Chairman's Award - Team 2584

2020 - Team 2584

Team Number

2584

Team Name, Corporate/University Sponsors

Mint Mobile/Raytheon/Stelray Plastic Products Inc&Viewpoint School&Reseda Charter High School

Briefly describe the impact of the FIRST program on team participants within the last five years.

As a community, we strive to promote inclusivity and fundamentally believe that robotics is an opportunity that should be given to all. We aspire to inspire. We create an environment where 100% high school graduation is expected and help students pursue higher education. 100% of alumni within the last 2 years have gone on to pursue a college degree, 92% of whom have attended a four year university, and 86% of which have entered STEM fields.

Describe the impact of the FIRST program on your community within the last five years.

We support 4 VEX VRC events and 4 Girl Powered Build Days each year. We host 1 Girl Powered Build Day and 2 VEX VRC events and have started 7 VEX IQ Teams and 4 VEX VRC teams. To broaden our reach, we produced a storybook featuring a girl and her journey in robotics. We published an app, the Patriot Alliance, allowing teams to scout in VEX VRC competitions. Students on our team created, implemented and funded a VEX IQ Robotics program for special needs students in the LAUSD school district.

Describe the team's methods for spreading the FIRST message in ways that are effective, scalable, sustainable, and creative.

Team 2584 fully embraces and advocates the FIRST Core Values: Discovery, Innovation, Impact, Inclusion, Teamwork and Fun. Our team is a public-private school partnership that opens its doors to any community members. Additionally, members of team 2584 have formally advocated to the LAUSD school board for support of FIRST programs. We visit local elementary schools and STEM fairs to create a network of STEM advocates spreading the FIRST mission.

Describe examples of how your team members act as role models and inspire other FIRST team members to emulate

Our mission includes the phrase, "Aspire to inspire." For us, robotics isn't just about building, designing, and executing. By ensuring everyone has access to FIRST programs, we can bring our community together. Our team members mentor younger VEX IQ teams as a requirement. Team members are expected to conduct themselves with an outstanding level of integrity and gracious professionalism. In doing so, team members encourage their peers to mimic these ideals, creating a kinder and better world.
Describe the team's initiatives to help start or form other FRC teams

Team 2584 has partnered with local FRC teams to create the Gold Coast Robotics Alliance. Together we are stronger and have greater collective resources. We have offered our skills to any regional team that is forming and requires help. In the off season, the alliance jointly hosted the event "Wings Over Camarillo" to give teams a place to learn and compete.

Describe the team's initiatives to help start or form other FIRST teams (including Jr.FLL, FLL, & FTC)

We are a newly formed team of two years. We have not yet started FLL or FTC teams, but we have started 7 VEX IQ teams at a local middle school. We volunteer 3 days a week, and they have already competed in their first and second competitions (November 16 and February 1). Our commitment to them is for the entire year/season. Our goal is to help create a sustainable program over three years and expand the program to other local middle schools.

Describe the team's initiatives on assisting other FIRST teams (including Jr.FLL, FLL, FTC, & FRC) with progressing through the FIRST program

In aims to support local FIRST teams we jointly host a free off-season event called "Wings Over Camarillo," enabling both rookie and veteran teams to gain competitive experience in a supportive environment. This off-season event takes place at the Camarillo Airshow, and encompasses a STEM pavilion. The STEM pavilion gives kids in the rural farm community of Camarillo not only an opportunity to see FIRST in action, but it also features an FLL table for them to experiment on their own.

Describe how your team works with other FIRST teams to serve as mentors to younger or less experienced FIRST teams (includes Jr.FLL, FLL, FTC, & FRC teams)

Team 2584 mentors 6 middle school VEX IQ teams, three days per week. Dedicating over 4 hours per week all year round ensures that these teams excel. Over 200 hours annually. Additionally, members on Team 2584 dedicated 200 hours volunteering and mentoring 250 students about engineering principles and in FLL and Jr. FLL.

