning of this season. He is graphics team member, Dennis's younger brother. He is heavily involved in school sports, playing football, baseball, and running track. He aspires to work in the trades.

Quote: "get 'er done"

Machinist

Tyler Barz

Tyler is a sophomore in his second year with the program. Tyler has gone between a few jobs within Electric Car and this year has decided to become a machinist with Dylan Davis after the program was left without any machinists. He hopes to become a software developer when he enters the work force.

Quote: "Are we in Mormon city? No, we're in Fond de Lac, Wisconsin"



Aerodynamics

Aerodynamics Lead

Jesse Hempstead



Jesse works as our team's aerodynamics leader, working directly with the crew chiefs and our advisor to design each new car. His prior experience as the 984's assistant crew chief last year has given him many insights to the program that he plans to bring into his car designs. He is new to aerodynamics this year, but was able to work under our last aerodynamic lead for a semester before taking up the mantle. He plans to join the military after high school.

Quote: "I've given up with everything by now"

Batteries

Batteries Lead

Noah Wilson

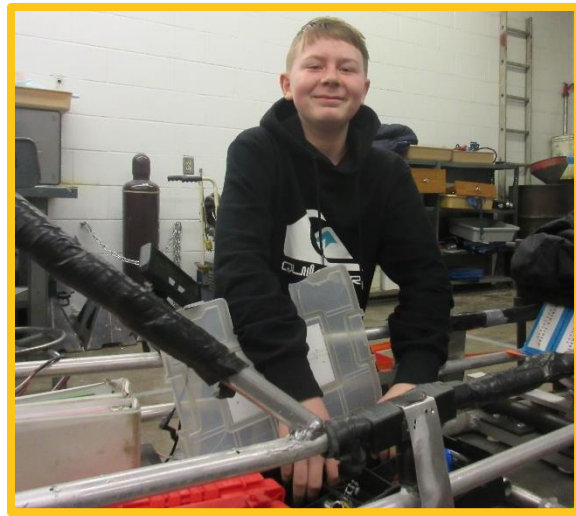
Noah's team profile can be found on page 32 in the 985's individual team section. We consider our batteries lead to be a member of each car's individual team as they are a member of the traveling team and work closely with crew chiefs on how to run their cars making them overall very important to the success of the car at races.

Batteries

Dylan Swallow

Dylan is a freshman and a new addition to the electric car team. He is currently unsure of what to do after high school but is exploring engineering options through the electric car program. His fun fact is "I'm short", so he may make a promising driver his sophomore year.

Quote: "It be how it be."



Batteries

Maxwell Dieter



Maxwell is a freshman in his first year with Electric Car. He would like to become an engineer but has not yet decided on what kind. This year he has joined the batteries team to explore electrical engineering.

Quote: “When there is no more pepperoni on the bagel bites, go outside.”

Batteries

Ethan Wagner

Ethan Wagner is a freshman who joined Noah Wilson's battery crew for the spring semester. He's a successful baseball player for Kennedy High school, and he hopes to play for the major leagues in the future.

Quote: “2nd is the 1st last”



Telemetry

Telemetry Lead

Brian Stubblefield



Brian is an integral part of our electric car team as the telemetry lead. He manages all of the communication systems between the driver and the crew chief during races, as well as the system that reports the status of the batteries to the cockpit. He states his fun fact as, “the more expensive it is, the easier it breaks”. He plans on being either a paramedic or a firefighter after high school.

Quote: “Barry, I need you to spend money...again”

Telemetry

Brylee Severson

Another new addition to electric car, freshman Brylee Severson works as an assistant to Brian in the telemetry department. She plans to go into construction after high school. She listed her fun fact as “2”.

Quote: “I was just walking around with a screwdriver. I never heard that was a crime.”



Documentation

Documentation Lead and 984 Driver

Kaleigh Martin

Documentation and 983 Driver

Elizabeth Severson

Both team profiles for our documentation team members can found on page 31 in the 983's individual team section. We consider our documentation team to be a part of each car's individual team since they write the books and the points for these books directly influence the overall season score.

Graphics

Graphics Lead and 985 Driver

Rodrigo Sagastume

As the driver for the 985, Rodrigo's team profile can be found on page 30 in the 985's individual team section.

Graphics

Dennis Davis

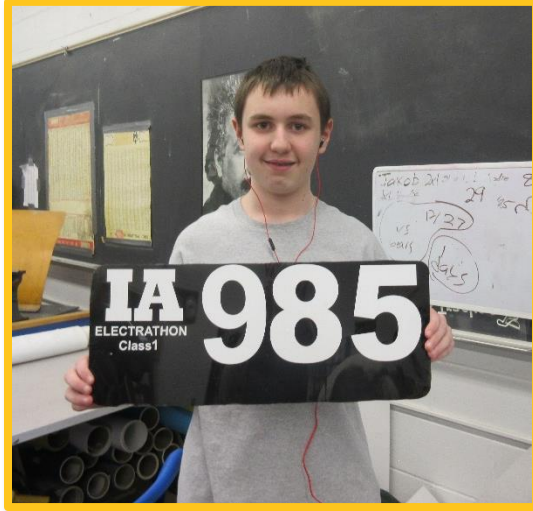
Dennis is a junior who is in his second year of the program like his brother, machinist Dylan Davis. Dennis has explored many of the jobs within the program including documentation and batteries. This year he returned to graphics, his first job, and is poised to take over as lead when Rodrigo graduates. He lists being tall as his fun fact and plans on joining the Navy after high school.

Quote: "There's a lot of stupid people in the world, don't be one of them."



Graphics

Trevor Montgomery-Provencher



Freshman Trevor is a new member of electric car. He came in with some experience working with our graphics tools making him a great addition to the team. He is a self-proclaimed gamer and is unsure of what to do with his life after high school.

Quote: "I always try to split my time