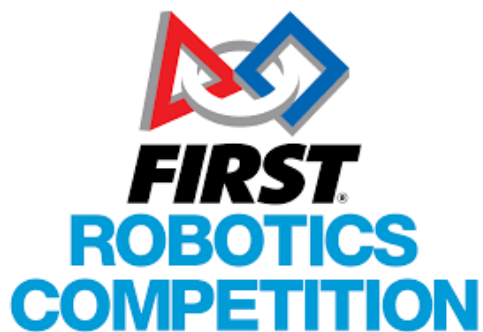




OHS ROBOTICS
THE FLYING CIRCUITS

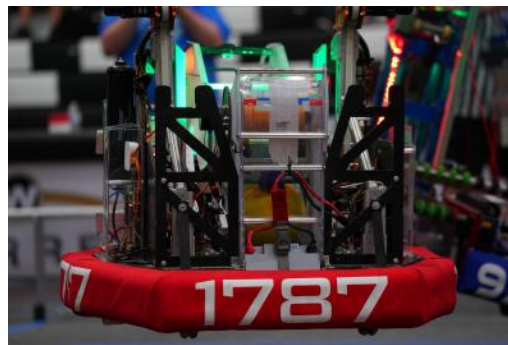


**2023-2024 Sponsorship
Information**

Orange High School - Pepper Pike, OH



THE FLYING CIRCUITS ORANGE HIGH SCHOOL





THE FLYING CIRCUITS ORANGE HIGH SCHOOL

PHONE: 216.831.8600 x 2004

Table of Contents

Hello from Team 1787!	3
About the Team	4
Mentorship	7
Material Donations	8
Team Finances	9
The Importance of Your Donation	10
Sponsorship Tiers	11
Sponsor Information Form	13



THE FLYING CIRCUITS ORANGE HIGH SCHOOL

Hello from Team 1787!

Thank you so much for your interest in our team! We appreciate the time that you are taking to learn more about our program.



The **Orange High School Robotics Team**, also known as Team 1787 or “The Flying Circuits,” is part of an international competition hosted by *FIRST* (For Inspiration and Recognition of Science and Technology). The *FIRST* Robotics Competition (*FRC*) calls for students to join together and face an engineering design challenge. Each student team builds a robot to fulfill the objectives set forth by *FIRST* and competes in tournaments worldwide.

This program is an opportunity for students to begin their journey to success. The members of Team 1787 build not only their own robot, but also a future in science, engineering, and technology. Together, the team fosters life skills such as self-confidence, leadership, and communication. Since 1989, programs like our own have been inspiring students to be leaders in the fields of science and technology.

However, we would not be able to reach our full potential without the help of our sponsors: those who seek to contribute to the science and technology community and the minds of its future. These generous individuals and organizations provide us with what our team needs to continue growing and learning. This aid ranges from financial support to tools, from materials to professional mentorship; any donations are helpful and greatly appreciated! Every year, we hope to meet the *FRC* challenge as well-prepared as possible, so that we can truly make the most of the experience.



THE FLYING CIRCUITS ORANGE HIGH SCHOOL

Our partnership can take many different forms, but all sponsor contributions are greatly appreciated! We hope to welcome you to the Flying Circuits family!

About the Team

"It's more than just a club." Being a member of Team 1787 means real commitment. We are graded not by our answers to a quiz, but by our results in the real world. At each stage of production—from designing the robot to machining and assembling its parts, from teamwork to community outreach—students are the ones getting involved and learning firsthand.

The competition itself consists of 139 world-class spectator events, with 95,000 participating high-school students on 3,898 teams from 35 Countries. Over 75,000 people came to watch the First Championship, where we made it to the division semifinals!



