

About the REC Foundation

Affordable, Sustainable, Accessible

Brandi Bolinger

Senior Program Manager
IRHS National Advisor
Program Provider for Michigan Section 99H

Elementary Education Teacher

Lead Mentor with 20+ Years Competitive Robotics Experience

- FIRST Robotics Competition since 2007
- VEX / RECF Robotics since 2012

Robotics Camps Program Director

Robotics Education and Competition Foundation (RECF)

- Team Engagement Manager
- Senior Program Support Manager
- Senior Program Manager



Our Mission & Vision

Our Mission:

The Robotics Education & Competition (REC) Foundation's global mission is to provide every educator with competition, education, and workforce readiness programs to increase student engagement in science, technology, engineering, math, and computer science.

Our Vision:

We see a future where every student designs and innovates as part of a team, overcomes failure, perseveres, and emerges confident in their ability to meet global challenges.

About the REC Foundation

2010

Founded

Articles of Incorporation as 501c3 signed in April of 2010

107

Employees

107 Employees in 36 US States and Australia, Canada, China and United Kingdom

1,740

Event Partners

1,740 Event Partners hosted workshops, scrimmages, camps and competitions this past season

26M

Volunteer Hours

Over 26 Million hours are invested by our volunteers annually









Why the RECF?

Affordable

Once a kit is purchased, annual registration fees are the only additional yearly costs. Kits typically last 5 years.

Accessible

Participation and success in our programs is self-paced and available for everyone, regardless of demographics & experience in STEM robotics.

Sustainable

We've built a local STEM ecosystem for our coaching & competition event support infrastructure.







Student-Centered

What Does It Mean?

There are many definitions for the term “student-centered” in the educational community. The REC Foundation considers student-centeredness to be a framework that prioritizes student leadership and learning. We believe that persevering through challenges and learning from failures are important steps to building lifelong skills.

Student-centeredness is expressed in both the learning and application settings for REC Foundation events and activities.

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Student-Centered Learning

Students are actively involved in learning opportunities to increase their knowledge and skills in the engineering design process, mechanical design, programming, and teamwork under the guidance of mentors. Student-centered teams are student-led, meaning that students take responsibility for all decisions and activities including building, programming, strategy, and communication

Student-Centered Application

Students have agency/ownership and control of how their machine is designed, built, programmed, and utilized in gameplay with other teams and in skills matches. Students use what they have learned to advance, innovate, and improve their building, programming, gameplay strategies, and communication skills.

Student-Centered

Why Is It Important?

Ultimately, students learn the most when they are given opportunities to test their own ideas, learn from their successes and setbacks, and persevere through difficult problems and situations.

We encourage mentors to provide guidance when needed to help educate students on the thinking behind problem solving rather than solving the problem. Mentors can be a valuable resource to help students learn the skills they will need to work in a team and design machines.



01 Our Programs

AERIAL DRONE COMPETITION

The REC Foundation's Aerial Drone Competition (ADC) provides a unique hands-on learning experience, fostering crucial STEM skills including drone piloting, programming, and problem-solving.

The competition environment mirrors the real world, requiring teamwork, critical thinking, and innovation to navigate mission challenges. Students learn to collaborate effectively, hone their communication skills, and build the resilience needed to tackle future challenges. This fosters a deep understanding of flight principles, documentation, and interpersonal skills, all while igniting a passion for drone-related careers.

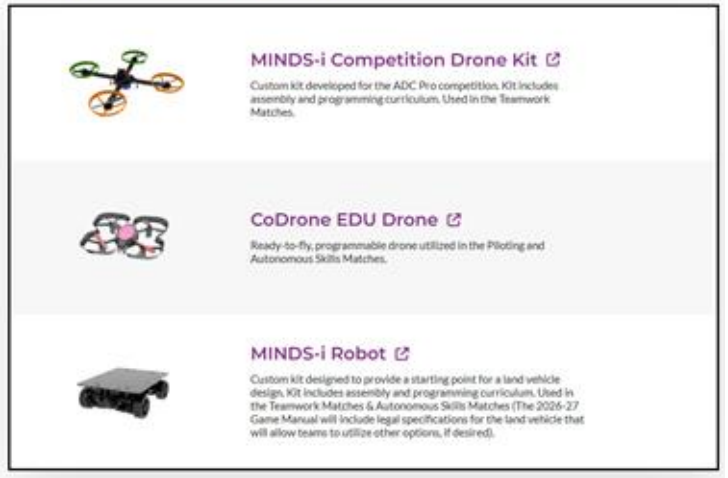


AERIAL DRONE COMPETITION PRO

The REC Foundation's ADC Pro Competition elevates the drone experience for advanced pilots, challenging students to push the boundaries of autonomous flight and precision programming. Teams engage with complex mission scenarios that demand technical mastery, strategic thinking, and real-time problem-solving under competitive pressure.

Working together toward a shared goal, students strengthen their ability to collaborate across skill sets, communicate effectively, and adapt to the unexpected. This rigorous environment builds the technical expertise and professional readiness that opens doors to careers in aerospace, autonomy, and emerging drone technologies.