Describe your Corporate/University Sponsors

Our team works with our corporate sponsors to improve our fiscal stability and bring mentors to help guide the team. In our third season, we are already beginning to see multi-year sponsors and volunteers. Moving forward, team 2584 continues to seek partnerships to ensure growth. This season we have raised $7000, a 350% increase from last year.

Describe the strength of your partnership with your sponsors within the last five years.

In our third year as a team, we have begun to secure meaningful, long-term relationships with corporate sponsors, securing 3 multi-year commitments from sponsors, offsetting our annual budget by 25%. We first try to understand what drives their philanthropy. Is it corporate exposure, or supporting the workforce pipeline? Once we understand their non-fiscal drive, we can begin to incorporate this in our communication, whether this means involving the company in robot demos or pure brand exposure.

Describe how your team would explain what FIRST is to someone who has never heard of it

FIRST is beyond a word. FIRST is a philosophy that guides us beyond high school. FIRST is what gives us not only the confidence to be changemakers, but also the skills to do it. FIRST is an inclusive community, welcoming people who seek a deeper understanding of engineering principles, real world marketing, and a motivational support system of peers and mentors. FIRST is a platform of competitive robotics.

Briefly describe other matters of interest to the FIRST judges, if any

A unique aspect of our team is its socioeconomically inclusive community. Our public-private partnership that opens its doors to any interested student enables us to obtain diverse perspectives. This enables us to draw from our differences in experience, education, and values, creating a space where courage, confidence, and character thrive.

For FRC teams older than 5 years, briefly describe your team's broader impact from its inception.

Team Captain/Student Representative that has double-checked this submission.

Haley Brooks
Essay

A Skydiving Plane:
Imagine jumping out of a skydiving plane, pulling on that large red handle strapped to your chest, and discovering that the parachute doesn’t deploy? What memories would flash before your eyes?
For me, it would be the day I found an encouraging and supportive community that I would soon have the privilege of calling family. For my teammates and I, Team 2584 is more than just the inclusivity of our tight-knit group. It is the 7 VEX IQ teams we started, the 200 elementary school girls introduced to robotics each year, the 10 years of tournaments we have hosted for our community, and the 150 special needs students across 12 middle schools in LAUSD that have access to a robotics curriculum. It is the (estimated) 50,000 people we have reached. It is how we plan to change the world around us. And what is Team 2584 you ask? Well, I’ll tell you.

ONE MISSION
Team 2584, Flame of the West, is an inclusive community, welcoming people without consideration of socioeconomic status, neurodiversity, race, ethnicity, sexual orientation, and religious backgrounds who seek a deeper understanding of engineering principles, machining skills, real world marketing, interpersonal skills, and a motivational support system of peers and mentors. We believe, passionately, that robotics is an opportunity that should be given to every student and that providing that opportunity gives our generation the confidence to change the world for the better.

OUR ORIGIN
The inception of Team 2584 was brought on by a physics teacher at Reseda High School in 2008. After lack of funding and student interest in 2011, the team wasn’t run again until 2014. With interest from a teacher at Viewpoint School, the team number, 2584, was rebranded and funded jointly by both Viewpoint School and Reseda High School. Team 2584 turned into Flame of the West and faced a new challenge: a lack of experienced mentors or students. Since the team’s reopening, we asked what the FIRST values mean to us. While we epitomize the discovery, innovation, impact, inclusion, teamwork and fun aspects of FIRST, what would these values mean without robotics being available to everyone in our community? Therefore, our team is a public-private school partnership that opens its doors to any community members interested at zero cost to any member.

TEAM MAKE-UP
Team 2584 is a unique and diverse makeup of students and mentors that accurately reflects the cosmopolitan nature of Los Angeles. 46% of Team 2584 is female. Over 50% of our team represents a minority and 43% of our team is considered economically disadvantaged, qualifying for free or reduced lunch. We pride ourselves in the fact that all students on the team participate for free to maximize our reach and driving principle of inclusivity.

LEADERSHIP
Our team's infrastructure employs a system that allows for an abundance of student leadership positions. Senior members (2-4 years experience) train younger members, which allows for invaluable peer mentorship. The skills learned on both parts, from the mentor and the mentee, create both confidence and irreplaceable interpersonal skills. Additionally, girls make up 50% of our leadership team.