"Better than last year, better than ever!" So goes the team motto. We never cease building upon past years; looking for ways to learn more, to achieve more, and to contribute more to the community. This was true back when our team had just a closet and a mostly wooden robot, and it remains true today. Although COVID-19 prevented FRC competition in the 2020-2021 season, our team continued to grow, participating in virtual challenges derived from the 2019-2020 game. Prior to Covid, we began to see great success in competition, with the 2018-2019 team being only the second and third times in Flying Circuits history that we made it to our regional playoffs, qualifying through a wild card at the 2019 Pittsburg regional to compete at the 2019 FIRST Championship (Worlds) in which we made it to our division's



THE FLYING CIRCUITS ORANGE HIGH SCHOOL

semifinals! While there we were awarded the Xerox Creativity award, out of all the teams in FIRST only 20 received design awards at the World Championship level. Additionally, due to our stellar performance during the season we were invited to compete at and then won the WOW Championship, a state level competition for West Virginia, Ohio, and Western Pennsylvania. Right before the COVID-19 pandemic started, we won the 2020 Miami Valley Regional, immediately qualifying us for worlds that year, but the pandemic shut down all other competition scheduled. Our team this year has already shown a great chance for success as we won the 2021 Mahoning Valley Robotics Challenge (MVRC) event. In our 2022 season, our team found victory at the Fingerlakes Regional in Rochester, NY, and were finalists at the Greater Pittsburgh Regional. For the first time ever, our team attended the World Championship in Houston, TX, rather than Detroit, and made it to semifinals in our division. Our team was also able to be the winners of the Ohio State Championship, marking the second time we were able to win state level competitions. Thanks to improved sponsorship and mentoring we blew through expectations that year, and with your help will do so again this year.

We pledge allegiance to the united members of the Flying Circuits, and to the innovation for which it stands, one team, indivisible, with a lifetime experience for all!



THE FLYING CIRCUITS ORANGE HIGH SCHOOL





THE FLYING CIRCUITS ORANGE HIGH SCHOOL

Mentorship

Mentors, who dedicate time to guiding our students, make the designing and building process all the better. We welcome you and your fellow professionals to partner with us and share your expertise with very willing listeners!

MENTOR ROLES	ROLE DESCRIPTION
CAD/3D Modeling	Teach students on the team how to use different CAD Programs (Inventor)
Marketing/Finance	Assist with team marketing and creating a team business plan
Writing	Assist the Marketing and Award Sub-Teams with team award submissions
Electrical	Teach proper wiring techniques, interpreting schematics, and troubleshooting
Programming	Work with the students to program the robot for competition (using Java)
Public Speaking	Teach the students how to speak in front of potential sponsors and judges
Engineering Design	Work with the team to pick a strategy, design a robot, and manage robot creation
Fabrication	Help the students with the CNC mill, metal lathe, TIG welding, etc
Social Media	Work with students to set up and manage social media sites



THE FLYING CIRCUITS ORANGE HIGH SCHOOL

Material Donations

Material Donations could be anything from spare parts to specific tools that we, as high school students, lack the resources to obtain. We strive to prevent our circumstances from holding us back and to make the most of what we have, but these donations help us reach greater heights! Here is a current list of items we need.

ITEMS NEEDED	AMOUNT	COST (APPROX.)
Frame Material	2-3	\$25(for 59in)
Lexan sheets	Varies	Varies by dimensions
Polymetal sheets	2-3	\$55(4x8ft) -- Varies by dimension
Custom Wheel Materials	Varies	Varies by part and robot need
Wire	Varies	Varies by gauge
Updated Pneumatics (air tanks, cylinders, solenoids)	Varies	Varies by part



THE FLYING CIRCUITS ORANGE HIGH SCHOOL

Team Finances

Financial Support is also critical to an FRC team's survival, as well as its ability to be meaningful for the students. There are many costs associated with running a team. Below is a list of specific items that the team is fundraising for, including fundamental costs and that of goals that we hope to reach this year.

ITEM	QUANTITY	SINGLE-ITEM COST	FINAL COST
Neo Motors	7	\$40	\$280
Spark Motor Controllers	7	\$75	\$525
Prototypes	1	\$2,500	\$2,500
Limelight	1	\$400	\$400
Pneumatic Control Modules	1	\$80	\$80
Gearbox	2	\$800	\$1600
Robot Battery	5	\$40	\$200
2020 Practice Field	1	\$800	\$800
Team T-Shirts	50	\$10	\$500
Leadership Shirts	7	\$25	\$175
3-D Printer	1	\$2500	\$2500
-	-	TOTAL	\$9,560