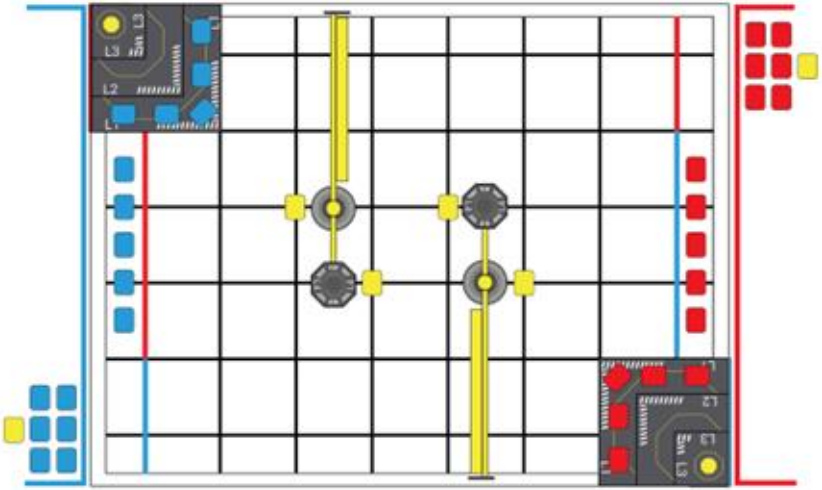
Competition Vehicles



RECF ENGAGE
ROBOTICS COMPETITION

The RECF Engage Robotics Competition provides elementary and middle school students with an exciting introduction to the world of robotics, sparking curiosity and building a foundation for lifelong STEM engagement.

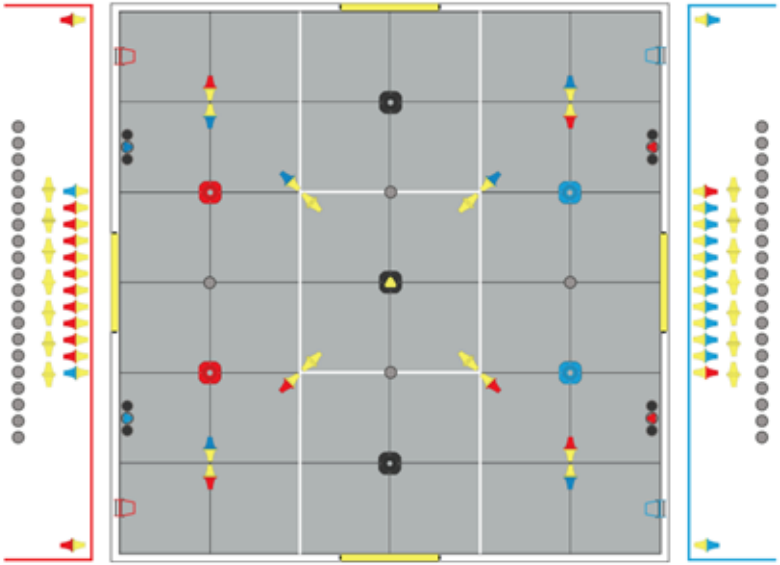
Through hands-on robot design and game-based competition, students develop critical thinking, creativity, and problem-solving skills in a supportive, age-appropriate environment. Teamwork is central to every aspect of the experience. Students learn to communicate, share ideas, and persevere through challenges together. By igniting a passion for building and engineering at an early age, Engage plants the seeds for future innovation and STEM career exploration.



RECF ACHIEVE
ROBOTICS COMPETITION

The RECF Achieve Robotics Competition offers middle and high school students a rigorous, real-world robotics challenge that sharpens both technical skills and professional acumen. Teams design, build, and program competitive robots while navigating a season-long journey that mirrors the iterative processes used by engineers in the field.

Beyond the technical, the competition environment cultivates teamwork, strategic thinking, and the resilience to learn from setbacks and improve. Students emerge with a deep understanding of engineering principles, documentation practices, and collaborative skills that prepare them to thrive in college and careers in STEM.



JROTC Robotics Competition

The REC Foundation is proud to offer the RECF Robotics Competition Achieve and Aerial Drone Competition to Air Force, Army, Navy, Marine, Space Force, and Coast Guard JROTC programs. Cadets and students alike design, build, modify, and program robots in JROTC invitational events and competitions. Cadet-lead teams compete throughout the robotics competition season with the goal of attending the JROTC National Championship.



JROTC students at the JROTC National Championship in 2024



2025-2026 | Team Registration Breakdown & Global Impact

RECF Robotics Teams ES	**27,947**
RECF Robotics Teams MS	**13,106**
RECF Robotics Teams HS	**14,328**
Aerial Drone Competition	**2,226**
University Robotics	**278**
SkillsUSA	**34 States**
Industry Certifications	**1,600**
IRHS	**115 Chapters**



109 countries throughout the world registered with the RECF in the 2024-2025 season.

IRHS
INTERNATIONAL ROBOTICS HONOR SOCIETY

International Robotics Honor Society

The International Robotics Honor Society (IRHS) has been established to recognize high school students for excellence, not only for their efforts on competitive robotics teams, but for academics, personal character, and community service.

LEARN MORE





THANK YOU

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