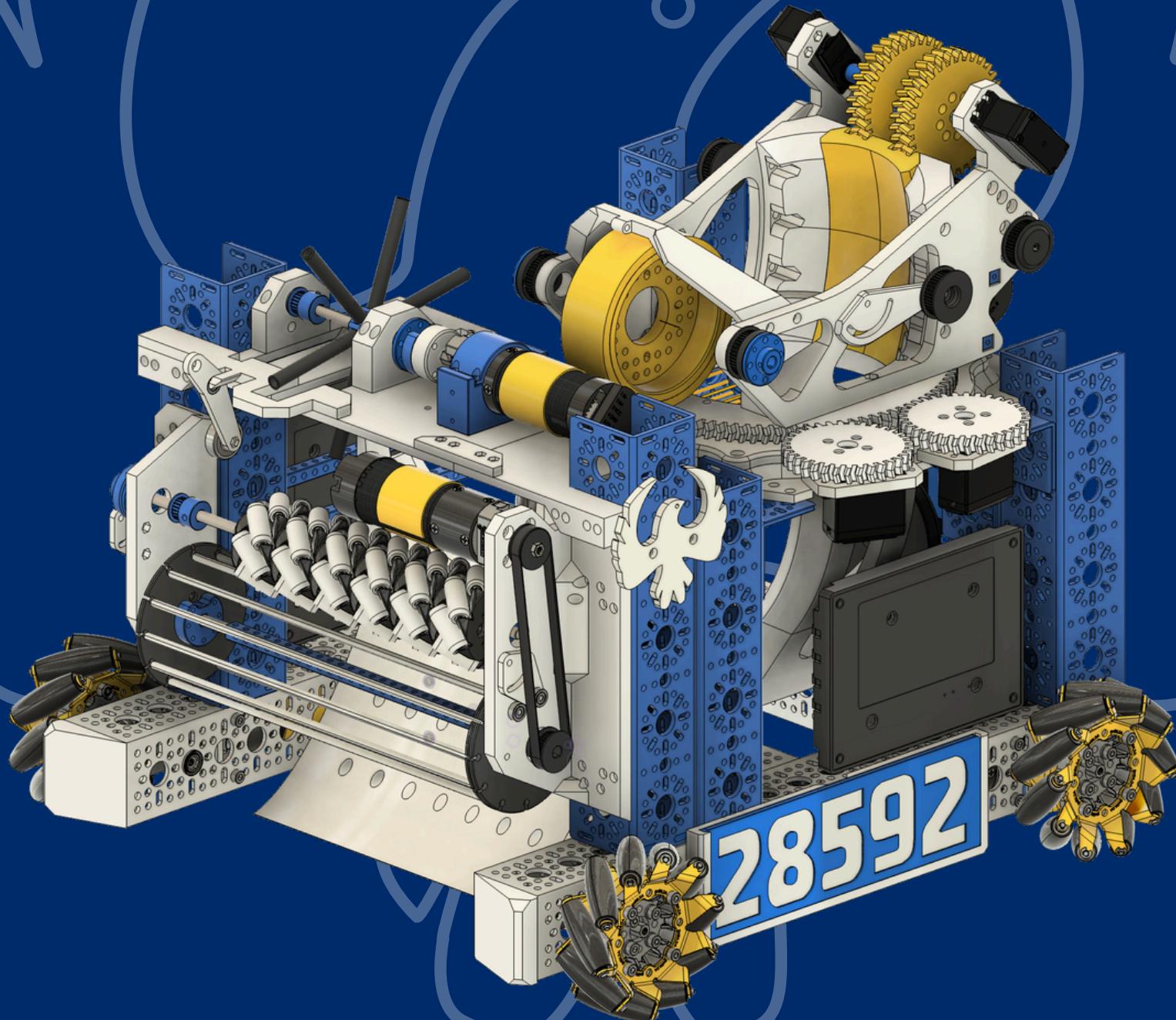


ENGINEERING PORTFOLIO



MMA ROBOTICS
FTC #28592



MEET THE TEAM



Programmer

Alex Ochoa

Design & Media

May Tse

Drive Team

Joanna Zhao and Levi McGuire

Build Team

Diego Ochoa, Joanna Zhao and Levi McGuire

WHO ARE WE?