THE FLYING CIRCUITS ORANGE HIGH SCHOOL

The Importance of Your Donation

Your donation is incredibly important to our team, because money is a very important part of robotics that is never in surplus. Our team uses monetary donations to fund several important projects: purchasing new mechanical resources, funding trips to competition, and operating community outreach activities. We need money to purchase new resources because rules of FIRST state that anything made for a robot in one competition cannot be reused in any future competition. Basically, every bit of aluminum stock, wood, and plexiglass we use one year can't be used for a future year, and we need to restock each year, and this takes money to do so. With our teams growing success, we also need to prepare for additional travel expenses. For many, traveling to Houston was an amazing experience, and we hope that our team continues to get this opportunity in the future, and your donation could assist in our team bringing as many members as possible. Finally, our team is looking to expand its community outreach program, which can only be done with monetary assistance.



One of our goals is to better our FIRST Lego League (FLL) team at our middle school to encourage STEM in younger kids. In order to expand outreach to our entire school district and fund this FLL team, we need money to run the programs. By supporting our outreach program, your business will be directly affecting the community in extremely positive ways, educating about STEM and encouraging children to explore their interests. There is no way to truly explain the impact that FIRST teams can have on their community other than to say that outreach is more valuable than anything else a team can do. Your donation will help our team expand in ways encouraged by FIRST, gaining valuable cooperative skills and returning support to the community that helps us grow.



THE FLYING CIRCUITS ORANGE HIGH SCHOOL

Sponsorship Tiers

Sponsors of Team 1787 all have one thing in common: the will to give back to the community and to create opportunities for students. Your contributions directly benefit students at Orange High School, and we definitely appreciate any support you can provide! Some of these contributions include things such as teaching young adults how to Code, Weld, 3D Model, and even do Electrical Work. First Robotics also gives out nearly \$85 million worth of scholarships. Through these scholarships, we've had many students that have gone into fields like Engineering, Computer Sciences, Software Engineering, and much much more. Through the base knowledge our program gave our students and the education they got in college they became very successful and we've had people work at places as prestigious as Apple.

When you donate \$100 or more you are guaranteed to have your logo on our t-shirts. Our T-Shirts will be viewed at the competition, and the competition is streamed on large platforms such as Twitch, Youtube, some of the competitions even end up on T.V. Along with your logo being shown off on all of those platforms your logo and company will also get seen through the local community as we go to different events.

Though these benchmarks are labeled with monetary values, we also base our Tiers on the 'loyalty' of a sponsor, so how long they support us, as well as what type of support they provide (mentorship, material, or monetary). For instance, long-term mentors receive a minimum of Gold Tier.



THE FLYING CIRCUITS ORANGE HIGH SCHOOL

BRONZE

\$100

Name on team T-shirt in plain text

\$500

Monochrome Logo on T-Shirt
(logos will be larger than plain text)

SILVER

GOLD

\$1,000

Logo on T-shirt
Name (text) on robot
A special thank-you package!

\$2,500

Logo on T-shirt
Color logo on robot
Perks from other tiers

PLATINUM

DIAMOND

\$5,000+

Large logo on t-shirt
Logo on robot
Logo on cart
Perks from all other tiers
A very special thank-you package!

CONTACT US!

Team: orangerobotics@gmail.com
Advisor (Ryan McMonigle): rmcmonigle@orangecsd.org
Advisor Phone: 216-831-8600 X2004



THE FLYING CIRCUITS ORANGE HIGH SCHOOL

Sponsor Information Form

(please send with your donation)

Business Name:

Contact Name:

Address:

City: State: Zip Code:

Phone: (.....) E-Mail:

Business Website:

Method of Support: FINANCIAL

Amount Donated: \$.....

Payment Method: CASH

CHECK

*please make check payable
to:*

Orange Board of Education

MENTORSHIP

MATERIAL DONATION

Please Specify:

OTHER

Please Specify:

If you are sending cash or check please mail it to the following address:

ATTN: Ryan McMonigle

Orange City Schools

32000 Chagrin Blvd.

Pepper Pike, Ohio 44124

All donors will receive a thank you letter from the Orange Board of Education, which may be used as a receipt for tax purposes.