OUTREACH
Comprehensive Special Needs Robotics Curriculum- The middle school robotics curriculum was written conjointly with a child psychologist, targeting middle school students on the autism spectrum. Individuals on the autism spectrum characteristically have delays in communication and language development. Speech and language delays affect socialization, behavior, and learning and often impact all areas of daily living. Teaching communication requires educators to determine the individual needs of each student. Improving technology has added a new dimension to developing communication, speech, and language. The middle school curriculum we developed with local psychologists utilizes a multidisciplinary approach incorporating applied behavior analysis (ABA), and sensory strategies infused in robotics.

Girl Powered Build Days and #Firstlikeagirl- The Girl Powered initiative aims to bring passionate STEM minded people together, and display that everyone in the robotics community is equal. We believe passionately in the power of diversity and its ability to forge creativity by using different perspectives. To create this space for equality, we host and support Girl Powered Build Days. Helping our community recognize societal obstacles presents an opportunity to change the culture surrounding women in STEM.

Girls in STEM- Team 2584 supports a Girls in STEM club, which aims to encourage girls of all ages to feel open to opportunities in STEM related fields, challenge the gender stereotypes surrounding women in these fields, and provide a space to explore STEM concepts without gendered pressures. All club meetings are attended by no less than four Team 2584 members, and occur biweekly. Additionally, out of the 9 girls on the Girls in STEM board, 5 are members of Team 2584.
Younger members of the community - We wrote a storybook for primary aged children called What Are You Waiting For?, which told a story of a girl initially intimidated by robotics, showing her learning the ropes of robotics and feeling accepted and included into the robotics team, and finally illustrating her success. This book was printed and shown to younger students to help overcome any fears about joining robotics and no is prominently displayed in the school library.

Patriot Alliance App - Team 2584 created the Patriot Alliance app to help new and small VEX Robotics teams with scouting during a tournament. This app has been downloaded over 100 times and aims to provide an accurate database of information for VEX teams all over the country.

Mentoring - We have started 6 VEX IQ teams at the middle school. We volunteer 3 days a week and the middle schoolers have already completed and won their first award. Our commitment to them is for the entire year/season including during build season. Our goal is to help create a sustainable program over three years and a strong pipeline to our upper school program.

FLL Camp and Summer Camp - Members on team 2584 spent over 200 hours volunteering at an FLL summer camp, creating FLL curriculum and implementing FIRST values. For 6 years, team 2584 has run a 3 week summer program for middle and high school students. The program is open to any member of the community.

SUSTAINABILITY
Since 2018, the team has been committed to partnering with companies and organizations to ensure economic sustainability. By developing mutually beneficial partnerships, we have created bonds that will last from year to year and ensure the viability of Team 2584. We encourage these companies to support the 21st century learning opportunities that robotics provides and in return provide social media posts, videos and stories for their corporate websites.

Marketing - Team 2584 operates by constantly recruiting new members. This strategy requires constant community engagement by attending fairs and STEM workshops. Marketing to sponsors includes soliciting local engineering firms, tool companies, and non-STEM related businesses. Approaching companies for sponsorships is student driven, and requires team members to participate in grant applications and real world correspondence, further promoting the idea of professionalism.

Finances - Team 2584 focuses on long-term financial prosperity. Team 2584 receives some institutional funding but relies heavily on sponsorship. Due to our inclusive mission statement, we do not charge membership fees and stick to that regardless of potential loss of funding. This year 20% of our operating budget came from corporate sponsorship and our goal is to make that 100% in the near future.

INCLUSIVITY
Our team's public-private school partnership opens its doors to any community members at no cost. The emphasis is on learning engineering's best practices and developing skills in a safe and fun setting. We recognize that we are not all the same. Using this, we can draw on our differences in experience, education, and values, creating a space where courage, confidence, and character thrive.

Now that I've told you what I would think about in that terrifying skydiving scenario, imagine the secondary parachute deploying. What would you do when you are safely on the ground? Well, I would go back to my team and design a better parachute.