FTC MMA ROBOTICS #28592

We are a pioneering team of five seniors from Maria Montessori Academy in Victoria, BC, Canada, dedicated to advancing the fields of STEM and robotics. As innovators and creative thinkers, we are committed to cultivating our leadership skills and embracing unconventional ideas to drive progress in our projects.

MISSION STATEMENT

Founded in 2024, MMA Robotics strives to promote STEM amongst youth, especially in smaller, independent schools where it may not be as accessible. Cultivating the next generation of critical thinkers, we aim to foster a healthy environment where ingenuity and creativity grow.

STARTING AS A ROOKIE TEAM

Despite the challenges of starting a new team in the same year you are competing with problems like lack of knowledge leading us to buy the wrong kit, and lack of advanced machinery like CNC's we've managed to create a very mechanically consistent robot utilizing the flexibility of 3D printing to our advantage.



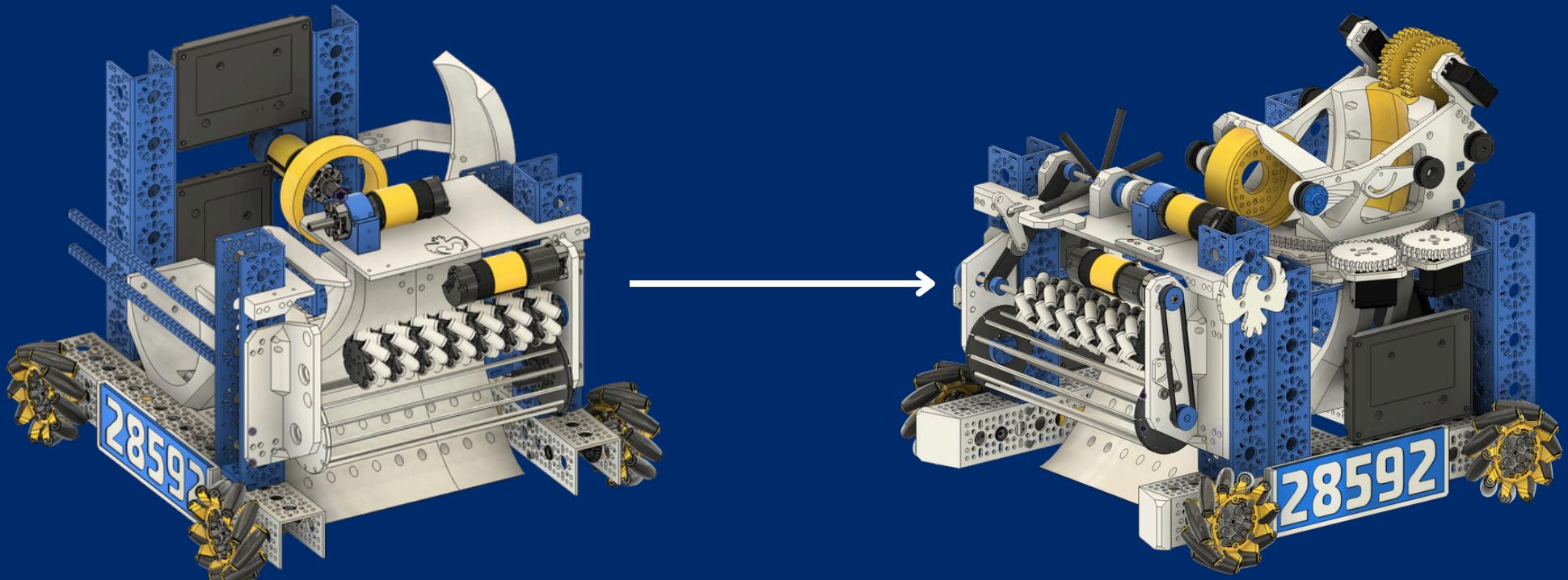
MEET DOVE

1. **Intake**

2. **Shooter**

3. **Transition**

4. **Drive-Train**



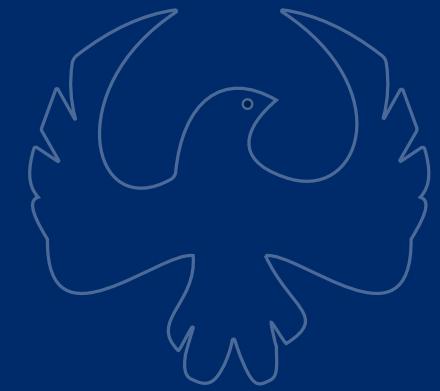
GAME STRATEGY

In many matches our alliance partners either lack an autonomous mode or have one with limited scoring potential. Because of this, our autonomous routine is designed to secure up to 36 points by collecting and scoring all of the balls on our side of the field, efficiently cycling between the starting ball line and the goal.

During Teleop, the drivers will quickly intake three balls, then move the robot into shooting position near the scoring zone. As long as the intake is pointed generally toward our alliance goal, the turret will automatically adjust its angle and flywheel speed. Once locked, the robot can fire all three balls in about one second. Since we do not have a ball sorting system, drivers will focus on collecting primarily purple balls to maximize scoring value.

For the Endgame, we will coordinate with our alliance partner. If our robot can fit underneath theirs, we will do so; if not, the robot with the higher firing rate will remain outside while the other positions inside the scoring square. With eight seconds remaining, the final robot will move into a partial scoring position.

OUR RESULTS



Scrimmages

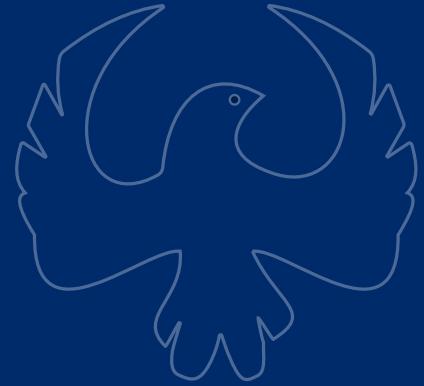
3th and 4th place overall in our first two scrimmages and achieved the highest points in a single match at our first scrimmage, all as rookies. Despite encountering several coding errors and having our drive team learn on the fly, we gained invaluable experience. We are applying these lessons to improve our robot for future competitions.

FUTURE EVENTS:

ownership

Event	Location	Date(s)	Condition / Notes
Scrimmage	Esquimalt, Victoria, BC	Nov 22, 2025	Practice / Preparation event
Qualifier 1	Esquimalt, Victoria, BC	Dec 13, 2025	Main qualifier event
Qualifier 2 (if not qualified)	St. Margaret's School, Victoria, BC	TBD (January 24, 2026)	Only if not qualified at first qualifier
Provincial Championship	Surrey, BC	February 21–22, 2026	If qualified at a qualifier event
FIRST Championship	Houston, TX (George R. Brown Convention Center)	April 29 – May 2, 2026	If qualified at Provincial Championship

OUR SPONSORS



What we're asking:

Our team is looking for community partnerships to help us continue building, inspiring and competing in the First Tech Challenge. Partnerships that will help us reach provincials, and, we hope, worlds.

We expect to qualify for provincials, given our recent results. Sponsorships will be allocated directly to cover expenses for robot parts, as well as travel and registration fees. Sponsors may also give aid in material forms, such as robot parts, 3D printers or filament.

In return:

We will proudly recognize our sponsors in the robot, in team hoodies, on social media and in team updates. We will also be sending out invitations for events and tournaments.

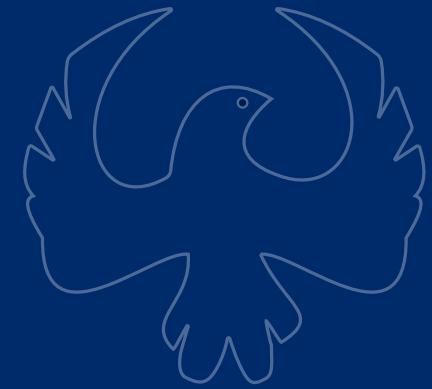


Contact Us:

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BENIFITS FOR SPONSORSHIPS



<u>Tier</u>	<u>Contribution Level</u>	<u>Benefits</u>
Silver	\$100 - \$500	<ul style="list-style-type: none">• Organization logo/appropriate design of choice on Robot “Dove”
Gold	\$500 - \$1000	<ul style="list-style-type: none">• Organization logo/appropriate design of choice on team jersey• Organization logo/appropriate design of choice on Robot “Dove”
Platinum	\$1000 - \$2000	<ul style="list-style-type: none">• Company logo/appropriate design of choice on team jersey• Company logo/appropriate design of choice on Robot “DOVE”• public and social media mentions, shoutouts at public conferences

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@mmarobotics on Instagram